VISION PLAN

June 2024





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HOW TO USE THIS DOCUMENT

This document is a digital pdf. It is intended to be viewed on a computer or mobile device. The layout will still support printing on 11x17 pages. As a digital pdf, it supports interactive document navigation and links to external online resources.

Chapter Header Hyperlinks

 These bars are color coded to reference each of the document's five chapters.
 Look to the upper right of each page for indication of the viewer's current chapter, and click on any other to quickly navigate to the next chapter.



Internal Document Hyperlinks

 These hyperlinks provide access to specific parts of the Velomont Plan without needing specific page numbers or lots of scrolling.

Take me to Chapter 4!

External Document Hyperlinks

These hyperlinks connect to external online resources for additional information.

Take me to the Internet!

Terms

ANR: Vermont Agency of Natural Resources

Corridor of Opportunity: The identified swath of focus for planning and connecting the Velomont

DEC: Vermont Dept of Environmental Conservation

DST: Vermont Agency of Natural Resources District Stewardship Team

F&W: Vermont Department of Fish and Wildlife

FPR: Vermont Department of Forests, Parks and Recreation

GMNF: Green Mountain National Forest

LVRT: Lamoille Valley Rail Trail

The Velomont: The Trail and hut system itself – a contiguous alignment of trail, pathways, and roads across Vermont that creates a backcountry experience linking huts, hostels, and more than 27 town centers across the State of Vermont.

VMBA: Vermont Mountain Bike Association

VTrans: Vermont Agency of Transportation



Acknowledgments

Steering Committee

This plan owes its final quality and direction to the following steering committee members who graciously volunteered their time and lent their expertise throughout the planning process:

JEFF ALEXANDER, VERMONT ADAPTIVE NICK BENNETTE, VERMONT MOUNTAIN BIKE ASSOCIATION JACKIE CASSINO, VTRANS DREW CLYMER, DEPARTMENT OF PUBLIC SAFETY PETER GILL, VERMONT NATURAL RESOURCES BOARD JOSH HANFORD, AGENCY OF COMMERCE AND COMMUNITY DEVELOPMENT (ACCD) BOB HEISER, VERMONT LAND TRUST JIM HENDERSON, BENNINGTON COUNTY REGIONAL PLANNING COMMISSION (RPC) HOLLY KNOX, UNITED STATES FOREST SERVICE, GREEN MOUNTAIN NATIONAL FOREST RANGER DISTRICT CAROLYN LAWRENCE, STOWE TRAILS PARTNERSHIP ABIGAIL LONG, KINGDOM TRAILS ASSOCIATION CAITRIN MALONEY, SLATE VALLEY TRAILHOUSE AND Sustainable Trailworks ANGUS MCCUSKER, VELOMONT TRAIL COLLECTIVE JEFF NUGENT, WINDHAM REGIONAL COMMISSION HEATHER PELHAM, VERMONT TOURISM HANNAH PHILLIPS, VT FORESTS, PARKS AND RECREATION CLAIRE POLFUS, VT FORESTS PARKS AND RECREATION Mark Rosalbo, Town of Randolph NIC STARK, RUTLAND RPC MATTHEW TETREAULT, VERMONT AREA SNOW TRAVELERS **RJ** THOMPSON, VT HUTS KEEGAN TIERNEY, GREEN MOUNTAIN CLUB KATE WANNER, TRUST FOR PUBLIC LAND MATTHEW WILLIAMS, CATAMOUNT TRAIL ASSOCIATION

This plan was funded by the Vermont Outdoor Recreation and Economic Collaborative (VOREC) and completed by planners and designers at **SEGROUP**



THE VISION

A vision is being crafted in the Green Mountains.

Imagine a continuous trail and conservation corridor that links mountain ridges to Vermont villages, all supported by a backcountry hut network. This ambitious project has the potential to conserve landscapes, connect communities, build economies, and create an incredible recreational resource. This is the Velomont.

The Velomont invites people on bikes, skis, and foot to one day explore 485 miles of trail which will connect 30-45 backcountry huts & downtown hostels and 27 communities, potentially conserving over 200,000¹ acres of crucial wildlife corridor. When complete, the Velomont will represent the largest hut- supported trail network in the United States.

This plan documents the vision and accomplishments of the Velomont to date, and provides clear guidance and direction for the next phase of trail and hut planning, design, permitting, and development. This plan was written to:

- Illustrate progress, opportunities, constraints, and the long-range vision for the Velomont
- Establish planning and design principles to guide future trail and hut development
- Document public input, as well as state and federal agency collaboration that helped develop this plan
- Outline a process for continued collaboration and partnerships

¹ Based on 2021 analysis by the Trust for Public Lands based on identification of non-agricultural parcels over 200 acres within the Velomont Corridor of Opportunity



PLAN HISTORY

In 2016, a VMBA Chapter, the Ridgeline Outdoor Collective, began to discuss connecting trails to neighboring chapters rather than building more loops within their own trail networks. This idea offered a chance to expand trail networks while better balancing recreation and conservation interests. That same year. Vermont Huts Association (VHA) was founded with a vision to create a cohesive statewide hut network. Ridgeline and VHA joined forces and opened conversations with Vermont Department of Forests, Parks and Recreation, (FPR) to explore central Vermont connectivity. During these discussions, FPR representatives recommended investigating a bolder vision – a state-wide trail.

This vision took hold and was dubbed The Velomont. Since 2016, 33 miles of the Velomont Trail Corridor have been established in the Green Mountain National Forest. An additional 97 miles are currently proposed and under review by state agencies.

The Velomont is envisioned to connect Massachusetts to Canada, through a scenic corridor rolling through the mountains, valleys, and villages of Vermont. Using existing trails and building new connections, the Velomont will create a unique and valuable hut to hut and village to village experience across the state of Vermont.

PLAN PROCESS

This document's overarching planning process began in 2023, funded by a grant through the Vermont Outdoor Recreation Economic Collaborative (VOREC) Community Grant Program and a US Forest Service cost share grant agreement. Built in close collaboration with state and federal land managers across Vermont, this plan included numerous coordination meetings, including:.

- Monthly Velomont / Green Mountain National Forest Ranger District meetings
- Five dedicated ANR District Stewardship Team meetings to discuss opportunities and constraints in each of the five districts
- Meeting with Vermont Agency of Transportation (VTrans) leadership to provide direction on Velomont utilization of state transportation routes
- Quarterly Velomont / Trust for Public Land meetings
- Three meetings with Natural Resource Board, Vermont Land Trust, and Trust for Public Land to coordinate trail and conservation projects.
- Five public open houses and a public online survey
- 14 monthly steering committee meetings. This group provided direct input on the content and presentation of this plan.

PROJECT LEADERSHIP

The Velomont Collective:

The team working to build the Velomont. Formed through a broad collaborative effort spearheaded by Vermont Huts Association, VMBA and its chapters, and the Catamount Trail Association, The Velomont Collective is a term used to encompass the local, regional, and statewide non-profit organizations working to develop and implement the Velomont.

Catamount Trail Association (CTA):

The Catamount Trail Association is a passionate group of outdoor recreation advocates and trailblazers working to expand access to Vermont's backcountry by stewarding the Catamount Trail and a growing network of world-class terrain, protecting access to mountain lands and pioneering programs to expand equitable access to skiing.

Vermont Huts Association (VHA):

A non-profit organization whose mission is to foster a deeper appreciation for our natural environment and strengthen Vermont's communities by providing enriching and immersive outdoor experiences for all.

Vermont Mountain Bike Association

(VMBA): A non-profit overseeing 28 local mountain bike advocacy chapters across Vermont, ensuring a unified voice. Their mission is to ensure the sustainability of mountain biking in Vermont and thoughtfully promote exceptional riding experiences for all through advocacy, education, and communitydriven stewardship.



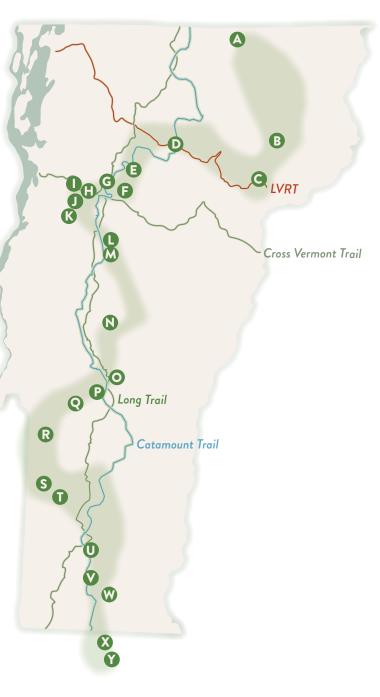
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Local Partners

- A. Memphremagog Trails
- B. Kingdom Trails Association
- C. Caledonia Trail Collaborative
- D. Stowe Trails Partnership
- E. Waterbury Area Trails Alliance
- F. Bolton Valley Resort
- G. Cochran's Ski Area
- H. Richmond Mountain Trails
- I. Sleepy Hollow Inn Ski & Bike Center
- J. Fellowship of the Wheel
- K. Mad River Riders
- L. Mad River Path
- M. Ridgeline Outdoor Collective
- N. Killington Mountain Bike Club
- O. Mendon Mountain Club
- P. Pine Hill Partnership
- Q. Slate Valley Trails
- R. Merck Forest & Farmland
- S. Northshire Area Trail System
- T. Southern Vermont Trails Association
- U. Mount Snow
- V. Hoot Toot and Whistle Bike Club
- W. Deerfield Valley Trails
- X. Thunder Mountain Bike Park

Statewide Partners

- Catamount Trail
- Cross Vermont Trail
- Green Mountain Club
- Lamoille Valley Rail Trail
- Trust for Public Land
- ► VAST-VT Assoc. of Snow Travelers
- VT Youth Conservation Corps
- Vermont Land Trust
- Vermont Adaptive Ski & Sports
- VT Department of Forests, Parks, and Recreation
- US Forest Service, Green Mountain National Forest
- Vermont Agency of Transportation



PARTNERS

The Velomont Collective is a collaboration between three main partner organizations: Vermont Huts Association, the Catamount Trail Association, and the Vermont Mountain Bike Association. These groups will pool resources to support the ongoing efforts needed to successfully plan, fundraise, and complete the establishment of a contiguous trail for biking, skiing, and hiking across Vermont. The role of The Velomont Collective will be to manage and oversee all portions of trail planning, grant writing, use agreements, wayfinding sign installation, and trail construction needed to see this project forward. The Velomont Trail will not be built by any one group, however. As a collaborative, state-wide effort, it will require the support of numerous groups, including:

- Vermont Department of Forests, Parks, and Recreation (FPR): Review proposals and provide guidance to support the connection and completion of the Velomont Route and hut sites to support statewide conservation and recreation goals.
- Trail Stewards: Individual VMBA Chapters, Vermont Association of Snow Travelers (VAST), CTA, and other local Green Mountain National Forest trail networks continue to support the (GMNF): Review proposals and provide Velomont and serve as on-going trail guidance to support the connection and stewards supporting established portions completion of the Velomont Route and hut of the Velomont through maintenance and sites to support goals for stewardship and management. recreation on Green Mountain National Local Governments: Town governments Forest lands.
- Vermont Agency of Transportation (VTrans): Review proposals and provide guidance to support the connection and completion of the Velomont Route to support goals for public safety and non-motorized transportation between

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communities. This agency manages many rail trail resources in the state of Vermont, and will be a key partner as the Velomont moves towards co-location with portions of the Lamoille Valley Rail Trail (LVRT) and Delaware & Hudson Rail Trail (D&H).

- Vermont Adaptive Ski and Sports: As a nationally recognized organization that empowers people of all abilities through inclusive sports and recreational programming, Vermont Adaptive Ski & Sports provides support and guidance as the Velomont develops adaptive-friendly trail corridors and huts, supporting access for all ages and abilities.
- Conservation Partners: Numerous conservation groups, such as the Vermont Land Trust, Trust for Public Land, and others have supported Velomont conservation opportunities and continue to advise and guide corridor planning toward the most suitable locations to align recreation and conservation resources.

Local Governments: Town governments and Vermont Regional Planning Commissions support the Velomont through ongoing coordination and planning related to community connections, public roadway use, and project funding. Towns will also review proposal and provide guidance related to town lands.

THE BENEFITS

Trails and outdoor recreation bring tangible benefits to the communities they serve. The Velomont trail's environmental, economic, and community benefits are estimated here to illustrate how this project will deliver significant returns on investment.

ENVIRONMENTAL BENEFITS

"People don't need trails. The Land needs trails." This simple observation from <u>Colorado's</u> <u>Guide for Planning Trails with Wildlife in Mind</u> recognizes that trails focus human activity upon specific corridors within the natural

Conservation Success: Rolston Rest

- 3 Major Trails Connected
- 2,744 Acres Protected
- 140,000 Protected Acres Connected

Rolston Rest was once the largest unprotected inholding in Vermont's Green Mountain National Forest. Spanning 2,744 acres of **dense forest**, **headwater streams, and scenic peaks**, Rolston Rest is a recreationalist's dream and an important habitat for bobcat, moose, otter, and the threatened northern long-eared bat.

The team behind Velomont and Trust for Public Land meet on a quarterly basis to ensure **recreation and conservation efforts are aligned.** Together, Rolston Rest was added to the Green Mountain National Forest, protecting the beloved forest, **connecting three major trails**, and linking **dozens of Vermont communities** so they can access the benefits of the outdoors. landscape. Without trails, outdoor recreation has the potential to disturb entire swaths of land, disturbing critical natural species habitats. Trails are a recreation tool that help us manage the impacts of human activity on the landscape by focusing certain types of use, like biking, hiking, and skiing, to well-designed corridors

Poorly planned trails can adversely impact wildlife and other natural resources. But the Velomont is not, and will not be poorly planned. Planned and designed as a conservation tool and sustainable, ecologically sensitive trail corridor, the Velomont offers numerous conservation benefits.



Conservation and public lands creation within the Velomont Corridor of Opportunity

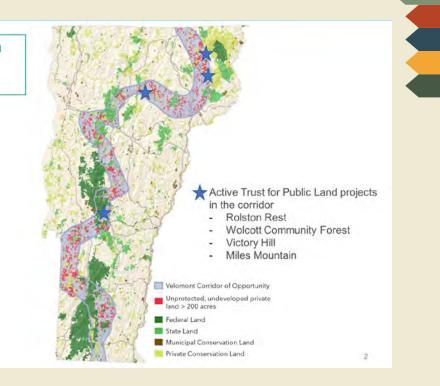
Today: Over 27,000 acres of <u>active</u> conservation projects within the corridor

555 unprotected and undeveloped parcels over 200 acres within the corridor

214,000 acres of strategic total conservation opportunity

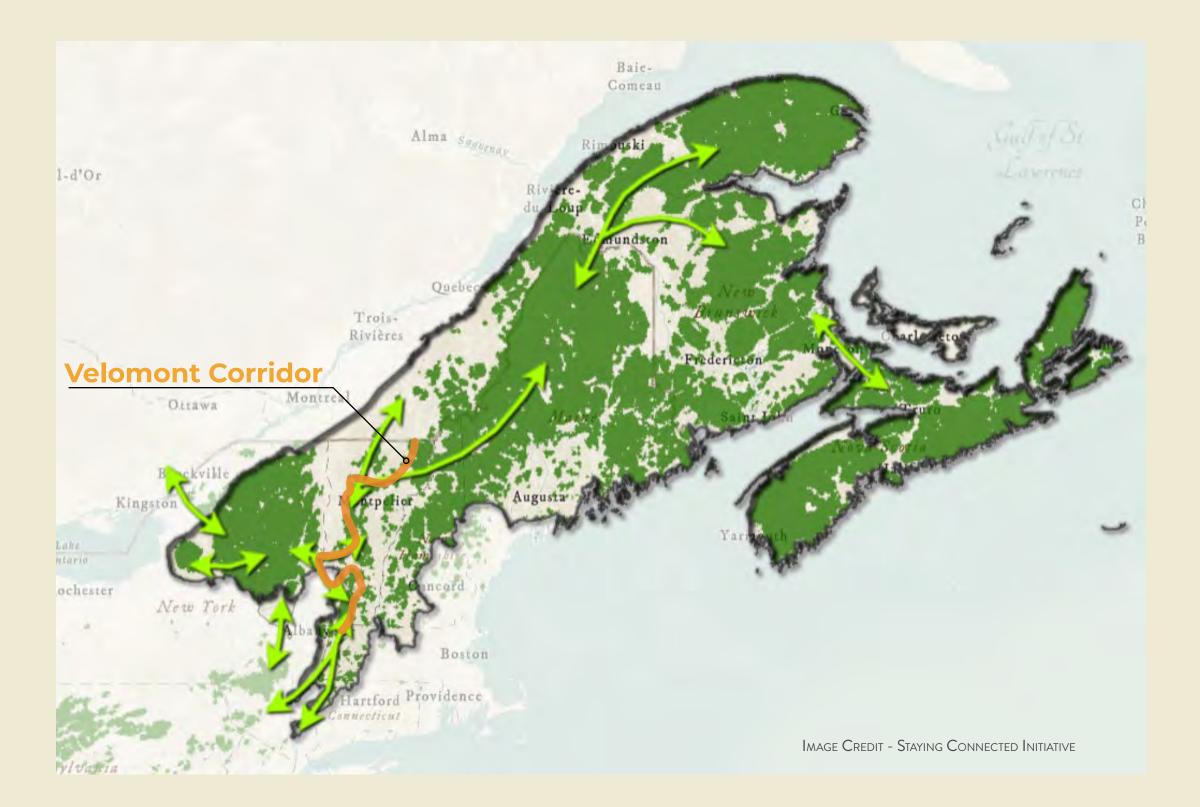
Recreation is a Conservation Tool

For generations, recreation and conservation have worked together in Vermont to support the state's economy and way of life. The Long Trail, built between 1910 and 1930, is a key reason that the spine of the Green Mountains has been conserved. This historic recreational trail played a part in the foundation of Green Mountain National Forest, Camel's Hump State Park and Mt. Mansfield State Forest, among many other public land units. Public access recreation is already designated as a land conservation purpose in Vermont Statute. Development of the Velomont Trail will support recreation and conservation efforts across the state of Vermont. The need for conservation is recognized not just in Vermont, but in Washington, DC as well. In 2021, President Biden signed into law the Executive Order



on Tackling the Climate Crisis at Home and Abroad which set the ambitious goal of conserving 30 percent of the nation's land by 2030. Known as 30x30, this executive order was echoed by Vermont Legislature in 2023 as the Community Resilience and Biodiversity Protection Act. This bill adopted the 30% by 2030 goal of its federal precedent and extended the goal to conserve 50% of Vermont's landmass by 2050.

The Velomont is designed to support these conservation objectives. Each segment of trail corridor carries with it the potential to conserve the parcel of land surrounding it. Conservation that builds a trail network can pull from conservation and recreation funding resources alike. The Velomont vision is to build a trail corridor that links communities through broad corridors of conserved land, preserving landscapes for wildlife migration and biodiversity while supporting statewide recreation.

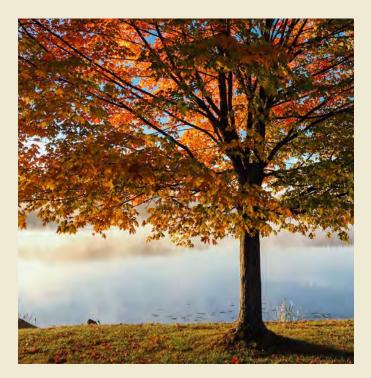


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Velomont Alignment Supports Climate Resilience

As the climate changes, plant and animal species will migrate to adapt. Multiple wildlife conservation groups, including the <u>Nature</u> <u>Conservancy</u>, Open Space Institute, <u>Staying</u> <u>Connected Initiative</u>, and the Vermont Agency of Natural Resources, have identified lands within and surrounding the Green Mountains as crucial wildlife migration corridors. Conservation of corridors of forest to facilitate these movements is crucial for the long-term survival of many species. The planned Velomont Trail offers an opportunity to coordinate recreation and conservation efforts and preserve land along these crucial migration corridors.

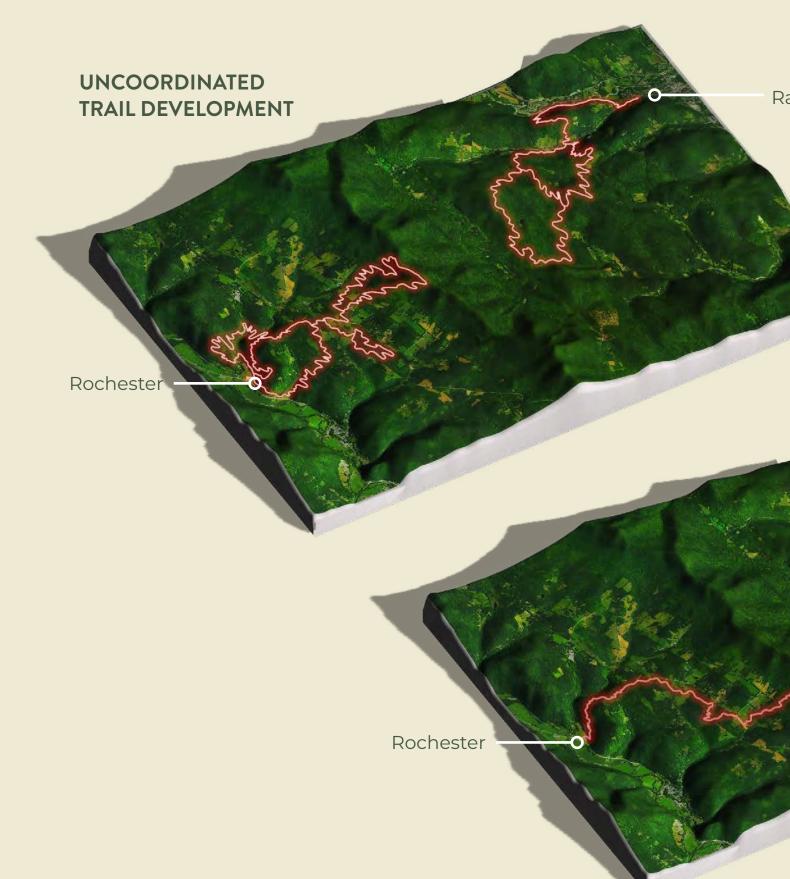


Coordinated Trails Create Less Landscape Disruption

The state has numerous small trail networks which are developed and maintained independently. Each small community has been planning, building, and maintaining trails independent of its neighbors, creating localized impacts on either side of invisible town lines. This approach has resulted in incredible local trail networks. The Velomont provides an opportunity to expand beyond local boundaries into a statewide trail project whose design offers an opportunity to leverage existing resources while supporting conservation and recreation goals.

Instead of multiple communities working on dense networks of trails on singular parcels, the Velomont offers an opportunity for trail advocates to work collaboratively across property and town boundaries. This approach creates improved recreational and conservation outcomes by building long distance trails that leave more portions of land undisturbed wildlife and ecological processes.

This approach will be realized by utilizing existing trails wherever possible. The Velomont is not a 'whole new trail' across the state, but rather a creative and thoughtful assemblage of existing resources, linked by strategic connectors to create a whole greater than the sum of its parts.





Randolph

Randolph

VELOMONT TRAIL DEVELOPMENT



COMMUNITY BENEFITS

Health Benefits

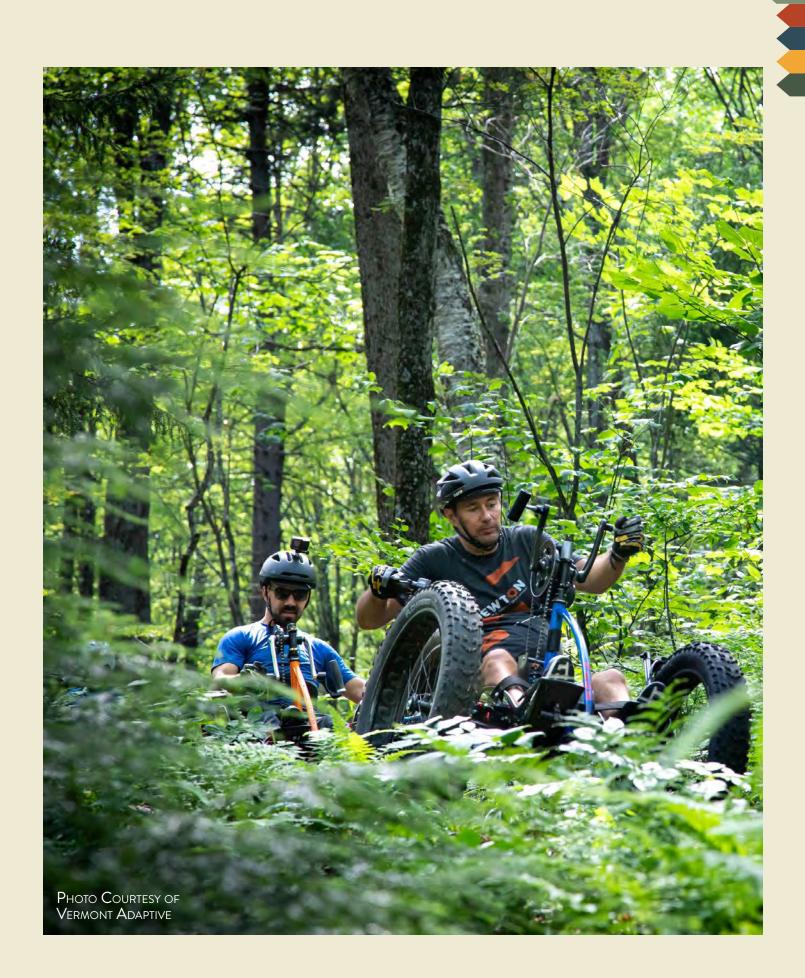
Velomont is designed to provide more trail access close to home that are accessible to all ages and abilities - creating health and wellness benefits for everyone. Through excellent trail design and integrated community programming, the Velomont can serve as a catalyst for encouraging more active lifestyles for nearby residents.

It is estimated that well over 100,000 Vermonters live within 15 minutes of the proposed Velomont corridor. The Center for Disease Control (CDC) has found that nearly one-in-five (19.6%) of the Vermont adult population reports being inactive for more than a week at a time, and additional CDC research has shown that active lifestyles reduce a person's annual healthcare costs by approximately \$1,600 annually. If even 1% of the inactive adult residents living near the corridor were to adopt a more active lifestyle, this could result in reduced healthcare costs of around \$550,000 annually for this population. A more ambitious 5% target could result in up to \$2.8 million in annual healthcare savings.

A Statewide Quality of Life Amenity

The Velomont is anticipated to connect through 27 Vermont communities, intersecting with major travel corridors and connecting to downtowns once complete. Bringing a well-designed trail into this number of communities represents an unprecedented opportunity and investment in recreation access for Vermont residents and an enviable quality of life amenity.

Vermont is home to <u>VT Youth Cycling</u>, a club comprised of 15 local cycling teams serving middle and high school aged youth. These locally led groups build fitness and confidence through interscholastic races, group rides, and trail stewardship. The Velomont's design to bring trails to town centers will only further support the physical and mental health and wellness of youth and communities across the state.





ECONOMIC BENEFITS

Long distance hiking trails, like the Long Trail, have been proven to attract adventurers from around the globe to Vermont. The Velomont will continue this trend and will also support small-town economies on and adjacent to the trail corridor. The Velomont route will connect travelers with the local cafes, outfitters, huts and hostels that will support an incredible backcountry trail experience. These trail users will directly support existing (and future) lodging, dining, and service industries in each Velomont town.

There is good reason for Vermont to continue to invest in outdoor recreation. The Bureau of Economic Analysis estimates that Vermont's outdoor recreation economy contributes 4.6% of the state's economy – generating \$666M in lodging, close to \$400M in retail sales and \$106M in manufacturing. This 2022 data does not account for the broader benefits realized by outdoor recreation communities when quality of life acts as a magnet for remote work as employees seek out locations that offer an escape from urban commutes and traffic into forest bathing and trail networks from their back door.

Economic Impact of Building The Velomont

The planning, design, and construction of the Velomont is specifically estimated to generate a one-time economic impact resulting in 112 new jobs, \$2M contributed to state taxes, and \$31M generated in total one time spending across the state.

Visitor Spending Along The Velomont

Once complete, visitor spending associated with use of the Velomont is estimated to be as high as \$3.2 million annually, supporting up to 48 full-time equivalent jobs. Non-local trail users and overnight users are projected to spend approximately \$80 – 90 per person per day as part of their visit to the trail. Efforts to connect the Velomont to downtown areas and community centers will be critical to realizing this economic potential by providing trail users with convenient options to purchase food, supplies, and overnight stays.

The Velomont will offer a recreational opportunity unlike anything else in the Northeast. The combined visitor spending associated with visitation to future huts along the Velomont is estimated to be as high as \$6.4 million per year, supporting up to 91 full-time equivalent jobs.



IN 2022, OUTDOOR RECREATION MADE UP 4.6% OF VERMONT'S ECONOMY, RANKING THE STATE 2ND TO HAWAII IN OUTDOOR RECREATION'S CONTRIBUTIONS TO THE STATE GROSS DOMESTIC PRODUCT

Direct Community Benefits

In addition to receiving sales dollars and tax revenues associated with trail user spending, communities along the Velomont corridor stand to benefit economically in ways that are harder to quantify. The quality of life afforded by convenient access to a high-quality and well-known recreational amenity can help communities attract and retain residents and businesses, increase property values, and put other community amenities and businesses on the map for visitors. Efforts to enhance and activate these linkages, such as wayfinding signage, local outing programs, and trailfriendly business programs will help bolster the benefits that communities see from the trail.

More broadly, the completion of the Velomont will bolster Vermont's established reputation as an outdoor recreation destination by providing a unique outdoor recreation

Four-Season Recreation

The Velomont includes connection to 11 ski areas and resorts including Burke, Stowe, Bolton, Cochran's, Mad River Glen, Sugarbush, Killington, Mt Snow, Haystack and Berkshire East. This project will support the local ski industry and the communities they support adapt to a changing climate with a non-snow dependent sport that can attract visitors and revenue. amenity that stands alone in the United States. The 2024 passage of the Biking On Long Distance Trails (BOLT) Act by Congress recognizes unique long distance mountain bike trails across the Western United States, and the Velomont will create the only long distance hut supported mountain bike trail in the eastern United States.

The Velomont is Vermont's chance to invest in summer recreation during a time when climate change is reducing the volume and duration of snowfall across the state. The completion of the Velomont can maintain Vermont as a premier four-season recreation destination on par with anywhere out west, with far-reaching impacts for Vermont's tourism and outdoor recreation economies.





THE PRINCIPLES

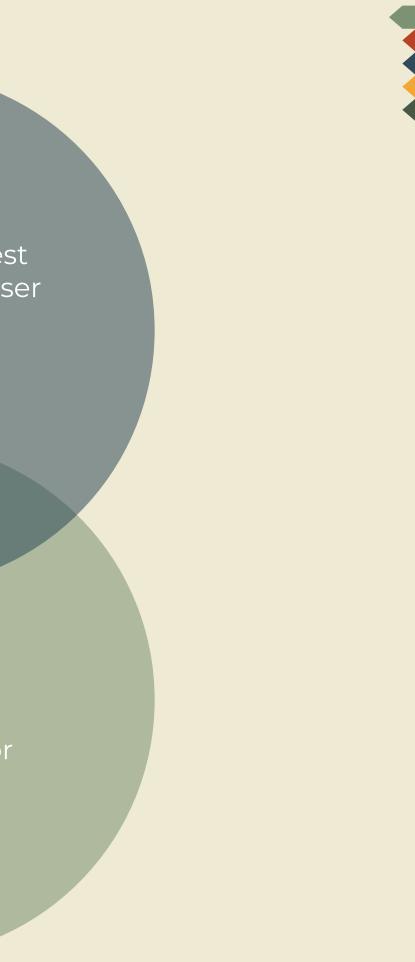
The Velomont, as it stands today, still has many more miles of new trail to plan, permit, and build. For each trail project that remains ahead of the Velomont reaching its full potential - three key questions guide The Velomont Collective when planning a trail:

- What is the best route for the land?
- What is the best route for the communities?
- What is the best route for the user experience?

Although it may be rare to find the perfect alignment that satisfies each question, The Velomont Collective seeks to find the best alignments possible through careful planning and following the trail planning principles outlined below.

From initial conceptual proposals to final trail or hut construction, these principles are intended to serve as guidelines to support sound planning and decision making. These principles have been developed through a review of trail planning and design best practices, summary of public feedback received through the statewide Velomont planning process, and established The Velomont Collective Trail User Objectives. What is the best route for the communities? What is the best route for the user experience?

> What is the best route for the land?



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SUPPORT COMMUNITY CONNECTIVITY

In order to facilitate this connectivity, the Velomont should be marked and signed to connect to community centers even when they are not directly on the trail itself. Wayfinding towards comfortable and safe bicycle and pedestrian friendly linkages between Velomont trails and nearby town centers will be established throughout completed sections of the trail.



BUILD PARTNERSHIPS

The Velomont's success will rely on partnerships. These partnerships will be built through long-term relationships between Federal and State land managers, members of The Velomont Collective, VT Huts, and other partners. Commitment to understanding each partner's unique contributions, perspectives, and goals in the process of developing a state-wide trail is an important starting point. Every voice in the process will have something to contribute and getting to 'yes' may not always be a straightforward process – but working together will be the only way forward.



VELOMONT TRAIL SYSTEM

This plan highlights portions of the Velomont Trail built and under permitting by early 2024, and portions of the trail corridor that are anticipated next steps. The Velomont will become more than the built corridors and known opportunities in these pages. The establishment of this regional trail will create unique opportunities for linkages to village centers, state parks, and community trail networks, and should be looked to as an opportunity to coordinate and collaborate on connections to and from the Velomont to support outdoor recreation and local economies across the state.



BUILD AN INCLUSIVE RESOURCE

Trails, amenities, and communications materials will be designed for all users and all abilities. This includes those with adaptive needs. This means that the majority of the Velomont will not incorporate high-risk features with maneuvers that require significant skill to navigate.

Adaptive optimized segments of the Velomont should be prioritized near community centers and trailhead access points. Further away from access points, the design of trails should be adaptive friendly where possible. This principle does not mean that the entirety of the Velomont will become an all-abilities trail, as many segments will be designed to different standards due to existing conditions, cost, terrain, or other limitations.



REMOTE, FOUR-SEASON OPPORTUNITIES

The trail will offer opportunities to escape the built environment of buildings, paved roads, and the daily grind. Long stretches of isolation from humans and human activity are the design intent, and built environment elements within the trail itself should be minimized. In addition, the trail will be built to standards that promote four-season access, so that the Velomont value is year-round, and an 'off-season' is minimized.



MITIGATE USER CONFLICTS THROUGH DESIGN

Trails will be designed to minimize user conflict. Trail corridors adopted as part of the Velomont will be selected based on alignments that do not introduce significant user conflict. Steeper grades which can create high downhill speeds will ensure sight lines are ample and integrate technical challenges or directional change to moderate speeds. Informational signage will be incorporated where feasible to educate visitors on a multi-use trail system, and widths and intersection design will encourage proper multi-use trail etiquette.



PROTECT NATURAL RESOURCES THROUGH LOW IMPACT PLANNING & DESIGN

The Velomont Trail will be located in resilient landscapes and ecosystems in order to reduce impacts from the creation and use of trail. When less resilient systems must be crossed to provide connectivity, the route will be designed to reduce impact as much as possible. All relevant GIS datasets regarding soil, forest, cultural resources, and sensitive species habitat should be referenced in the planning process, and best-practice buffers, setbacks, and avoidance measures should be adhered to. Chapter 4 provides a preliminary list of best-practice guidelines for environmentally sensitive planning, design, and construction of future segments of the Velomont. In addition, it is anticipated that in 2024 VMBA will be producing Vermont-specific best management practices for trails in the state. Velomont will follow these guidelines throughout the design, construction, and maintenance processes.



ENCOURAGE ECONOMIC DEVELOPMENT

The Velomont will coordinate with state agencies, municipal governments, and individual businesses to leverage the potential for recreation to support local economies. Trail access points and wayfinding should highlight opportunities to connect trail users to goods and service centers wherever possible, and online wayfinding tools established to further this economic support as the network evolves.

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02. THE TERRAIN



This chapter highlights the physical, environmental, and social terrain – the existing conditions – across the Velomont corridor of opportunity. The elements that should be considered in this project are divided into three categories:



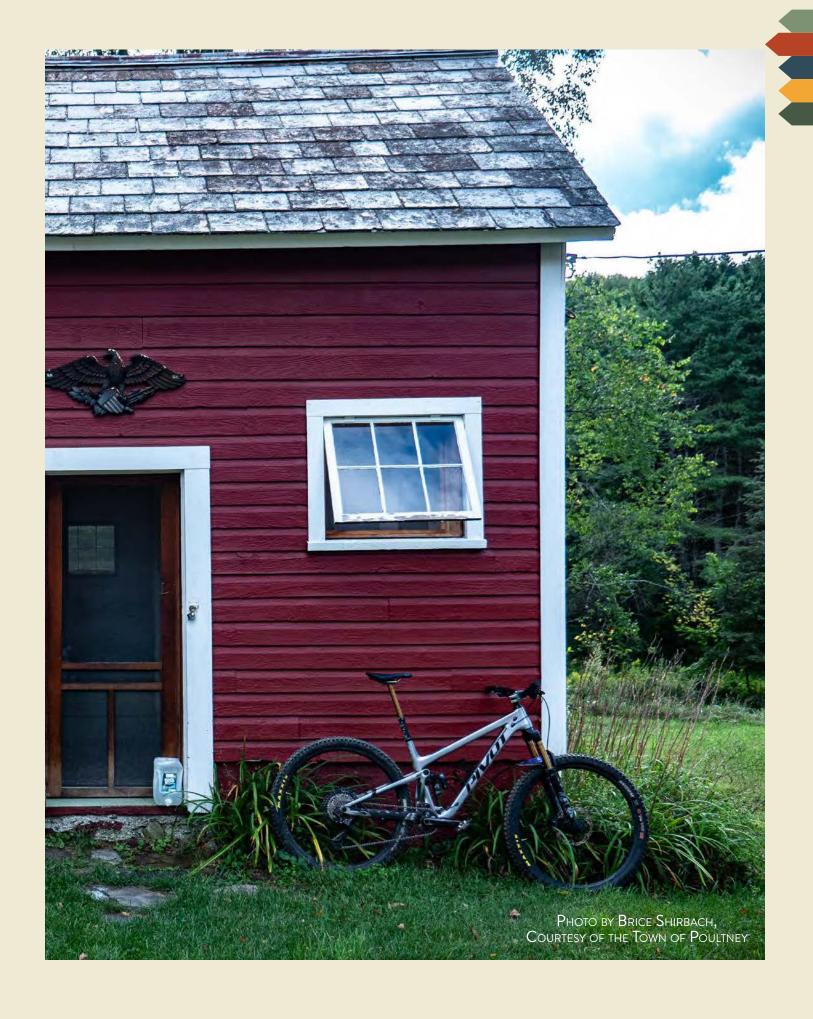
Physical Terrain focuses on the physical landscape considerations as the corridor moves between small downtowns to historic farmlands or backcountry hardwood forests, and how the trail interfaces with each area.



Environmental Terrain identifies environmental factors to be considered through the trail planning process to ensure the Velomont is designed to mitigate, to the greatest extent possible, any impacts to the natural environment it traverses.



Social Terrain identifies existing recreation facilities, public and private land ownership patterns, and direct community input that must be considered when planning future portions of the Velomont. This segment identifies landowner and land manager specific planning and processes to be adhered to as minimum standards for the Velomont.





PHYSICAL TERRAIN

The Velomont will cross numerous ecosystems and built landscapes. It will lead explorers out from a morning at the village hostel and café, onto paved roads transitioning to gravel roads winding past farms. Seventy percent of the trail is intended to transition users off public roads onto singletrack trails built among the hardwood forests, hemlock and oak stands, and over rugged backcountry terrain to a night in a hut to recharge for the next day's adventure. In between, paved bike paths and public roadways connect singletrack to singletrack and hut to hut.

Across each of these landscapes (town, farm, forest) the Velomont should blend into its surrounding context. In places, the Velomont will share an old road corridor marked by wayfinding markers. In other places, it will utilize a shared-use trail in a town forest. And elsewhere, it will be a brand new trail segment that provides all ages and abilities access between a town center and a backcountry hut. Each of these segments must be context-sensitive and physically sustainable.

EXISTING COMMUNITY RECREATION RESOURCES

Vermont's outdoor recreation resources are a core component of the state economy and are managed by a collaborative network of volunteers, state agencies, municipalities, and non-profits. The Velomont will connect existing trails, trailheads, routes, and town centers as the Velomont vision is achieved. This portion of the document identifies important 'dots' to be connected as part of the broader Velomont vision.

Existing Trail Network

Vermont is home to over 7,700 miles of trails. The Velomont offers an approach to create a state wide trail network supported by a collective of trail stewards bringing benefits to communities across the state.

Existing & Planned Huts and Hostels

The Velomont Trail is inseparable from its hut network. Nights in the backcountry are made vastly more accessible to all ages and abilities by the provision of thoughtfully located off-grid huts. Currently, 15 huts and yurts are established across the state, adjacent to the Velomont, Catamount, and other existing trail systems. Expansion of these huts along with an interconnected trail network will boost hut accessibility and create an unparalleled long-distance trail experience in Vermont.







BUTTERNUT CABIN

Chittenden Brook Hut





GALE'S RETREAT

GROUT POND





Merck Forest and Farmland Center

Nulhegan Confluence Hut



BOLTON LODGE



BRYANT CAMP



CROW'S NEST YURT



DARK STAR CABIN



HADSEL-MARES CAMP



Merck Forest and Farmland Center



TRIPLE CREEK CABIN



Spikehorn Yurt

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Velomont Vision Plan

PHYSICAL TRAIL SUSTAINABILITY

It takes years of planning, permitting, and fundraising to build a simple mile of natural surface trail. Each foot of the Velomont that is built as a new trail, or restoration of an existing corridor, should be designed to create a resource that is low maintenance and high value. The guiding principles of sustainable natural surface trail design have been identified by numerous organizations and agencies, including the US Forest Service (USFS), Bureau of Land Management (BLM), Vermont Agency of Natural Resources (ANR), and International Mountain Bike Association (IMBA), among others. A full list of trail design guidelines and Velomont Trails standards can be found in Chapter 4: The Design.

By following the guidance of these established publications, the Velomont planners and trail designers will ensure that the Velomont enjoys the most sustainable alignments possible. But it is crucial that slope and hydrology are not the only considerations given to siting a trail - habitat impacts and other factors are equally important to consider and are discussed in depth in the environmental terrain segment of this chapter. A core guidance document to identify and specify trail construction best practices specifically for Vermont and the Northeast broadly is currently being drafted by the Vermont Mountain Bike Association. This upcoming VMBA Trail Best Management Practice document will provide additional clarity and guidance for trail developed or improved as part of the Velomont system.

Towns Along the Velomont

This table identifies the Vermont, New York, and Massachusetts communities where a Velomont corridor is being built, permitted, or planned. The table identifies specific communities whose town centers will be adjacent to, or upon the Velomont Corridor, and those whose lands could be part of a future connected corridor. Communities north of St. Johnsbury have not been identified in this table due to the need for additional planning in the Northeast Kingdom to better determine a future Velomont Route. Towns and local advocates in the Northeast Kingdom are encouraged to collaborate with The Velomont Collective to help identify a route in their backyards.

Town Name	Velomont Corridor Crosses Town Lines	Town Center On or Adjacent to Velomont Corridor
Bethel	X	
Bolton	X	
Braintree	X	X
Cabot	X	
Chittenden	X	
Danville	X	X
Dorset	X	X
Dover	X	X
Duxbury	X	
Fayston	X	
Greensboro	X	X
Hancock	X	
Hardwick	X	X
Hinesburg	X	
Huntington	X	
Hyde Park	X	X
Ira	X	
Johnson	X	X
Killington	X	X
Landgrove	X	
Mendon	X	X
Morristown	X	X
Mount Tabor	X	
Pawlet	X	X
Peru	X	

Town Name	Town Land In Velomont Corridor	Town Center On or Adjacent to Velomont Corridor
Pittsfield	X	X
Poultney	X	X
Proctor	X	X
Randolph	X	X
Readsboro	X	X
Rochester	X	X
Roxbury	X	
Richmond	X	X
Rupert	X	
Rutland City	X	X
Rutland Town	X	X
Saint Johnsbury	X	X
Searsburg	X	
Somerset	X	
Stannard	X	
Stockbridge	X	
Stowe	X	X
Stratton	X	
Walden	X	X
Warren	X	X
Waitsfield	X	X
Waterbury	X	
Wells	X	X
West Rutland	X	X
Weston	X	
Whitingham	X	
Wilmington	X	X
Winhall	X	
Wolcott	X	X
Granville -NY	X	X
Rowe - MA	X	X
Charlemont - MA	X	X



ENVIRONMENTAL TERRAIN

The Velomont will eventually connect 27 communities across a wide range of natural landscapes. When new segments are being proposed, Velomont planners will follow best practices to identify corridors that minimize impact on important natural and cultural resources.

What follows is an environmentally conscious trail planning checklist. It is meant to provide a high-level overview of the detailed environmental review that will come at each stage of the planning, permitting, and construction process for new portions of the Velomont.

VELOMONT ENVIRONMENTAL RESPONSIBILITY CHECKLIST

When planning, proposing, or building any new segment of the Velomont, a thorough environmental review will ensure that proposed corridors and final adopted segments of the Velomont protect and preserve the ecological functions of Vermont's natural landscape.

The following checklist represents a core set of considerations to be taken into account at each stage of the trails planning process. This list has been adopted from <u>Vermont Town</u> <u>Forest Recreation Planning: Natural Resource</u> <u>Guide</u> which provides additional detail.

When planning new segments of the Velomont, many of these environmental checklists can be reviewed from two webmaps published by the Vermont Agency of Natural Resources: BioFinder and the ANR Natural Resources Atlas. The Biofinder site is more specifically focused on flora and fauna and related features – whereas the ANR Atlas has a more comprehensive list of permits, hazardous waste sites, and more. These webmaps and their associated layers should be the first stop as trail proposals are being developed. These datasets and their respective web services can also be sourced from the Vermont Center for Geographic Information (VCGI).

All these online resources, and the environmental elements they represent, are for planning purposes only, to inform a trail corridor proposal. Their level of detail is only approximate, and site visits and ground delineation will be needed in addition to these resources to build final trail alignments in many cases.



Vernal Pools

Trails should not be built within 100 feet of Vernal Pools to help protect the amphibian population, which relies on these resources for reproduction and nurseries every spring. When siting trails less than 600 feet from Vernal Pools, care should be given to sight lines to help protect these temporal wetlands from curiosity-driven impact from hikers, bikers, and their pets. Mapped Vernal Pools are documented in the ANR Atlas and BioFinder – but it should be recognized that unmapped vernal pools can be prevalent in numerous landscapes.

Soils

Recreational trails are built sustainably on a wide variety of soil types - but each comes with its own specific considerations. A key soil type to avoid when possible are hydric soils, which are closely associated with wetlands and may indicate the presence of wetlands during certain parts of the year. The ANR Atlas contains a hydric soils layer that highlights areas that would be less suitable for trails.



Cultural Resources

The Velomont seeks to honor the legacy of Vermont's indigenous people who have long cared for this land and continue to do so. Future trail planning should seek to identify and protect the cultural and historic resources of the indigenous people and colonial settlers who have come before us. During the planning and permitting stages of the Velomont's development, historians and cultural resource specialists should be consulted for the review of any project on public lands to ensure that trail routing protects and preserves sensitive cultural resources. A starting point for understanding these resources begins with consulting the Vermont Division of Historic Preservation.



Lakes & Ponds

Lakes and Ponds are destinations for many types of recreation. Because of the sensitivity of these systems, extra care must be taken in planning and managing trails near lakes and ponds. Strategies like building spur trails to viewpoints lessen impacts while maintaining high-quality recreation opportunities.

State Significant Natural Communities

Specific groupings of plant, animal, and soil types are seen across Vermont. Each creates its own unique ecosystem and interdependencies between plants, animals, soil, and water. These communities are recognized by Vermont's Agency of Natural Resources on a 5-point scale with "S1" being the rarest type of natural community (Alpine Meadows), and "S5" being the most common (Northern Hardwood Forest). Those communities that are both rare and in good condition are considered "significant natural communities." Natural communities recognized as rare and/or in good condition should be avoided for future trail development or expansion whenever possible. Additional information on Significant Natural Communities can be found at Vermont Fish and Wildlife's website. Natural Community GIS layers are available through VCGI, BioFinder, and ANR Atlas.



Mast Stands

Mast stands are specific areas in the forest that provide crucial feeding grounds for bears, deer, turkey, and numerous other wildlife species. If areas of mast stand are identified when designing the Velomont trail, they should be assessed for quality and extent. The trail should be designed to minimize impact to these important wildlife areas wherever possible. These areas are best identified through site visits and specialist reviews.



Rare, Threatened, or Endangered Species

Recreational trails should seek to avoid impacts on rare, threatened, or endangered (RTE) species. If future planning of the Velomont encounters known RTE species habitat along an identified future trail corridor, consultations with qualified biologists at the Vermont Agency of Natural Resources should be sought to help trail proposals to avoid impact on these species. Rare and Uncommon Species records are identified in BioFinder.

Wetlands

Recreational trails should maintain an appropriate buffer from wetlands across the state. Even while maintaining an appropriate buffer from known wetlands, care should be taken in trail construction to avoid altering natural hydrology that supports existing wetlands. Numerous federal and state laws and permits govern wetland permitting and specific buffer requirements as they relate to trails. Some recreational trails may be built adjacent to and/or through certain wetlands, but trail planners must be prepared for a highly regulated and complex process to build trails that will avoid creating impacts to these important natural features. These areas are coarsely identified in both the BioFinder and ANR Atlas. Additional guidance is available through the Vermont Department of Environmental Conservation's Wetlands Program documentation of **Recreational Trail** Building and Wetlands.



Recreational trails should maintain a buffer from ledge, cliff , or talus areas that are larger than just boulder outcroppings, but create their own landforms. These unique micro landscapes of vertical granite or other stone outcroppings in Vermont forests provide important habitat for unique plant species and wildlife, including peregrine falcons, coyotes, and fishers. Spur trails to these locations, rather than trails along cliff edges, may be a more suitable trail alignment strategy. These areas are best identified through site visits.



Interior Forests

Interior forests are recognized swaths of forest in Vermont that have been minimally impacted by human activities. Limited recreational trail development in these areas may be considered. For example, multi-trail 'networks' are not recommended, while a single connecting trail could be considered, particularly as it could be built towards the edge of these undisturbed blocks. These layers are available in both the BioFinder and ANR Atlas.

Streams/Rivers

Stream crossings are a necessary feature of any long distance trail, but should be kept to a minimum as much as possible. The location where any recreational trail crosses a stream or river should be a very well-considered choice – not just a convenient point on a map. Well-considered stream crossings can accommodate wildlife movement and minimize habitat fragmentation. Stream crossings should be designed to minimize impacts on the existing course, current, and cross-section of the natural stream channel. Key considerations include:

- Crossings should be built perpendicular to the channel and span the channel's entire width. Bridges are recommended over culverts whenever new construction is proposed.
- A 25-100 foot riparian buffer should be included in proposed stream or river crossings. Only minimal needed vegetative clearing should occur within these riparian buffers.
- Stream crossings of a particular trail corridor should be kept to a minimum.

Deer Wintering Areas

Where possible, recreational trails should maintain a 300 foot buffer from deer wintering areas, or maintain strict closures during winter months. Trail users spooking deer during winter months cause the deer to expend additional energy that compromises their ability to survive until spring. These areas are coarsely identified in the ANR Atlas.



SOCIAL TERRAIN

Social terrain refers to how people own, manage, and operate the land. In this portion of the document, the land ownership patterns will play an important role in realizing the Velomont Vision. This portion of the document is organized into three segments:

Community Conversations: Themes and highlights from the public discussions regarding the Velomont conducted as part of this project.

Public Lands: Illustration and outline of the public land management agencies consulted as part of this project and the process by which The Velomont Collective should continue to collaborate with these agencies to ensure ongoing success.

Private Lands: Discussion of the sensitive relationship between private lands and public trails, and the demonstrated success of Velomont on private lands.

COMMUNITY CONVERSATIONS

This project included a broad public engagement including a Visioning Survey and five Open Houses held across the Velomont Corridor of Opportunity. This engagement process:

- Assessed public opinion on the values of the Velomont concept (Connectivity, Supporting Economic Vitality in Vermont Downtowns, Accessibility & Access to the Outdoors, Conservation, Increasing Local Quality of Life).
- Gathered input from a variety of individuals, including Vermont residents and potential new users/visitors
- Gauged interest in the hut system and overnight accommodations
- Provided insight regarding the ways potential trail and hut users would like the Velomont concept to integrate stewardship and conservation with recreation.









Key takeaways from this process include:

1. Respondents support the overall concept of the trail and five core elements (Connectivity, Supporting Economic Vitality in Vermont Downtowns, Accessibility & Access to the Outdoors, Conservation, Increasing Local Quality of Life). Over 70% of Open House participants indicated that each vision element was "very well aligned" with their desired vision for the Velomont.

2. The engagement effort reached many different user groups. About 90% of open house participants were mountain bikers and/ or hikers/walkers, and 70% were backcountry skiers. 90% of survey respondents were hikers/ walkers, 75% were mountain bikers, and about 60% were Nordic/XC skiers.

3. There is strong interest in using the new hut network associated with the Velomont.

Just under 40% of Open House participants currently use backcountry huts/cabins, and almost 90% of participants indicated that they would use the Velomont hut network.









PUBLIC COMMENT THEMES

ENCOURAGE ECONOMIC DEVELOPMENT

Mitigate Gentrification (Tourists Pricing Out Locals) Focus On More Than Just Tourism Opportunities

SUPPORT COMMUNITY CONNECTIVITY

Link To Existing Trail Networks

Connect The Velomont To Local Schools And Community Assets

BUILD AN INCLUSIVE RESOURCE

Make Velomont Accessible To A Variety Of Income Levels Providing Excellent Wayfinding And Trail Information

MITIGATE USER CONFLICTS

pop Trails (Not Just it-And-Back) Avoid Impacts To Hunting Resources

PROTECT NATURAL RESOURCES

Prioritize Conservation Education

Avoid Overcrowding Issues On Trails

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PUBLIC LAND PLANNING

14.4% of the state's land is public - either federal or state ownership (not including town owned parcels). This percentage of land represents some of the largest contiguous and undeveloped parcels in the state and some of the Northeast's most important ecosystems and recreational areas. The Velomont supports numerous public land management goals and objectives related to both conservation and recreation. These alignments are summarized by the land management agency below.

Green Mountain National **Forest Plans**

The Green Mountain National Forest Plan was developed in 2006 and identifies a variety of resource management goals for the

400,000 acres of Green Mountain National Forest (GMNF) throughout Vermont. As noted in the plan, the GMNF includes multiple long-distance trails, including the Appalachian National Scenic Trail, the Long Trail, and the Catamount Trail. The 2006 Forest Plan broadly supports backcountry trail uses like the Velomont, that will enable Vermont residents and visitors to access and enjoy the GMNF on sustainably built trails. The GMNF prohibits new recreation facilities, such as huts, in certain forest management areas such as federally designated Wilderness areas. Mountain bike use of trails in Wilderness areas of the forest is similarly prohibited. Additional in-depth analysis will be required to ensure the Velomont's compatibility with the Recreation-**Opportunity Spectrum designations for** different portions of the trail.

Alignment of GMNF 2006 Plan with the Velomont

GMNF 2006 Plan Text

The Forest Service will manage the Green Mountain National Forest for multiple uses.

Our recreation niche will focus on the fact that the GMNF's large, contiguous blocks of land are well su to trail-based activities in backcountry settings. The remote nature of much of this land makes Wilderne a special role the GMNF will serve to play. Working partnership with many organizations will continue t a hallmark of how the Forest Service provides recrea opportunities to the public.

Goal 12: Provide a diverse range of high-quality, sustainable recreation opportunities that compleme those provided off National Forest System lands.

Complete comprehensive trail planning for 100 percent of the Forest

Guideline 4: Multiple use trails should be emphasized over single use trails where the uses are compatible;

Guideline 5: Multiple use recreation trails should be designed and maintained to adequately and safely accommodate the most demanding or impacting typ use allowed.

Recreation Standard:

• S-1: New recreation facilities (huts, cabins, shel tent platforms, and associated structures) shall prohibited [in remote wildlife habitat managem area 6.3]

	How the Velomont Supports this Goal				
n	The Velomont is envisioned as a multi-use recreational trail that will traverse sections of the GMNF.				
uited e ess g in co be ation	The Velomont will provide a venue for trail-based activities in backcountry settings. As described above in the "Trail Partners" section, the Velomont also embraces the prospect of collaboration and partnership between The Velomont Collective and the GMNF.				
ent	The Velomont will connect existing trail segments within and adjacent to National Forest lands, helping to increase the Forest's variety of excellent recreation opportunities and complement the existing recreation offering outside the GMNF. The Velomont trail planning effort also supports the Forest Plan's goal of completing comprehensive trail planning for the entire GMNF.				
red e pe of	The Velomont is envisioned as a multi-use trail that will be built and maintained to accommodate a range of users, including hikers, walkers, and mountain bikers.				
lters, be vent	The Velomont should not pursue hut development in remote wildlife habitat areas of GMNF				



Vermont Agency of Natural Resources (ANR) Plans

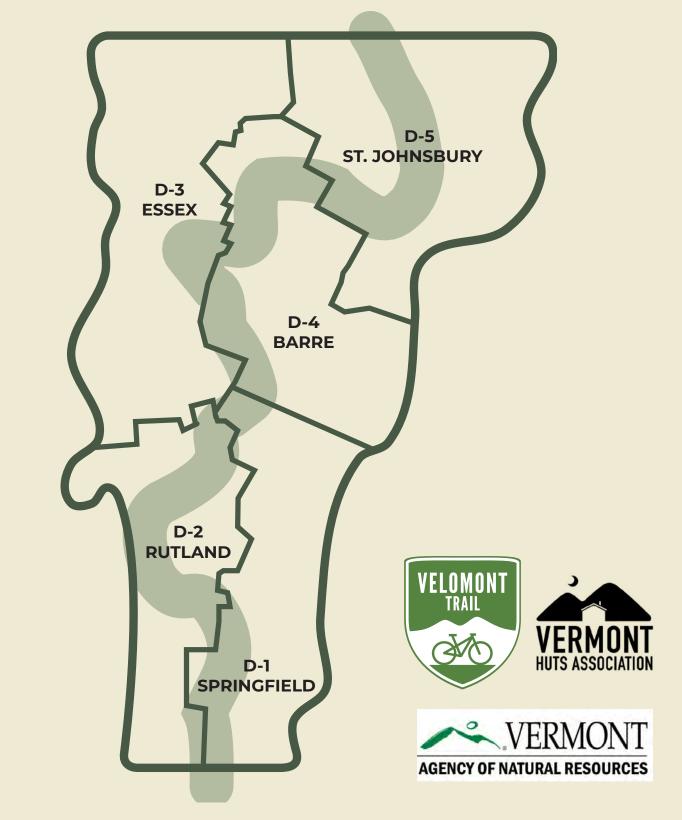
The Vermont Agency of Natural Resources is charged with oversight and management of Vermont's Natural environment on behalf of the people of Vermont. This agency includes three departments:

- Vermont Department of Forests, Parks and Recreation (FPR): Responsible for the conservation and management of Vermont's forest resources, the operation and maintenance of the State Park and State Forest systems, and the promotion and support of outdoor recreation for Vermonters and our visitors. In addition, FPR is responsible for the acquisition, planning coordination, and administration of all Agency of Natural Resources lands.
- Department of Fish and Wildlife Department (F&W): The department's mission is the conservation of fish, wildlife and plants and their habitats for the people of Vermont.
- Vermont Department of Environmental Conservation (DEC): While the DEC issues most of the state's environmental permits, the Department does more than just set forth regulations and assure compliance. Through its programs, the DEC manages water and air quality, regulates solid and hazardous wastes, and administers a number of voluntary pollution and waste reduction programs.

The Agency's planning can be seen at two levels: Statewide Planning, covering broad goals and missions statewide, and Management Unit planning, which focuses on decision making or specific land management units. Statewide planning goals broadly support the establishment of the Velomont trail, as outlined in the summary of both the 2017 Forest Action Plan and 2019-2023 Statewide Comprehensive Outdoor Recreation Plan (SCORP). District Stewardship Teams (DST), based in regional offices across the state, develop Long Range Management Plans for the management units in their districts and consider proposals for new recreation projects that align with the management plans. The DSTs are often referenced as specific numbers: D-1 Springfield, D-2 Rutland, D-3 Essex, D-4 Barre, D-5 St. Johnsbury.

Each DST includes resource experts from across the Agency of Natural Resources and is responsible for developing Long Range Management Plans and Annual Stewardship Plans for state-owned lands within their district, including State Parks, State Forests, and Wildlife Management Areas, among other holdings. DSTs are also responsible for developing annual work plans, and reviewing proposed new acquisitions. The following portion of the document outlines broad and specific planning guidance from ANR regarding state lands as a whole, as well as specific management unit guidance.

Velomont Corridor of Opportunity Overlaid with ANR District Stewardship Team Boundaries







Statewide Planning Documents

This segment illustrates the alignment of the Velomont Trail with statewide planning documents produced by FPR – the 2017 Forest Action Plan and the <u>2019-2023</u> <u>SCORP.</u> It is worth noting that FPR is currently updating the SCORP but the 2024-2029 SCORP findings are not yet available.

<u>The 2017 Forest Action Plan</u> developed by the Department of Forests, Parks, and Recreation (FPR) is a plan for Vermont's state forests that provides five Desired Future Conditions for the forest system. As noted in the plan's assessment of Forest-Based Recreation, "Recreational trails are integral to public health, providing a wide variety of recreational opportunities for people to get outdoors and connect to Vermont's scenic and working landscapes." The Velomont trail will help connect Vermont communities and visitors through a world-class, sustainably built trail system that will traverse many types of Vermont landscapes.

Alignment of 2017 Forest Action Plan with the Velomont

Plan Text	How the Velomont Supports this Goal
Forest Based Recreation Assessment:	
• Public land managers are finding it difficult to maintain recreational trails and structures due to increased and diversified use. Vermont has a tradition of working with non-profit partners and the volunteer clubs and chapters that they support to meet the challenge of providing outdoor recreation opportunities in a resource scare environment [sic].	The Velomont Trail will continue the tradition of partnership between FPR and organizations such as VAST, VMBA, and the CTA. The Velomont's sustainable construction and thoughtful design will aim to minimize future maintenance needs.
 Goal 8: Maintain and Enhance the Full Spectrum of Forest-Based Recreational and Tourism Opportunities. Strategy 34: Build partnerships to support sustainable forest-based recreation and tourism, including new forms of recreation. Strategy 35: Work with community groups and landowners to provide access to a well-maintained trail network for appropriate forest-based recreation. 	The Velomont Trail concept is centered on partnerships between public lands managers, community groups, and trail organizations. The trail also supports many different forms of trail-based recreation.

Alignment of 2019-2023 VT SCORP with the Velomont

Plan Text

Priority 1: Stewardship of Natural Resources and Recreational Areas

- Objective 1: Support ecological integrity, conservation goals, and environmental quality i recreation planning and management
- Objective 2: Manage recreational assets and resources
- Objective 3: Cultivate political and public support for funding new and existing recreation and conservation efforts

Priority 3: Public Participation and Access for All

- Objective 1: Provide resources to Vermont's outdoor recreation organizations to implement diversity and equity strategies to meet the need of all Vermonters and visitors
- Objective 4: Provide support and remove barrie to private landowners hosting public recreation access and/or amenities such as trails on their lands

Priority 4: Community Connections, Health, and Wellness

- Objective 1: Enhance opportunities for community health and wellness through outdoo recreation
- Objective 2: Strengthen livability of communities through outdoor recreation

Priority 5: Economic Vitality and Tourism

• Objective 2: Provide professional support to regional and statewide outdoor recreation initiatives

	How the Velomont Supports this Goal
n	As described in the Environmental Terrain section, the Velomont trail will be designed and constructed based on a rigorous environmental review process. The trail brings together the goals of expanding both conservation and recreation access by utilizing existing trail segments whenever possible.
s	New portions of the Velomont trail and hut network will be built as all abilities accessible trails where feasible. As a trail network that will traverse public and private lands, the Velomont expands access to recreation on private lands and aligns with Objective 4.
ər	The Velomont Corridor will connect 27 communities via a premier long-distance trail. This will expand access to relevant health and wellness benefits associated with getting outside and enjoying the outdoors.
	When complete, the Velomont is estimated to generate \$31M in total spending across all sectors. As a statewide recreation initiative with strong economic potential, the Velomont deserves support and assistance.



Management Unit Planning

The following table highlights key state holdings that could intersect a future Velomont corridor and their current Long Range Management Plans.

This table is limited to those state-managed lands which lie directly on or adjacent to the

Velomont Corridor of Opportunity.

This table serves as an at-a-glance summary of dedicated meetings between the Velomont Collective and Vermont ANR District Stewardship Teams. See the full District Stewardship Team (DST) meeting notes in the appendix for formal detail.

DST	State Lands	LRMP status	Velomont / DST Meeting Highlights	
1- Springfield	Okemo State Forest	Update Underway	High value wildlife corridor - passage on established forest highway could need an amendment to LRMP. Geography is outside of Velomont Corridor of Opportunity.	
2- Rutland	Riley Bostwick Wildlife Management Area	1986	Velomont currently using existing trail within this WMA	
	Emerald Lake State Park	1996	Velomont access suitable on existing forest roads. New trail access would require update to LRMP - avoid center of park/campsites to minimize user conflict.	
	Gifford Woods State Park	Unknown	Mountain Bike Trails exist in park. Parking / Access issues a concern.	
	Birdseye Wildlife Management Area	Update Underway	Birdseye Road, rather than Ira Birdseye Road suggested by DST for improved alignment & experience.	
	Rupert State Forest	n/a	Could support Velomont connectivity between Merck Forest and NATS Trails in Dorset	
3- Essex	Camel's Hump Management Unit	2021	A proposed Velomont corridor is identified along the VAST corridor on the eastern side of Camels Hump State Park and two proposed hut locations are noted in the current LRMP. The DST expressed concerns about Velomont use of other areas of this unit such as Phen Basin, Catamount Trail, or Huntington Gap. See DST notes for details.	

DST	State Lands	LRMP status	Velomont / DST Meeting Highlights	
4-Barre	Mt. Mansfield State Forest	2002 (update anticipated by 2034)	Cotton Brook Trail in Little River State Park and Mt. Mansfield State Forest is already open for biking and could host a Velomont co-location with review by the DST. The northeast section of MMSF could be considered for hosting the Velomont trail with ANR review and an update to the LRMP.	
	Roxbury State Forest	1988 (Update anticipated ~2026)	Minimal developed recreational facilities exist here. Cram hill section could be considered, utilizing VAST corridor.	
	Little River State Park		Cotton Brook a good choice for future co-location and Velomont anchor point. DST suggests low-elevation connections to Driving Range & sensitivity to wildlife crossings in this area.	
5- St. Johnsbury	Groton Management Unit	2008	Groton State Forest recommended as opportunity for Velomont due to existing Wells River Trail and potential lodging expansion opportunities. Note location outside of Corridor of Opportunity.	
	Lyndon State Forest		Already hosts mountain bike trails – could be a connection point	
	Kingdom Heritage Lands	n/a	FPR owns the public access easement to the Kingdom Heritage Lands. All trail development must be managed through a Corridor Management Plan with a recreation partner. Currently, there is not a Corridor Management Plan for bike trails.	

Given broad support in state level plans for a project like the Velomont, future planning efforts should prioritize LRMP updates for land management units with outdated plans throughout the Velomont Corridor of Opportunity. Velomont Trail Collaborative and public engagement in LRMP update processes will be important.

A full summary of Velomont Specific DST meetings for each region are included in the appendix of this document and provide additional detail and clarity not captured here.

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VTrans Planning

The 2021 Bicycle Pedestrian Strategic Plan is a guiding document for the Vermont Agency of Transportation. The plan vision is as follows: "The needs of people walking and bicycling of all ages and abilities will be considered in all VTrans activities. VTrans staff will continue to work collaboratively internally and with external partners to improve safety, connectivity, and access to promote walking and bicycling."

Alignment of 2021 VTrans Bicycle Pedestrian Strategic Plan with the Velomont

Plan Text	How the Velomont Supports this Goal
Fund, promote, and implement appropriate infrastructure to encourage people to walk or bike.	The Velomont, as a trail network designed to connect community resources and expand opportunities walking and biking, represents an ideal way to support this objective.
Prioritize network improvements which emphasize safety as well as stimulate outdoor recreation, environmental benefits, tourism, economic growth, productivity, and competitiveness for Vermont businesses.	The Velomont will expand access to outdoor recreation for 27 communities within the Velomont Corridor. Sections of the Velomont are envisioned to include the Lamoille Valley Rail Trail and other state-owned trail resources.

Municipal and Regional Plans

This project directly supports stated goals in many regional and municipal plans. A few are highlighted in the following table.

Alignment of the Velomont with Regional & Municipal Plans

Plan Name	Plan Text	How the Velomont Supports this Goal
<u>Rutland</u> <u>Regional Plan</u> (2018)	Goal: Support connectivity between trails throughout the Region. The plan also highlights that bike and pedestrian trails are an unmet need for municipalities in the region.	The Velomont will link together multiple trail systems and communities in the Rutland area.
<u>Two Rivers</u> Ottauquechee <u>Regional</u> <u>Commission</u> <u>Regional Plan</u> (2020)	TRORC supports the development of transportation infrastructure that improves public access to noncommercial outdoor recreational opportunities. For example, TRORC has assisted with planning efforts for the proposed Velomont Trail, a multi-use 130-mile mountain bike trail along the Green Mountains through the entire state.	The Velomont is explicitly called out as a kind of transportation infrastructure that expands access to noncommercial outdoor recreation opportunities.
<u>MRV Moves</u> (2016)	The Mad River Valley (MRV) Moves Active Transportation Planenvisions a consistent, cohesive and connected regional system of trails, roads and sidewalks that provide a range of transportation options and recreational experiences for diverse user groups in the Mad River Valley (MRV), all while connecting users to the natural landscape and respecting the resources that make the valley so special. It is important for the Valley to be creating a connected network that allows walking, bicycling or other means of generally non-motorized movement as a means of accessing the facilities and moving between them.	The Velomont helps achieve the "cohesive and connected" trail system envisioned for the Mad River Valley. Importantly, the Velomont also fulfills the goal of "connecting users to the natural landscape and respecting the resources that make the valley so special."



PUBLIC LANDS PROCESS

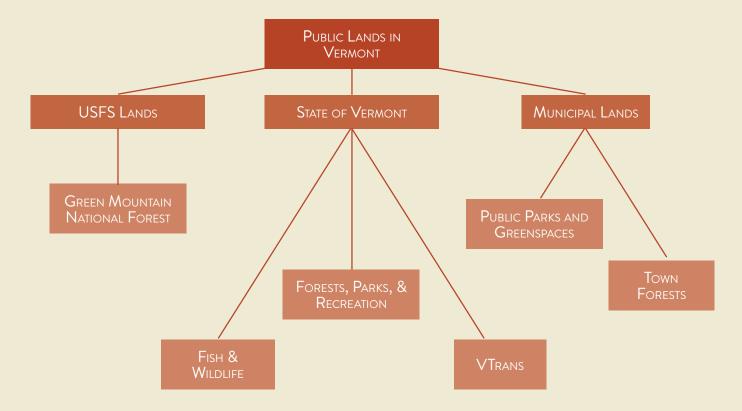
All decisions on public lands, from a state highway to a national forest, require a detailed series of planning and permitting steps. It is beyond the scope of this document to identify each and every one of them, but a general outline of the framework and process are included here to support the planning and permitting process of the Velomont through state and federally managed lands.

Public Lands Trail/Hut Approval Process

Permitting is an important part of the development of any large recreational amenity. This section summarizes the permitting process for trails and huts on public lands in Vermont. In this section, you will find step-by-step guides to the permitting process with different public lands managers, as well as suggestions for ways to use this Master Plan document to support your permit application.

About Public Lands

There are several types of lands owned/ managed for public benefit - these include federal, state, and municipal lands, as well as privately conserved parcels. The <u>ANR</u> <u>Atlas</u> shows public lands in Vermont and the departments of the Agency of Natural Resources (ANR) that manage them. <u>This</u> <u>series of maps</u> shows management for 10 different subareas of the state. These maps also show some other public lands that are not managed by ANR, including U.S. Fish and Wildlife and National Forest lands.



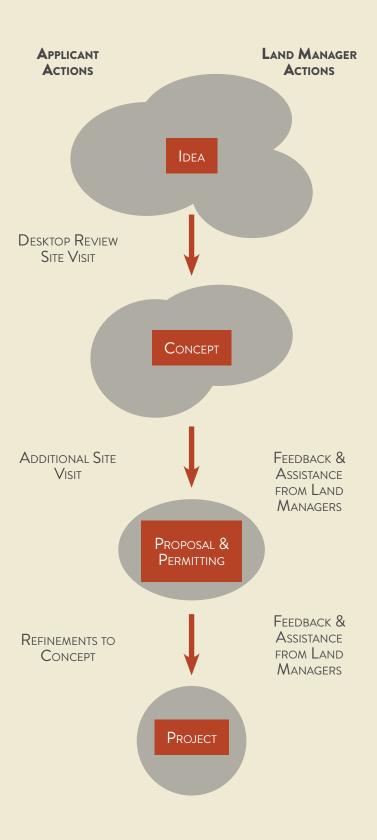
The graphic on the facing page shows the various types of public lands, which include federally managed lands (the Green Mountain National Forest), state lands, and municipally managed lands. There are three main types of state lands that are implicated for the Velomont project: transportation corridors managed by VTrans, lands managed by Forests, Parks, & Recreation, and additional lands managed by Fish & Wildlife.

In this document, GMNF process (federal), ANR process (state lands) and VTrans Process (state roads) are discussed separately.

Project Approval Overview

The graphic on this page provides a simplified overview of steps for permitting a trail and/or hut on state lands. The specific process may vary from project to project, and permitting processes may take significant amounts of time.

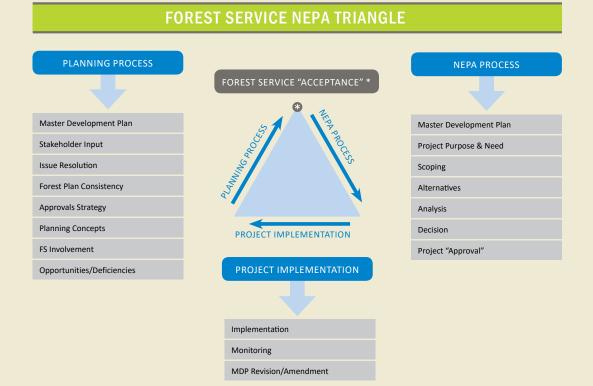
Note: If projects span multiple types of public lands, separate approvals will be needed from each land manager unless specific guidance is given otherwise from relevant public land managers.



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Green Mountain National Forest Process

Velomont will continue its partnership with the Green Mountain National Forest, and maintain consistent meeting schedule to ensure that projects such as the Telephone Gap Integrated Resource Plan, which include developing portions of the Velomont are developed successfully. Once segments of the Velomont are complete on lands within the Green Mountain National Forest, they will continue to be monitored and stewarded by local trail partners, such as the Killington Mountain Bike Club and other VMBA Chapters, as well as Federal Land Managers. As existing Velomont trail segments age, and new portions of Velomont trail are identified on Federal land, it is anticipated that the planning, permitting, design, and monitoring process for these corridors will follow a standard USFS NEPA process. Planning as the first phase, that includes public input and a step by step Forest approval process for multiple rounds of feedback, moving then to a NEPA process which allows for more detailed review of proposed corridors, refinement, and final decision making, and finally implementation, which includes monitoring of resources to make any changes needed as resources age and use patterns change. This process is illustrated in the flowchart below.





State Lands Process

Detailed, individual guides for state lands processes relevant to specific agencies and departments are included in the <u>appendix</u>.



Public Roads Processes

The Velomont is envisioned to be established as a 70% a natural surface, singletrack trail experience. Despite that vision for the majority of the trail, it will have to use public roadways to connect with the Town and Village Centers along the way, or when the 'off-road' connection has yet to be permitted or built.

When considering the Velomont's alignment on any stretch of public roadway, the primary goal is user safety. It should also be recognized that state highway decisionmaking is a complicated and nuanced process. When considering a request to the Vermont Transportation Agency (VTrans), Velomont planners and advocates should be prepared for a significant amount of work involved in meeting VTrans requirements and permitting. The following principles should guide alignments on public roads:

Prioritize Low-Stress Roadways:

Wherever possible, the Velomont should co-locate on roads that have speed limits under 35mph, average daily traffic counts of under 1000, and/or those that maintain separate or dedicated bike lanes, sidewalks, or shoulders. There may be cases in which higher speed and volume roads are unavoidable – but in no situation should the Velomont attempt to access a limited-access road that currently prohibits bicycle and pedestrian traffic.

Utilize existing roads and access points:

Wherever possible, the trail should access a public road from an existing driveway, crossroad, or trail. Building a new trail to access a town or state highway will require coordination with the municipality or VTrans, respectively.

Understand right of way:

Every public roadway has a "right of way" which can be simply understood as the land that is under the control of the municipality or state agency maintaining the roadway. This right of way can be roughly interpreted by GIS data in a statewide parcel viewer, and this preliminary understanding of a 50', 70' or 100' width of the roadway is an important detail to understand. Actions within the right of way require permission from the town or state agency. Actions outside of the right of way require permission from that specific landowner. For state routes, any request to add wayfinding signage to the public right of way will begin with a 1111 permit.



Town 1st, State 2nd:

 Every public road in Vermont is maintained by either the Town or the State. Typically, the State maintains state and federal highways (VT 100, VT 9, US 7, etc.) and interstates, and a Municipality maintains its town roads. Before initiating a conversation with State engineers and planners, Velomont advocates should ensure that their proposal is supported by the town where the crossing or access would take place. Demonstrating Town support when approaching the state agency is an important step when seeking approval for any change.

Road Crossings Require Engagement and Guidance:

Any proposal for a new road crossing by the Velomont should align with the guidance provided in the <u>2019 VTrans</u> <u>Guidelines for Pedestrian Crossing</u> <u>Treatments (or most current version)</u>. As of 2024, The Velomont Collective is pursuing permitting for a trail segment on USFS land that will need to cross Vermont Route 9 at Woods Road and the Medburyville Bridge. This example is further illustrated in the appendix, and additional road crossing guidance is also discussed in the wayfinding portion of this document.

Rail Trails Processes

The Velomont has identified the Lamoille Valley Rail Trail and D&H Rail Trail as opportunities for co-location. No changes to the existing corridors are anticipated beyond the addition of approved wayfinding signage to recognize portions of a rail trail as the Velomont Corridor. The process and approach for approving co-location and wayfinding signage on these assets controlled by the Vermont Transportation Agency (VTrans) Rail Trail division will be through a formal use agreement and approval by the relevant rail trail council. The process for approval will require outreach and guidance from both VTrans Staff and Relevant Rail Trail Councils. Velomont will be required to enter into a license agreement with AOT for any areas of state-owned rail trails they intend to co-locate upon. These license agreements will be a first step ahead of establishing physical wayfinding Contact information for the Rail Trail Division is included in the appendix. For a list of current Rail Trail Council contacts, contact VTrans Rail Trail Division.



PRIVATE LAND PROCESS

The generosity of private landowners to the recreation community in Vermont can not be understated. Over 70% of public access trails in Vermont are hosted by private landowners.¹ Yet nonetheless, public recreation on private lands is a topic that must be approached sensitively. Some landowners have no interest in allowing for public trail access. But there are many examples where private lands and public access exist harmoniously. The 100+ mile trail network of Kingdom Trails is one of the most well-known private land supported trail networks in the country. Velomont has also benefited from landowner generosity, as portions of the current route above Rochester and Randolph are located on private lands.

The Velomont perspective is that any trail on private land is the landowner's trail first and foremost. Velomont has the privilege and opportunity to create or maintain an amazing recreational trail for the landowner's personal use - if the trail can be publicly accessible. Velomont will always seek to build trails on private land that suit the landowners needs, from a singletrack trail, to doubletrack suitable for driving a side-by-side or farm vehicle.

This plan does not try to identify specific private parcels that could be considered for future Velomont alignment because The Velomont Collective relies on a 'kitchen table first' approach when dealing with landowners. Before mapping, discussing, or proposing any trail in a formal document or public setting,

Vermont Trails and Greenway Council

the first step must be to sit in the kitchen with private landowners. When it comes to private land, these personal relationships must be built long before maps and plans. To reverse this order is to risk the opportunities of a private land alignment being closed for good.

It should be recognized that private landowner agreements exist on a spectrum some landowners will never feel comfortable with anything more than a verbal agreement, others will be willing to sign a 1, 5, or 10 year access agreement and a few who will go all the way with a full trail easement. And some landowners may be interested a conservation easement that includes a permanently preserved trail. While trail easements are the gold standard for the Velomont, VMBA has pioneered the development of 10-year Landowner Access Agreements. Developed in the mid 2010's, these 10-year agreements were the first to enable the receipt of public funds (RTP) for trail projects on private land. FPR also has their own 10-year agreements which can be reviewed for additional guidance. FPR requires all grant recipients to have a 5-year agreement for maintenance and small projects, a 10-year agreement for new trails and major projects, and a 25+ year agreement for permanent structures.

The maps included in this document help Velomont planners identify potential land owners to be contacted, and relationships must be identified and built in order to move towards easements or similar agreements on private land.

Easement Structure & Process

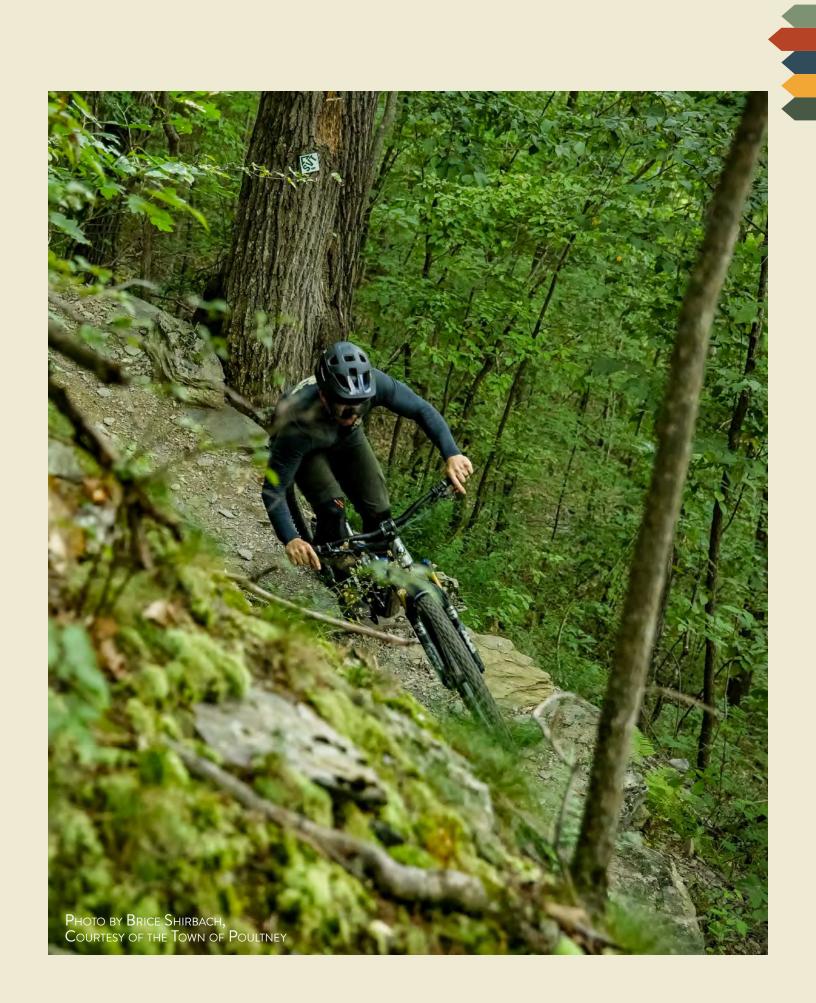
Velomont generally relies on the local Chapter or trail manager for all landowner agreements, from handshake approvals to formal easements. Where no existing VMBA Chapter or other Velomont Partner exists, it can be possible for Velomont to take on the typical Chapter role, though this option should be explored only as needed, as Chapters and other land managers bring a more direct local perspective to landowners rather than a statewide trail project.

Easements should be pursued where possible, and are the end goal for all sections of the Velomont. It is recognized, however, that even a donated easement will cost financial and time resources due to the land law requirements. Title searches, legal review, tax implications, and land record complexities add a need for professional support in any easement process. Where possible, Velomont will rely on partners, such as the Catamount Trail Association, to support the easement process due to their experience navigating these complexities.

Private Land Resources

Numerous resources are available online to facilitate ongoing, one-on-one conversations with private landowners regarding public trail access. These include:

- VT Recreational Use Statue State law that limits the liability any landowner has while persons utilize the land. This can still apply if a landowner is compensated for an easement or other agreement, but not if the landowner charges individual users for access.
- VMBA Landowner Guidance The VMBA Chapter resource library contains numerous guidance and reference documents that can support ongoing dialog with public landowners. These include:
 - o <u>Guidance for Chapters</u>
 - Cover Letter for Landowners
 - <u>Landowner Access Agreement</u> <u>Template</u>
 - <u>Sample Ridgeline & Catamount</u> <u>Trail Easements</u>





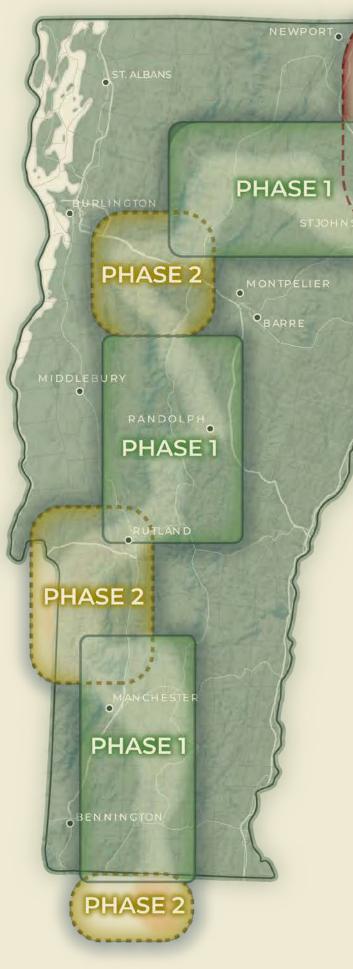
03. THE PLAN



VELOMONT PHASES

As of 2024, the Velomont Trail corridor can be divided into three distinct phases. Each phase is applied to one or more specific geographic areas.

- Phase 1: Permits are underway or ready to be pursued. Landowner agreements are being secure, and trail alignments have been reviewed on site. Phase 1 maps illustrate conceptual and existing Velomont Trail alignments. Built alignments for all conceptual segments will vary based on final permitting and site review.
- Phase 2: Initial planning discussions are underway. Trail corridor options have been identified, but no specific alignments established. Phase 2 maps identify potential areas that could 'host' the Velomont, but are not yet formally approved.
- Phase 3: Low-fidelity plan: No permits or exact corridors yet identified. Key connection points offer 'connect the dots' opportunities. Maps of Phase 3 zones illustrate key points of connectivity to be considered through future planning efforts. No specific alignments are identified for Phase 3 segments.









SECTION BY SECTION VISION

The Velomont Corridor of Opportunity is divided into 13 sections. Each section is mapped in the pages that follow to highlight specific geographies, landowners, and regions that can one day create a interconnected Velomont Trail across the mountains and communities of Vermont.

SECTION BY SECTION MAPS

The pages that follow describe the Velomont corridor in a linear fashion, from south to north. They describe the terrain to be followed by the Velomont, existing trail and road corridors, lodging and hut opportunities, project partners, and key next steps to achieve the vision of a contiguous Velomont Trail connecting communities across Vermont.

Each of the maps which follow are supported by descriptions of:

- Corridor Overview: a high level executive summary of the content of the Velomont section.
- Corridor Narrative: in depth description of planned the Velomont Trail, including built sections, projects under review/ permitting, proposed co-locations, and areas where no trail corridors are yet identified. Narrative also identifies key linkages to communities and proposed 'anchor points' for future connectivity where none yet exists.

- Huts and Community Resources: description of existing and proposed hut locations, and local lodging resources that will support multi-day journeys across the Velomont Trail.
- Velomont Trail Partners: non-comprehensive recognition of key partners, including state agencies, municipalities, landowners, and non profits in the particular section.
- Next Steps for Velomont: high level guidance for next steps to build Velomont connectivity in a particular section.





Map ID	1	2	3	4	5	6	7	8	9	10	11	12	13
Phase	2	1	1	1 & 2	2	1 & 2	1	1 & 2	2	2	1	1 & 3	3
Federal Land Partners		GMNF	GMNF	GMNF		GMNF	GMNF	GMNF	GMNF				Silvio Conte National Wildlife Refuge
State Lands on Map			Emerald Lake State Park	Deleware and Hudson Rail Trail	Birds Eye Wildlife Management Area (WMA)	Gifford Woods State Park	Gifford Woods State Park	Roxbury State Forest, Riley Bostwick WMA	Camel's Hump State Forest & State Park Mt. Mansfield State Forest, Little River State Park, Robbins Mountain WMA	Camel's Hump State Park, Mt. Mansfield State Forest, Little River State Park	Lamoille Valley Rail Trail, Elmore State Park	Lamoille Valley Rail Trail, Lyndon State Forest, Darling State Park, Victory State Forest, Steam Mill Brook WMA	Kingdom Heritage Lands (State Easement), Willoughby State Forest, (Numerous Others)
Community Lands on Map	Rowe, MA; Charlemont, MA; Readsboro	Wilmington, Dover, Stratton	Peru, Londonderry	Dorset, Manchester, Rupert, Pawlet, Wells	Poultney, Castleton, West Rutland	Rutland, Proctor, Mendon, Killington	Mendon, Killington, Pittsfield, Rochester	Rochester, Randolph, Braintree, Roxbury, Warren	Waitsfield, Huntington, Hinesburg, Richmond, Bolton	Catamount, Stowe Trails Partnership, Waterbury Area Trails Alliance	Johnson, Morrisville, Wolcott, Hardwick, Greensboro		East Burke, West Burke, Newport, Derby Center, Morgan
Regional Trail Partners	Catamount, FRCOG, Pelham Lake Park	Catamount, Hoot, Toot and Whistle Bike Club, Southern Vermont Trails Association, JAMBA, NATS	Catamount, JAMBA, NATS	Northshire Area Trail System	, Trails	Catamount, Mendon Mountain Trails, Killington MTB Club	Killington MTB Club, Ridgeline Outdoor Collective	Ridgeline Outdoor Collective, Mad River Riders, Catamount	Catamount, Mad River Riders, Richmond Mountain Club	Catamount, Stowe Trails Partnership, Waterbury Area Trails Alliance	Catamount, Rail Trail Council, Craftsbury Outdoor Center,	Council, Caledonia Trail	Northwoods Stewardship Center, Kingdom Trails
Other Land Partners Velomont V	Berkshire East Ski Area, Great River Hydro, VLT	Great River Hydro, Mt. Snow Resort		Merck Forest & Farmland Center				Private Conservation Easements, Sugarbush Resort	Cochran's Ski Area, Sleepy Hollow, Private Conservation Lands	Bolton Valley, Stowe XC Center, Trapp Family Lodge, Sterling Forest, Conservation lands	Hardwick Village Forest,		Private Conserved Lands Page 35

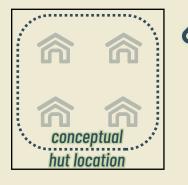


HOW TO READ CHAPTER 3 MAPS

There is a lot of information in each of these maps. They are built to offer both a high level view of the landscape, as well as detailed contour lines, parcel boundaries, and land management types to support future decision making. This page serves as a quick guide to the legend and symbology on the following 13 maps.

Velomont Links & Concept Huts

These overlays on top of the map provide a quick highlight of the future assets of the Velomont. In many areas, a specific corridor has not yet been identified, but these intended links and conceptual hut locations provide an at-a-glance overview of future connection points.



Stratton Mountain

Land Ownership

This portion of the legend uses land color as shorthand for identifying specific land management types



Land, Assets, and Infrastructure Legend

This legend at left shows the symbols for specific lands, recreational assets, and transportation infrastructure and boundaries.

Key Map

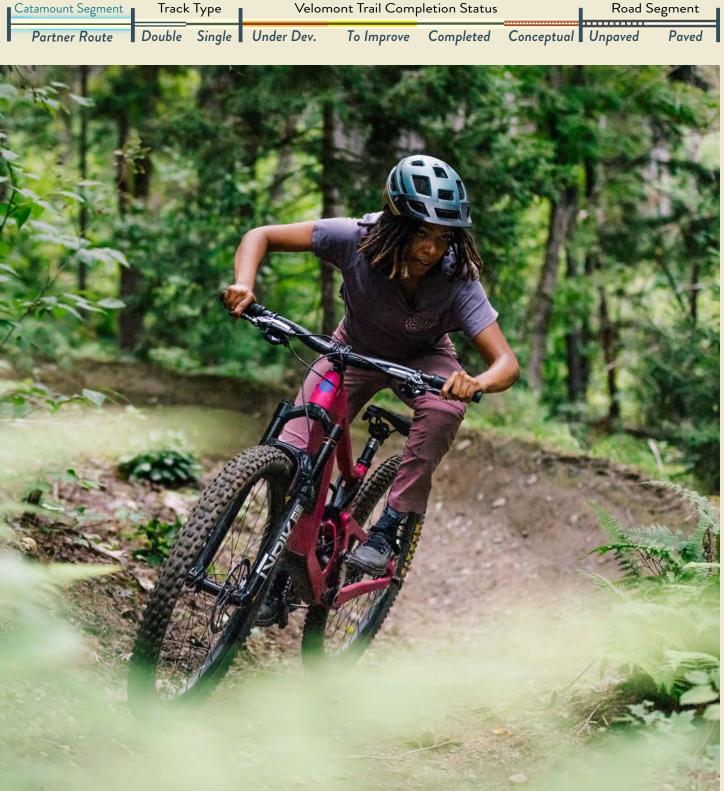
Dark green square indicates this map's location in the overall context of Vermont.



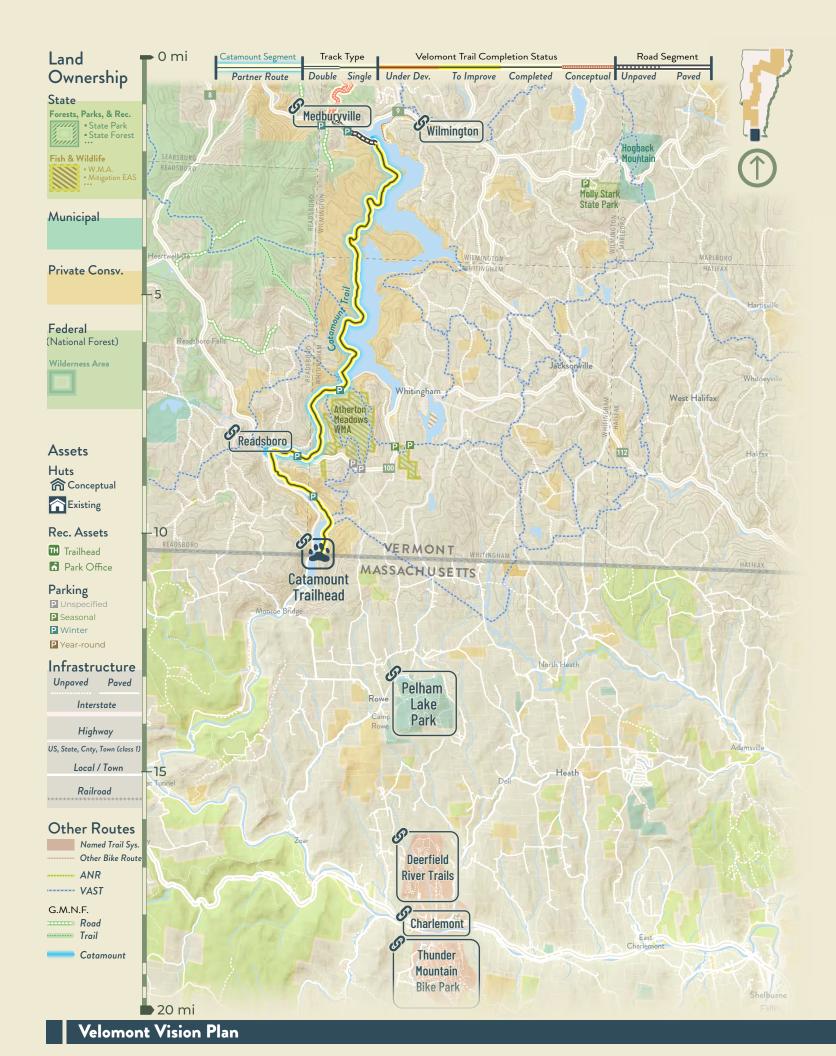
Velomont Corridor Legend

This legend uses color to identify the status and type of Velomont trail highlighted in this document.

Catamount Segment	Track	к Туре	Velomo		
Partner Route	Double	Single	Under Dev.		







MAP 1: MASSACHUSETTS HILLTOWN TO SOUTHERN VERMONT

Corridor Overview

The southern route of the Velomont will connect outdoor recreation hubs in western Massachusetts with a Velomont/Catamount Trail corridor leading into the Green Mountain State.

Corridor Narrative

The southern terminus of the Velomont is envisioned as the community of Charlemont, MA. There is not yet any identified trail alignment between Charlemont, MA and the southern border of VT.

Charlemont is home to Thunder Mountain Bike Park, Berkshire East Ski resort, Deerfield River Trails, whitewater rafting, and many additional recreation opportunities. It presents an ideal outdoor recreation hub to serve as Velomont's beginning. From here, the Velomont is intended to connect north towards the Town of Rowe, MA and Pelham Lake Park.

Currently, the Town of Rowe operates Pelham Lake Park. Pelham Lake Access Permits are required for vehicular access, but trail access is public, and designating a key segment of these trails as a Velomont corridor should be explored further with Park staff and Town officials. From Pelham Lake Park, the feasibility of developing trail corridors on New England Power property should be investigated; these landowners hold a significant amount of undeveloped land north to the Vermont border and the Catamount Trail's southernmost point. Ongoing planning by the Franklin Regional Council of Governments (FRCOG) to improve and establish access points for a future East/West Mohican-Mohawk Trail in the area may also offer future access point or co-location opportunities for the Velomont. Exploration of co-location with trails in this region should be further explored with FRCOG and Town staff members.

From the Vermont border traveling north, the Velomont is anticipated to be co-located with the Catamount Trail. The Catamount Trail Association and the Velomont Trail Collective will be working together to improve 10 miles of Catamount Trail on the western shores of Harriman Reservoir. At the northern side of Harriman Reservoir, the Velomont will cross Route 9, where transit service exists to connect the corridor to the community of Wilmington. A significant portion of this corridor is former railroad bed. Once improved, this corridor will become an all ages and abilities multi-season trail supporting cycling, skiing, and hiking. This corridor will extend towards Woods Road, following it northward for approximately 1 mile to Medburyville, a small community in the Town of Wilmington. Woods Road currently contains a simple pull out that could be used for future trail access. This southern corridor will pass through the eastern edge of the Village of Readsboro, creating additional opportunities to link the Velomont with a village center and support local economies.

Velomont Trail Partners

This area benefits from numerous potential partners, including: Catamount Trail Association, Thunder Mountain Bike Park, Berkshire East Ski Resort, Deerfield River Trails, Town of Rowe, and Berkshire Chapter of New England Mountain Bike Association (NEMBA), as well as Franklin Regional Council of Governments (FRCOG) Local partners in the Readsboro area include Readsboro Economic Development, which owns trailhead access sites on Route 100, and the Town of Readsboro.

Huts and Community Resources

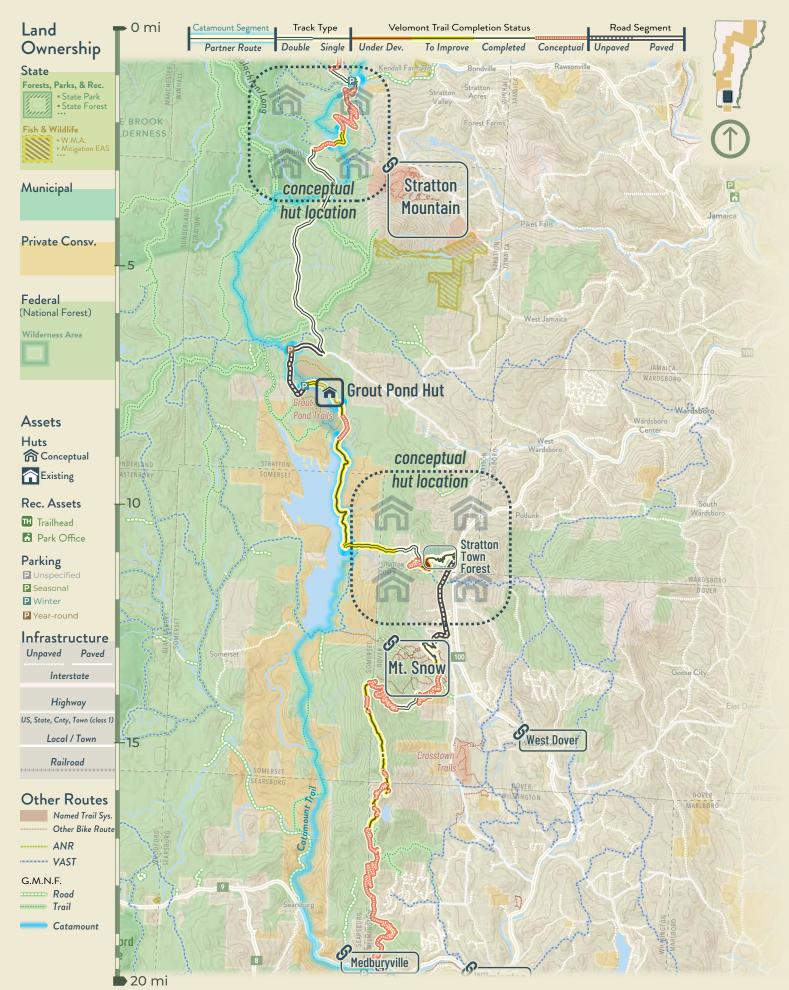
In the southernmost extent, it is anticipated that lodging will be satisfied by existing and future resources in Charlemont and Rowe. Warfield House in Charlemont serves as a trailhead for Deerfield River Trails. Once the Velomont reaches Vermont, Readsboro currently provides overnight lodging and goods at the local inn and general store. There are many lodging opportunities in the villages of Wilmington and Dover, particularly near Mount Snow Ski Resort. Dining opportunities in this area are supported by the Readsboro Inn and General Store. There are no outfitting/ guiding businesses in this area.

- Resources must be dedicated to planning and approving a corridor from Charlemont, MA to the Vermont border and southern terminus of the Catamount Trail.
- Resources will be needed for additional planning and coordination, as well as eventual trail construction, improvement, or adoption.
- Building relationships with planning partners and large landowners listed here would be excellent next steps.









MAP 2 – SOUTHERN FORESTS & RESERVOIRS

Corridor Overview

From Medburyville into the Green Mountain National Forest (GMNF), this segment of the Velomont will soon offer connections to the existing Grout Pond Hut, and linkages to the communities of West Dover and Wilmington.

Corridor Narrative

Departing from the Catamount Trail in Medburyville, the Velomont will cross Vermont Route 9 into the GMNF. From this highway crossing, the Village of Wilmington is 3 miles east, with many stores and lodging opportunities. Future improvements to this connection could support safe access between services in Wilmington and the Velomont Trail. Transit service on Route 9 is offered by the Moover and could further improve access to the trail, as transit linking Readsboro, Wilmington, West Dover and Mt Snow offers bike racks on most, if not all, of their vehicles.

The proposed Velomont route will travel below the peak of Haystack Mountain to connect to existing trails above Haystack Pond (including the Town of Wilmington's Glebe Lot). Known as Deerfield Ridge, this next portion of trail will traverse the spine of the mountains and receive numerous small reroutes to improve the overall sustainability of the corridor. The Velomont Collective seeks to locate a future Hut in this vicinity to support overnight lodging.

From the summit of Mount Snow, a new trail is proposed to offer a winding descent to connect with existing mountain bike trails and ending at an existing doubletrack road at the base. From this road, a new trail will link to existing trails at the base of Mount Snow. These trails will end at Far Beyond Road, which offers a two-mile shared road corridor connecting to trails of The Town of Stratton's Stephen Greene Town Forest. Current improvements are underway in the Stephen Greene Town Forest to link Far Beyond Road to a VAST doubletrack corridor on GMNF and private land that connects the Town Forest to Great River Hydro land, cresting a ridge and descending to the eastern edge of Somerset Reservoir. Southern Vermont Trails Association has been maintaining and building additional trails in Stratton Town Forest, and will be a key partner supporting ongoing maintenance of these sections of the Velomont.

At the Somerset Reservoir, the Velomont will once again collocate with the Catamount Trail and improve approximately 2.25 miles of trail corridor for multi-season use. Travelers will leave the banks of Somerset Reservoir on a proposed trail reroute from existing GMNF trails towards existing trails and backcountry lodging at the Grout Pond Hut. The GMNF's Grout Pond Recreation Area, with campsites, leantos, privies, water, and picnic tables, is located nearby. Just under a mile west of the Grout Pond Hut location is a trailhead access point at the end of Grout Pond Road. The Velomont will follow a town road north from here to Stratton Arlington Road, which it will follow to Forest Road 341, aka the IP Road.

This existing forest road network provides a five-mile corridor on the western slopes of Stratton Mountain. Though there has been a desire to connect Velomont with Stratton Mountain Bike Park on the eastern side of Stratton Mountain, it is unlikely that the corridor will move in this direction due to the need to build new trail corridor through sensitive habitats on this portion of National Forest. The Velomont is proposed to depart IP Road just southwest of Little Pond. A proposed trail reroute will offer a sustainable trail connection from Little Pond down to existing trail access on Kendall Farm Road.

Velomont Trail Partners

Ongoing partnerships and coordination with the GMNF will be crucial throughout this segment. Partnerships with the Town of Stratton and Mount Snow will be crucial as well. Trail stewardship partners will include the Catamount Trail Association and VMBA Chapters including Southern Vermont Trail Association, Jamaica Area Mountain Bike Alliance (JAMBA), and Northshire Area Trail Systems (NATS). Town partners include Wilmington, Dover, and the Southern Vermont / Deerfield Valley Chamber of Commerce. Where improvements are needed for highway crossings, VTrans should be consulted to guide and permit these crossing points.

Huts and Community Resources

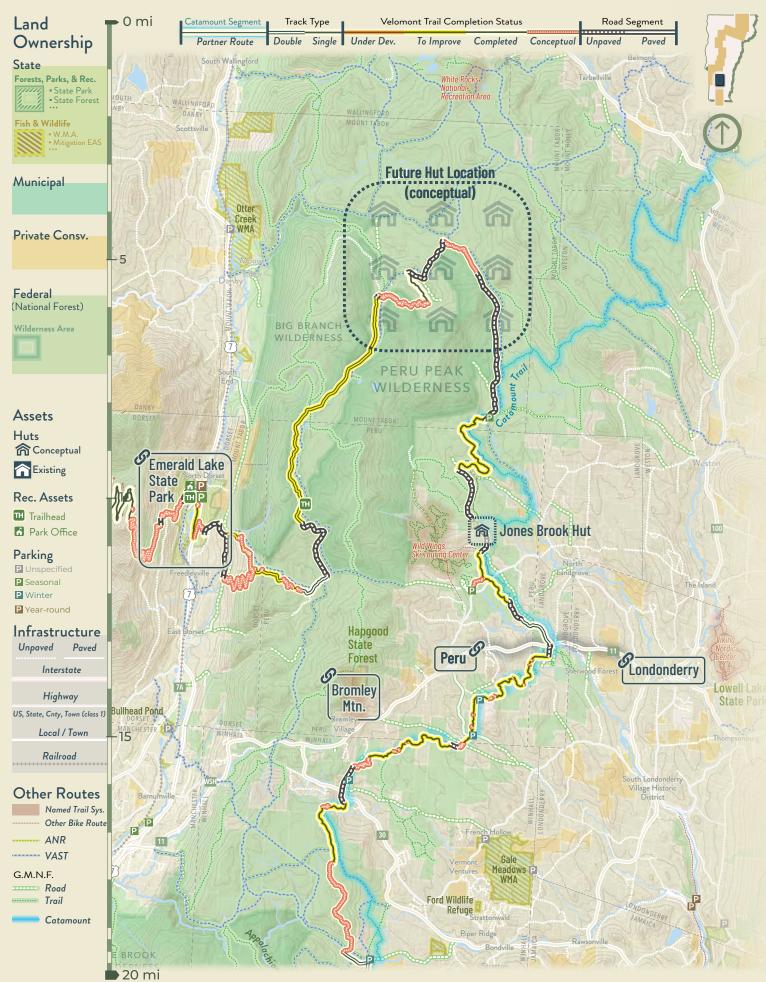
The existing Grout Pond Hut is an excellent destination for overnight trips, but there is a need for additional Huts north and south of this location. Future development of Huts in the vicinity of Mount Snow / Deerfield Ridge, and another in the vicinity of Kendall Farm Road, Northwest of Stratton Mountain will be able to offer a more accessible hut-to-hut experience through this region of the Velomont. In addition, there are lodging options in the villages of Wilmington and Dover, particularly near Mount Snow Ski Resort. There are numerous camping opportunities on public land in this area as well such as Grout Pond and Hapgood Pond Recreation areas. Several dining options can be found in Wilmington and along Route 100 towards Dover. There are very few outfitting/ guiding businesses in this area, with one business located in Stratton, VT. At least one bike shop operates in the Mt. Snow area, and another is located in Rawsonville, just east of Bondville.

- In the near term, close collaboration with the GMNF should permit a majority of the trails proposed in this area to move towards implementation.
- Continue efforts to identify and develop huts in the Kendall Farm Road and Mount Snow areas.









MAP 3 – AROUND THE WILDERNESS

Corridor Overview

This 'bend' in the Velomont corridor of opportunity avoids Peru Peak wilderness and connects backcountry Huts, the Catamount Trail and existing forest roads towards Emerald Lake State Park. Community connections towards Peru and Londonderry will be possible here.

Corridor Narrative

From the existing Catamount Trail Association parking on Kendall Farm Road in Winhall, three miles west of the village of Bondville, the Velomont will travel north onto a conceptual corridor on GMNF land. This corridor will add three miles of new trail to two miles of existing forest trail routed towards Vermont Route 30, where a crossing is anticipated at Upper French Hollow Road. A proposed trail reroute will avoid the last steep $\frac{1}{2}$ mile of this roadway and connect the Velomont with the existing Catamount Trail within the National Forest. Improvements to this section of Catamount will connect with a short ¼ mile segment of Old Manchester Road until joining a proposed reroute of the existing trail towards a trailhead on South Road. This segment utilizes the existing Catamount Trail corridor past Mud Pond, towards a short crossing of Route 11 at Ridge / Brook Roads.

The northern terminus of Brook Road becomes doubletrack and turns into Anderson

Road. This two-mile road segment connects to an existing segment of Catamount Trail, bypassing intersections on Hapgood Pond Road before reconnecting to existing forest roads. This portion of the Velomont passes through the Utley Brook Trails complex. The trail follows and improves forest trails and roads, primarily Forest Road 10, the Danby-Mount Tabor Road, with a proposed reroute towards the intersection of Old Job Road.

The Velomont then follows Old Job Road, with conceptual reroutes added to create more singletrack mileage. This reroute would connect with existing parking access on the upper segment of Old Job Trail, and the Velomont Corridor can follow this doubletrack road southeast for approximately 8 miles until it intersects with Mad Tom Notch Road. From here, it is proposed to travel west and downslope towards Emerald Lake State Park. It is anticipated that a future Hut located near Emerald Lake State Park could complement existing resources, as the park currently only offers campsites and lean-to shelters.

Exact routes through Emerald Lake State Park have not been approved by the ANR Rutland District Stewardship Team (DST), but it is hoped that the corridor could utilize existing trails and roads connecting users from the eastern to western borders of this state park while avoiding direct travel through the campground area. Close coordination with FPR will be needed if the Velomont is to cross the Vista Trail's pre-existing, gradeseparated crossing underneath Route 7. Any changes to this crossing will require additional coordination with the railroad. Note that this existing, secure, and separated trail crossing on public land is the safest and most established crossing of this state highway in the region. If the trail were sited anywhere else in the immediate area crossing Route 7 it would almost certainly cost more and be less safe for users of the highway and trail alike.

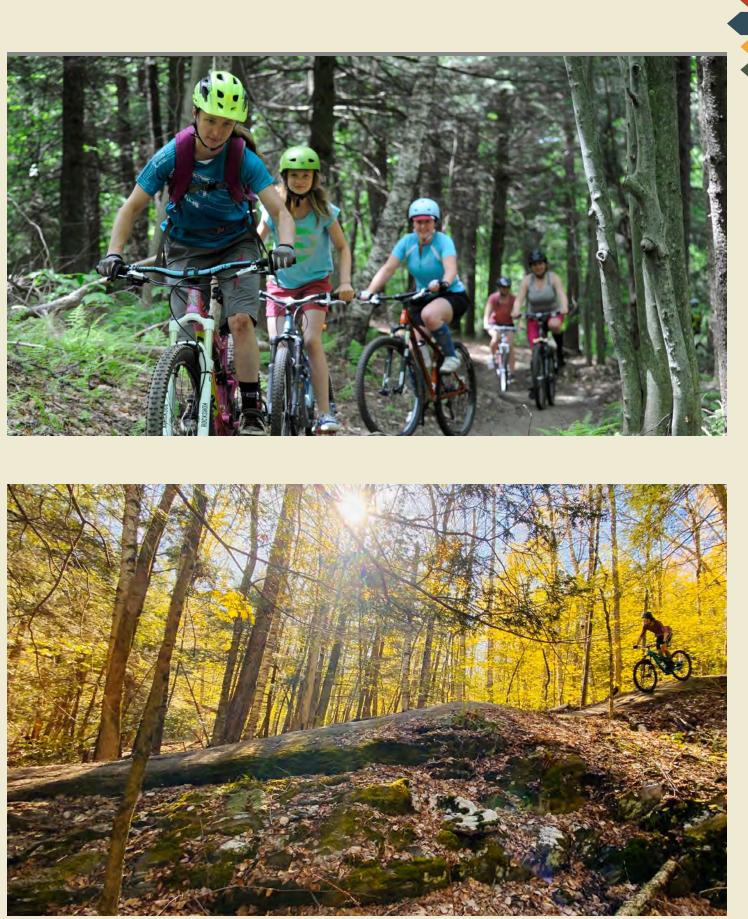
Velomont Partners

This portion of trail corridor will require close collaboration with GMNF for use of and improvements to existing forest trails and roadways. Continued collaboration with Rutland ANR District Stewardship Team should be a key focus of future efforts to determine the most suitable route through Emerald Lake State Park. Where at grade changes are anticipated, VTrans will need to be consulted for crossings of State Routes 30, 11, and 7. The VMBA Chapters of Jamaica Area Mountain Bike Association and Northshire Area Trail Systems are anticipated to serve as trail stewardship partners as corridors are established. Coordination with the Green Mountain Club will be useful to ensure that Velomont alignments create synergies with resources in the area such as Griffith Lake Campsites.

Huts and Community Resources

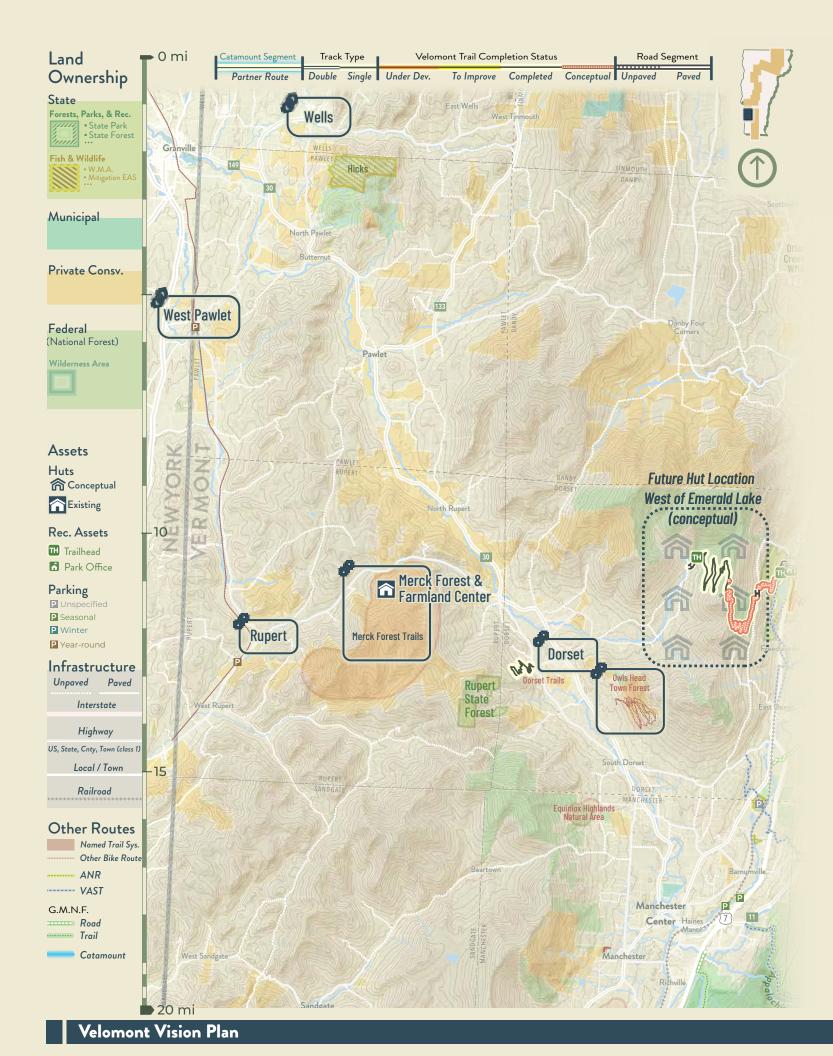
Jones Brook has been identified as an ideal future Hut location, and more broadly, the area at the western edge of Old Job Road could be a future location, as could lands in the vicinity of Emerald Lake State Park. There are limited dining options in this area, with a few restaurants clustered in Londonderry.

- Finalizing permitting and implementing new and restored sections of trail within the GMNF will be the first steps in this area.
- Continued effort should be dedicated to planning and identifying Jones Brook and at least one other Hut location.
- A formal pre proposal to the ANR Rutland DST will be needed to establish an approved route through Emerald Lake State Park to take advantage of existing grade-separated trail infrastructure to avoid highway conflicts on Route 7.









MAP 4 – MARBLE HILLS

Corridor Overview

This portion of the Velomont is intended to connect Emerald Lake State Park to Dorset Mountain, Owls Head Town Forest to Dorset's Town Center. Moving west from the Town of Dorset a future connection to existing backcountry lodging and trail resources in Merck Forest should be established. From Merck Forest, the goal is to connect to Slate Valley communities of Granville and Wells.

Corridor Narrative

The land west of Emerald Lake State Park has been considered a prime conservation opportunity to create a contiguous block of preserved lands. The Velomont corridor west of Emerald Lake State Park is envisioned to climb the mountain hills and cross over Dorset Mountain to existing trails descending towards Tower Road. No specific corridor has been identified from this point towards the Dorset Town Center, but initially, these points could be connected by town roads. Future planning should seek to identify opportunities to connect to the Owls Head Town Forest southeast en route to Dorset Town Center.

From Dorset, the Velomont is anticipated to climb through existing trails in the Dorset Town Forest west of town and seek opportunities through private land or Rupert State Forest to connect with the existing trail and Hut network within Merck Forest. The Rupert State Forest does not currently have a Long Range Management Plan which would be required before permitting Velomont on this parcel.

Future partnerships with Merck Forest will be required to identify how or if mountain bike access can be allowed in this privately-owned recreation resource. Merck Forest owns and operates a series of backcountry Huts for year-round recreation and lodging, but mountain biking is not a designated use.

From Merck Forest, the corridor is anticipated to move northwards towards the Slate Valley communities of Pawlet, Granville, and Wells. The D&H Rail Trail, operated by VTrans may offer one potential corridor, as may other private land connections.

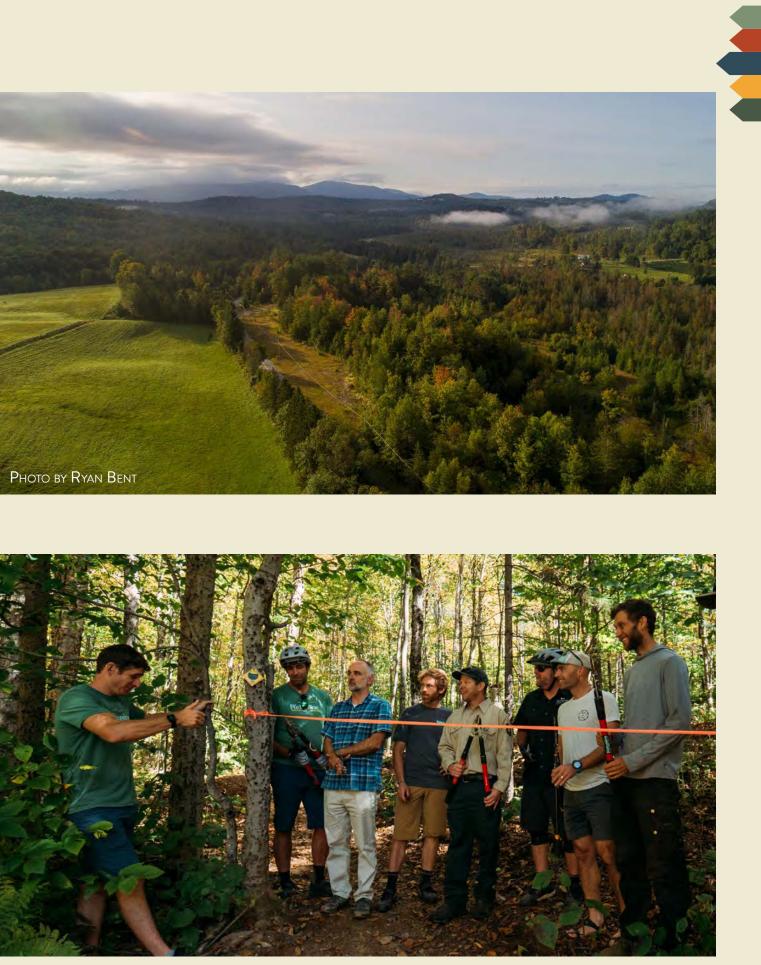
Velomont Trail Partners

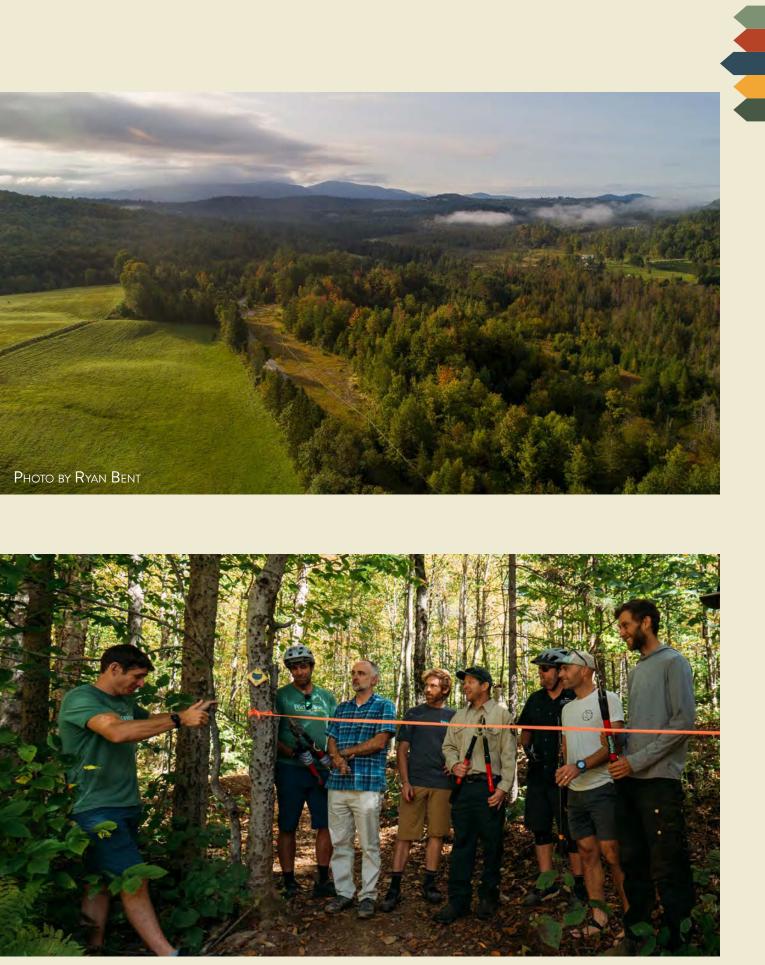
Conservation partners such as the Trust for Public Land and Vermont Land Trust should be coordinated with to identify trail and conservation opportunities west of Emerald Lake State Park. FPR should be consulted for opportunities within Rupert State Forest. The Town of Dorset and Northshire Area Trail Systems will be crucial partners to identify routes in and out of this community. Merck Forest will also be an important partner moving forward, and planning efforts should focus on discussions and potential partnerships to identify and improve a mountain bike accessible route through their existing trail system.

Huts and Community Resources

Siting a future Hut near Emerald Lake State Park should be considered, as the site only offers sheltered and unsheltered campsites, but no cabins or huts. Beyond this area, the existing lodging resources of Dorset and Merck Forest are anticipated to provide the needed overnight lodging for this segment of Velomont Corridor. Numerous dining and lodging options exist in Manchester, with some limited services in Dorset and Pawlet.

- Pursue conservation opportunities west of Emerald Lake State Park.
- Begin planning level conversations with Merck Forest and Farmland Center.
- Work with local VMBA Chapter and the Town of Dorset , including Hike Dorset's Outdoor Recreation staff, to identify potential routes to connect existing resources across private lands. Work with advocates in the southern Slate Valley to explore potential alignments for a Velomont trail corridor north of Merck Forest.









MAP 5 – SLATE VALLEY

Corridor Overview & Narrative

This area of the Velomont will need to connect through the communities of Wells, Poultney, Castleton, and towards West Rutland and Rutland. Central to this vision is utilization of the significant trail network southeast of the Poultney Town Center. These trails, combined with a possible connection through existing road corridors within the Birdseye Wildlife Management Area, are the main points of connection that should be sought as planning efforts mature for this specific section. Supporting the corridor are existing lodging and dining resources within the town centers, as well as existing recreation and lodging resources well established at Lake Saint Catherine State Park.

Velomont Trail Partners

The VMBA Chapter of Slate Valley Trails will be a primary partner in this area, both for identification and formalization of the Velomont network through existing trails and through ongoing landowner outreach and discussions, a crucial part of building a contiguous trail corridor where none currently exists.

The Town of Poultney has also been developing plans to connect to surrounding trail resources and has the D&H Rail Trail connecting it directly to the Town of Castleton to the north. The Town has completed recent



planning efforts to continue to link their community with surrounding trail resources, which could hold promise for future Velomont partnerships.

The Rutland District Stewardship Team (ANR) has indicated that, as a town road, Birdseye Road through the Birdseye Wildlife Management Area might be utilized for Velomont access, but no new construction could be permitted because of legal restrictions. Additional review of existing road condition will be needed to determine suitability in this area.

It is likely that making this connection will require a crossing of Route 4, and early conversations with VTrans could help identify ideal locations within this limited access highway for a future crossing.

Huts and Community Resources

A future Hut location in the Poultney area should be pursued to provide direct access to Slate Valley Trails and the Velomont. Poultney has two bike shops, numerous cafes, and a few inns and BnBs. There are plans to convert the former Green Mountain College into a hotel and housing. Wells has limited lodging and dining options. Fair Haven and Castleton have several dining options, hotels/inns, and one outfitting business that is geared toward fishing/angling.

- Work with Slate Valley Trails and the Town of Poultney to support building trail connections between and to Slate Valley communities and trail networks.
- Work with VTrans to identify potential future crossing locations of the Route 4 corridor, as well as any needs to cross or utilize Route 30 between Slate Valley Trails and Lake St. Catherine State Park.
- Identify Velomont partners within the business communities of Wells, Poultney, Castleton, and Rutland









MAP 6 – CITY CENTER TO TELEPHONE GAP

Corridor Overview

This portion of the Velomont aims to provide a connection through Rutland, Proctor, Mendon, and the Telephone Gap area of the GMNF. Pine Hill Park in Rutland, with its significant existing mountain bike trail network and proximity to downtown Rutland accommodations and eateries, is a priority linkage for this corridor. Existing doubletrack trail from Pine Hill Park to Proctor and proposed trail alignments in the Telephone Gap area provide some clarity for the trail corridor. The ongoing tri-town-trail planning project led by the Rutland Regional Planning Commission will provide direction for future trail connectivity between Rutland, Proctor, and Pittsford. Velomont should seek to coordinate and co-locate with this process to the extent practical.

Corridor Narrative

Pine Hill Park, located directly northwest of downtown Rutland, offers a robust network of singletrack mountain bike trails. Additional planning is needed for the southwest approach to this network from the Slate Valley Trails in Poultney – a key opportunity to connect these two premier and popular trail networks. North of Pine Hill Park, the Carriage Trail provides an existing doubletrack connection to the Proctor Town Center, terminating at Olympus Road.

No specific corridor has been identified from Proctor to Mendon. Initial travelers could use secondary roads to make this connection. VAST corridors and future trails should seek to connect with Mendon's future village center development as proposed in Mendon's Route 4 corridor scoping study.

From Mendon, the Velomont is anticipated to reenter the GMNF via the conceptual Blue Ridge Connector singletrack. This three-mile trail would wind around the southern flank of Blue Ridge Mountain before connecting to existing Class IV/Forest Service roads that climb up to Rolston Rest - a nearly 3,000acre conservation landscape recently acquired by USFS from the Trust for Public Land. From here, the Velomont is anticipated to follow 8 miles of conceptual singletrack, connecting to a proposed Hut at South Pond before descending to Townshend Brook Road. An alternate 4-mile conceptual singletrack would provide a connection to Gifford Woods State Park to the east. Parking and access issues at the State Park will need to addressed prior to establishing this conceptual trail corridor.

These conceptual trail connections and proposed Hut are included in the GMNF's Notice of Proposed Action for the Telephone Gap Integrated Resource Project prepared in Summer 2023.

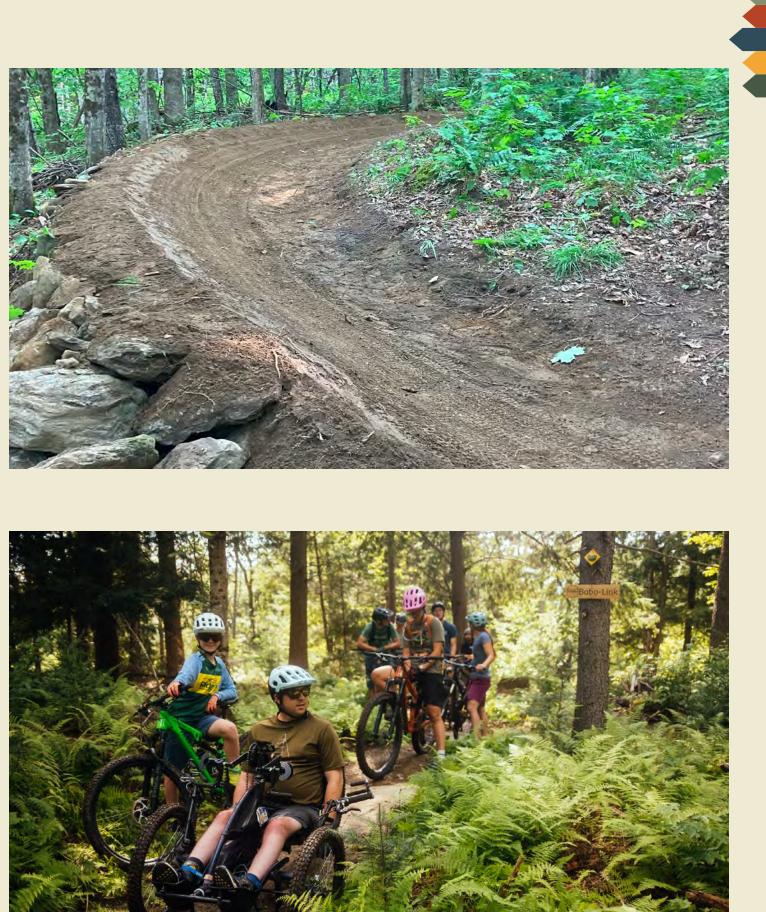
Velomont Trail Partners

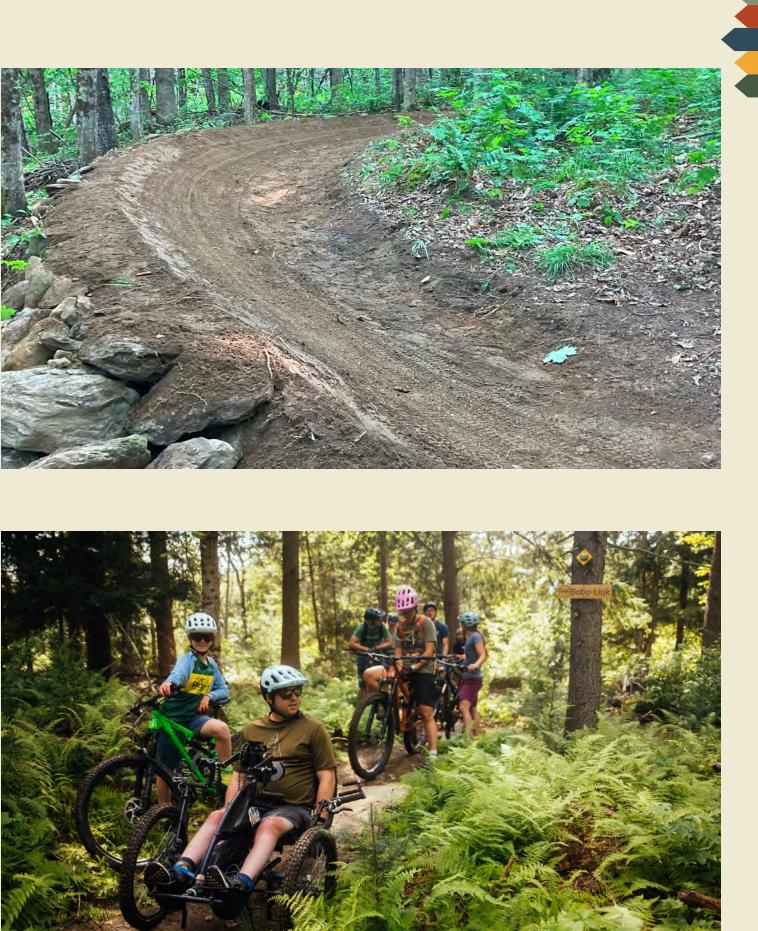
This portion of trail corridor will require continued collaboration with GMNF for use of and improvements to existing forest trails and roadways as well as construction and maintenance of new conceptual singletrack trails. VTrans will need to be consulted for crossings of US Routes 4 and 7. Pine Hill Partnership, Mendon Mountain Club, and Killington Mountain Bike Club (all VMBA Chapters) will be key trail stewardship partners as corridors are established. Engagement with VAST will be needed if the use of snowmobile trails is to be considered. Coordination with ANR/FPR will be crucial to identify appropriate access to the Velomont through Gifford Woods State Park.

Huts and Community Resources

There are no established Huts along this section of the Velomont. The proposed South Pond Hut would address a significant gap in lodging along the Velomont corridor between Mendon and the existing Chittenden Brook Hut near Brandon Gap. There are a variety of overnight accommodations in downtown Rutland as well as Mendon, owing to the proximity to Killington and Pico ski areas. Rutland offers numerous lodging, dining, and services and is poised to become an excellent hub for Velomont access both south into Slate Valley and north into the Green Mountains. Rutland is home to several bike shops; Killington also has one bike shop/outfitter.

- Continue to work with USFS towards the finalization of the Telephone Gap Integrated Resource Project.
- Work with community organizations in Rutland, Proctor, and Mendon to identify future trail connections.
- Work with landowners and advocates west of Rutland to build connectivity towards Castleton and Poultney.
- Support State Parks and Killington Mountain Bike Club / Mendon Mountain Riders to address visitor use management concerns in Gifford Woods State Park.









MAP 7 - VELOMONT 2024

Corridor Overview

Almost wholly contained within the GMNF, this portion of the Velomont aims to connect the Telephone Gap area to Chittenden Brook, downtown Rochester, and the existing Rochester Valley Trails network, while providing additional loop trail options for connecting to the nearby Green Mountain Trails and downtown Pittsfield.

Corridor Narrative

The primary Velomont corridor is anticipated to connect sections of existing and recently built trail between the Telephone Gap area and Route 73. Four miles of conceptual singletrack are proposed to provide a connection between Townsend Brook Road and NFR 97, including utilizing a brief section of VAST Trail. Following NFR 97 and NFR 35, the Velomont would then cross Upper Michigan Road and follow the five-mile Perspiration Trail, completed in 2023, which accesses the Chittenden Brook Hut along the descent on Chitty Bang Bang towards Route 73. The Velomont briefly merges with Chittenden Brook Road before exiting on to the Ferns and Turns trail, completed in 2023.

Ferns and Turns terminates at VT 73; from here, the Velomont is anticipated to follow West Hill Road briefly before reentering the GMNF on a five-mile stretch of conceptual singletrack trail that would traverse the southern flank of Little Pico Mountain before connecting to Bingo Road. After following



Bingo Road, the Velomont would reenter the GMNF using the existing two-mile singletrack Swan Dive Trail to connect to the Swans Mill doubletrack trail. Short sections of new singletrack trail bypass excessively steep portions of the Swans Mill Trail as it ascends towards Tunnel Ridge. The Velomont then picks up the recently completed Tunnel Ridge Trail, offering sweeping vistas before a long descent on singletrack towards downtown Rochester.

From downtown Rochester, the Velomont is anticipated to head east towards Randolph, using existing singletrack trail to climb towards Randolph Gap. This section would initially use existing GMNF singletrack trails before following existing trails that are primarily on private lands, including a brief stretch through Riley Bostwick Wildlife Management Area.

This portion of the Velomont includes a loop option that connects downtown Pittsfield, the Green Mountain Trails, the recently improved Contest Trail, and downtown Rochester using Liberty Hill Road. This route is already being promoted by the Ridgeline Outdoor Collective as the "Heart of the Greens" loop. In addition to connecting additional trails and downtown areas into the primary Velomont corridor, this alternative corridor will also provide opportunities for a 1-2-night itinerary using the Chittenden Brook Hut and Spikehorn Yurt.



Velomont Trail Partners

This portion of trail corridor will require continued collaboration with GMNF for use of and improvements to existing forest trails and roadways as well as construction and maintenance of new conceptual singletrack trails. Vermont Fish and Wildlife partnerships will be important to ensure ongoing success of the segment located in Riley Bostwick Wildlife Management Area. VTrans will need to be consulted for crossings of US Route 100 and VT 73. Ridgeline Outdoor Collective (VMBA Chapter) will be a key trail stewardship partner as corridors are established. Engagement with VAST will be needed if the use of snowmobile trails is to be considered.

Huts and Community Resources

The Chittenden Brook Hut, maintained by the Vermont Huts Association, is located directly along the primary anticipated Velomont Corridor south of Brandon Gap. The Spikehorn Yurt, also maintained by Vermont Huts, is located off Liberty Hill Road along the alternative corridor loop. The Green Mountain Trails, located along the alternative corridor, feature a rentable cabin. There are a handful of inns in downtown Rochester along the primary corridors, as well as inns in downtown Pittsfield. There are some restaurants/ dining establishments in both Pittsfield and Rochester. Rochester is home to a bike shop and contains a mountain biking trail system, Rochester Valley Trails, that is maintained by the Ridgeline Outdoor Collective.

- Work with GMNF to permit and construct conceptual singletrack trail connections.
- Work with private landowners in Rochester to address trail gaps between downtown Rochester and the Randolph area.







MAP 8 - RANDOLPH TO WARREN

Corridor Overview & Narrative

This section of the Velomont will need to connect from the Randolph Gap area to downtown Randolph before heading north into the Mad River Valley and the town of Warren.

While the overall corridor is largely undefined, there are a handful of key connection points that should be a focus of future planning efforts. A conceptual three-mile singletrack trail would provide an initial connection between built eastern Rochester trails and Randolph's Sayward Town Forest trails. The Randolph Trails and Sayward Town Forests are established mountain bike trail networks that can facilitate a trail connection directly into downtown Randolph. The Velomont Collective and Vermont Huts are currently working to develop a downtown Randolph Hostel. From Randolph, it is only a quarter mile to town managed trails on Ellis Lot connecting users to lands north of the Town Center. There is a unplanned gap between this location and Warren.

Prior planning efforts of the Velomont corridor in areas between Randolph and Warren have encountered challenges. Bicycles are not permitted in the federally designated Breadloaf Wilderness in the GMNF. State land managers have denied a proposed trail connection through the Granville Gulf Reservation due to concerns about old growth forest impacts. Prior proposals through Roxbury State Forest were not supported by the 1988 Roxbury State Forest Long Range Management Plan, due to relative lack of guidance regarding mountain bike trail access. Since that time, the Barre District Stewardship Team has elevated this Forest's Long Range Management Plan to a planning priority. This upcoming process should provide an opportunity to coordinate potential Velomont corridor on state lands. Conversations with the ANR Barre DST illustrated an openness to consider Velomont through the eastern section of Roxbury State Forest, while noting steep and wet slopes on the western parcel creating natural resource concerns.

In Warren, the Blueberry Lake trails are a potential destination for the Velomont, with a potential opportunity to establish a new Hut. There are a variety of established trails north of Warren such as the Mad River Path, as well as an envisioned multi-use path along VT 100, that can be explored for incorporation into the Velomont corridor.



Velomont Trail Partners

This portion of trail corridor will require future collaboration with the ANR Barre District Stewardship Team for considering possible trail connections through Roxbury State Forest, particularly when a new management plan is developed. VTrans will need to be consulted for any crossings of or trail connections along US Route 100 and/ or VT 12A. Ridgeline Outdoor Collective and Mad River Riders (VMBA Chapters) will be key trail stewardship partners as corridors are established. GMNF will need to be engaged regarding use of and connects to the Blueberry Lake trails and siting of a potential Hut.

Huts and Community Resources

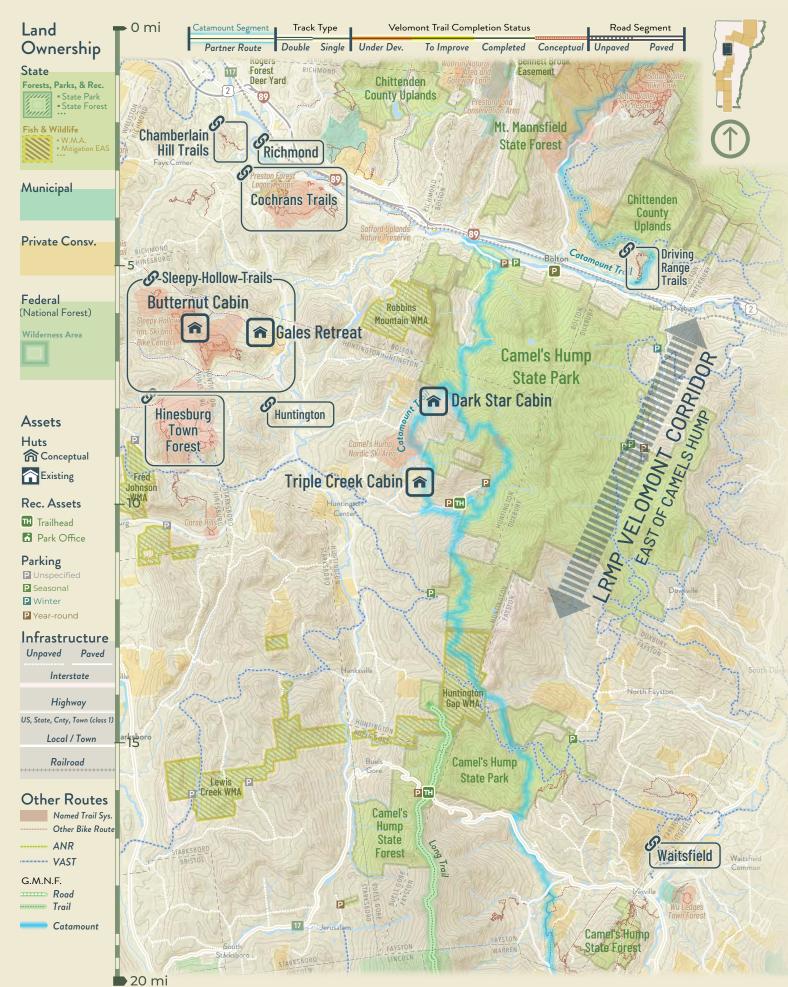
Vermont Huts has begun efforts to establish a downtown "trail hostel" in Randolph, as well as establishing a Hut in the Blueberry Lake area. From these anticipated sites, lodging further north is anticipated to be served by existing options in Warren. Randolph has a variety of dining options and an outdoor gear store. Randolph also has a pump track and two nearby trail systems: the Randolph Town Forest and the Randolph trails (served by parking downtown). Warren has several dining and lodging options, owing to its proximity to Mad River Glen and Sugarbush ski areas. Warren is also home to the Blueberry Lake trails, a trail system that is suitable for beginners.

- Closing the gap between Randolph and Warren will require partnerships between private landowners, ANR Barre District Stewardship Team, Ridgeline Outdoor Collective, and others. This corridor should be a primary focus as Velomont moves from Phase 1 completion towards planning and permitting Phase 2 projects.
- Engage with ANR Barre DST to discuss an eastern corridor alignment in Roxbury State Forest. Upcoming planning processes for this parcel may provide an ideal opportunity to identify a supported Velomont Corridor.
- Continue to engage with private landowners in this area to identify a suitable and supported alignment to connect to Warren









MAP 9 - PAST CAMEL'S HUMP

Corridor Overview

The goal of this portion of the Velomont is to connect Warren and Waitsfield to Chittenden County trail resources and onto the Waterbury/Stowe Valley.

Corridor Narrative

Two Velomont routes could be considered in this region - West of Camel's Hump and East of Camel's Hump. The routes should not be mutually exclusive, as establishing both could create a valuable 'loop' of the Velomont, accessible to communities west and east of this iconic mountain. However, it may not be pragmatic or feasible to expend resources to develop both routes. Either of these routes may require permission to access Camel's Hump State Park.

West of Camel's Hump

The western option is the Velomont Collective's preferred corridor, as it has an opportunity to reduce miles of trail construction required to make the connection by utilizing existing trails within Phen Basin (Camel's Hump State Park), Huntington Gap WMA, Carse Hill, Hinesburg Town Forest, Sleepy Hollow, and Cochran's. It could connect to services in Richmond Village Center, before moving east. Both west and east options are envisioned to connect to existing trails at the Cross Vermont Trail, Driving Range and Little River State Park. Many of these trails are some of the most popular recreation destinations in the state. In addition, three existing Hut resources are in place along this western corridor that could become part of the overall Velomont network.

However, access to the western side of Camel's Hump could utilize a connection via the Huntington Gap WMA, which the ANR Essex DST does not support. Members of the DST cited incompatibility with the management objectives of both Huntington Gap WMA and Phen Basin Natural Area, and natural resource concerns in both locations. Although proposed corridors would use existing trails, DST did not want to add additional summer use as both the Catamount Trail and VAST corridors are primarily winter trails. The ANR Essex DST documented a preference for the East of Camel's Hump route and future hut sites as part of the 2021 Camel's Hump Long Range Management Plan. This preference is not shared by all members of The Velomont Collective, as population centers and existing trail networks point to the value, efficiency, and lower cost of the western route.

East of Camel's Hump

As identified in the 2021 Camel's Hump Management Unit Long Range Management Plan, the Velomont is envisioned to utilize an existing VAST corridor descending the eastern flank of Camel's Hump. The Velomont would not be restricted to the snowmobile



trail tread, as in many places it would need to create switchbacks or alternate alignments to maintain sustainable grades along these mountain slopes.

Velomont Trail Partners

Numerous VMBA Chapters could contribute to the maintenance and stewardship of the Velomont Trail in this area, particularly Mad River Riders (Waitsfield), Fellowship of the Wheel (Huntington/Hinesburg), Waterbury Area Trails Alliance (Waterbury, and Richmond Mountain Trails (Richmond). Ski resorts such as Mad River Glen and Sugarbush (Mount Ellen) could serve as valuable partners.

The ANR Essex DST will be the key partner for any trail in Camel's Hump State Park. The ANR Barre DST is the final decision maker for any trail in Camel's Hump State Forest. Other private partners may offer opportunities on lands outside the state managed parcels.

Huts and Community Resources

Four existing Hut resources are in place on the western side of Camel's Hump. Gale's Retreat above Richmond does not allow bicycles on site, but hike-in access would be possible. In addition to this cabin, Vermont Huts Association operates Dark Star Cabin, Crow's Nest Yurt, and Triple Creek Cabin in this region. Complementing these resources, existing lodging and services within the Town Centers of Waitsfield and Richmond (or Bolton) are anticipated to 'bookend' the experience in this area once complete. The Camel's Hump Management Area Long Range Management Plan supports a hut in the vicinity of the eastern Velomont corridor option.

Waitsfield offers numerous dining and lodging options, while Richmond, Bolton, and Huntington offer fewer to no options. Specifically, Richmond has several dining options but no lodging options aside from short-term rentals. The Town of Bolton has no lodging, dining, or outfitter options to speak of outside of those provided at Bolton Valley Resort. This section of the trail corridor borders on the town of Waterbury and their VMBA Chapter of the Waterbury Area Trails Alliance, which are discussed in greater detail in the following section.

- If the Velomont Collective's aspiration of West of Camel's Hump route is to be achieved, a single east/west access point is needed across the ridge south of Camel's hump. Limitation on connectivity via forested routes suggest these connected may need to be on existing public roadways or through private land in the area.
- The Velomont Trail Collective should work closely with the ANR Essex and Barre DSTs to further explore the feasibility, costs, and alignments of an eastern route in this area.
- Monitor ongoing recreation planning projects in communities in this region. These include Mad River Valley Planning District's <u>Conservation</u> <u>Recreation Visioning</u> process to the south, Waterbury Area Trails Alliance projects to the East, and Richmond Mountain Trails projects to the west and north.
- The Velomont Trail Collective should work closely with Cross Vermont Trail, Regional Planning Commissions, and local governments to support east-west trails planning along Winooski River Corridor.







MAP 10 - MOUNT MANSFIELD'S FLANK

Corridor Overview

From the base of Camel's Hump, the Velomont corridor is envisioned to move northeast towards Little River State Park to trails linking Waterbury and Stowe. The Velomont Trail Collective has worked with Waterbury Area Trails Alliance (WATA) and Stowe Trails Partnership (STP) to identify trails throughout their network to be part of the Velomont. These trail networks are envisioned to connect across the northern flank of Mount Mansfield State Forest and into Johnson, VT, where the Velomont is anticipated to access the Lamoille Valley Rail Trail.

Corridor Narrative

Regardless of an eastern or western corridor past Camel's Hump, the Velomont will use the Winooski Valley to connect to assets such as The Driving Range trail system, and eventually find a way to connect to Little River State Park. Connections from The Driving Range to Little River will attempt to find low-elevation connections, as higher elevations in the area have noted environmental sensitivities related to soil and water resources. The ANR Barre DST meeting with the Velomont Trail Collective identified a road referenced as 'Compartment 10' road that could offer a connection to the Woodward Trail and VAST parking area. ANR has identified a parcel above the Driving Range as a Highly Sensitive Area in the Mt. Mansfield LRMP and this specific area should be avoided. The lowest elevation corridor, Route 2, should also be avoided wherever possible, due to on-road safety and the highway shoulder experience not being in alignment with the goals and desired experience of the Velomont Trail. The route will need to cross this highway and pass underneath Interstate 89 and the identification and structure of this crossing should be coordinated with VTrans.

Though formal approval by the ANR Barre District DST would need to be granted for the route to become official, Little River State Park and adjacent Mt. Mansfield State Forest appear to offer an excellent anchor point for the Velomont Trail and provide existing trail corridors which already allow multi-use access. Cotton Brook trail is already a VAST + summer hiking and biking trail and could make an ideal Velomont corridor. In addition, a future Hut location in the vicinity of historic structures in this park offer additional synergy for the Velomont.

From Little River State Park/Mt. Mansfield State Forest, connections to Stowe Trail Partnership trails have been identified, beginning with trails through the Trapp network - Stepping Stone trail, past the Trapp Family Lodge, to Tap Line, connecting to Old County Road and onto Growler and to Haul Road. From Haul Road, the proposed corridor splits to offer a choice of Cheddar or Shredder/Kimmers, before exiting the trail network on Haulapalooza. This alignment puts the Velomont across the western edge of the



Stowe Rec Path, a paved multi-use path that will connect the Velomont with the numerous amenities available in Stowe.

A short gap in continuous trail could be connected through Edson Hill trails or on road connections northwards, towards identified corridors in Sterling Forest. Here, eight bridges and existing doubletrack will connect towards Callagy's Trail and Mount Mansfield State Forest. No corridors have been identified in Mount Mansfield State Forest. but initial conversations with the ANR Barre DST point to some potential here, noting that the Beaver Meadow area should be avoided. This northeastern corner of Mount Mansfield State Forest is envisioned by the Velomont Trail Collective as an opportunity for a future Hut. Planning and coordination with ANR Barre DST will be required to further this concept. An update to the Mt. Mansfield LRMP would be needed for new trail and hut development.

Velomont Trail Partners

Multiple VMBA Chapters will act as trail stewards in this area. Richmond Mountain Trails stewards The Driving Range trail networks. Waterbury Area Trails Association supports FPR in stewardship of Little River State Park, and the Stowe Trails Partnership stewards the Luce Hill, Trapp Family Lodge, and Sterling Forest trail networks.

The ANR Barre DSTs will be crucial partners to engage to request co-location of

any trail corridors in Little River State Park and Mt. Mansfield State Forest, as well as proposals for other state lands.

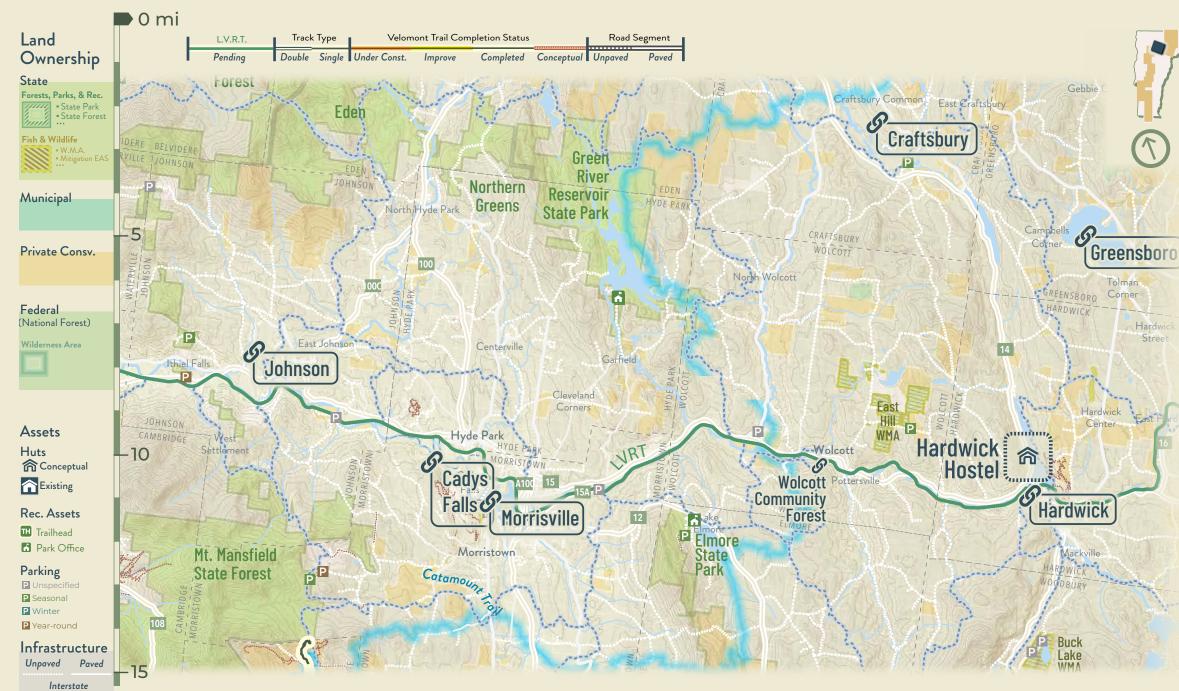
Huts and Community Resources

This segment of the Velomont is anticipated to be served by a future Hut within Little River State Park - ongoing coordination is exploring the potential of a Goodell House site that could honor the historic character of former settlements in the park. From the State Park, the community of Stowe boasts numerous amenities and the Velomont will offer an opportunity to bolster summer economies by intersecting the Stowe Rec Path. Another Hut location is conceptualized near the northeastern corner of Mount Mansfield State Forest, on private or public land. Waterbury Center and Stowe offer many lodging and dining options and access to local trail systems, notably Cady Hill and the Rec Path in Stowe. Multiple gear shops/bike shops are located in both Waterbury Center and Stowe.

- The most work is needed to identify and develop a low elevation trail corridor to access Little River State Park. This could be from The Driving Range trail network or as far west as the Richmond Town Center.
- Formal proposals with the ANR Barre DST should develop an approved corridor through Little River State
 Park/the southern end of Mt. Mansfield
 State Forest, and ongoing partnership and collaboration with Stowe Trail
 Partnership should formally identify the Velomont throughout their trail network.
- Work with FPR, local advocates, and landowners to identify a corridor along the northeastern eastern flank of Mount Mansfield State Forest.
- Plan to actively engage in the Mansfield State Forest Long Range Management Plan update. This significant undertaking is anticipated to begin within the next five years.







MAP 11 - LVRT WEST

Corridor Overview & Narrative

North of Mount Mansfield, the Velomont is anticipated to follow the scenic Lamoille Valley Rail Trail (LVRT), joining the trail in Johnson or Hyde Park and connecting through downtown Morrisville, Wolcott, and downtown Hardwick. The LVRT is Vermont's newest rail trail, and significant efforts are underway to integrate and connect this trail to communities along the corridor and provide improved trailside amenities for users. There are numerous adjacent trail systems and trail development opportunities along the LVRT that could be incorporated into the Velomont corridor. Access to the LVRT in Johnson could be facilitated through a town-owned trailhead in Johnson. The Cady's Falls and Cricket Hill trail systems near Hyde Park are located close to the LVRT and could be directly incorporated into the primary Velomont or potentially connected to the LVRT via new spur trails.

Highway US, State, Cnty, Town (class 1)

Local / Town

Railroad

Other Routes

ANR

Catamoun

----- VAST

G.M.N.F.

----- Road

----- Trail

Named Trail Sys.

Other Bike Route

After passing through downtown Morrisville, the LVRT skirts by the Wolcott Community Forest, where the Trust for Public Land is working with community partners to establish a conserved area with a variety of recreational trails. Continuing east, the LVRT passes through downtown Hardwick. Hardwick Village Forest enjoys an established mountain bike trail network that could act as a spur trail network. This downtown has been identified as a potential location for a future "trail hostel".

Potential Velomont Trail Partners

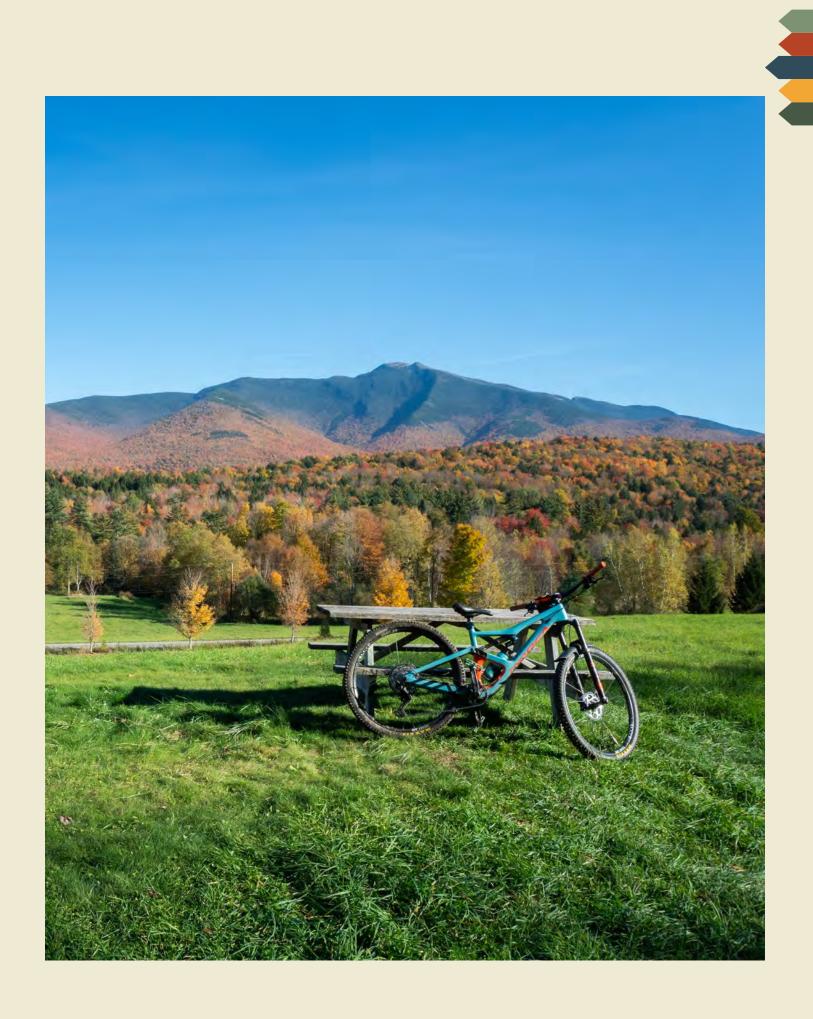
The primary partner for the Velomont in this location will be VTrans who manages and operates the LVRT. From this 'spine' numerous VMBA Chapters and other partners are anticipated to support specific trail networks, including Brewster River Mountain Bike Club, Craftsbury Outdoor Center, and the towns of Johnson, Hardwick, Wolcott, and Greensboro.

Huts and Community Resources

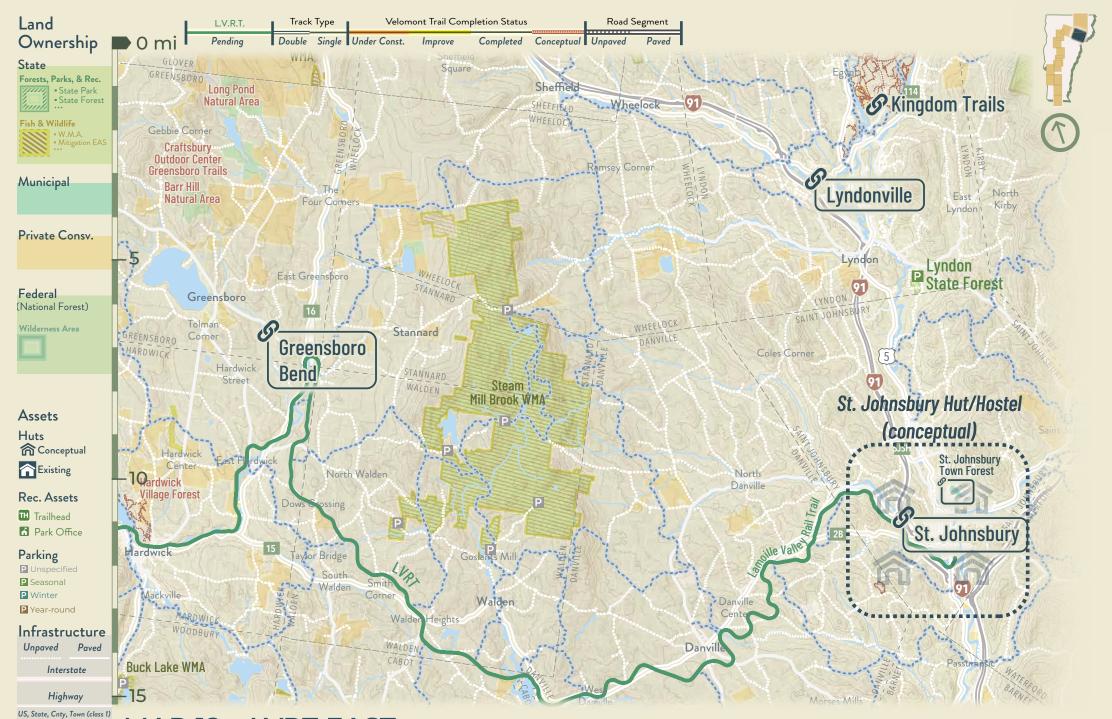
The primary lodging along this corridor is anticipated to be serviced by a future downtown Hardwick hostel, and existing lodging in the other communities adjacent to the Rail Trail. Elmore State Park located just south of the LVRT offers additional 'spur' options for campsites and lodging. Hardwick has some dining options and limited lodging options. Morrisville has some dining and lodging options, as well as one sporting goods store.

- The first step for the Velomont will be to use this document and the formal wayfinding package developed to propose use and wayfinding on the Lamoille Valley Rail Trail (LVRT). This will begin with the appropriate Rail Trail Council and continue through VTrans. Connections to the LVRT should seek to join at existing roadway crossings and/or trail access points, as the introduction of new access points to the LVRT is a more onerous process than leveraging existing connections.
- The Velomont Trail Collective will enter into a license agreement with the Agency of Transportation. This license agreement will help clarify roles and responsibilities required for LVRT/ Velomont co-location. A more formal discussion of this permitting process is discussed in the appendix.

- Additional work will be needed with private landowners, the Town of Johnson, and the ANR Barre/Essex DSTs to identify a connection to the rail trail from corridors near Mount Mansfield State Forest.
- As the LVRT is formally integrated into the Velomont, continued work with adjacent communities to create singletrack trails which 'spur' from the core rail trail experience will be crucial to preserve the experience of Velomont as a singletrack trail experience.
 Without these spur trail networks, it will simply be a rail trail, and lack the dynamic, challenging, and backcountry 'feel' that is the intent of this project.







MAP 12 – LVRT EAST

Other Routes

Railroad

Local / Town

 Named Trail Sys.

 Other Bike Route

 ANR

 VAST

 G.M.N.F.

 Road

----- Trail Catamount

Corridor Overview & Narrative

Continuing east from Hardwick, users will continue along the LVRT towards St. Johnsbury. A future Hut or hostel location is anticipated in St. Johnsbury.

The LVRT turns north after downtown Hardwick, passing through East Hardwick Village and Greensboro Bend. From here, a future Velomont spur could connect to Greensboro and the trail network at Craftsbury Outdoor Center – a concept that has been identified and supported in numerous local planning efforts, such as the Greensboro Bend Revitalization Plan, and Craftsbury Trails Initiative. The Caledonia Trail Collective has ongoing efforts to develop trail networks west of St. Johnsbury, and Velomont should leverage these efforts to create additional singletrack 'spurs' from the LVRT in this area. Caledonia Trail Collaborative is also working to build trail networks in Danville. Communities such as Cabot and Danville can offer lodging and amenities to travelers. From St. Johnsbury, a clear corridor north has not yet been identified, but the goal is to connect a singletrack trail or rail trail towards Lyndonville with the key aim of reaching Kingdom Trails. A key connection point between St. Johnsbury and Lyndonville may be Lyndon State Forest, which has an existing network of Mountain Bike Trails. The St. Johnsbury Twin State Railroad corridor is one corridor that has been considered, but significant constraints due to ownership, wetlands, and the lack of a direct connection with Lyndonville make it an imperfect option.

Should there be a possibility of connecting further east from St. Johnsbury to Victory State Forest, there is an existing "Golden Trail" that connects this State Forest to the Kingdom Trails network. This multi-use trail hosts an existing lean-to and connects from Victory to the Kingdom Trail Network.

It has not yet been determined which Kingdom Trails corridors could be collocated with the Velomont, but the group and private landownership in the region has been generally supportive of the project. The larger hurdle will be linking St. Johnsbury and Lyndonville with a non-road trail connection.

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Velomont Trail Partners

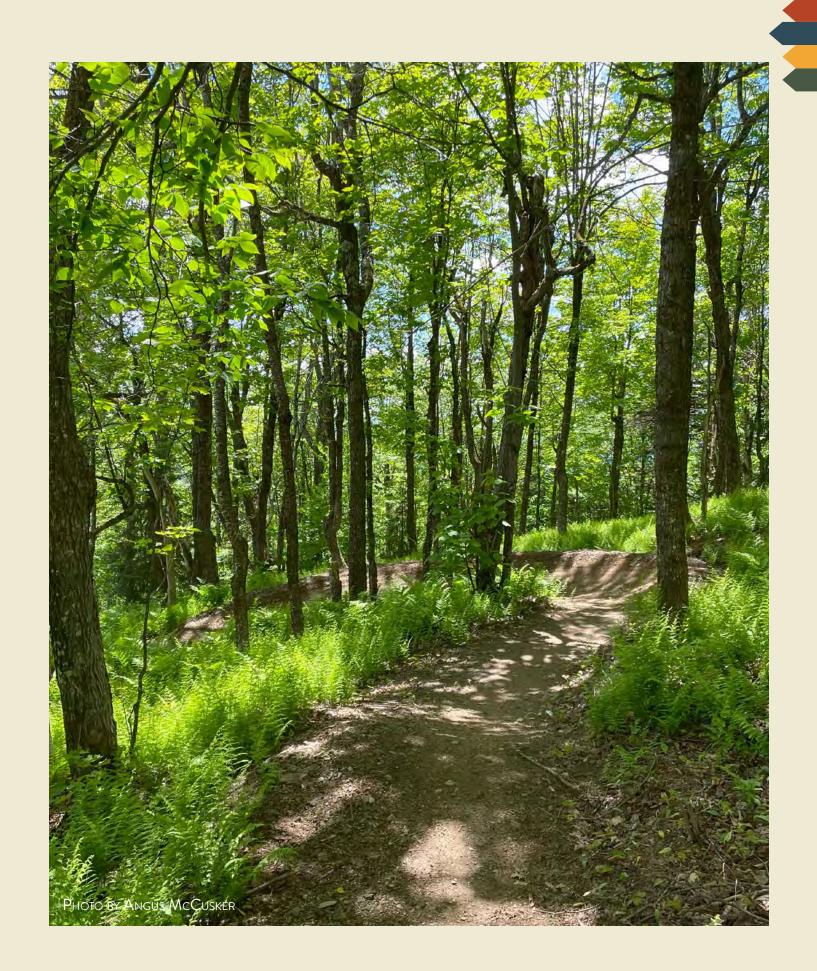
A primary partner for the Velomont in this location will be VTrans who manages and operates the LVRT. From this 'spine' numerous VMBA Chapters and other partners are anticipated to support specific trail networks, including Caledonia Trails Collaborative (CTC), the Towns of Greensboro, Craftsbury, Cabot, Danville, and St. Johnsbury.

To build a connection between St Johnsbury and Kingdom Trails, partnerships with the ANR St. Johnsbury DST, Victory Hill Trail Club, and Kingdom Trails, among others will be crucial to develop and maintain in order to identify an appropriate corridor to link these resources.

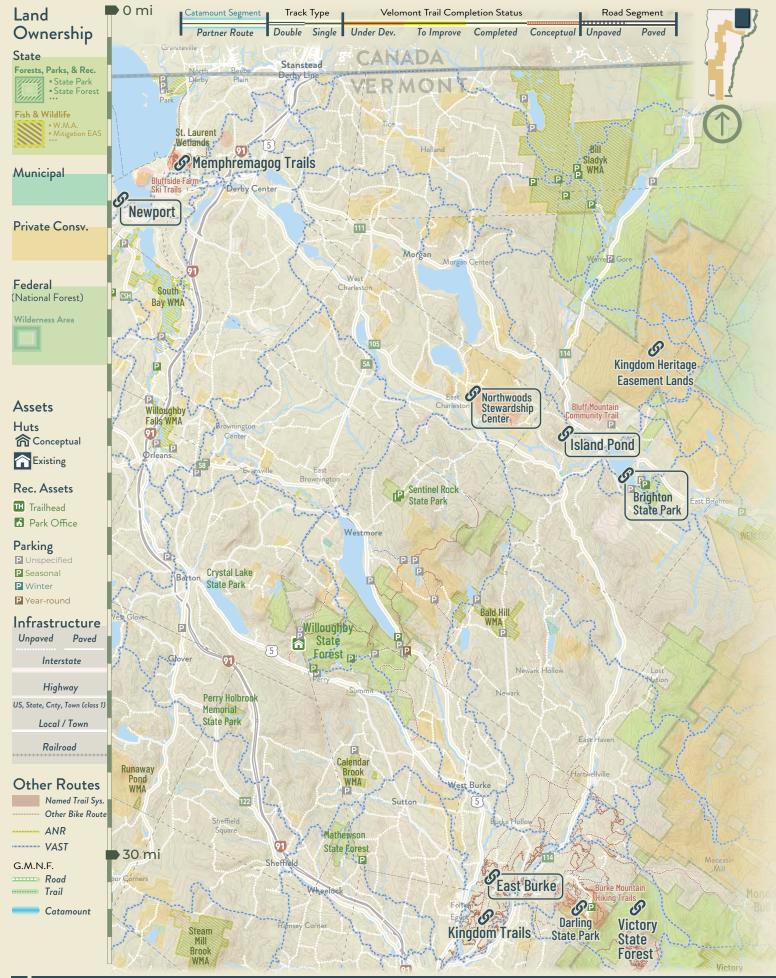
Huts and Community Resources

This area is not expected to be served by backcountry Huts but by resources within communities, including the future Hardwick hostel and additional hostel opportunities in other towns. The lodging stock in the "Kingdom Corridor" is 44% short-term rentals. There are also camping opportunities at the Caledonia Fairgrounds and Kingdom Campground, close to Kingdom Trails in Burke. Lyndon and Burke both have dining and lodging options. Lyndon and Burke have several outdoors and sporting good stores.

- The first step for the Velomont will be to use this document and the formal wayfinding package developed to propose use and wayfinding on the Lamoille Valley Rail Trail. This will begin with the Rail Trail Council and go through VTrans.
- Connections to the LVRT should seek to connect at existing roadway crossings and/or trail access points, as the introduction of new access points to the LVRT is a more onerous process than leveraging existing connections. A more formal discussion of this permitting process is discussed in the appendix.
- The Velomont Trail Collective should work with CTC & Towns of St.
 Johnsbury and Lyndon to further conversation regarding building singletrack trail access adjacent to the LVRT.
- The Velomont Trail Collective should work with the ANR St. Johnsbury DST to identify potential access points and corridors through Lyndon State Forest trails.







MAP 13 - THE KINGDOM AND BEYOND

Overview & Narrative

The goal of this portion of the Velomont is to link the Northeast Kingdom with a trail that reaches from Kingdom Trails to Newport and the Canadian border. This Phase 3 portion of the Velomont has no defined corridor, but rather a series of 'dots' that are to be connected as future planning determines and develops ideal corridors.

The base for any mountain bike trail in the area will be the extensive Kingdom Trails network. Assuming a suitable corridor can be identified through this network on private land, the trail would move northward, and should look to opportunities with conserved lands east of Route 114. Connections and partnerships with the Northwoods Stewardship Center could offer potential, with an eventual connection towards Island Pond as an excellent Town destination to host Velomont users on their journey.

Conversations with the ANR St. Johnsbury DST identified that Willoughby State Forest should be avoided due to existing high visitor use. Additional ANR lands should be considered in this area as potential Velomont corridor opportunities. These include Victory State Forest, Darling State Park, Brighton State Park, West Mountain WMA and the Kingdom Heritage easement lands. In addition to state lands partnerships, coordination with local VAST trail managers should be pursued, as the existing network of snow travel trails are ample and conversion to multi-season use may be an ideal partnership between the Velomont and VAST in the northeast kingdom. VAST trails, however, vary significantly in their suitability for summer use, and each corridor under consideration will require careful field review.

Potential Velomont Trail Partners

Clear partners in this region include, Kingdom Trails, VAST, and local landowners and conservation interests. The ANR St Johnsbury DST will be a key partner to identify which of the numerous ANR parcels in this region could support overall Velomont goals of connectivity and conservation.

Huts and Community Resources

Though specific locations are not yet identified, it is anticipated that Velomont lodging would be supported by 1-2 future Huts in this area. There is a Community Hub planned for this area that would serve as a welcome center for visitors to Kingdom Trails. There are several restaurants in the vicinity of Kingdom Trails, as well as multiple inns.

- Due to the lack of definition in this corridor compared to others, it may be worthwhile to consider dedicated significant planning resources to this area alone in order to better identify specific trail corridors to be considered, landowners to be approached, and partnerships pursued.
- Continued work with organizations such as ANR, Kingdom Trails, VAST, and Vermont Land Trust, and Trust for Public Lands and will be crucial in this northernmost portion of the Velomont.







04. THE DESIGN



TRAIL DESIGN & MAINTENANCE BEST PRACTICES

DESIGN GUIDELINES

The Velomont Collective utilizes established trail design guidelines when building new segments of trail. Key reference documents include:

- <u>USFS Trail Construction and</u> <u>Maintenance Handbook</u> (2007) – Referenced to guide sustainable trail design and construction techniques. Primary guiding document when working on any USFS lands.
- IMBA / BLM <u>Guidelines for a Quality</u> <u>Trail Experience</u> (2017) – Referenced to guide higher-level planning and design of new trail corridor and selection of existing corridors to provide a high-quality trail experience.
- <u>Town Forest Trail</u> Design Guide Provides environmental checklists and guidelines for trail experience types. A primary reference on municipal and state-controlled land – although not a formally adopted document by Vermont Agency of Natural Resources – it provides a Vermont-specific trail design toolkit. This document also outlines the preferred corridor widths, sight lines, and longitudinal / cross slopes for multi-use, accessible, and mountain bike specific trail segments of the Velomont.

- <u>VT Wetland Program Trail Building</u>
 <u>Guidance</u> Documentation to guide any and all trail work in and around known wetlands.
- Vermont Trails and Greenway
 Council Best Management Practices

- Guidance on best management practices, including these documents and others, compiled by the Vermont Trails and Greenways Council. This guidance is crucial in the collaborative maintenance and care of existing and future Velomont segments.

USFS Trailhead Design Guidelines

- When and if a Velomont Project involves building a new or updating an existing trailhead, this federally approved document provides an excellent reference point to guide changes to trailheads and access points.

Velomont Trail projects that build new or improve existing trails will adhere to the best practices found in these guidance documents. Where possible, new Velomont Trail projects will strive to go beyond standards, and build more inclusive trails for all ages, abilities, and backgrounds. It is anticipated that in addition to the recognized standards listed above, Velomont will adhere to upcoming Trail Best Management Practice guidance being developed by the Vermont Mountain Bike Association specifically for this region.

BUILD 'JUST ENOUGH' TRAIL

Whenever possible, Velomont will be established on existing, high-quality trail networks. From singletrack trails in the Green Mountain National Forest to multi-use trails through state parks, or gravel roads connecting rural communities, Velomont will stitch together the best recreational corridors Vermont has to offer into a whole greater than the sum of its parts.

When collocated with a partner resource such as the Lamoille Valley Rail Trail, a State Park, or within the Green Mountain National Forest, Velomont will adhere to land



management guidance for trail and trailhead design and wayfinding.

The Velomont Collective seeks to build new trails when no existing trails are available, or the available facilities are unsustainable or present a long on-road segment impacting the intended experience of a 70% singletrack trail corridor. In many cases, roadway corridors will offer a temporary solution to connect the Velomont until new trail can be built.

Establishing the core Velomont route will in addition expand local opportunities for single day tours or loop opportunities connecting a portion of the Velomont to other existing trail and road corridor resources.

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DESIGN ADAPTIVE OPTIMIZED TRAIL EXPERIENCES

A goal of the Velomont is to build trails that offer the benefits of outdoor recreation to all. As part of that goal, many segments will be built to adaptive friendly or adaptive optimized standards. Adaptive Trails are trails built to standards suitable for access by hand cycles ridden by people unable to ride a traditional pedal-powered bicycle. As an added benefit, the grades and clear-zone widths of adaptive trails support beginner rider access while still offering an engaging experience for all levels of expertise. A stated objective of the Velomont Trail is to provide a quality trail experience for adaptive riders. This may not be possible on all segments of the Velomont as it will adopt segments of trail that have been already built, but new trail development, existing trail improvement, and signage should keep the following in mind:

Velomont should maintain clear messaging regarding what sections of the trail are or are not built to adaptive standards. The adaptive rider's experience of planning a trip, setting up logistics, and enjoying days on the trail should be considered in all site planning. Adaptivefriendly and adaptive-optimized trail segments should be built throughout the Velomont whenever possible, and some segments will be optimized for adaptive use. Adaptivefriendly trails will make efforts to remove pinch point barriers, off camber slopes, and ensure structures such as bridges can accommodate three-wheeled bikes. Adaptive optimized trails will go further to maintain a 48" width throughout the trail and create experiences optimized for handcycles, but this will not be feasible in all portions of the Velomont due to its adoption of existing trails in backcountry areas and the cost and impacts of improving all segments to this standard. Adaptive optimized trails are to be prioritized adjacent to Town centers and connecting to accessible huts.

Trail planning should also consider three elements: passability, fall consequence, and level of support required. These qualities are used by Vermont Adaptive Ski and Sports and VMBA to assess the accessibility of a trail. If a trail poses no limitations to an aMTB rider independently completing the trail, then the trail is considered "passable." If a trail has obstacles and/or tread width that would prevent an aMTB (36" width) from completing the trail, then the trail is not considered passable. Adaptive-friendly and adaptive optimized trails should be, at minimum, passable. Trail designers should also consider the fall consequence of different trail features. Trails with higher fall consequences should be given a higher difficulty rating. Higher consequence areas include trail sections with more exposure, meaning the likelihood that one or both wheels will leave the ground. These areas should have fall zones that minimize the consequences of a fall/roll-over. The level of

support required for navigating a trail gives a trail a designation of AMTB 0, AMTB 1, AMTB 2, or AMTB 3. AMTB trails with a rating of AMTB 0 require no support, while AMTB 3 trails have major challenges and need support for people navigating them.

In addition, connectivity should be considered uniquely from the adaptive perspective. For example, no backcountry trail should be built to adaptive standards if it is "islanded" from points of entry. Accessible trails should always connect to one or more accessible access points. It may be desirable to concentrate adaptive development resources onto contiguous trail sections, thereby facilitating an uninterrupted mountain biking experience for an adaptive rider. Whenever new access points are established, or existing ones improved, establishing accessible parking, circulation, and trail access should be a priority.

Velomont Trail Collective staff and volunteers are encouraged to engage with Vermont Adaptive Ski and Sports, VMBA, and the Kelly Brush Foundation on a regular basis for ongoing guidance and to ensure adaptive rider needs are being considered wherever possible.

PROMOTE DIVERSITY, EQUITY, INCLUSION

Dismantling structural bias in outdoor initiatives is crucial, as the physical, mental, and economic benefits of outdoor recreation can, and should apply to everyone. There should not be an 'outdoorsy' type of person, but all people, regardless of race, creed, or color should have equitable access to the outdoors. This task, however, is not always an easy one. To face this head on, the Velomont Trail should consider the following questions on a routine basis:

- In what ways can the operating model of the Velomont Trail be more equitable? For example, is there a way that the current fee structures (for parking, usage, hut reservations) might be biased against groups who are already disadvantaged?
- If I had a different identity, would I feel safe parking/riding/sleeping in this location? If not, then how can the trail initiative improve the situation?
- Do riders have a clear protocol for how to engage with residents or local services if something goes wrong, or if they need medical or mechanical help?

- Are riders prepared to be without cell phone service? Do riders understand that a lack of cell phone service is inevitable? Do riders feel safe knowing this?
- Can someone new to mountain biking, bikepacking, or outdoor sports understand this signage/blurb/website? Is the text free from exclusionary language, and avoiding "gatekeeping" with communications?
- Are third-party guiding services helpful, necessary, or extraneous? Is marketing and outreach done by marketing, guiding, or outfitting partners reaching, and inclusive of, the intended demographics and populations?

SUPPORT SEARCH AND RESCUE

Anywhere that the Velomont is established, particularly when it is established by the construction of new trail segments, close coordination with Vermont's search and rescue (SAR) organizations should be sought. At a minimum, newly established sections of the Velomont should provide:

- Injury report protocol the anticipated chain of command, or reporting protocol, when an emergency call is received. This includes state police, ambulance, fire departments, local search and rescue, and/or volunteers.
- Lost/Missing report protocol the anticipated chain of command when a trail user is declared missing in the vicinity of the Velomont Trail.
- Description identification of communications/emergency access staging areas.
- Description and clear maps illustrating established Velomont sections and identified staging locations to support a search and rescue operation. Contact the local Municipal E911 Coordinator for trailhead E911 addresses (if needed). Trail shapes should be provided to E911 Coordinator and VT E911 database team.

- Updates to the state-maintained e911 database to reflect new trails, new trail alignments, or other changes. Contact the local Municipal E911 Coordinator for trailhead E911 addresses (if needed). Trail shapes should be provided to E911 Coordinator and VT E911 database team.
- Key contacts and anticipated local trail stewards available to support.
- Identification of landowner/land manager contacts for additional coordination purposes.

The Velomont Hut network is anticipated to provide support to search and rescue by serving as staging locations during backcountry operations, and The Velomont Collective will work with local SAR providers to supply them with hut access codes.

As a template and model, the <u>2024</u> <u>Brandon Gap SAR</u> plan is included in this document's appendix .



TRAILHEAD DESIGN BEST PRACTICES

As discussed here, these design best practices apply to any new trail access point improved to support not only trail access, but trailside parking in any amount. The Velomont Trailhead Siting & Design best practices are based on standards established by the USFS in a detailed <u>Trailhead Design Guideline</u> <u>Document</u>. This summary outlines key components that should be considered when selecting and designing trailhead locations along the Velomont Trail. Though eventual use may require updates and upgrades to existing trailheads as part of the Velomont, few brand new trailhead construction projects are currently anticipated for Phase 1 or Phase 2 sections of the Velomont. In the near term, it will be important for The Velomont Collective and partner groups to monitor built segments of the trail to identify areas where improved access may be needed, such as existing road crossings near population centers.



SITE SELECTION:

- Wherever possible, select sites that have already been developed and/or disturbed.
- Environmental sensitivity considerations must be taken into account not only for the trailhead site itself, but for all the surrounding areas.
- Surrounding areas should also be understood for impacts on adjacent land uses – trailheads in residential contexts should be sited and sized differently than those on backcountry roads.

PERMITTING

Permitting for trailhead development should follow similar approaches to the process described for huts below - with some modifications. No structural permits may be necessary for a trailhead with only a kiosk, but surface water permitting is often required for parking locations due to their contribution to impervious surfaces. Preliminary site selection will inform any pre-proposals or preliminary permits, and final design will inform final permitting requirements. Reference the step by step process outlined in the hut permitting section to identify the appropriate permitting structure for trailheads.

DESIGN PROCESS:

- Size Matters: Consider the desired future condition of a trailhead – is this a large hub that will accommodate large gatherings and work-parties, and serve as a regional access point? Or is this one in a series of trailheads (an emerald necklace) that provides local access along an entire corridor of the Velomont? And what amount of parking and use can the site accommodate comfortably?
- Human Impacts: Trailhead maintenance can be significant – many federal land managers have policies against placing trashcans at trailheads unless resources exist to clean facilities regularly. Consider the implications of trash and human waste at the trailhead.
- Consider Circulation: A good trailhead design has space for cars and people to move about without causing unnecessary conflict. When the site constraints allow, an ideal design has drivers only moving forward through a one-way loop of parking spaces to minimize accidents due to driving in reverse or multiple streams of auto and pedestrian traffic crossing one another. Clear signage can further help circulation flow.

HUT SITING BEST PRACTICES

The process of siting a backcountry hut can be complex and involve many stakeholders. There are several important considerations to siting a hut, including environmental resource constraints, access and wayfinding, land ownership and management, and sustainability. Despite their more significant development impact and cost than a tent site, some research has shown that well-designed, properly sited huts are one of the most ecologically friendly backcountry lodging types, resulting in less trampled vegetation and impact than dispersed camping sites.

SITING APPROACH OUTLINE

This outline provides three steps to follow when siting a new hut on the Velomont system. For each step, key questions and actions are listed. These questions support the development of a formal proposal and a streamlined process of proposing, permitting, and developing a backcountry hut. Not every site will be suitable for a backcountry hut, and this approach seeks to identify roadblocks early on to minimize the time spent on unsuccessful permitting/approvals.

Key Considerations:

- Huts should be located adjacent to an active trail system if possible. Many users are drawn to a hut experience because of the ability to stay on-trail overnight.
- Huts should be located in a remote location to support the experience of sleeping in the woods. However, huts should not be located in remote locations that have highly complex environmental constraints. Consider selecting locations below 2500' where possible, and avoiding ridgelines and other sensitive natural resource areas unless existing infrastructure would complement and support a hut location at these elevations
- Some land managers may have more complex permitting processes than others. Consider this when choosing the hut site.
- Recognize social constraints or impacts when siting a hut that will host regular visitation.

Step 1: Where will the hut go and Who will this hut serve?

Determine the general site for a hut, the s ager/owner of the land.

Preliminary Questions:

- What trails and recreational uses will this hut serve?
- What level of seasonal use rates do the trails in this hut site vicinity receive, or what is the anticipated level resulting from new Velomont connectivity?? Are these levels sufficient to support hut use?
- Who manages/owns the land for this hut site? Who manages/owns the land adjacent to the hut site?
- Who are potential partners to demonstrate broad support for this hut? Examples include advocacy groups, landowners, and outdoor recreation businesses.
- What is the access route for construction and maintenance of the hut? How will the public access the hut on a year-round basis, and where will they park?
- Is there a viable water source near the hut? If not, what is the plan for guest access to water?

Determine the general site for a hut, the supporting trail users, and the relevant land man-

Actions:

- Reach out to landowners and land managers about the hut concept. Identify the desire to site a hut and identify the appropriate contact to work with to develop a formal proposal.
- Identify at least three potential hut locations in the area. Select one as the preferred location and present the other two as alternatives, in case site constraints make the preferred location untenable. At this first step, these locations should be conceptual, and identify an area much larger than the hut footprint to allow for siting flexibility.
- If any site is on public land, review the appropriate land management plan to ensure compatibility. (See Appendix)
- Reach out to other partners to identify potential supporting roles and responsibilities.

Step 2: What are the constraints?

As a second step in this process, identify and document any possible constraints in the hut project area.

Actions:

- Conduct a desktop environmental assessment of the sites using the ANR Atlas. Follow this assessment with a site review by a trained environmental scientist. Use this information to site the potential hut away from sensitive areas, such as steep slopes, important habitat areas, vernal pools, and other sensitive landscapes.
- Identify other site constraints that may impact this hut project, such as roadways, property boundaries, or nearby noise or lights.

Step 3: Identify Permitting Needs

As a third step in this process, identify any move forward.

Actions:

- Determine in what town the hut site is located. Identify if specific zoning bylaws allow backcountry huts, cabins, or recreational uses. Depending on this regulation, it may be necessary to seek conditional use approval for the hut from the Town's Development Review Board. Huts likely do not qualify as campgrounds but check how the Town defines them just in case.
- If working on private land, it is best practice to conduct a Natural Resource Inventory to ensure the hut site mitigates or avoids sensitive flora and fauna. State and Federal lands require such analysis.

Velomont Vision Plan

As a third step in this process, identify any permitting approvals required for this hut to

Use the DEC Permit Navigator tool to determine other permits that may be required for this hut project, such as a stormwater permit. Note that this tool requires an address to use and thus it may not work for some more remote hut sites and hut sites on public lands.
 Pursue necessary permitting processes as identified by the Town, land manager, or State. Consider working with consultants who specialize in permitting processes if the effort will be significant.



WAYFINDING

INTRODUCTION

The Velomont experience is one of a user finding their way through trails, villages, and rugged forests across Vermont. The Velomont will connect hundreds of miles of existing trail networks, each with their own unique wayfinding systems. This chapter of The Plan provides guidance on how Velomont wayfinding will integrate into existing trail wayfinding systems – and when needed, build new ones. This chapter provides a quick reference guide to how the Velomont will be clearly signed and marked as it crosses Vermont. Key themes include:

- Trail Network Branding and Identity
- Trail Markers
- Trail Signposts
- Trail Kiosks
- Placement Guidance
- Digital Wayfinding

VELOMONT SIGNAGE FOLLOWS ESTABLISHED GUIDELINES

The design and placement of Velomont signage must comply with established standards and guidance for public lands and roadways.

Whenever the Velomont is within public roadway signage must adhere to guidelines established in the <u>Manual for Uniform Traffic</u> <u>Control Devices (MUTCD).</u>

Whenever placed on lands managed by the USFS, the trail signs should follow guidance provided by the <u>Sign and Poster Guidelines</u> for the Forest Service. The designs in this document have been developed to comply with these documents while providing a quick reference guide for other land managers to utilize in the absence of agency or town specific guidance.







TRAIL NETWORK BRANDING AND IDENTITY

Central to the identity of the Velomont will be the consistent use of the logo, typefaces, and colors that are prominent in this project's brand identity. The logo should be included on all official communications from The Velomont Collective, all associated merchandise and maps, and featured prominently on the Velomont website.

Primary Velomont colors and typefaces are included here as well to guide future communications, cartography, and related efforts.

The logo should be legible at any size. Do not stretch or distort The logo should be padded by approximately 0.25" to help it appear clean and uncluttered.

Green is Velomont's main color. White is used as an accent. Text should be grey. Pops of colors from the tertiary colors can be used, but all branding should rely heavily on green, white, and grey.

ROBOTO CONDENSED BOLD is the font used in the logo. All other fonts are used to compliment the logo.

Trail Branding Logo

MAIN LOGO

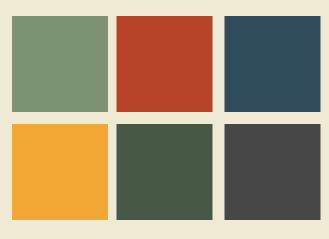


LOGO SPACING





TERTIARY COLORS









Typography

BRANDING ONLY

ROBOTO CONDENSED BOLD

ABCDEFGHIJKLMNOPQRSTUVWXYZ

1234567890

DOCUMENT HEADINGS

MONTSERRAT ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890

DOCUMENT BODY TEXT

Ubuntu

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

DOCUMENT CAPTIONS

Brandon Grotesque Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890



VELOMONT TRAIL MARKING PRINCIPLES

As the Velomont crosses boundaries between state, federal, and private land, a consistent 'Velomont' identity should be communicated. Marking the Velomont Trail in a fashion that recognizes the primacy of each State Park, Town Forest, or National Forest it crosses is a key component of successful wayfinding. Three principles are intended to accomplish this goal:

- The Velomont is a partner to numerous trail networks. Velomont signs, kiosks, and trail markers should retain a 'secondary' visual hierarchy to pre-existing trail networks they cross. The Velomont Marker should be placed below a trail partner's trail sign/kiosk/or trail marker whenever possible.
- Trails should only be identified as part of the Velomont when written permission has been obtained from the managing agency/trail stewards for the respective trail corridor.
- Velomont Markers will be specific to the Velomont Corridor only. Routes, spurs, and loops associated with the Velomont Trail will utilize their own signage, but should identify the presence /distance to the Velomont at all intersection markers and /or entrance kiosks.

TRAIL MARKERS

Often referred to as 'blazes', these simple trail markers are anticipated to be the primary form of identifying a partner trail network or public roadway as a Velomont segment. Three Marker types are recommended to indicate the Velomont Corridor and will be the primary wayfinding elements seen throughout the Velomont.

Reassurance Markers

Use to identify a corridor as the Velomont. These Markers are designed to ease 'second guessing' wayfinding decisions while in the field. These Markers can stand alone.

Place Reassurance Markers in same location as any existing partner VMBA Chapter or Land Management Agency markers.

Directional Markers

Used only in conjunction with a Reassurance Marker, these indicate Velomont corridor direction at junctions and turns.

Type Markers

Used only in conjunction with Reassurance and/or Directional Markers, these optional Markers identify additional features/ characteristics/trail partners.

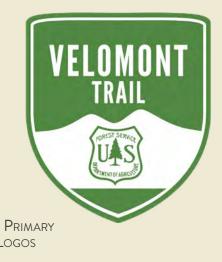
Reassurance Markers

This version of the Velomont logo stands alone as a Reassurance Marker. Keeping this unique shield shape as a Reassurance Marker supports quick recognition by trail users. The loss of the central bike logo element creates a space to recognize land managers/trail partners when necessary and ensures that travelers do not mistake the corridor for a bike-only trail.





Reassurance Markers should be placed every 500 feet to ¼ mile spacing along uninterrupted trail corridors, and at all trail intersections. Where winter conditions, drainages, deer paths, or other conditions create confusion, the Reassurance Markers should be placed more closely together to support confident navigation. Care should be taken not to 'clutter' the landscape with more than one Reassurance Marker visible in one direction at any one time.





Directional Markers

These Markers are intended to identify Velomont routing at any turn or intersection on the trail. They should be placed directly below Reassurance Markers whenever used.

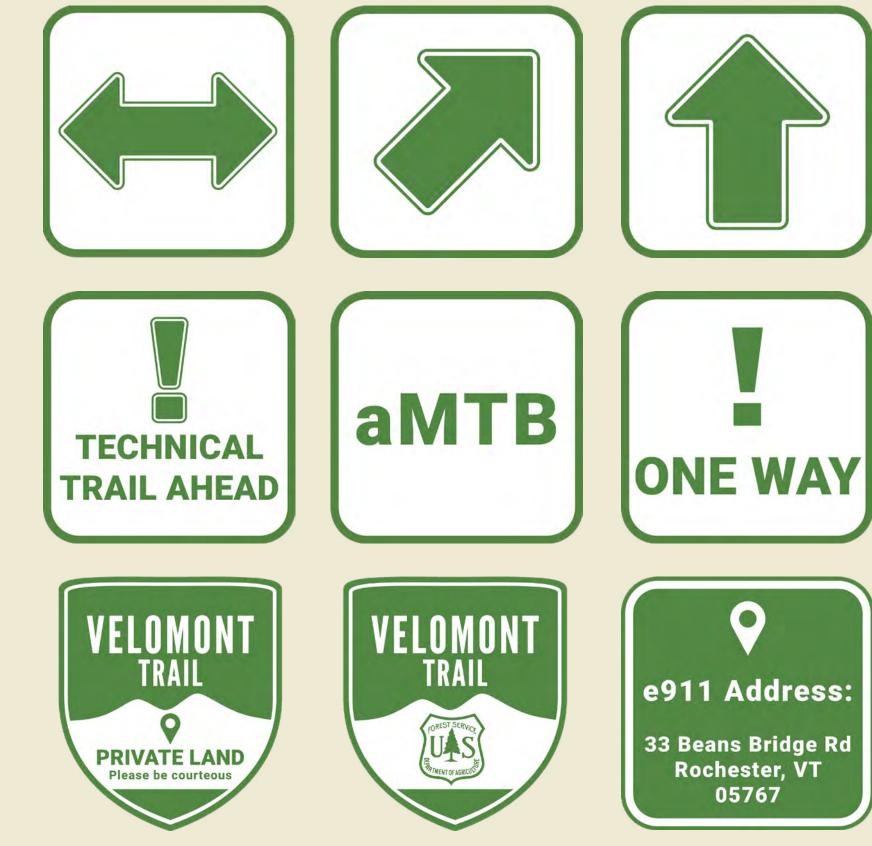
These Directional Markers can be utilized in conjunction with existing trail signs and kiosks to support wayfinding.

Type Markers

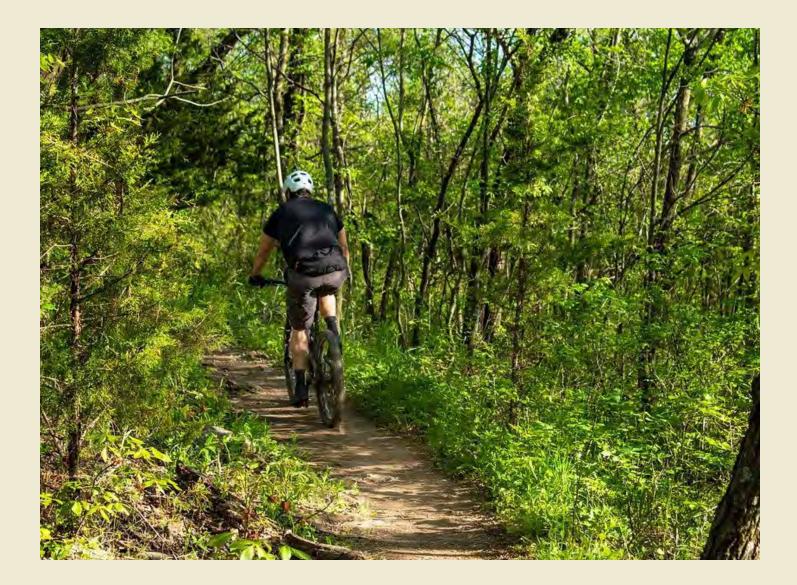
Type Markers are an optional marker type. These Markers will be custom printed as needed to convey additional/unique information about specific portions of the Velomont Trail. Three anticipated cases for these Markers include:

- Identifying accessible-optimized trail within the Velomont system.
- Identifying trail challenge level using the green circle, blue square, black diamond convention. This will be more applicable to expert-level areas as they will be the exception, not the rule, on the Velomont.
- The e911 Marker is to be used only at trail entrances from public roadways and trailheads, and affixed to entry kiosk or trail sign.

Partner trail systems will be identified by their own markers, either through VMBA Chapters, town forests, or land management agencies. Velomont Markers should be placed in vertical alignment with these markers following agency guidance while keeping all Velomont Markers together (either above or below existing trail partner Marker).







Materials & Placement Guidance

All Velomont Trail Markers are intended to be made from recycled and/or biodegradable plastic. Markers should be placed at a 'typical' eye level range (5-6' from the ground) when placed on trees and mounted by small aluminum nails. Care should be taken to ensure that Markers are not obscured by brush or near overgrowth that could overtake Markers within three growing seasons.

Marker placement, in any location, should always be placed in order, from top to bottom, as Reassurance Marker, Directional Marker (if needed), Type Marker (if needed). Velomont Markers should not overlap one another or partner signage.

These Markers should be placed on trees, existing signposts, or if neither is available, upon a new signpost. When placed adjacent to existing signage (trail, roadway, kiosk) the Velomont Marker should always be placed below the existing signage, centered if possible, or to the lower right if not.

Partner Signpost Integration

Velomont Markers should be placed below partner signs, centered to the greatest extent possible. Markers are anticipated to be placed on signposts, signs, or tree trunks. Whenever



REASSURANCE MARKER TYPICALLY PLACED FIRST **ARROW DIRECTIONAL MARKER** PLACED THIRD TRAIL FEATURE MARKER **OPTIONAL, AFTER ARROW PARTNER MARKER** *PLACEMENT VARIES, CAN BE PLACED TOP OR BOTTOM possible, signs should be affixed to existing signs or signposts rather than tree trunks. Velomont Markers should always maintain approximately a $\frac{1}{2}$ spacing between partner signs and the edge of the Velomont Marker and should never obscure any partner sign information.



Partner Kiosk Integration

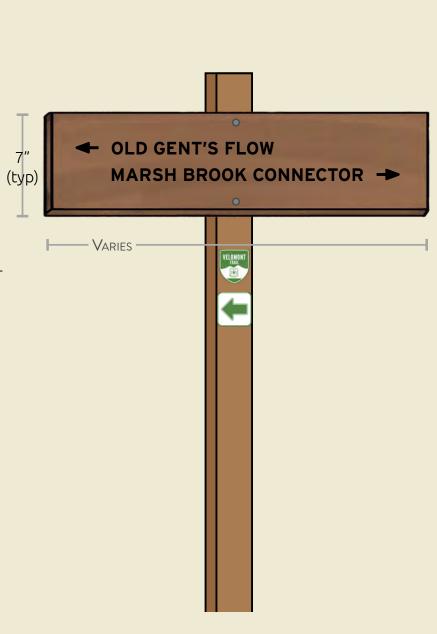
Partner kiosks should have Velomont Markers placed to the lower (viewer's) right-hand side of kiosk information panels. This can be mounted on the frame or the kiosk leg, depending on design. Wood screws, nails, or adhesive backing can be utilized to place the Velomont Marker on the kiosk as appropriate.



TRAIL SIGNS

Newly established portions of the Velomont will need to establish new trail signs and kiosks. When these projects are on state or federal land, the first approach will be to support the construction of standardized trail signs or kiosk per land manager guidance and affix the appropriate Velomont Markers to them. When a Town Forest or other land manager does not have specific guidance, the following trail signs and kiosks are recommended for new construction as relevant. These signs, as proposed, are USFS standard trail sign specifications with the addition of UV oil and scorched lettering for higher-contrast visibility.

Trail signs are intended to mark major landscape features. Primarily, they will mark trail junctions, but may also be used for identification of summits / peaks, land management or political boundaries, and other notable features throughout the Velomont.



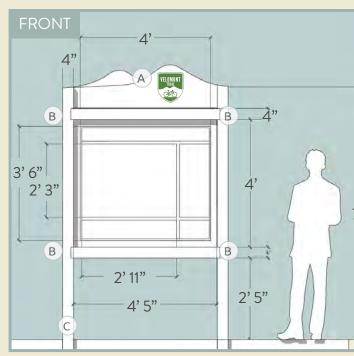


TRAILHEAD KIOSKS

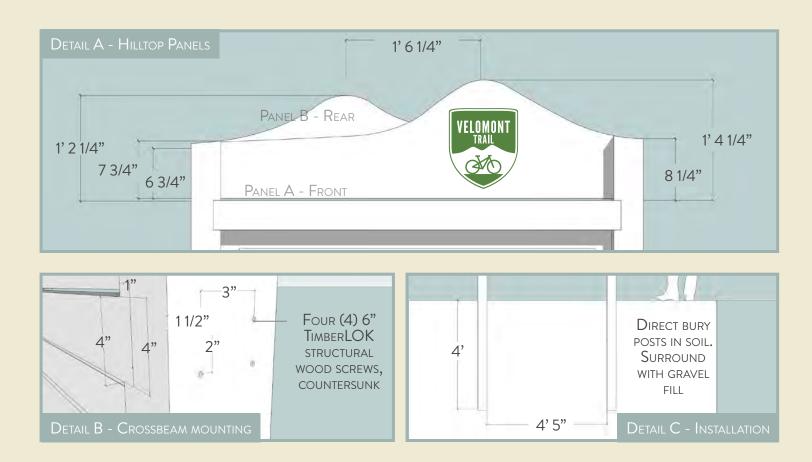
Where new trail access points are built as part of the Velomont, there may be a call to install new trailhead kiosks. Where land managers have pre-approved kiosk designs, these kiosks with a Velomont Marker applied to the lower right-hand post should be installed. Where no prior designs are available, a Velomont specific kiosk design should be used. This design can also be considered for any trail access points that would like to be identified as 'jumping off points' for trips through the Velomont.

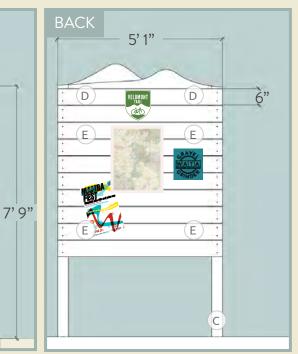
Kiosks should be placed towards the edge of any trailhead or parking lot, with the formal side facing pedestrian and automotive circulation paths. Where feasible, the backside boards of the kiosk offer an 'informal' community posting space that can be more readily accessed as a physical bulletin board for the local trail community.





FRONT SIDE KIOSK PANEL TO SERVE AS LONG-LASTING MAPS & TRAIL / ACCESS INFORMATION TO BE UPDATED ONLY WITH LAND MANAGER'S APPROVAL. PARTNER AGENCY LOGOS TO BE INCLUDED CLEARLY ON FINAL MAP/PANEL DESIGN.

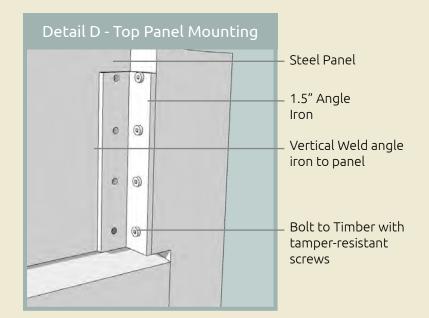




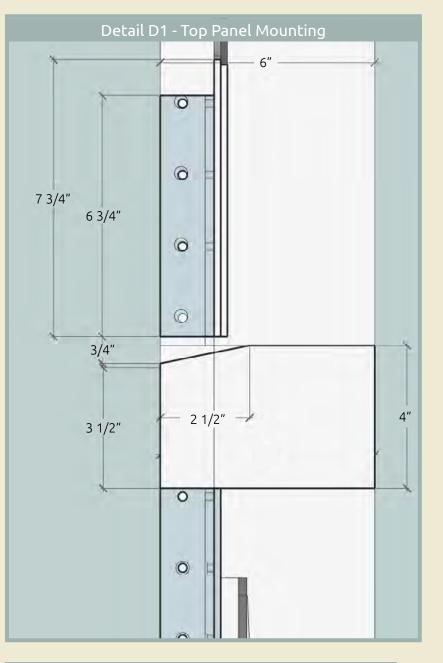
Optional backside 1x6" rough cut LOCUST TIMBER (OR SIMILAR) PANELS PROVIDE COMMUNITY POSTING SPACE FOR STAPLED/PUSH-PINNED INFORMATION

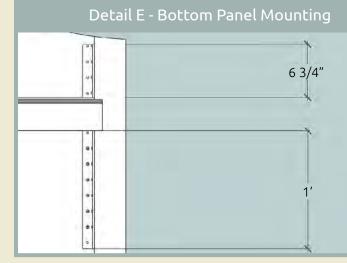
Trailhead Kiosks

Steel Panel Mounting Details









Elevating the steel panels above the cross beams, and creating a chamfered edge to the crossbeams will prolong the life and minimize rust staining between the steel and wood elements.



PLACEMENT GUIDANCE: VERMONT RAIL TRAILS

Velomont will be required to enter into a license agreement with VTrans for any areas of state-owned rail trails they intend to co-locate upon. Wherever the Velomont is co-located on a rail trail, wayfinding and signage should defer to the State's Rail Trail Guidance. The Vermont Agency of Transportation (VTrans)'s State Rail Trail Community Wayfinding Guidance (contact VTrans for a copy) document provides direction to municipalities along Vermont State Rail Trails. This document outlines a consistent approach to off-route directional signs that adheres to state and federal guidance. In addition, the LVRT Management Plan outlines strategies for trail connections as part of the Economic Development & Community Connections initiative. The LVRT Trailside Facility Design Guidelines provides local municipalities with guidance to design and implement amenities and trailheads to better serve their individual communities and the entire 93-mile corridor of the LVRT. For further information, contact the local rail trail council and/or Rail Trail Division at VTrans.

Kiosks

The LVRT Trailside Facility Design

Guidelines provide information regarding the design, construction, placement, and allowable content details for Kiosk Maps that meet VTrans maintenance, safety, and accessibility

requirements while aligning with the unified aesthetic for all rail trails in Vermont. Per the Design Guidelines, the footer section of the printed maps at kiosks have room for funding info, acknowledgments, logos, etc. Similarly, how this space is used to acknowledge VAST as a partner, the Velomont would likely be included in this section. Additionally, the guidelines state that memorial/donor plaques can be attached to the posts of the kiosk structure on the outside face of the post.

Marker Placement

The State Rail Trail Community Wayfinding Guidance does not have explicit direction regulating the addition of partner trail network markers.

However, it does identify Singular Point of Interest Wayfinding signage. An example of this signage is included at right. These signs should direct users on the Rail Trail towards Velomont connection points and spurs. Recognizing the unique branding of the LVRT, it is recommended that the Velomont provides signage at key entry and exit points using singular point of interest wayfinding signage. Velomont should rely on existing LVRT signage to guide users along the general course of the LVRT where the Velomont colocates.

State Rail Trail Community Wayfinding Guidance

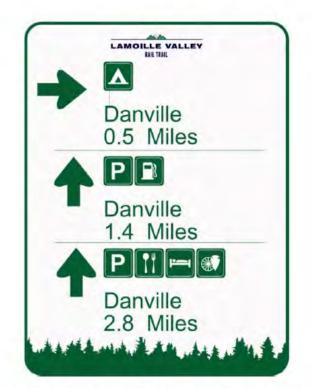
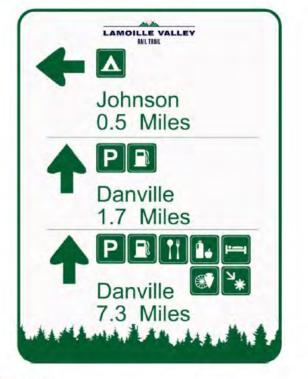


Figure 13: Singular Point of Interest Wayfinding Sign







PLACEMENT GUIDANCE: PUBLIC ROADWAYS

Velomont is envisioned as a 70% off-roadway experience. However, many miles of this trail system will be co-located on public roads. Public roadway signage is strictly governed by the <u>Manual for Uniform Traffic</u> <u>Control Devices (MUTCD)</u> and Velomont road signs should follow this guidance closely.

Roadway Types

In the broadest terms, there are two categories of roads in Vermont: Town-maintained and State-maintained roads. A key difference between the two is the permitting process.

State-maintained roads are primarily state highways (e.g. Route 100, Route 9), and Interstates. The Velomont will not access any Interstates, but it will cross and perhaps access state highways. Adding any signs in state-maintained road right-of-way (ROW) will require a <u>1111 permit</u> which approves work within state highway ROW.

Town-maintained roadways will be governed by their Town staff, (typically public works departments) who must be contacted with requests for additional signage on public roadways to gain approval for signing the Velomont corridor on public roads. Whenever possible, Velomont should strive to keep the corridor off state highways due to the complexities of permitting on state roadways, and the higher traffic volume impact on the comfort and enjoyment of cycling, or hiking, on roads shared with cars.

Roadway Sign Placement

For all public roadways in the state, Velomont signage will be required to conform to bike route signage approved by the Manual of Uniform Traffic Control Devices (MUTCD) instead of Velomont Trail Markers. This document contains detailed guidance on road sign placement on public roads.

For the Velomont, the MUTCD wayfinding sign is D11-1c, with custom text as recommended in section 9B.20 of the MUTCD. Optional wayfinding arrows can be paired with these signs to support wayfinding at intersections.

Signs will typically be required to be placed on their own signposts on public roadways, unless existing route or directional signs are in place that could host non-conflicting Velomont trail signage. An example of this would be a portion of the signed Cross Vermont Trail is co-located with the Velomont Trail. In this case, an existing Cross Vermont Trail signpost could host a Velomont directional sign.



BIKE ROUTE

D11-1_BP



M6-2







D11-1c



M2-1



M6-1





Roadway Crossings

Any proposal for a new road crossing by the Velomont should align with the guidance provided in <u>the 2019 VTrans Guidelines for</u> <u>Pedestrian Crossing Treatments</u>, and any future updates.

In most cases, a natural surface trail crossing a roadway will be considered an unsignalized intersection and uncontrolled approach, or an unmarked crossing. In these conditions, preserving user safety when crossing an open road should be the top priority. Best practice considerations include:

- Cross roads at 90° angles this provides the best line of sight for trail user and drivers alike.
- Cross where "sight distance" is highest – avoid crossing roads where they curve, especially hilltops or winding segments of roadway, or where vegetation or structures block views between road and trail users.
- Seek established crossings if an existing pedestrian crosswalk, or roadway intersection is nearby, those crossings are preferred as that's where drivers expect to see others crossing the road.
- Choose lower speed and lower volume roads – this simply creates safer and more enjoyable trail corridors.

Warn trail users when they are leaving a trail to a public road: All segments of the Velomont that intersect a public roadway should be marked with clear signage indicating the need for caution entering a roadway. Similarly, trail crossing signage should be installed in the adjacent roadway (see VTrans guidance document above)



Start with data: When discussing a future roadway crossing with a Town or the State Agency of Transportation, key datapoints support any conversation, and informed, efficient decision making. These data include:

Roadway Speed Limit

- <u>Roadway Average Annualized Daily</u> <u>Traffic</u>: Current AADT can be found via the VTrans MS2 database for most roadways in the state. Always use the latest and most nearby data possible.
- Roadway dimensions: Measure a line across the roadway, perpendicular to direction of travel to answer – how wide are the shoulders? How wide are the travel lanes? How wide are any existing pedestrian/bike facilities? (Or just how wide is the dirt road?)
- Sight Lines: This is a measurement that is best understood standing on the roadway how far away from the crossing can a pedestrian be seen when driving? This measurement and roadway speed are the key decision points if a crossing is safe, or if a driver wouldn't have enough reaction time and stopping distance to stop for a person crossing. (See MUTCD table 6c-2)
- Bike / Pedestrian Facilities: Identify any existing facilities at or nearby the proposed crossing.





PLACEMENT GUIDANCE: ALL INTERSECTIONS

Velomont wayfinding markings should be applied consistently and conservatively throughout the corridor. This document does not attempt to identify every single type of wayfinding/intersection puzzle presented on a state-wide trail. Instead, this provides broad guidance and principles to ensure that the experience of navigating the Velomont remains intuitive and enjoyable. Intersection placement guidance includes:

- Always consider two-way traffic: The Velomont is not a one-way corridor and should be marked for users traveling in either direction.
- Roadway signs go on the right side of the road: All roadway signs and markings must be on the right side of the roadway, facing the direction of travel. Signs on trail corridors should be clustered for efficient posting and can be on either side of the trail, reducing sign clutter and focusing trail user attention on fewer sign clusters.
- Beware of sign clutter group trail signs where possible: When making decisions on placement, less is more. Signs should be grouped with existing signs, and sign clutter reduced whenever possible.

Only one Reassurance Marker should **be visible:** Only one Reassurance

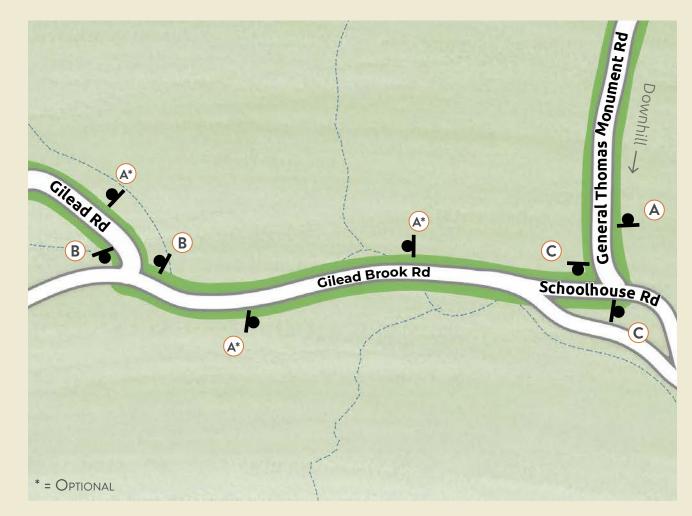
Marker should be visible from any one point on the trail. On some corridors, such as rail trails, Markers may only need to be placed at existing intersections or ¼ mile intervals. On other corridors, such as backcountry winter trails, once a user passes a Reassurance Marker, the next one should be immediately visible.

Signs are for people who haven't been here before: Local trail experts don't always make the best trail signage installers. Signs should be placed to direct and confirm navigation for people who have never been to the trails before, not those who know them like the back of their hand.

Placement Diagrams

The diagrams that follow offer contextspecific guidance for marking portions of the Velomont Trail. These examples are modeled on the excellent road and trail signage guidance produced by the USFS in chapter 5A of Sign and Poster Guidelines for the Forest Service. Refer to this document for additional guidance on recommended signage placement on trails throughout the Velomont system.

Road Intersection Approach

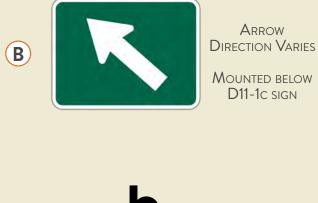






ARROW **DIRECTION VARIES**

MOUNTED BELOW D11-1C SIGN



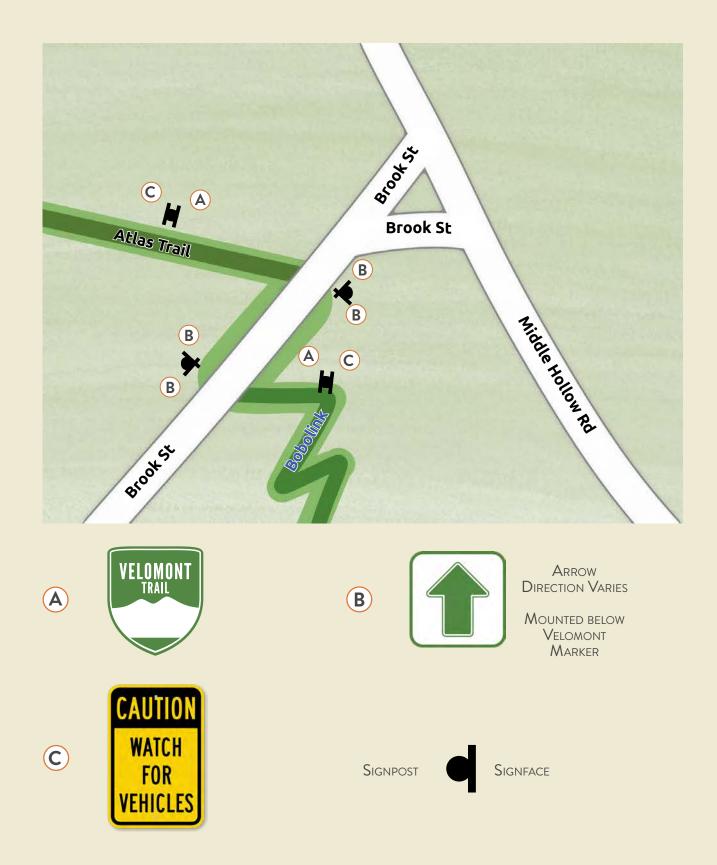
SIGNFACE

SIGNPOST



Road / Trail Intersection Approach

Road / Trail Intersection Approach







C





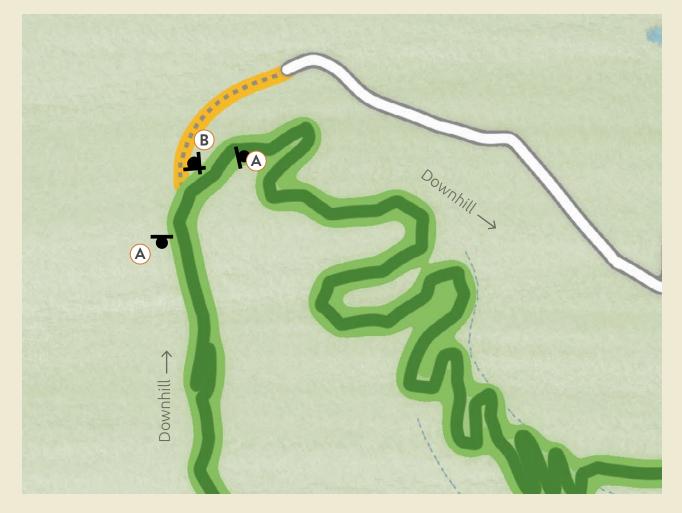


Arrow Direction Varies

Mounted below Velomont Marker

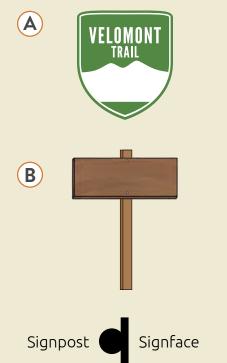


Trail Intersection Approach – Velomont Turns



DIGITAL WAYFINDING

In this modern world, very few backcountry travelers still rely purely on paper maps. Digital wayfinding resources, from the Google Maps app on a smartphone to a dedicated GPS device mounted to a bicycle handlebar or wrist, are the norm. For that reason, this plan has also developed Velomont's go-to wayfinding tool as an online webmap that can be viewed on mobile or desktop devices. See Velomonttrail.org for an interactive wayfinding tool developed as part of this planning process.



INSTALLATION **GUIDANCE FOR PHASE1**

To support the first phase of establishing the Velomont, high level guidance is provided regarding estimated sign quantities throughout Phase 1 areas of the trail.

- Trail Reassurance Markers should be overestimated at every 500' per direction to ensure appropriate supply.
- Trail intersection signage assumptions are based on having two signs per intersection.
- MUTCD Reassurance Marker intervals are assumed approximately every 1/4 mile per direction.

Velomont Phase 1 Cost Estimator				
ltem	Qty		Unit Price	Ext Cost
Trail Blazes	50	units	\$1.32	\$66.00
Trail Intersection Signs	22	units	\$102.00	\$2,244.00
Trailhead Kiosks (new)	2	units	\$4,500.00	\$9,000.00
Trailhead Kiosks (addition to existing)	2	units	\$102.00	\$204.00
Hostel Signage	1	unit	\$4,500.00	\$4,500.00
Installation - Staff Time	80	hours	\$20.00	\$1,600.00
			Total Cost	\$17,614.00
			25% Contingency	\$4,403.50
			Final Estimated Cost	\$22,017.50
Assumptions				
Trail to be Blazed	11.1	miles		
Blaze Spacing	1320	feet		

MUTCD road intersections assume two arrows per intersection, one for each direction.

Estimates assume that there are no specific Velomont markers along the LVRT corridor, only where the Velomont and Rail Trail converge/ separate.

When ordering markers, consider adding a 15% additional contingency on the order of any single sign type, as having too many is a lesser issue than having too few.

These estimates are conceptual in nature only, additional research and estimates into specific segments to be marked will be needed to further refine these estimates.



IMPLEMENTATION

A finished vision plan is the beginning. Chapter 3 contains segment by segment recommendations for next steps in specific areas of the Velomont, but there will be much more to do in the overall sense of coordinating and communicating this project's evolution over time. The following recommendations are written for The Velomont Collective to serve as a checklist in the first years following this plan's publication.

KEEP MEETING

The Velomont's 53 miles of built trail and 135 miles of current permitting projects are due to productive partnerships with the Catamount Trail association, USFS, private landowners, and numerous municipal and VMBA Chapter partners. This success has, in part, been facilitated by regular recurring meetings that The Velomont Collective has held with partners, including:

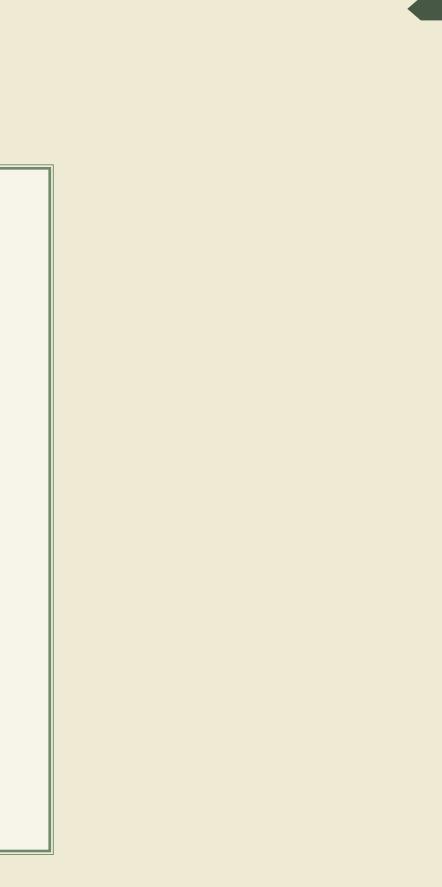
- o USFS Green Mountain Ranger District monthly meetings
- o Trust for Public Lands / Vermont Land Trust quarterly meetings

But those productive partnerships are only a small part of the whole range of partnerships needed to see this project through. The Velomont Collective should strive to set recurring meetings with the following groups in order to establish regular communication, explore potential opportunities and address challenges and conflicts as they arise.

- Agency for Natural Resources Focus on regular meetings with the FPR Recreation Program Manager. The State Lands Administration Program Manager and Conservation Program Manager should be involved in these meetings as needed. These meetings can determine when additional engagement with specific DSTs are needed.
- VTrans These meetings should occur on a regular basis in the near term to focus on the process and permissions by which the Velomont can co-locate with the LVRT. Once signage is in place to identify Velomont's entrances and exits from the LVRT, these meetings may become as needed to discuss specific projects requiring access to or across state highways.
- Regional Planning Commissions Meetings with planners at regional

planning commissions may help identify opportunities for promotion and linkage to sections of the Velomont that exist or are anticipated for the near term. These meetings can serve a secondary role of building planning support / partnerships to explore those areas of the Velomont that are not yet well identified beyond the overall Corridor of Opportunity

Additional partners, such as specific municipalities, should be coordinated with as needed to build relationships and secure permissions for future segments of the Velomont on town managed roadways and lands. Wherever practical, meetings should reach across departmental silos and combine roadway, municipality, and state lands conversations in order to reduce meeting redundancy for The Velomont Collective.





SPECIFIC AREAS OF FOCUS

In the near term The Velomont Collective should prioritize these projects to remain focused and accomplish the full vision of Velomont's Phase 1.

- **Southern VT** Continue to support the Manchester District of the GMNF as they continue to work through the NEPA process to support future Velomont Corridors in Southern Vermont between Dorset and the Massachusetts border. Ensure that communication is prioritized between The Velomont Collective and the major land managers in this area of Manchester Ranger District and Green River Hydro. Secure VTrans or local municipality permits for any changes or work needed within public road right of way.
- **Telephone Gap IRP** This ongoing project with the USFS Green Mountain Rochester Ranger District will be the next significant portion of the Velomont built, linking resources between state, federal, and community partners, including Mendon, Killington, and Pittsfield. As such, it should be a primary point of focus and investment to ensure successful outcomes of this well-planned partnership.
- LVRT Collocating the Velomont with the LVRT will only be a successful as the partnership with VTrans that enables such an overlay. The Velomont Collective should work with VTrans Rail Trail Program Manager, local rail trail groups, and VTrans Active Transportation section to identify how and where the Velomont can co-locate with the LVRT and establish the appropriate permits and signs needed to official recognize the use of this corridor.

- Resolving Gaps Throughout the state, key gaps remain that should be the priority of The Velomont Collective's planning efforts. Key gaps for future research and resolution include:
- o Phase 1 Randolph to Warren: Use this plan to discuss opportunities extending planned Velomont Trail from Randolph north through or around Roxbury State Forest and towards Warren, linking the established 'core' of the Velomont with resources in the Mad River Valley.
- o Phase 2 Mid South Gaps: Additional planning and local outreach will be needed to identify the correct corridor to link Dorset to Mercks Forest, to Poultney and Rutland, and Rutland the southernmost trails proposed in the Telephone Gap IRP.
- o Phase 2 Camel's Hump: Coordinate closely with ANR to identify the most productive path forward linking Mad River Valley to existing trails and partners in Chittenden County (Fellowship of the Wheel, Cochran's, Sleepy Hollow, and Richmond Mountain Trail resources) in order to connect to Little River State Park and the Waterbury Area Trails Alliance network.
- Phase 3 Northeast Kingdom: Identifying local resources in this region that can help narrow down a potential Velomont corridor in this region, as well as identify public and private landowners who would support future Velomont Trail is critical to move from the 'big picture' presented in this plan, to a more focused project proposing and developing specific segments of trail. Kingdom Trails, Caledonia Trail Collective, and the towns of St. Johnsbury and Lyndon could serve as initial partners in this area.

PROMOTE AWARENESS

Use this plan as a tool to promote awareness of the benefits, significance, and vision of the Velomont. Presentations should be brought to planning conferences, trails conferences, and other gatherings state-wide and throughout the region. The more community members, planners, and advocates know about the Velomont project, the more it can move forward with broad support. Share this plan!

ANNUAL REPORTING

The Velomont Collective can't meet with everyone, all the time. To better update community partners, VMBA Chapters, and other interested parties, The Velomont Collective should consider publishing annual reports which outline key accomplishments, miles of trail built, miles of trail under permitting, new huts and hostels established, and other notable accomplishments. This will both update partners, provide a clear track record for use in fundraising, and offer a regular point to reflect on the progress made by this project every year.

ADVOCATE FOR EXPANDED STATEWIDE SUPPORT

As this corridor begins to span more regions of the state, it will become, much like the Long Trail, and Catamount Trail, a project of statewide significance. Key state led actions could support trails such as the Velomont, and should be advocated for whenever possible. These include:

- Act 250 Reform -careful consideration should be given to future act 250 changes to ensure that they do not overly hinder natural surface trail expansion or development, while ensuring that the principles of environmental protection are still preserved.
- **Current Use Reform** current Vermont law provides tax breaks for miles of Vermont trails rely on the generosity of private landowners. The Velomont should support other trail advocates across the state in identifying ways in which private support of statewide recreation projects can enjoy some form of reward.

landowners who identify current use of forestry or agriculture on their property, but recreation is not included in that tax relief. Yet countless



05. THE DETAILS



PUBLIC ENGAGEMENT

Engagement has been a central element of the planning process for the Velomont. The overarching goal of this engagement effort was to gather input on the Velomont concept from the general public, particularly potential users of the trail and/ or hut system.

The primary engagement elements consisted of a Visioning Survey and five Open House events held in different communities around Vermont along the projected trail alignment. The core intentions for the public engagement process were as follows:

1. Assess the opinion of the general public on the values of the Velomont concept (Connectivity, Supporting Economic Vitality in Vermont Downtowns, Accessibility & Access to the Outdoors, Conservation, Increasing Local Quality of Life).

2. Gather input from a variety of individuals, including Vermont residents, and potential new users/visitors

3. Gauge interest in the hut system and overnight accommodations

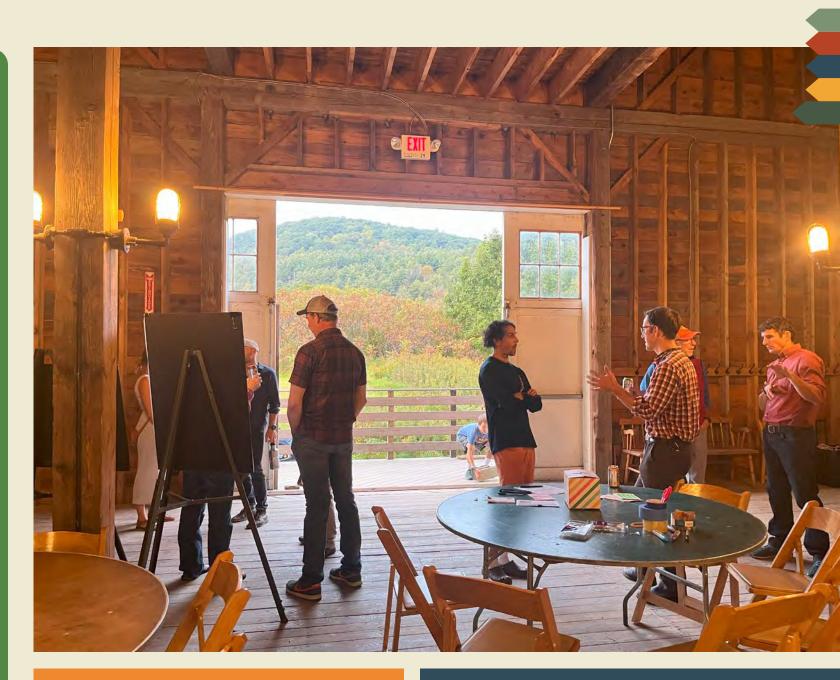
4. Understand the ways that potential trail and hut users would like the Velomont concept to integrate stewardship and conservation outcomes with recreation opportunities.

TOP TAKEAWAYS

1. Respondents support the overall concept of the trail and the five vision elements (Connectivity, Supporting Economic Vitality in Vermont Downtowns, Accessibility & Access to the Outdoors, Conservation, Increasing Local Quality of Life). Over 70% of Open House participants indicated that each vision element was "very well aligned" with their desired vision for the Velomont.

2. The engagement effort reached many different user groups. About 90% of open house participants were mountain bikers and/or hikers/walkers, and about 70% were backcountry skiers. 90% of survey respondents were hikers/walkers, 75% were mountain bikers, and about 60% were Nordic/XC skiers.

3. There is strong interest in using the new hut network associated with the Velomont. Just under 40% of Open House participants currently use backcountry huts/cabins, and almost 90% of participants indicated that they would use the Velomont hut network.



207 attendees at Open House events

357 respondents to the Visioning Survey



Visioning Survey

The online visioning survey was open between August and October 17th, 2023. The survey received a total of 357 responses, including 126 complete responses and 231 incomplete responses. The survey reached residents across Vermont and neighboring states. About 3/4 of respondents were from Vermont, but the survey received responses from a total of 111 zip codes.

Who did we hear from?

The survey reached a wide range of age groups. As shown in the pie chart (inset), no single age group represented more than a third of responses to the survey. The survey received relatively fewer responses from the 18-24 age bracket compared to other age groups. About 60% of survey respondents identified as male, about 39% identified as female, and 1% identified as non-binary.

Additional survey results will be included in the appendix of the document.

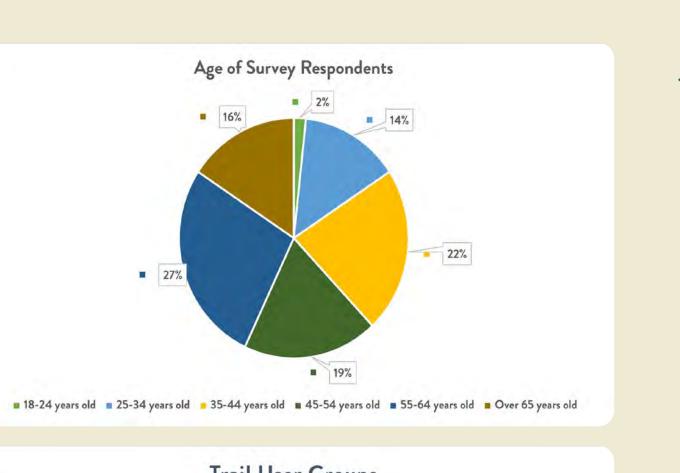
TOP FINDINGS

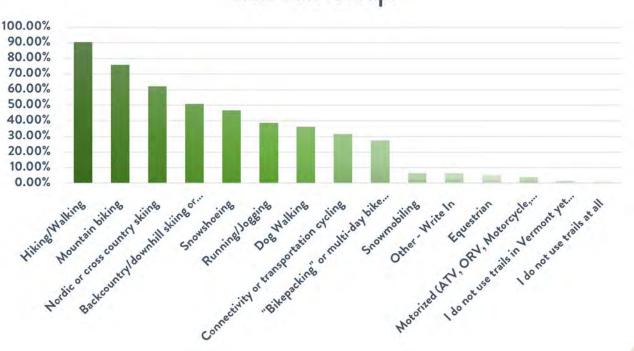
1. The survey reached a variety of age groups and trail users, but primarily reached hikers/ walkers (90%), mountain bikers (75%), and Nordic skiers (about 60%).

2. There was substantial interest in using the Velomont for mountain biking, hiking, and multi-day biking trips. There was also moderate interest in winter uses, including Nordic and backcountry skiing. Respondents expressed the least interest in running/walking and dog walking, suggesting that prospective users are seeking more rugged, remote experiences on the Velomont.

 Prospective Velomont hut users would like to use the huts in all seasons. About 80% of respondents were interested in using the huts in Summer and Fall. About 70% were interested in Winter use, and 56% were interested in Spring use.

4. 75% of respondents indicated that conservation and access easements on private lands was a high priority for the Velomont trail. Just under half of respondents indicated that new state parks were a priority.





Trail User Groups

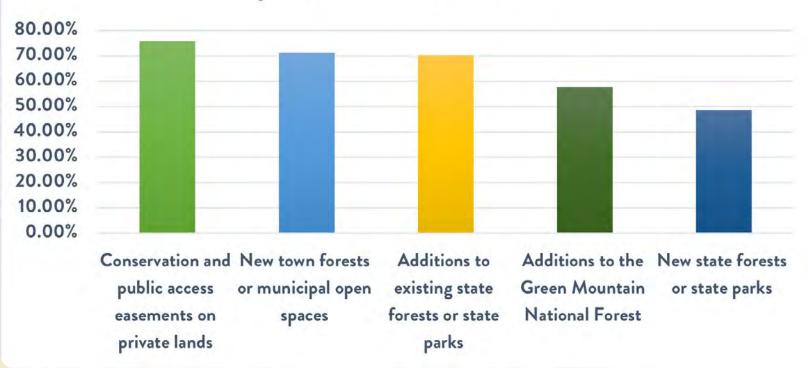


Visioning Survey, continued

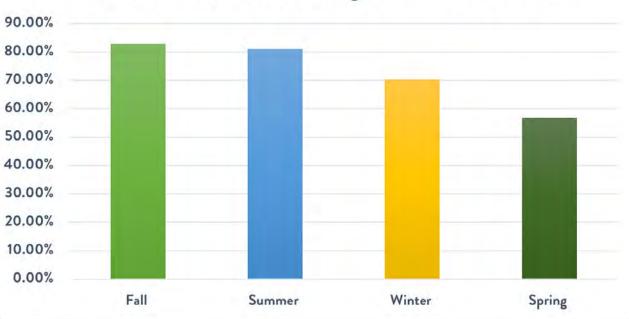
As highlighted in the Top Findings section, there was interest in using the Velomont for a variety of trail uses, particularly mountain biking and hiking/walking. Prospective users are interested in multi-season opportunities for trail recreation and hut stays.

When asked about top conservation priorities for the development of the Velomont, survey respondents indicated that conservation and access easements on private lands were a top priority. However, all conservation priorities received some level of support. This mirrors feedback received from the open house events.

Top Conservation Priorities for the Development of the Velomont Trail









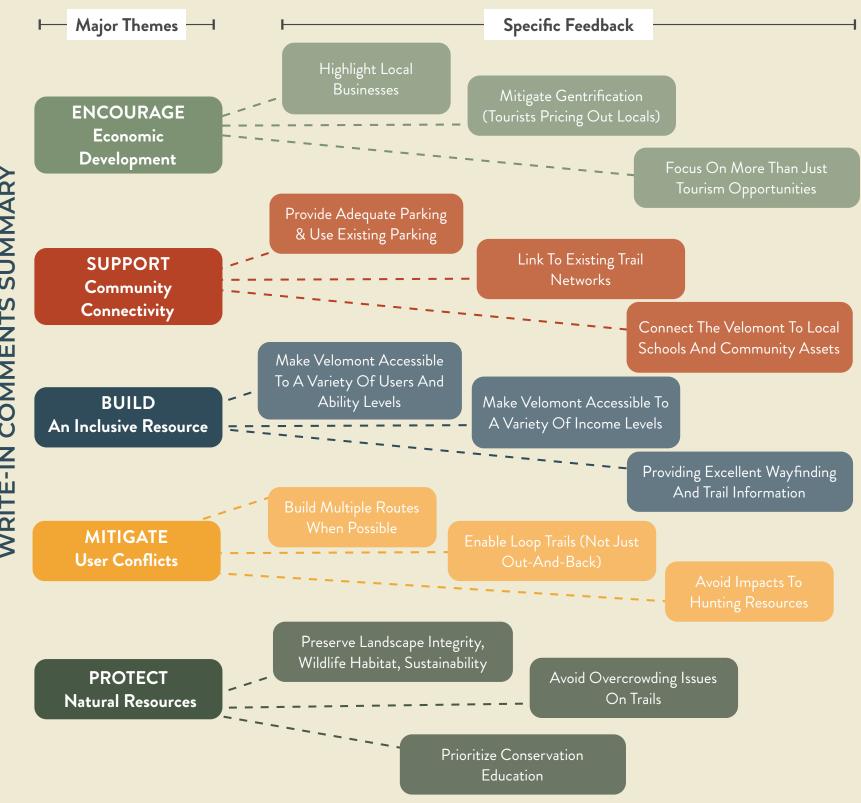


Visioning Survey, continued

Survey takers were invited to provide write-in responses for each of the five vision elements of the Velomont trail (Connectivity, Conservation, Increasing Local Quality of Life, Supporting Economic Vitality in Vermont Downtowns, Accessibility & Access to the Outdoors). Survey participants highlighted their values and concerns related to each visioning element. The inset graphic summarizes write-in responses.

"Trails are good for peoples' wellbeing: body, mind, spirit. Good quality trails that are easy to access and people know about are a must. Even if people only use the first 1/2 mile, they are getting out. Make that first 1/2 mile doable by your average person." -Write-in response

WRITE-IN COMMENTS SUMMARY

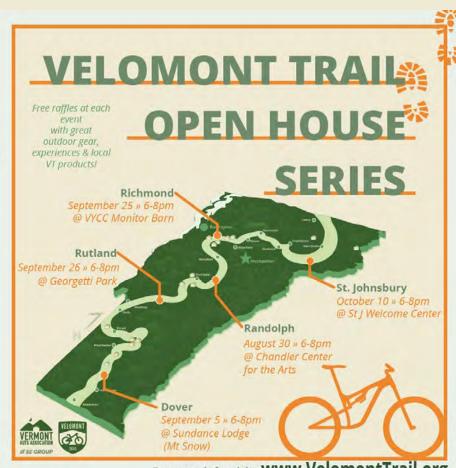


Regional Open Houses

The project team held five Open House events along the anticipated Velomont Trail corridor. These open houses presented information about the Velomont concept and the project's main values. Attendees had the opportunity to offer input on the future direction of the project through sticker dot polling.

The Open House events were promoted via

flyers, social media posts (inset), and on the Velomont website (https://velomonttrail.org/). 68 attendees in Randolph,
48 attendees in Rutland,
30 attendees in Dover,
23 attendees in Richmond,
38 attendees in St. Johnsbury



For more info, visit: WWW.VelomontTrail.org

TOP FINDINGS

1. Attendees supported all conservation activities related to the Velomont trail,

but showed particular support for conservation easements on private lands, as opposed to new or expanded state and national forests. One possible reason for this is that participants would like to see the Velomont concept get off the ground quickly, and they see private lands as a faster process than the creation of a new state forest, for example.

2. Open House attendees showed some level of support for all vision elements of the Velomont (Connectivity, Supporting Economic Vitality in Vermont Downtowns, Accessibility & Access to the Outdoors, Conservation, Increasing Local Quality of Life). 37 participants indicated that Accessibility & Access to the Outdoors was their top priority for the trail, more than any other category.





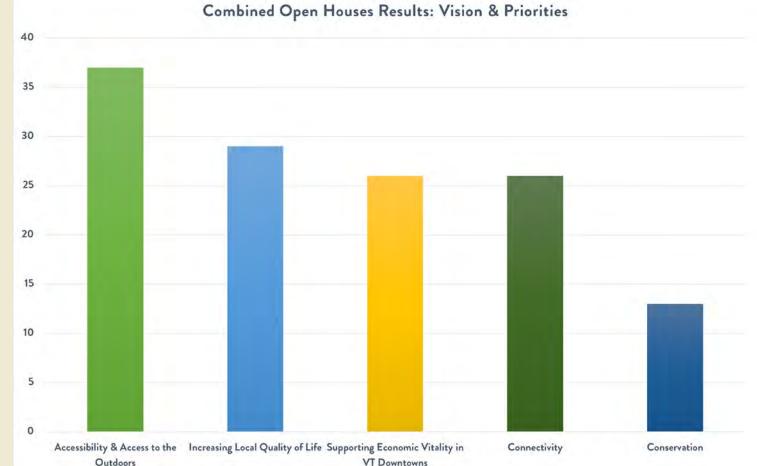




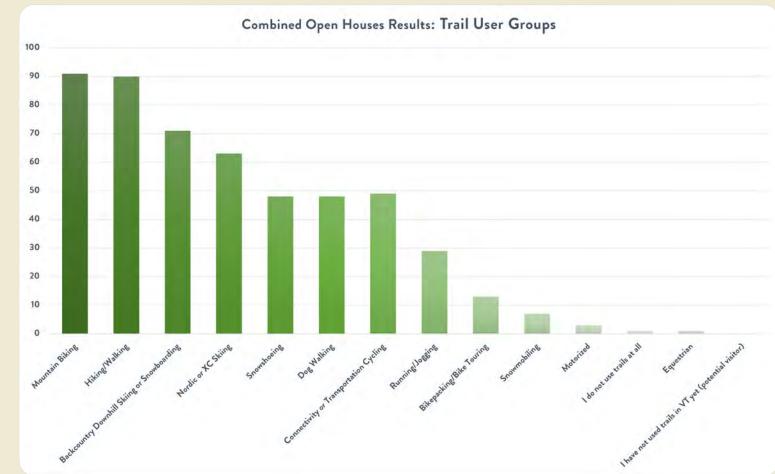
Regional Open Houses, continued

As shown in the graph below, the open houses reached a variety of trail user groups. The majority of open house participants self-identified as mountain bikers, hikers/ walkers, and/or backcountry skiers. There were few motorized trail recreation users and few equestrian trail users in attendance. The graph below combines responses from all five open houses, but each open house had a very similar makeup of attendees.

Open House respondents expressed support for all of the vision elements of the plan, as shown in the graph to the right. For this question, respondents were asked to indicate which elements were "top priorities" for them in the development of the Velomont trail. Access & Accessibility to the Outdoors received the highest level of support, and Conservation received the lowest level of support.







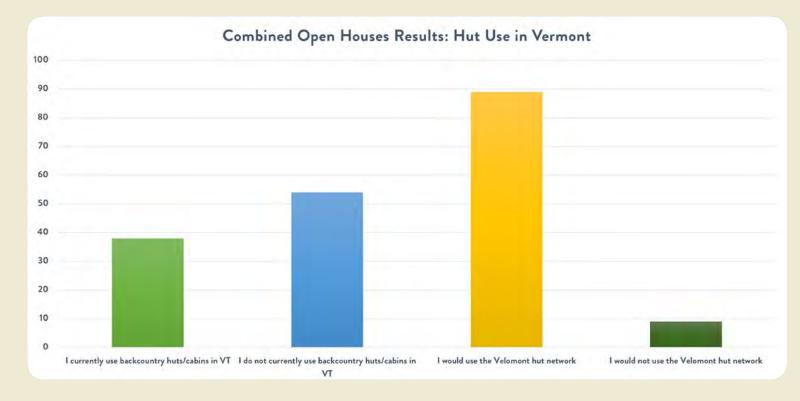


Regional Open Houses, continued

54 Open House attendees indicated that they were not current hut/cabin users in Vermont. However, 89 attendees expressed interest in using the hut network associated with the Velomont.

Taken together with the finding from the Visioning Survey that prospective users are interested in using the hut network in all seasons, this indicates substantial public interest in the hut network.









AGENCY ENGAGEMENT

The following is a summary of the ongoing Federal, State, and Non-Profit coordination that has provided direction for this plan and the future of the Velomont.

USFS COORDINATION

Ongoing monthly meetings to coordinate projects such as the Telephone Gap IRP and upcoming trail improvements on GMNF land.

 14 Velomont Collective meeting with Green Mountain National Forest representatives.

FPR / ANR COORDINATION

Dedicated meetings, one with each District Stewardship Team (DST) to specifically discuss the potential, impact, and constraints regarding the development of the Velomont on State-Managed lands.

- ANR Kickoff Meeting April 13th 2023
- ANR Springfield DST May 31st 2023
- ANR St Johnsbury DST June 5th 2023
- ANR Barre DST June 12th 2023
- ANR Rutland DST June 13th 2023
- ANR Essex DST June 20th 2023

NRB COORDINATION

A focused meeting to understand how permitting should best be approached and understood in regards to a unique statewide trail resource such as the Velomont.

- October 5th 2023 Meeting Attendance:
 - o Pete Gil Natural Resource Board Executive Director
 - o Alison Stone, Natural Resource Board Legal Counsel
 - o Nick Bennette, Executive Director, VMBA

CONSERVATION GROUP COORDINATION

These meetings provided, and continue to provide, an opportunity to ensure that the conservation value of The Velomont Trail is fully realized and well-coordinated with key non-profit land conservation agencies active in the State of Vermont.

- Quarterly Meetings with Trust for Public Lands
- Focused Meeting on October 20th, 2023 with Vermont Land Trust and Trust for Public Lands.
 - o Bob Hieser, Vermont Land Trust
 - o Kate Heiser, Trust for Public Lands

VTRANS COORDINATION

This meeting provided an opportunity to clarify the best approach to working with VTrans on the Lamoille Valley Rail Trail and roadway crossings.

- January 8th 2024 Meeting Attendance:
 - o Amy Bell -- Policy, Planning & Intermodal Development Division Bureau Director
 - o Kristin Driscoll Traffic Operations Manager
 - o Amanda Holland -- Active Transportation
 - o Kevin Gadapee -- District Transportation Administrator
 - o Jackie Cassino -- Vermont Rail Trails Program Manager
 - o Sommer Bucossi Active Transportation

PRIVATE AND MUNICIPAL LAND COORDINATION

These meetings provided the Velomont Collective team with regional insights and an understanding of regional opportunities and constraints on municipal and private lands.

- Southern RPC Coordination October 23rd, 2023
 - o Jim Henderson: Bennington County Regional Commission
 - o Ethan Pepin: Rutland Regional Planning Commission
 - o Nic Stark: Rutland Regional Planning Commission
 - o Jeff Nugent: Windham Regional Commission out of Brattleboro
- Central RPC Meeting November 1st, 2023
 - o Keith Cubbon, Central Vermont Regional Planning Commission
 - o Joshua Schwartz, Mad River Valley Planning District
- Northern RPC Meeting October 27th, 2023
 - o Seth Jenson, Lamoille County Planning Commission
 - o Alison Lawe, Northern Vermont Development Association



ANR DST Meeting Notes:

ANR Velomont Kickoff Meeting April 13^{th,} 2023

Agency Representation:

VT Agency of Natural Resources (ANR) VT Department of Forest Parks and Recreation (FPR) VT Department of Fish and Wildlife VT Department of Environmental Conservation (DEC)

Summary:

Members of the Velomont Team met with ANR staff from across the state to introduce the concept of the Velomont Trail and discuss key concerns and feedback from stakeholders, as well as lay out the process by which this plan will be developed.

The meeting

- Provided an overview of the Velomont Trail vision,
- summarized the Velomont master planning effort & timeline,
- provided initial statistics and information about the envisioned trail,
- set expectations for next steps and further master planning working sessions at the District Stewardship Team level

Additional discussion included key measures of the project thus far (A trail corridor touching 48 towns, up to 485 miles of trail possible), Key wildlife and ecological concerns and opportunities, recreational goals and trails in Vermont. and the meeting closed with a recognition that site-specific discussions would follow at the upcoming series of DST-specific meetings.

ANR Springfield District Stewardship Team Velomont Meeting May 31^{st,} 2023

Attendance:

- Aaron Hurst, Hannah Phillips
- Vermont Department of Environmental Conservation: Marie Caduto
- SE Group: Caleb Weathers, Drew Pollak-Bruce
- VT Huts: RJ Thompson
- Velomont: Angus McCusker

Summary:

constraints identified within the District relative to the Velomont Trail.

General Discussion

- process is currently underway.
- rehabilitation here.
- east side of Coolidge State Forest.
- the Velomont Corridor, not a trailhead.
- and east towards Groton State Forest (District 4-Barre).

Questions:

trail preservation?



• Vermont Department of Forests, Parks and Recreation: Tim Morton, Brian Renfro, Claire Polfus,

• Vermont Department of Fish and Wildlife: Courtney Buckley, Danielle Owczarski

 Four members of the Velomont Master Planning team and seven members of the ANR Springfield DST met at District offices to discuss key opportunities and constraints throughout State lands in the Springfield district along the Velomont Corridor of Opportunity. This document summarizes the key takeaways from these meetings and the opportunities and

 Hamilton Falls in Jamaica State Park is seen as a problematic location for Velomont alignments for a broad variety of reasons and would best be avoided by a master planned trail.

• The Okemo corridor is a high-value wildlife corridor. Additional recreation proposals in this area would need to be carefully planned to avoid impacts and may not be possible in some places in Okemo State Forest. Passage via the established Forest Highway (Government Road) would likely need an amendment to the LRMP. The Okemo State Forest Long Range Management Planning

There are stormwater concerns on some old class 4 roads near Coolidge and Plymouth. However, they are likely better than the forest highway roads on state lands.

Hogback Mountain Conservation Area needs additional support for their trails, and could be seen as an opportunity to use Velomont resources and public awareness to support trail

With infrastructure upgrades, there are opportunities to link to three lean to structures in the

Townshend State Park is relatively under-utilized, and Velomont alignment through this area could benefit the park with additional trail traffic. This location should be planned as a 'spur' to

Use of State Lands in the Springfield District really depends on whether the Velomont ultimately seeks to veer west towards Dorset and Poultney (District 2- Rutland), or wants to connect north

- Are there any additional parcels surrounding State Lands ideal candidates for conservation and



ANR Rutland District Stewardship Team Velomont Meeting June 13th, 2023

Attendance:

- Vermont Department of Environmental Conservation: Angie Allen, Shannon Pytlik
- Vermont Fish and Wildlife: Joel Flewelling, Luke Groff, Nick Fortin, Travis Hart, Danielle Owczarski
- Vermont Forest Parks and Recreation: Reuben Allen, Ethan Crumley, Kyle Mason, Hannah Phillips, Lesley Porter, Lisa Thornton, Claire Polfus
- SE Group: Austin Novak, Drew Pollak-Bruce
- VT Huts: RJ Thompson
- Velomont: Angus McCusker

Summary

15 members of the Rutland DST and 4 members of the Velomont Master Plan Steering Committee met on June 13th, 2023 to discuss key opportunities and constraints throughout State lands in the Rutland District through the Velomont Corridor of Opportunity. This document summarizes the key takeaways from these meetings and the opportunities and constraints identified within the District relative to the Velomont Trail.

General Discussion

- Birdseye Wildlife Management Area
 - DST Suggests Birdseye Road, rather than Ira Birdseye Road, for better alignment and a more pleasurable experience Note some easements for non-motorized use exist in the parcel, so mountain bike use would need to follow the roadway (*"to provide for dispersed, non-commercial, non-motorized, non-mechanized, wildlife-based public outdoor recreation, as well as, the quiet enjoyment of the Protected Property"*).
- Gifford Woods State Park:
 - Parking/access and user conflict are the primary use issues here. Off season lot creates access issue and the crossing of Route 100 is not safe
 - This issue needs to be solved in conjunction with the local club (KMBC), whether or not Velomont connects here. USFS partnership could potentially create an additional parking area. DST would have difficulty approving anything further until access issues are resolved. (Further conversations on this topic are ongoing)
- Emerald Lake State Park
 - Long Range Management Plan is from 1996 needs revision to authorize new trail. Passage on existing roads would not require LRMP revision.
 - DST Optimistic about utilizing Emerald Lake SP, particularly if trail would route on existing forest roads – but more conversation needed, and would need to improve / reroute existing trail for Velomont Use
 - DST suggests that trail should not pass through the center of the park to avoid user conflict with park visitors and administrative conflict of paying vs non-paying visitors. There is existing road infrastructure to support circumnavigation of perimeter of the park and enters just north of the park entrance)
 - Avoid state park campsites,

- Area on west side of the park is part of a natural community in which groundwater movement is critical. Avoid area entirely if possible. Potential for VT Huts / ELSP partnership for future cabin use / development.
- Note east side of ELSP is deer wi seasonally closed.
 - Trails less than 12-15' in deer movement.
- DST suggests the use of Rupert SF for Velomont connectivity between existing Merck Forest and Farmland Trails and NATS Trails in Dorset. Parcel would need an LRMP.
- TPL currently exploring the acquisition of a private parcel for Velomont connectivity abutting Emerald Lake SP property to the east and USFS property to the west. Parcel acquisition would help protect an east-west wildlife corridor along Route 7.

Questions:

- Are there any additional parcels surrounding State Lands ideal candidates for conservation and trail preservation?



- Note east side of ELSP is deer wintering area Future trails would likely need to be
 - Trails less than 12-15' in width reduce winter snow build up that can restrict



ANR Essex District Team Velomont Meeting June 20th, 2023

Attendance:

In full disclosure: Due to staff turnover at SE Group, a full attendee record of this meeting was not available. Details of discussion related to this DST have been captured through a collaborative effort of meeting attendees.

- Vermont Forests, Parks and Recreation: Kathryn Wrigley, J Nerenberg, Claire Polfus, Hannah Phillips, Mike Johnson, Matt Leonard, Emily White
- Vermont Fish and Wildlife: Amy Alfieri, Danielle Owczarski, Toni Mikula, David Sausville, Lee Simard, John Gobeille
- Vermont Department of Environmental Conservation: Karen Bates,

Summary

Members of the Velomont Master Plan Steering Committee and members of the Essex DST met on June 20th, 2023 to discuss key opportunities and constraints throughout State lands in the Essex District of ANR through the Velomont Corridor of Opportunity. This document summarizes the key takeaways from these meetings and the opportunities and constraints identified within the Camel's Hump Management Area's Long Range Management Plan.

General Discussion:

- Camel's Hump Management Unit
 - A corridor along the VAST trail on the east side of the unit was identified in the LRMP for Velomont Trail development. The trail could colocate with the VAST trail wherever possible, but could also leave the corridor in order to provide sustainable grades.
 - o Two areas are also noted as possible hut locations, one on either side of the mountain ridge. Only one of these locations could be developed according to the LRMP.
 - Velomont shared a desire to pass through Huntington Gap WMA and Phen Basin. The DST alerted the Velomont team of the many legal hurdles that any new trail proposal in that area would encounter, and also raised many natural resource concerns. The DST was clear that they would not support a proposal to pass through Huntington Gap WMA and/or Phen Basin.
 - The DST noted that the west side of the unit hosts some of the most popular recreation trails in the state.
- Mount Mansfield State Forest
 - The line between Barre and Essex districts falls on the height of land between Bolton and Little River State Park. For further notes regarding connectivity through Bolton and Little River State Park - see notes in Barre DST Meeting
 - The DST discussed the multiple landowners in the connection between Little River and Bolton including State Forest, forest legacy easement and private lands.
 - The Essex DST inquired about Velomont's interest in connecting to Bolton Valley and descending over the ridge into the Cotton Brook Basin. Velomont shared that they were interested in connecting to Bolton Valley as a spur, but were not envisioning as an overthe-mountain connection to Little River. However, recreation infrastructure associated

with the future Velomont Trail may contribute to use in this area and staff noted the importance in being proactive in planning for this use.

Questions:

- trail preservation?
 - CHMU.
- Valley?



- Are there any additional parcels surrounding State Lands ideal candidates for conservation and

• The DST discussed conservation opportunities, particularly on the east side of the

Given the guidance in the 2021 Camels Hump Management Unit LRMP and discussion during the meeting, what possibilities exist for connecting Huntington/Richmond to the Mad River



ANR Barre District Team Velomont Meeting June 12th, 2023

Attendance:

- Vermont Fish and Wildlife: Danielle Owczarski, Bret Ladago, Noel Dodge, Dave Adams, Josh Blouin
- Vermont Forests, Parks and Recreation: Lisa Wright, Dan Singleton, Hannah Phillips, Claire Polfus, Jack O'Wril, Walter Opuszynski, Andrew Hirsch, Brad Greenough, Nick Caputo
- Department of Environmental Conservation: Keith Fritschie
- VT Huts: RJ Thompson
- Velomont: Angus McCusker
- SE Group: Drew Pollak-Bruce, Austin Novak

Summary

Five members of the Velomont Master Plan Steering Committee and fifteen members of the Barre DST met on June 12th, 2023 to discuss key opportunities and constraints throughout State lands in the Barre District of ANR through the Velomont Corridor of Opportunity. DST was broadly supportive of effort, but many alignment suggestions were made beyond the existing Velomont Corridor – which would prove highly difficult from a connectivity standpoint.

General Discussion:

- Consider the lack of plowing on Park Roads in Winter parking wouldn't be feasible during these months without additional winter maintenance support.
- New Long Range Management Plan for Worcester Range is under development. DST suggested proposing a connection from the LVRT to Elmore SP, over the height of land into Morrisville to connect to Mt Mansfield SF. Velomont was not interested in this idea and declined to make this proposal through the long-range management planning process.
- The DST asked about e-bikes. E-bikes are not part of the broad vision, but it is not anticipated that ebikes will be categorically prohibited – it will depend on the regulations of each underlying landowner / manager.
- In general, co-locating on VAST trails could be possible, but there are a lot of VAST trails that are not suitable for summer use and/or follow historical and unsustainable alignments.
- DST members expressed concern about the extent of cross-slope trails, especially in relatively wet areas, and the impact that would have on hydrologic systems.
- Roxbury State Forest:
 - DST noted numerous natural resource constraints to adding trails to the western section of the Roxbury State Forest, especially along the Braintree Ridge, a proposal which had been previously denied.
 - Cram Hill Section in Roxbury could be considered for a Velomont Trail proposal, particularly utilizing the existing VAST trail corridor.
 - Roxbury SF needs a new Long Range Management Plan. This parcel is next in line following completion of the Worcester Range.
- Mt Mansfield State Forest
 - Eastern Flank of MMSF around Mud City could potentially be utilized to connect to Johnson. However, extensive review and consideration of the existing unauthorized trails

the LRMP.

- There is a scientific forest study area on the northern end of MMSF. Any use of that area would need to be designed not to conflict with any ongoing studies.
- Mt Mansfield State Forest Beaver Meadow is a no-go Area due to wet soils and use.
- Note that MMSF is a shared plan between D3 and D4 and updates will be a large undertaking. It will be renewed within the next 10 years.

- Little River State Park

- Corridors to be considered here.
- Connections to Driving Range area from Little River should stay low in elevation. Higher elevations in this area commonly have shallow and wet soils that are prone to sliding. There are also many important water resources in the area. Be aware of wildlife corridor considerations in this area, particularly in the crossing of I-89 and US-2.
- Group discussed connection via the Compartment 10 Road((?), which would spit riders out on the road at the Woodward Trail/VAST parking area. Goodell House could be restored as part of the Vermont Huts Network

- Elmore State Park:

- Private lands surrounding Elmore State Park have a variety of easements upon them both Vermont Land Trust and FPR - but each needs to be reviewed to understand the particularities of public access and trail-specific constraints. Elmore State Park could be an ideal 'next stop' from when the Velomont departs the Lamoille Valley Rail Trail.
 - o Elmore can handle more visitors.
 - Trail would be a change to the LRMP drafts already being formalized / finalized. Would likely need an amendment or a surge in interest from public comment.

Other State Parks:

additional visitors.

Questions:

construction & conservation?

Mt. Mansfield: Would use of the 'mud city' area of Mt Mansfield State Forest be possible to extend a corridor north on the eastern side of the valley?

- connectivity from Randolph? Could this be the Cram Hill Section noted below?
- trail preservation?



would need to occur before the DST could recommend the area, as well as an update to

 Little River State Park could be a good anchor point for access to the Velomont + Existing Trail corridors. Cotton Brook is a good choice for alignment co-location. HSA and VAST

Consider connecting to Zack Woods State Park – good location for overnight use for

- Little River: How can the Velomont best connect Richmond / Bolton to Little River State Park? What existing trail corridors can be considered, or what lands should be looked to for new trail

Roxbury: With the history of a Rochester what options can be pursued to facilitate northern

Are there any additional parcels surrounding State Lands ideal candidates for conservation and



ANR St. Johnsbury District Stewardship Team Velomont Meeting June 5th, 2023

Attendance (to be confirmed):

- Vermont Forests, Parks and Recreation: Nick Caputo, Lou Bushey, Paul Szwedo, Luke O'Brien, Claire Polfus, Hannah Phillips
- Vermont Department of Environmental Conservation: Ben Copans
- Vermont Fish and Wildlife: Paul Hamelin, Tim Appleton, Danielle Owczarski
- SE Group: Drew Pollak-Bruce, Caleb Weathers
- VT Huts: RJ Thompson
- Velomont: Angus McCusker

Summary

Four members of the Velomont Master Plan Steering Committee and 11 members of the St. Johnsbury DST met on 6/5/2023 to discuss key opportunities and constraints throughout State lands in the St Johnsbury DST along the Velomont Corridor of Opportunity.

General Discussion

- Key question: where is Velomont trying to go after Kingdom Trails? So much land in this district that a bit more guidance might be helpful. The DST welcomes the opportunity for additional planning in the Northeast Kingdom
- Groton State Forest is largest land-ownership in this district with enormous potential to host the Velomont Trail and huts. The Wells River Rail Trail passes through the forest, there are multiple State Parks which would be appropriate locations for a hut (or provide other accommodations), and it would present an opportunity to connect to the City of Barre, which would benefit enormously from a project like this. Also, Millstone Trails is in Barre. The DST strongly encourages Velomont to consider rerouting the Velomont through Groton State Forest, providing a linkage between Barre and Kingdom Trails.
- The Golden Trail connects Victory State Forest to the Kingdom Trails Network. It is currently open and used by mountain bikes and hosts a lean-to. There are conservation opportunities to ensure that public access from Victory State Forests to the Kingdom Trails Network continues. This was presented as a priority for the DST.
- Twin State Rail Road along US-2 east of St. Johnsbury is a potential corridor but key constraints are known:
 - Corridor would bypass Lyndonville, which would be unfortunate
 - Mixed CSX ownership makes establishing access difficult. (AOT pursuing purchase currently)
- Although there are good opportunities to utilize existing trails in Victory State Forest, state land in this area is not able to accommodate additional parking areas. Velomont and partners may need to look into acquisition of additional property to satisfy parking needs.

- pursuing Velomont trail in that area at this time
- Kingdom Heritage Lands
- - Strong desire to get to Lyndon from partners/stakeholders
- - Cross New Hampshire Adventure Trail
 - Victory Hill Mountain Bike Trails
 - Seymour Lake Mountain Bike Trails unsure what this is
 - Island Pond Village Amenities
 - Linkage to Craftsbury Outdoor Center through Glover
- As in other districts, many snowmobile trails
- Island Pond is a good destination overall. Should link from there to Derby.
- not suitable for summer use.

Question:

planners?



 Willoughby State Forest is a significant management challenge currently, has seen large spike in use and associated negative impacts. (Parking, trash, illegal camping) DST does not recommend

o South of Island Pond has West Mountain WMA has less access potential, existing road may be suitable, but not campsites or off road trails in this area. Would need to consult with management partners. Kingdom Heritage Lands north of Island Pond have an easement with public access owned by the State. The easement requires that trails be managed through a corridor management plan. Currently no organization has taken on bike trail management in the area. Would need to consult with partners.

 St Johnsbury to Lyndon has both Gravel Road and Rail Bed Options to connect parallel to the 91 corridor and would be a good place for connecting communities through trails. • This same corridor should be considered for potential conservation opportunities.

 Lyndon State Forest already hosts mountain bike trails and could be an anchor point. Additional recreational opportunities in this area that would be ideal to link to the Velomont

• Similar concerns with class 4, legal trails and snowmobile trails. Most VAST trails in district are

Numerous parcels may provide opportunity for conservation in conjunction with a future Velomont alignment – can these parcels be further identified and discussed by DST/Velomont



RESOURCES

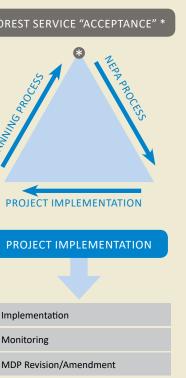
FEDERAL LAND PERMIT **PROCESS GUIDE**

Velomont will continue its partnership with the Green Mountain National Forest, and maintain consistent meeting schedule to ensure that projects such as the Telephone Gap Integrated Resource Plan, which include developing portions of the Velomont are developed successfully. Once segments of the Velomont are complete on lands within the Green Mountain National Forest, they will continue to be monitored and stewarded by local trail partners, such as the Killington Mountain Bike Club and other VMBA Chapters, as well as Federal Land Managers. As existing Velomont trail segments age, and new portions of Velomont trail are identified on Federal land, it is anticipated that the planning, permitting, design, and monitoring process for these corridors will follow a standard USFS NEPA process. Planning as the first phase, that includes public input and a step by step Forest approval process for multiple rounds of feedback, moving then to a NEPA process which allows for more detailed review of proposed corridors, refinement, and final decision making, and finally implementation, which includes monitoring of resources to make any changes needed as resources age and use patterns change. This process is illustrated in the flowchart below.

FOREST SERVICE NEPA TRIANGLE PLANNING PROCESS FOREST SERVICE "ACCEPTANCE" * Master Development Plan Stakeholder Input **Issue Resolution** Forest Plan Consistency Approvals Strategy **Planning Concepts PROJECT IMPLEMENTATION** FS Involvement **PROJECT IMPLEMENTATION Opportunities/Deficiencies**

Implementation

Monitoring



NEPA PROCESS

Master Development Plan	
Project Purpose & Need	
Scoping	
Alternatives	
Analysis	
Decision	
Project "Approval"	

General Process Guide for Public Lands

Step 1: The Idea

- Determine your project scope and details (What does your project entail? How long is the trail segment and/ or where will the hut be located? What other amenities are you seeking to include (e.g., bathrooms, bike parking, signage). How much disturbance can you expect? Who owns/manages the land?). It is important to determine the right scope for your project. A scope that is too small means a great deal of permitting effort for a small reward, while a scope that is too large may be risky if a single issue imperils the entire permit application. It is also important to consider multiple possible alternatives (alternative trail alignments, hut locations, etc.) that you can propose if your preferred concept proves too challenging from a site constraints/ permitting standpoint.
- Review the Process Guide below for the specific agency/agencies you will be engaging with and make an initial contact with the agency to inform them about your project.
- Review property boundaries, ownership, and local zoning for the town in which your project is located.

- Review maps that show sensitive environmental resources (e.g. steep slopes, wetlands, floodplains, wildlife corridors), existing trail alignments, future land use, and zoning. If this is a hut project, check if the Town's definitions for "campground," "backcountry hut," or "accessory structure" are compatible with the huts.
- Review local sign regulations if your project involves signage. Tools such as DEC's <u>Permit Navigator</u> can provide useful guidance when developing a proposal and identifying required permits.
- Contact the Town zoning administrator to understand any other regulations and requirements that may apply to your project. If necessary, proceed with a conditional use review process in consultation with the zoning administrator.
- Conduct a site visit and desktop analysis to understand if the project area can support a trail that meets the sustainable trail guidelines for the Velomont. Seek guidance from your contact at the agency (see process guides) to advise this environmental review. See "The Terrain" for more details.

Step 2: The Concept

Refine your project concept based on the findings of your site visit, desktop analysis, and initial conversations with representatives from VTrans, FPR, or Fish & Wildlife.

Step 3: The Proposal

- Prepare and submit a proposal to the relevant state lands manager. Some land managers, such as FPR, also require a pre-proposal that is less involved than a full proposal.
- The State Agency will work with you to workshop aspects of your proposal. Your project will likely evolve somewhat from your initial idea in order to account for all necessary constraints on your site. The State Agency may ask you to consider alternative trail alignments and/or hut locations based on site constraints.

Step 4: The Project

- If your permits are approved, the State Agency can begin to work with you and move towards project implementation.
- Congratulations! Your project will help make the Velomont a reality, facilitating world-class recreational experiences throughout Vermont.

Specific Process Guides for specific state and federal land managers have been included in the appendix of this document.



STATE LAND **PROCESS GUIDE PROCESS GUIDE FOR** STATE LANDS – FPR PERMITS

Step 1: Share Your Idea

- Get in touch with the relevant district Recreation Specialist. When reaching out to this district representative, specify that your project is envisioned as part of the Velomont system. Describe the nature of your project (location, proposed activities, scope of the area affected), and reference the parts of this plan that support your project.
- Links:
 - o Using State Lands for Recreation Department of Forests - Parks and Recreation (vermont.gov)
 - Recreation Project Proposal Public Information Sheet.FINAL_.pdf (vermont.gov)

Step 2: Complete the Pre-Proposal Form

- Fill out <u>Pre-Proposal Form</u>. This form asks for general information about your project and other due diligence information, including:
 - o Your contact details and the contact details for the FPR representative you have been interacting with
 - o Details about your proposed project, including narrative descriptions of the purpose of your project
 - o A Geographic Location map of your proposed project area that includes a variety of variables, including

Town/County boundaries, Potential Significant Natural Communities, Potentially Significant Archaeological Communities, Waterways/bodies, and more

- o A Site Plan map of your proposed project that shows several elements, including existing and proposed structures and development, site amenities, roads, waterways/bodies, and more
- Submit to FPR Staff/Stewardship Team Review.
- Response from contact person within 30 days of receipt of pre-proposal.
- You may receive an Invitation to submit Full Proposal for eligible projects.

Step 3: Submit a Proposal

- A Full Proposal will ask you to provide a map (as provided previously) and information in the following categories:
 - o Support and Success of Recreation Project – This section asks about support for this project and how it will get done. Use various sections of this plan to support your application.
 - o Who is pushing for this project? -Reference Section X: Engagement, Introduction
 - o What is the evidence for the demand for this project? -- Reference Section X: Engagement, others?
 - o What other uses are currently occurring on the property? -Reference your own site research and interactive map?
 - o Is there demonstrated support from other types of users? -- Reference Section X: Engagement.
 - o Who will build or improve this project site?
 - o What costs are associated with this

project and how this project will be funded?

- o Who will maintain this recreation project for future use?
- o If this is a trail project, have you reviewed acceptable trail standards? - Reference Chapter 2: The Terrain
- o Which trail standards will you use to construct or maintain this project?
- o Management and Construction
- o What are the potential short and long term management issues associated with this project? Are there any known design, construction or maintenance issues? Are there any known management concerns (abutter concerns, user conflicts, safety, resource impacts)? Would this trail need to meet ADA accessibility standards? Yes/No? Why? List Conditions for Departure
- o Site Evaluation
- o This analysis will be context-specific for each site. The District Forester will assist you in identifying the needed information to provide about your site.
- o Other potential impacts or conflicts
- Stewardship Team Review of Full Proposal which might include:
 - o Resource Assessment/Inventory
 - o Site Visit(s)
 - o Public Involvement (could be at various points in the process)
 - o Amendment to LRMP
 - o Lands Team (Agency of Natural Resource) Review
 - o Town Involvement
 - o Feasibility Studies
 - o Design/Engineering/Planning
 - Timeline shifts 0
 - o Modify/Development of Proposal

- A response with next steps outlined will be given to all Full Proposals within 60 days.
- If project is approved, then it will be put in the District Annual Stewardship Plan which is put together in late fall/early winter (typically done by March 1).

PROCESS GUIDE FOR STATE I ANDS – F&W PERMITS

The permitting process for F&W is summarized here.

Step 1: Share Your Idea

- Get in touch with the relevant Wildlife Division Contacts. When reaching out to this representative, specify that your project is envisioned as part of the Velomont system. Describe the nature of your project (location, proposed activities, scope of the area affected), and reference the parts of this plan that support your project. Email a brief project description and map with site and project locations clearly marked, preferably on a USGS map or Aerial photo, to the appropriate contact indicated on the map. Indicate the regulatory process the project is going through. Site plan(s) may be requested if there are potential resource constraints of interest to the department.
 - o View the map to find the relevant Wildlife Division Contacts:
 - WILDLIFE REG REVIEW MAP.pdf (vtfishandwildlife.com)
- Projects involving or adjacent to water resources (lakes, ponds, streams, rivers, etc.) are reviewed by fisheries division staff.
 - o View the map to find the relevant Fisheries contacts:
 - Fisheries Districts Map (vtfishandwildlife.com)

Step 2: Receive & Incorporate Feedback

The relevant Wildlife Division Contacts will provide feedback on your project and advise you on the next steps to amend and/or permit your project.

HELPFUL TOOLS

The Agency of Natural Resources recommends contacting a Community Assistance Specialist for assistance with permitting large and complex projects, including linear projects.

The Agency of Natural Resources Atlas is a helpful, interactive map that provides relevant natural resource information that can be used in a desktop analysis of a potential project site.

The Agency of Natural Resources offers a permit navigator to assist with the permitting process. Note that this tool requires an address to generate anticipated permitting information, and is therefore challenging to use on state lands areas that do not have addresses.

PROCESS GUIDE FOR STATE ROADS

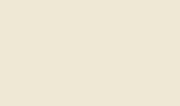
Note: The VTrans website does not include an established process for designating a recreational trail on an existing rail trail, for example. The following steps are based on best practices for permitting a recreational trail and/ or use.

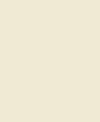
Step 1: Share Your Idea

Get in touch with the relevant <u>Regional</u> Traffic Operations Representative to share the idea for your project. When reaching out to this representative, specify that your project is envisioned as part of the Velomont system. Describe the nature of your project (location, proposed activities, scope of the area affected), and reference the parts of this plan that support your project. Email a brief project description and map with site and project locations clearly marked, preferably on a USGS map or Aerial photo, to the appropriate contact indicated on the map. Indicate the regulatory process the project is going through. Site plan(s) may be requested if there are potential resource constraints of interest to the department.

Step 2: Receive & Incorporate Feedback

The relevant VTrans representative will provide feedback on your project and advise you on the next steps to amend and/or permit your project.







Route 9 Road Crossing Proposal Example

Any proposal for a new road crossing by the Velomont should align with the guidance provided in the <u>2019 VTrans Guidelines for</u> <u>Pedestrian Crossing Treatments</u>. As of 2024, The Velomont Collective is pursuing permitting for a trail segment on USFS land that will need to cross Route 9 at Woods road and the Medburyville Bridge.

When proposing a trail crossing of a roadway, contextual details of the road and surrounding context are critical. Such as:

- Roadway Speed Limit: 50mph
- <u>Roadway Average Annualized Daily</u> <u>Traffic:</u> 3,470 according to VTrans MS2 2023 data.
- Crossing dimensions: 8' shoulders, 12' travel lanes create a 40 paved surface.
- Sight Lines: A pedestrian crossing at the proposed location is visible to traffic from approximately 450' west and over 600' east. These distances exceed the required stopping distance on a 50mph road according to the Manual on Uniform Traffic Control Devices, which requires a 425' stopping distance (see MUTCD table 6c-2)
- Pedestrian Facilities: No existing pedestrian facilities are present, beyond the wide 8' shoulders. Contextually, there are numerous recreational access points on either side of this highway, and pedestrian crossing signs are present approximately ³/₄ mile east of this location.

Due to the relatively low traffic volumes and excellent sight lines, it is recommended that Velomont and VTrans pursue unmarked crossings in this location by installing pedestrian warning signs (W11-2) approximately 100-200' from the intersection of Woods road and Route 9.

A small portion of natural surface trail is proposed to be built within the right of way, up to the paved roadway shoulder. No construction impact to the paved roadway is anticipated. A 1111 permit is anticipated to be filed as a next step. Guidance from VTrans will be important to understand if Velomont trail classifies as a sidewalk (no fee required) or a minor commercial operation.

SEARCH AND RESCUE PLANNING

The following page includes a copy of a 2024 Search and Rescue Plan to serve as a model template and reference for future sections of the Velomont as they are developed.



DRAFT 2/8/2018 (edited with Neil VanDyke at U.S Forest Service meeting)

Winter Search and Rescue (SAR) Preplan – Brandon Gap Back Country Ski Lines

Brandon Gap Backcountry Area, Green Mountain National Forest Vermont Towns of Goshen (Addison County), Chittenden (Rutland Cnty), & Rochester (Windsor Cnty)

Activation

Initial notification to 911.

INJURY REPORT:

- 1. EMS will be toned
 - White River Valley Ambulance -report of injured skier in Bear Brook / No Name areas
 - Brandon Area Rescue report of injured skier in Goshen Mountain / Sunrise Bowl areas
- 2. EMS immediately request dispatch to notify Rescue Inc and Rochester FD (and Brandon FD??)
- 3. KSAR notify Ridgeline
- 4. If needed, notify Vermont State Police (VSP), State SAR (DPS), and/or Stowe SAR
 - Lieutenant Roger Farmer, Search and Rescue Team Leader, State Police (C: 802-234-9933)
 - Neil VanDyke, State SAR Coordinator (DPS): (C 802-557-2502)

LOST/MISSING REPORT

- 1. State police trooper will be notified
- 2. VSP (Farmer) and DPS (VanDyke) will be notified
- 3. DPS/VSP will initiate a call out (asking dispatch to notify KSAR and Rochester FD)
 - o Rochester FD bring snowmobiles
- 4. DPS/VSP will notify RASTA
- 5. DPS/VSP request Stowe Mountain Rescue (SMR) standby / activation as secondary response team depending on situation and resources from:
 - Lamoille County Dispatch (802-888-3502)
- 6. Obtain National Weather Service Spot 48 Hour Forecast, and VTRANS road conditions.

Communications: stage at Mt Horrid Overlook (north side of Vermont State Route 73)

Incident command post (if needed for extended operation): Rochester Fire Department

Area Description

The Brandon Gap Backcountry Ski Lines Areas are situated in four northerly facing forested areas located at and east of Brandon Gap and south of Route 73 (aka Brandon Mountain Rd or Gap Rd). The overall area extends approximately 2 mile East-West and 0.5 miles south of Route 73.

The ski lines in each area are essentially nameless parallel and braided cut ski lines within the proficiency of intermediate and expert ability skiers and snowboarders. The two western areas (Sunrise and Goshen Mountain) are generally accessed from the Brandon Gap Long Trail Parking Lot (3255 Gap Rd Goshen, VT) and the two eastern areas (Bear Brook Bowl and No Name) are accessed by the Bear Brook Bowl Access and Trailhead Parking Lot (8107 Brandon Mountain Rd Rochester, VT).

The Long Trail and Chittenden Brook Spur Trail are within varying proximity to the four designated ski line areas and essentially connect them. It provides access to the base of the two western areas and to the top of the two eastern areas. Subsequently, subjects lost or injured on the western ski line area could possibly have a vehicle parked at the eastern Bear Brook Bowl Trailhead or vice versa. The Long Trail ascends gradually

southward from Brandon Gap and is prominently signed and blazed. Several bridges crossing small drainages (and regulations ?) limit snowmobile access to both the Long and Chittenden Brook Spur Trails.

All ski line access climbing or up tracks are marked with RASTA Arrow Signs (2" x 2") nailed to trees and visible to uphill travelers. The cleared ski lines are prominently marked only at the top of each area with permanent wooden Forest Service signs and no additional marking along the lines other than remnant survey flagging used for layout purposes. The lower runout of all ski lines ultimately funnel back to the two Trailhead's via a combination of different Up Tracks and/or the Long Trail, and ultimately Route 73.

On the larger scale the current Brandon Gap Backcountry Ski Line Areas are bordered on the east side by the Chittenden Brook Campground and Seasonal Road Access and Chittenden Brook Trail Spur Tail and on the west side by the Catamount Trail which is long an old road (Puss and Kill Area) used by frequently used by snowmobiles.

Primary Incident Access – Staging, Communication, Equipment

Plowed Bear Brook Bowl Access and Trailhead approximately 1 mile east of Brandon Gap on the south side of Route 73 (8107 Brandon Mountain Rd Rochester, VT). Coordinates (WGS84 UTM) – Zone 18 T N0665110 E4855950 Elevation 1820'. (Do not confuse with Brandon Gap Long Trail Parking Lot on top of Brandon Gap).

Both cellular and existing repeater coverage from the Ski Line Areas is limited and unreliable especially along the road. Simplex coverage appears reliable, but needs to be further tested.

KSAR activates with Cascade Two Piece Carbon Fiber Sled and possibly KFD Vehicle depending on situation and availability of local resources

Attached:

- 1. USGS 1:24K WGS 84 UTM Topographic with and without USFS Brandon Gap Backcountry Area Map.
- 2. E911 Map Overview
- 3. KSAR Callout and Contact
- 4. RASTA Members available to assist.

For discussion and to incorporate into agreed preplan.

Interagency support – Brandon Fire, Brandon Ambulance, Rochester Fire, White River Ambulance, USFS, and VTrans

Local snowmobile club contacts to access Catamount (west) and Chittenden Brook (east) trails.

Extended SAR event IC availability – High Pond Woodworking 110 Newton Rd, Brandon (Forestdale) Brandon. 7 miles and 10 minutes away. (Business of Karl Fjeld one of the lead RASTA organizers)

Designate DHART Landing Area with coordinates at Mt Horrid View Parking Area located on north side Route 73 between Brandon Gap and Bear Creek Trailhead Parking Areas. Overhead power line obstruction ?

RASTA callout - Angus McCusker and additional local members for search area familiarity and rescue support. Suggest invite to local training exercise.

Estimated KSAR response time.

JB 1/22/17



Ridgeline Easement

RIDGELINE OUTDOOR COLLECTIVE & VERMONT MOUNTAIN BIKE ASSOCIATION TRAIL EASEMENT DEED

For property located at 829 Middle Hollow Rd, Rochester VT 05767

KNOW ALL PERSONS BY THESE PRESENTS that XXXXXXX of XXXXXX, Vermont ("Grantor"), in consideration of one dollar paid to his full satisfaction by RIDGELINE OUTDOOR COLLECTIVE INC ("Grantee"), a Vermont nonprofit corporation and chapter of VERMONT MOUNTAIN BIKE ASSOCIATION, by these presents does hereby grant unto the said Grantee forever, an easement and certain rights on lands of Grantor in the Town of XXXXXXX, in the County of XXXXXXX and State of Vermont, more particularly described as follows, *viz*:

A perpetual, nonexclusive easement consisting of an approximate four-foot trail width for use by the Grantee, Grantee's members, guests and licensees and the general public for year-round use as a hiking, non-motorized bike and ski trail across the Grantor's property described on Exhibit A hereto. The lands burdened by the herein conveyed easement are a portion of the same lands and premises conveyed to XXXXXXXX by **xxxxx** and recorded in recorded in Book xx, Page xx of the land records of the Town of XXXXXX, Vermont-, as further described on Exhibit A. The easement area ("Easement Area") is depicted on a plan entitled "Ridgeline Outdoor Collective Trail Easement Plan: XXXXXXX" dated XXXXXX prepared by the Ridgeline Outdoor Collective and attached as Exhibit B hereto.

The Easement Area is commonly known as XXXXXX Trail(s), providing a critical link to the core of the XXXX Trail Network as well as the Velomont Trail Network. Grantor and Grantee recognize the public recreational, scenic and natural values of the Easement Area and share the common purpose of conserving these values by the conveyance of this Grant to permit public access to and to prevent the use or development of the Easement Area for any purpose or in any manner which would conflict with the maintenance of these values. The Grantor and Grantee agree that the use of motorized vehicles, horseback riding and hunting within the Easement Area shall not be permitted (except for landowner use), and motorized vehicle use within the Easement Area is permitted for a medical emergency or maintenance of the trail.

The Grantor covenants and agrees that the Easement Area shall be available to the general public for all types of non-motorized recreational activity including mountain biking, hiking, snowshoeing and cross-country skiing consistent with the purposes of this Easement. For purposes of this Easement, Class 1 E-bikes shall be deemed to be non-motorized vehicles.

The Grantee shall have the right, within and immediately adjacent to the Easement Area, to implement ditching and related drainage channels, cut brush, fell, trim and remove dead trees or trees and/or limbs threatening the trail, and to otherwise maintain the trail tread for the purposes set forth herein, and shall do so in the months of May through November in a manner that minimizes disturbance to the natural topography of the land and causes a minimum of disruption to the quiet use and enjoyment by Grantor of the herein described lands and premises and adjoining lands and premises owned by Grantor.

The Grantee shall have the right to construct bridges and erosion control structures necessary to maintain a clear, dry passage for winter use through the Easement Area. Grantee shall provide Grantor with 30 days prior written notice of any such construction.

The Grantor shall retain the right to clear, construct, and maintain trails for walking, skiing, and other non-motorized recreational activities within and across the Easement Area, provided that the Grantor shall take reasonable steps to prevent and correct erosion within the Easement Area.

The Grantor may use the Easement Area for the purpose of removing, skidding, and/or transporting timber and other wood products from the Easement Area and adjacent lands owned by the Grantor, provided that:

a. the Grantor establishes a temporary alternative trail for the duration of the logging operation if requested by the Grantee and with approval of Vermont Land Trust under the terms of their conservation easement; and

b. the Grantor shall return the Easement Area and trail to its condition prior to the logging operation, such that it is suitable for mountain biking, hiking and other recreational activities.

The Grantor and the Grantee may agree from time-to-time, consistent with any management plans for the Grantor's property, to relocate the Easement Area to another portion of the Grantor's property so long as the relocation allows connection for to the trail system of the Grantee on either side of the Grantor's property and is similar in nature and construction as the trail within the thenexisting Easement Area. Notice of a request for trail relocation shall be given to the other party at least ninety (90) days in advance and timed to ensure that all permitting, relocation, and construction activities relating to the relocation of the Easement Area are complete prior to [December 1] to ensure uninterrupted winter use of the trail. Any relocation of the Easement Area shall be evidenced by an amendment to this Easement signed by both parties and recorded in the XXXXXX Land Records and on a map maintained by Ridgeline Outdoor Collective.

The Grantee shall consult with the Grantor from time to time or at Grantor's request about any issues or concerns relating to the public use of, and access to, the Easement Area and the trail, and the Grantee shall take reasonable steps to correct any problems caused by public use of the Easement Area and the trail and to minimize any adverse impact on the Grantor's use and enjoyment of the Easement Area and adjoining property owned by Grantor.

Grantee may take reasonable steps from time to time to ensure compliance by the Grantor with all of the covenants and restrictions set forth herein, including making periodic inspection of all or any portion of the Easement Area. Grantee shall have the right of reasonable access to the Easement Area for such purposes.

In the event that Grantee or the Grantor becomes aware of an event or circumstance of noncompliance (other than that which may be caused by natural events beyond the Grantor's control including, but not limited to, flood, ice, storm and other climatic or weather condition, fire, and infestation or disease) with the terms and conditions herein set forth, notice shall be given to the other party requesting corrective action sufficient to abate such event or circumstance of noncompliance and restore the Easement Area to its previous condition. The non-complying party shall promptly take all reasonable steps necessary to correct such noncompliance to the other party's reasonable satisfaction. In the event that the non-complying party fails to take such steps, the other party may commence reasonable cure efforts to cure the non-compliance, in which case such party shall be entitled to prompt reimbursement by the non-complying party for any costs reasonably incurred in connection with such cure efforts.

The easement and rights granted hereby shall run with the land.

References to the Grantee shall be limited to RIDGELINE OUTDOOR COLLECTIVE and/or VERMONT MOUNTAIN BIKE ASSOCIATION and subject to re-negotiation with future successors. In the event this Easement is extinguished by eminent domain or other legal proceedings, the Grantee shall be entitled to any proceeds which pertain to the extinguishment of their rights and interests under this Easement, subject to the Vermont Land Trust's rights in the event of extinguishment, eminent domain or other legal proceeds, as described in the Grant of Development Rights and Conservation Restrictions.

Reference is made to the above-mentioned deed and its records, and to all prior deeds and instruments and their records, for a more particular description of the herein conveyed land and premises.

TO HAVE AND TO HOLD, said granted easement and above-described rights, with all the privileges and appurtenances thereof, to the said Grantee to their own use forever.

And the said Grantor, XXXXXXX, for Grantor and Grantor's heirs, successors and assigns, does covenant with said Grantee that until the ensealing of these presents the Grantor is the sole owner of the property on which the Easement Area is located, and has good right and title to convey the easement and rights described herein in the manner aforesaid, that they are FREE FROM EVERY ENCUMBRANCE that would prevent or preclude the Grantee's exercise of the easement and rights granted herein; and the Grantor hereby engages to WARRANT AND DEFEND the dame against all lawful claims whatever, except as aforesaid.

IN WITNESS WHEREOF, the Grantor and the Grantee have caused this instrument to be executed and acknowledged effective as of the _____ day of _____, 20__.

GRANTOR:

STATE OF VERMONT COUNTY, SS

At _____, Vermont, this ____ day of _____, 20__, ____, duly authorized agent of _____, personally appeared and acknowledged this instrument, them sealed and subscribed to be their free act and deed and the free act and deed of

Notary Public

Name: My commission expires: Commission Number:

GRANTEE:

RIDGELINE OUTDOOR COLLECTIVE INC

By:___ Name: Title:

STATE OF VERMONT _ COUNTY, SS

At _____, Vermont, this ____ day of _____, 20_, ____ duly authorized agent of RIDGELINE OUTDOOR COLLECTIVE INC, personally appeared and acknowledged this instrument, them sealed and subscribed to be their free act and deed and the free act and deed of RIDGELINE OUTDOOR COLLECTIVE INC.

Notary Public

Name: My commission expires: Commission Number:





VELOMONTTRAIL.ORG

