WAITSFIELD PLANNING COMMISSION
AGENDA
May 21, 2024 at 7:00 p.m.

Waitsfield Town Office
4144 Main Street
Waitsfield, VT 05673
(802) 496-2218
www.waitsfieldvt.us

THE PLANNING COMMISSION WILL BE HOLDING A HYBRID MEETING. THE PUBLIC MAY ATTEND IN PERSON AT WAITSFIELD TOWN HALL OR REMOTE VIA ZOOM WITH TELEPHONE AND/OR VIDEO ACCESS. THOSE PARTICIPATING MAY SPEAK DURING THE DESIGNATED PERIODS.

To join the meeting remotely, use this link:
https://us02web.zoom.us/j/9190265312
Meeting ID: 919 026 5312
Or call: 1 929 205 6099

1. **CALL TO ORDER / ROLL CALL**
2. **REVISIONS TO AGENDA, IF ANY (5 +/- min)**
3. **PUBLIC FORUM (10 +/- min)**
4. **APPROVAL OF MINUTES – MAY 7, 2024 (10 +/ min)**
5. **PUBLIC HEARING: LOCAL HAZARD MITIGATION PLAN (30 +/- min)**
6. **RIVER CORRIDOR PRESENTATION (30 +/- min) Alice/Brian Voigt**
7. **VILLAGE MASTER PLANNING (15 +/- min) AnnMarie**
   a. Formal Recommendation to SB update
   b. Meeting w/ Shannon Morrison 6/3
   c. Project Kick-off 6/4 PC meeting
   d. Steering Committee/PC Process
8. **WASTEWATER PLANNING PROJECT UPDATE (10 +/- min) Bob**
9. **OTHER BUSINESS (10+/-min)**
   a. PC Vacancy
10. **ADJOURNMENT**

Waitsfield Planning and Zoning Administrators Report
Planning Commission May 21, 2024 meeting

5. Public Hearing: Local Hazard Mitigation Plan (LHMP)

The initial portion of this meeting will be encompassed by the public hearing for the draft Local Hazard Mitigation Plan (LHMP). The draft is included in the packet.

6. River Corridor Presentation

Ms. Peal and former PC member Brain Voigt (CVRPC) will be presenting on River Corridor planning.

https://dec.vermont.gov/watershed/rivers/river-corridor-and-floodplain-protection/planning

7. Village Master Planning (MPG)

At last meeting, the Board decided to revise the deliverables from SE Group for the MPG. Given the impending remapping of state wetlands as well as changes to the rules, the Board felt it better to focus on the Irasville wetlands for the next cycle of MPGs in late 2025. The focus of this cycle with SE Group will be conceptual planning with some preliminary work on the wetlands as well as potential stormwater measures. The PZA has been in touch with Alex Belensz of SE Group to update him on this status.

On June 3, Planning Commissioners, members of the Village Master Planning Steering Committee (VMPSC), and Shannon Morrison will meet via Zoom to discuss the wetlands in Irasville.

Then on June 4, at the next meeting of the PC, SE Group will be present along with members of the VMPSC to officially kick off the project!

The PZA has again included both the MPG RFQ as well as the proposal from SE Group. The PZA urges commissioners to review the SE Group proposal again and focus on projects the company has done related to stormwater management – for example, the Downtown Montpelier Core project. The PZA encourages the Board to include deliverables on potential stormwater measures which would go hand in hand with the more detailed wetlands planning that would be the focus of the next MPG.

A parable from the Virtuous Circle Theory: "*A society grows great when its elders plant trees they know they'll never enjoy*."

8. Wastewater Planning Project Update

The Community Meeting for the project was held on May 8th at the Village Meeting House. Turnout was good, perhaps 35 in the room and another 7-8 on Zoom. If you have not yet watched the meeting, the recording can be found here. Misty Sinsigalli of USDA was present for the meeting.

The bond vote will take place the Village Meeting House on June 11. Ballots were mailed to every registered voter in town on May 16th. Project coordination team members will be mailing out informational postcards on Monday May 20. The postcard is included in the packet.

The Town should begin to hear soon about its CDS applications for Senators Welch and Sanders, in addition to Rep. Balint. Initial feedback from Welch's office was very positive.

The public outreach team continues to meet on the Mondays, as well as the Engineering Technical Team which meets on Wednesdays. This Wednesday the ETT team will travel to Sugarbush to visit the sewage treatment facility there. That system is very similar to what the Town is proposing.

There are only 25 days to the bond vote as of this writing!

The Town website page for the project has been updated and can be found here.

The story map page can be found here.

9. Other Business

We have received no interest as of yet in the vacant position. The Town Clerk has posted the ad in Front Porch Forum a few times. However, Becca Newhall (who was on the phone for the last meeting while traveling) maintains interest in the vacancy. She will next attend the June 4th meeting of the PC.

Upcoming trainings/webinars:

Spring Zoning and Development Review Forum

This forum will have two main components. Law clerks from the Environmental Division of Vermont's Superior Court will explain many practical aspects of how the E-Court operates, best

practices for local boards to write effective decisions, and recent case law affecting municipal zoning appeals. In addition, VLCT's Advocacy staff will explain the status of current legislation relating to local zoning and development.

Sessions
Behind the Bench: Insights into Municipal Zoning Appeals
The law clerks from the Environmental Division of the Superior Court will address an array of topics including how cases work through the court system, recent case law regarding municipal zoning appeals, and best practices for Development Review Boards and Zoning Boards of Adjustment in writing effective decisions.

2024 Legislative Wrap-Up

Presenters
Zach Handelman, Law Clerk, Vermont Superior Court, Environmental Division
Lizzie Filosa-Leonardi, Staff Attorney, Vermont Superior Court, Environmental Division
Ted Brady, Executive Director, VLCT
Josh Hanford, Director of Intergovernmental Relations, VLCT

Date: Thursday, May 30, 2024

Time: 9:00 AM - 12:00 PM

Registration Deadline: Thursday, May 30, 2024

Register here.

Respectfully submitted,

J.B. Weir

TOWN OF WAITSFIELD, VERMONT
Planning Commission Meeting Minutes
Tuesday, May 7, 2024

Draft

Members Present: Beth Cook, Bob Cook, Emma Hanson, AnnMarie Harmon, Alice Peal, Jonathan Ursprung
Staff Present: JB Weir, Planning and Zoning Administrator
Others Present: Becca Newhall

1. Call to Order
The meeting was called to order at 7:15 pm by Jonathan. The meeting was held in person at the Town Offices and remotely via Zoom.

2. Review agenda for addition, removal, or adjustment of any items.
No adjustments were made to the agenda.

3. Public Forum.
Nobody present requested time to address the Commission. Becca joined part of the meeting as a person potentially interested in joining the PC.

4. Approval of Minutes
The minutes of April 16, 2024 were approved.

5. Regional information updates
Regional Plan – Alice reported that the extension request for completion of the Regional Plan update was granted, and that work has begun on the new iteration. There will be a Climate Action chapter added, and population information will be included in an Appendix.

Climate Action Plan – Alice will be working with the rural resource and resilience group; several presentations are planned which will provide background information for those drafting the Plan.

River Corridor regulations – Alice and Brian Voigt will be presenting at the next PC meeting regarding what needs to be incorporated to update Waitsfield's Fluvial Erosion regulations; the RPC has grant money to help towns draft River Corridor language; adopting such plans, along with having a Local Hazard Mitigation Plan in place, will provide the most beneficial ERAF (Emergency Relief and Assistance Fund) rates for the Town.

Local Hazard Mitigation Plan – Alice indicated that this work is wrapping up, and public hearing for the Plan is scheduled for the next PC meeting.

Home Act – Alice reported that new requirements are working their way through the Legislature. There has been some discussion regarding the potential for allowance for too much density through recent bylaw changes around the state.

6. Village Master Planning
AnnMarie explained that the Steering Committee had spent some time discussing the strengths and weaknesses of each of the three consulting firm candidates; there was agreement that SE Group would be

the most proficient for the Master Planning work, but some hesitation was expressed regarding their newly-hired wetlands expert, whom it was felt does not have a broad experience base. The Committee has recommended that SE Group be engaged as the consultant, despite the reservations expressed regarding their strength in the associated wetlands planning work.

Alice noted that the Arrowwood work from three years ago speaks to the need for delineating wetlands; she also indicated that DEC is working on wetlands delineation in the region, and that some of the necessary work will be completed through that effort. Some PC members expressed that the underlying wetlands work should precede the actual planning work, although it was agreed that SE Group has provided excellent consulting previously, and has the background knowledge regarding Irasville to enable moving forward quickly with the planning work.

There was discussion regarding the potential to focus primarily on the master planning portion of this effort during the work to be performed under the grant which has been received, with the intent to follow through with a second phase which would primarily focus on the wetlands work. ACCD has indicated that a follow-up grant is possible through the Municipal Planning Grant (MPG) Program for larger projects such as this. The initial phase will include consideration of limitations imposed by general wetlands understanding, and may also include some planning for stormwater infrastructure.

It was agreed that the initial scope of this work and the deliverables associated with the current grant award will need to be modified slightly, with less focus placed on wetlands delineation and enhancement work. It was noted that this initial work will likely be more conceptual, and that it will be necessary to do further work, potentially through a follow-up MPG, to complete more detailed planning.

MOTION: AnnMarie made a motion to recommend to the Selectboard that SE Group be approved as the chosen consultant for the Village Master Planning Project, and to enter into a contract with SE Group pursuant to the guidelines set forth in the associated Municipal Planning Grant. The motion was seconded by Beth, and passed with Bob and Alice abstaining.

7. Wastewater Planning Project Update

Updates were provided:

- The video has been completed and will be presented at tomorrow's informational meeting.
- Bond vote ballots will be mailed to all voters.
- The group is waiting for a response from Becca Balint's office regarding a grant application.
- It has been decided to proceed with an SBR system, which is a simpler system to have in place, and will be able to handle the household and restaurant waste generated with less chemical treatment.

8. 2024 Work Plan Discussion

JB confirmed that he had added Town Plan work as discussed at last meeting.

9. Other Business

PC Vacancy – JB noted that Becca plans to attend the next PC meeting as well, and that he had posted the vacancy on Front Porch Forum.

10. Adjournment

The meeting adjourned at 8:55 pm.

Respectfully submitted,

Carol Chamberlin, Recording Secretary

Notice of Public Hearing for Waitsfield's Local Hazard Mitigation Plan (LHMP).

A Public Hearing will be held at **7PM on Tuesday May 21 at the Planning Commission Meeting**. All interested Waitsfield Residents and interested parties are invited.

The LHMP is the Emergency Planning Guideline for the Town. It identifies potential hazards such as flooding, fire, pandemic illnesses, roads and more. The LHMP is required for ERAF, The Emergency Relief and Assistance Fund. ERAF provides **State funding to match FEMA Public Assistance after federally-declared disasters.**

1 INTRODUCTION

Mitigation planning provides an opportunity for local government to lessen the impact of the next natural disaster. The goal of this plan is to advance and prioritize mitigation investment to reduce risks posed by natural hazards and to increase the Town of Waitsfield's resilience to damages from natural hazard impacts.

Hazard Mitigation is any sustained policy or action that reduces or eliminates long-term risk to people and property from the effects of natural hazards. FEMA and state agencies have come to recognize that it is less expensive to prevent disasters than to repeatedly repair damage after a disaster has struck. This plan recognizes that opportunities exist for communities to identify mitigation strategies and measures during all the other phases of Emergency Management – Preparedness, Response and Recovery. While the hazards can never be completely eliminated, it is possible to identify what the hazards are, where their impacts are most severe, and identify local actions and policies that can be implemented to reduce or eliminate the severity of the impacts.

2 PURPOSE

The purpose of this plan is to assist the town in identifying all-natural hazards facing the community, ranking them according to local vulnerabilities, and developing strategies to reduce risks from those hazards. Once adopted, this plan is not legally binding; instead, it outlines goals and actions to prevent future loss of life and property. The intention is to create a multi-year pathway to mitigating hazards within the community.

The benefits of mitigation planning include:

Source: FEMA LHMP Skill Share Workshop 2021

Furthermore, the Town seeks to be in accordance with the strategies, goals, and objectives of the 2023 State Hazard Mitigation Plan.

3 3 COMMUNITY PROFILE

Land Use and Development Patterns

The Town of Waitsfield is a small, rural, residential, and tourism-based community located in the southwestern portion of Washington County. It is bordered by Moretown and Duxbury to the north, by Fayston to the west, by Warren to the south, and Northfield to the east.

According to the 2023 Waitsfield Town Plan, the town charter was granted in 1782. It was first surveyed in 1788 with settlers following a year later. Many water powered mills fed by the Mad River and its tributaries fueled the early development of the town.

Waitsfield nestled between the main range of the Green Mountains and the Northfield range is drained by the Mad River. Waitsfield Village, is the only state designated village with in the town. Irasville and

Waitsfield Village are the main economic areas within the town with multiple stores and restaurants.

Outside of the villages, residential development in Waitsfield has a rural character. Much of the town still has active agricultural lands. Residential structures throughout the town are a mix of year-round residences and seasonal homes largely due to the close access to Sugarbush and Mad River ski destinations.

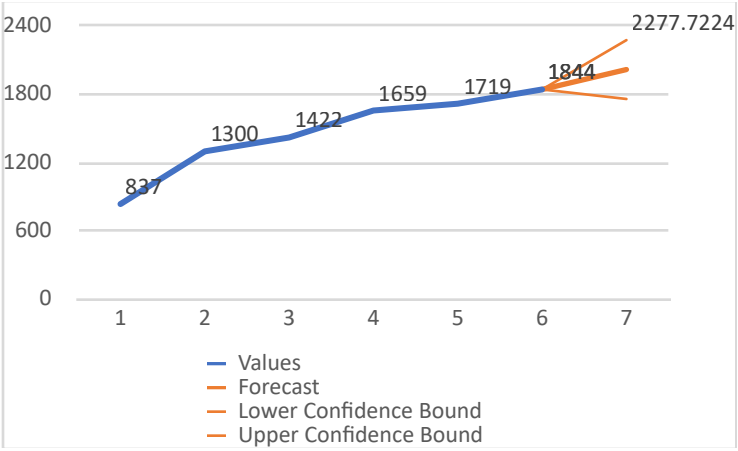
Land Features

Waitsfield's landscape is defined by forested mountains, the Mad River and many of its tributaries. This varies from river bottom farm fields to steep slopes of the Northfield Range to the East. The town lies at the base of the eastern slopes of the Green Mountain Range. Elevation ranges from 620 feet at its lowest elevation to 2867 at Scragg Mountain on the town's eastern edge.

Several extensive land areas are owned by the State and the town including Camel's Hump State Forest, Wu Ledges, Lareau Park, Mad River Park and Scragg Mountain Town Forest.

Demographics and Growth Potential

The 2020 Decennial Census prepared by the U.S. Census Bureau shows an estimated population of 1,844 and 1,049 housing units. Over 50 years of steady growth the trend within Waitsfield is expected to continue.



Source: Census data with excel projection of expected growth

Between 2010 and 2020, the median age of Waitsfield has increased by 2.3 years; 48.2 is the median age, higher than the Vermont median age of 43.2. The portion of the population over 65 is 44.8%, compared to 21.6% in Vermont and 16% in the country. The population density of the town is 68.6 people per square mile compared to an overall state density of 68.

Waitsfield's growth potential is limited by a lack of developable land and access to sewer utilities to allow greater density. Revitalizing existing infrastructure and properties, encouraging mixed-use development, and repurposing underutilized spaces offer the greatest opportunities for growth in Waitsfield.

Of Waitsfield's two designated growth areas, Irasville and Waitsfield Village makes up one area and has the most potential for new residential development. The other area is between Airport Road and North Fayston Road. There is currently little opportunity for new development. The rural countryside also lacks access to public utilities and much of the property is either owned, rented, or leased. The town is trying to address this by undertaking a Wastewater planning project focusing on the Irasville and Waitsfield Village area. This would allow for a great density of development within the areas served by this system. This directly aligns with the State's guidance of increased development. Also addressing climate change by attempting to limit vehicle miles travelled by increasing density and walkability.

Precipitation and Water Features

Average annual precipitation is 45 inches of rain; with July being the wettest month. Average annual snowfall is 102 inches; with February being the snowiest month.

The Mad River and its many tributaries (High Bridge Brook, Mill Brook, Pine Brook, and Shepard Brook) are the major water features in Waitsfield.

Drinking Water and Sanitary Sewer

Public drinking water is supplied by Waitsfield Municipal Water System which is managed by the Waitsfield Water Commission. This system provides water to 130 connections, serving 250 businesses,

dwellings, and municipal organizations with 28 hydrants for fire protection. All other structures and residences are served either by private wells or springs.

Municipal sanitary sewer service is being studied for the Waitsfield Village and Irasville area. This is still in the planning phase as the town is trying to acquire funds for construction. The town has discussed that if implemented that the Wastewater plant should have a robust Emergency Action Plan to prevent accidental discharges during extreme weather events.

Transportation

Waitsfield is ±40 square miles in size with primary access via Vermont Route 100, a north-south minor arterial route, and VT Route 17, running East-West connecting Route 100 with Route 4 south of Vergennes.

The 2023 VTrans Town Highway data indicates that Waitsfield has 29.67 municipal road miles: No miles of Class 1; 9.45 miles of Class 2; 20.22 miles of Class 3; 5.94 miles of Class 4 (or functionally Class 4). Of the total municipal road miles, ±26% are paved and 74% are gravel. In addition, there are 7.83 miles of State highway in Waitsfield, for a total of ±43 traveled highways, including Class 4 roads.

According to the Town's 2023 road erosion inventory, 47% of Waitsfield's Road mileage is hydrologically connected - meaning it is within 100-feet of a water resource (i.e., stream, wetland, lake, or pond). Proximity to water resources can make these sections of road more vulnerable to flooding and fluvial erosion. These sections must be up to the standards created for the Municipal Roads General Permit program with a requirement of 7.5% of non-compliant segments being upgraded per year.

According to the Town's 2023 bridge inventory, Waitsfield has a total of 8 municipal bridges – 2 short structures (6'-20' length) and 6 long structures (>20' length). The town's 6 long structures are inspected every two years by VTrans through the Town Highway Bridge Program.

Waitsfield has a total of 277 culverts in the municipal road right-of-way; all were inventoried in 2020 by the Central Vermont Regional Planning Commission. Several culverts were listed in critical or poor condition and ideally been considered for replacement and/or upgrade in accordance with Town Road and Bridge Standards. The local road network is maintained by the municipal highway department, whose garage is located on Trembly Road.

Electric Utility Distribution System

Electric service to approximately 1034 accounts is provided by the State of Vermont Department of Public Safety. Average annual outage statistics between 2017 and 2019 are summarized in Table 1.

Table 1: Power Outage Summary

Average Annual (2017-2019)	
% of customers who lost power was in a year	8.02
Avg number of outages greater than 24 hours	8

This data has limitations to its accuracy due to the State of Vermont and many of the utilities not tracking outage data at the town level.

Public Safety

Fire protection is provided by the Waitsfield Fayston Volunteer Fire Department, an all-volunteer organization. The Fire Department is a member of the Capital Fire Mutual Aid Association. Law enforcement is provided by the Washington County Sheriff's department and the town constable, with support from Vermont State Police. The nearest hospital is the Central Vermont Medical Center which is a half hour drive from the center of town. There are limited routes available for travelling out of the valley to the hospital, each of these routes can become compromised during a flooding event cutting off the valley from these services except by air transport. Ambulance services are provided by Mad River Ambulance service a volunteer ambulance service. Whether or not we can continue this model as the town grows and experiences demographic changes may present issues as far as long-term sustainability.

Especially based on overall trends nationwide of securing volunteers.

Emergency Management

Per the town's Local Emergency Management Plan, currently the EMD is a member of the Selectboard and is assisted by the town Emergency Management Coordinator an appointed position. They work with others in town to keep the LEMP up to date and coordinate with nearby towns and regional emergency planning efforts.

Vulnerable Populations

Waitsfield has multiple vulnerable communities within the town's boundaries. Residents who have medical needs and are residing in their homes can choose to be listed in the CARES (citizen assistance registration for emergencies) program. The town Emergency Management director can access this list from the Vermont Emergency Management Watch officer. Also, there are two facilities that deal with Senior Housing: Evergreen Place and Mad River Meadows. The town also has the Waitsfield School, Spring Hill School, Waitsfield Children's Center, and the Neck of the Woods day care. Finally, the Verdmont Park Mobile home park. These communities are all called out and addressed in the town Local Emergency Management Plan.

4 PLANNING PROCESS

Plan Developers

The Town assembled a Hazard Mitigation Planning Team to participate in updating the Plan. Team members included: Selectboard member (local EMD), Emergency Management Coordinator, representative of the Planning Commission, and Friends of the Mad River staff.

The Central Vermont Regional Planning Commission (CVRPC) assisted the Town with this Plan update. FEMA Building Resilient Infrastructure and Communities (BRIC) funds supported this process.

Plan Development Process

The 2023 Local Hazard Mitigation Plan is an update to the 2017 single jurisdiction mitigation plan. A summary of the process taken to develop the 2023 update is provided in **Table 2.**

Table 2: Plan Development Process

Nov 1, 2023: Kick-off meeting. Discussed what an LHMP is; benefits of hazard mitigation planning; current plan status; planning process; outreach strategy; and plan sections. Planning Team working meetings were not open to the public.

Nov 29, 2023: Planning team working meeting. Discussed outreach plan and plan for holding public forums. Reviewed possible locations for public forum and next steps.

Feb 2024: To notify the Whole Community* of the plan update, the Town posted physical and online notices. Physical notices were posted at the Town Office, Waitsfield Post Office, Mehuron's Market, Joslin memorial library, and Shaw's Grocery. Online notices were posted on the Town website (waitsfieldvt.us), and Front Porch Forum.

*Whole Community stakeholders include: 1) local and regional agencies involved in hazard mitigation; 2) entities with authority to regulate development; 3) neighboring towns; 4) representatives of business, schools/academia, and other private organizations that sustain community lifelines; and 5) representatives of nonprofit organizations that work directly with or provide support to vulnerable populations.

CVRPC posted online notices on the CVRPC website (centralvtplanning.org). CVRPC also direct emailed notice to 1) officials (Selectboard and Planning Commission chairs, Town Managers and Clerks, Emergency Management Directors) in neighboring towns of Fayston, Moretown, Warren, and Northfield.

2) Key Partners Mad River Planning District, Winooski Natural Resources Conservation District, Hardwood Unified School District, Central Vermont CWSP, VDH Regional Emergency Preparedness Specialist, VTrans District 6 Projects Manager, Central VT Floodplain Manager). Notice included CVRPC contact for information on planning process and opportunities for public input – see **Appendix C**.

Feb 2024: To solicit input from the Whole Community, the Town utilized a survey (see **Appendix D**) and hosted an in-person Community Workshop on Feb. 29th. The Town provided notice of the survey and workshop by posting physical notices at the Physical notices were posted at the Town Office, Waitsfield Post Office, Mehuron's Market, and the Joslin memorial library. Online notices were posted on the Town website (waitsfieldvt.us) and Front Porch Forum. CVRPC posted online notices on the CVRPC website of the opportunity to provide input on where each hazard might impact the town; assets most likely to be affected; and preferred types of mitigation actions (Sections 5 and 6). CVRPC also direct emailed notice of the survey and February Workshop to local officials in neighboring towns and Key Partners – see **Appendix C**.

March 25, 2024: Planning Team working meeting discussing mitigation actions and drafting team will submit additions and will meet again to review (Section 6). Also discussed sections 1-5, and 5 drafts.

April 25, 2024: Planning Team working meeting discussing mitigation actions and to review at public meeting (Section 6). Discussion of process moving forward.

National Oceanic and Atmospheric (NOAA) National Climatic Data Center's Storm Events Database Referenced to develop the risk profile and hazard history in Section 5.

FEMA Disaster Declarations for Vermont Referenced to develop the risk profile and hazard history in Section 5.

Vermont Department of Health Referenced to develop the risk profile in Section 5.

Vermont Department of Conservation Stream Geomorphic Assessments-Structures Used to identify bridges and culverts that are undersized and prone to failure mitigation actions to address floods in Section 6.

Vermont Agency of Natural Resources Natural Resources Atlas Referenced to develop the risk profile in Section 5.

2021 Vermont Climate Assessment Referenced to develop the flood risk profile in Section 5.

2023 Local Emergency Management Plan Primarily used to identify local organizations that support vulnerable populations to ensure these organizations are invited to participate in the plan update.

2020 Structures Inventory (culverts and short structures) Referenced to develop the risk profile in Section 5 and mitigation actions to address floods in Section 6.

2023 FEMA NFIP Insurance Reports Used to determine how many structures are insured, number of repetitive loss properties, and describe NFIP compliance in Section 6.

2023 Waitsfield Town Plan Referenced to develop Community Capabilities, Integrating into Existing Plans and Procedures, Mitigation Strategy Updates – Changes Since 2017 Plan in Section 6.

In addition to the local knowledge of Planning Team members and other relevant parties, several existing plans, studies, reports, and technical information were utilized in the preparation of this Plan. A summary of these is provided in Table 3.

Table 3: Existing Plans, Studies, Reports & Technical Information

2017-2019 VT DPS Power Outage Data Used to develop Table 1 in Section 3.

2024 Zoning Ordinance Referenced to develop Community Capabilities, Integrating into Existing Plans and Procedures, Mitigation Strategy Updates – Changes Since 2017 Plan in Section 6.

2020 US Census Data Used to develop the Demographics and Growth Potential information in Section 3.

2023 State of Vermont Hazard Mitigation Plan Primarily referenced to develop the risk assessment and profiles in Section 5.

2017 FEMA Region 1 Mitigation Ideas for Natural Hazards Used to develop mitigation actions to address impacts from severe winter storms, high wind, and floods.

2023 Road Erosion Inventory Referenced to develop the risk profile in Section 5 and mitigation actions to address floods in Section 6.

2019 Central Vermont Stormwater Master Plan Duxbury, Fayston, Moretown, Waitsfield, and Warren Referenced to develop the risk profile in Section 5 and mitigation actions to address floods in Section 6.

2013 FEMA Mitigation Ideas Resource for Reducing Risk to Natural Hazards Used to develop mitigation actions to address impacts from severe winter storms, high wind, and floods.

VTrans Town Highway Bridge Inspection Reports Referenced to develop the risk profile in Section 5 and mitigation actions to address floods in Section 6.

VTrans Transportation Resilience Planning Tool Referenced to develop the risk profile in Section 5 and mitigation actions to address floods in Section 6.

Vermont Dam Inventory (VDI) Referenced to develop the risk profile in Section 5 and mitigation actions to address floods in Section 6.

2023 FEMA Local Mitigation Planning Handbook Used to ensure plan meets the Federal mitigation planning requirements, including those for addressing climate change.

2023 FEMA Hazard Mitigation Assistance Program Policy Guide Used to ensure plan meets the Federal mitigation planning requirements, including those for addressing climate change.

2020 US Census Data Used to develop the Demographics and Growth Potential information in Section 3.

Mitigation Strategy Update - Changes Since 2017 The 2017 local hazard mitigation planning effort analyzed natural hazards and the risk they posed to the Town of Waitsfield. The risk assessment resulted in the categorization of High, Medium and Low risk level hazards. Floods and fluvial erosion; dam failures and ice jams; hurricanes and severe storms; and winter storm, ice storms, extreme cold with power outages; were ranked as the community's High-risk natural hazards. Actions proposed in 2017 focused on mitigating risks from flooding due to their frequency and severe nature.

As the Town has sought to implement the 2017 mitigation strategy, they have looked for opportunities to incorporate information and recommendations from the 2017 Plan into other plans, programs, and procedures. They were successful in doing so in recent Town Plan and Zoning Ordinance updates.

The Waitsfield Town Plan, adopted in 2023, serves as the Town's framework and guide for reaching community goals, including those for how future growth and development should proceed.

It includes flood resilience and land use policies and actions to support the goal of mitigating risks to public safety, critical infrastructure, historic structures, and municipal investments posed by flooding and fluvial erosion.

The Town Plan is the basis for local land use controls such as those in the Waitsfield Zoning Bylaws, amended in 2020 and currently undergoing another amendment update. Waitsfield Zoning Bylaws includes Flood Hazard Area and Fluvial Erosion Hazard Overlay Districts to ensure the selection, design, creation, and use of development in these hazard areas is reasonably safe and accomplished in a manner that is consistent with public wellbeing, does not impair stream equilibrium, flood plain services, or the stream corridor.

In addition, Waitsfield made significant progress in completing other mitigation actions identified in the 2017 Plan – see Appendix B.

They have much to be proud of and noteworthy mitigation accomplishments are highlighted below.

Improvements to the town roads especially in culvert upsizing and the Mad River Valley Stormwater Master Plan has helped to make town roads and infrastructure more resilient to flash flooding and fluvial erosion have achieved the intended results and performed well during the July and December 2023 storms. These mitigation investments have 1) strengthened the community's Transportation lifeline; 2) reduced risk to infrastructure; and 3) supported Town efforts to comply with the Municipal Roads General Stormwater Discharge Permit and protect water quality by controlling erosion and stormwater runoff from municipal roads.

Generators have been installed at the Town Office building; local shelter at the elementary school, Waitsfield-Fayston Fire station, and at Mad River Valley Ambulance. These mitigation investments have 1) strengthened the community's Energy; Communications; and Food, Water, Shelter lifelines; 2) reduced risk to people during power outages and 3) provide continuity of emergency and vital town services during power outages.

Actions taken by Waitsfield since 2017 have made the community more prepared and less vulnerable to future natural hazard impacts.

As described in the Community Profile above, Waitsfield's population has been in a steady growth cycle and growth potential is believed to be limited by a lack of public sewer utilities that would allow a greater density.

So, changes in population and development since 2017 have not made Waitsfield more vulnerable to natural hazards and therefore are not the primary drivers for a shift in the Town's mitigation priorities in 2024. Rather changing weather conditions most influenced the Town's current mitigation strategy.

Changes in population and development since 2018 have not made Waitsfield more vulnerable to natural hazards. Rather changing weather conditions most influenced the Town's current mitigation strategy.

Climate change is increasing the frequency, duration, and intensity of storms, floods, fires, and extreme temperatures across the nation. Local communities are feeling the impacts of climate change now, and these multi-hazard trends are expected to continue to increase in severity over the next century2.

As a result, Waitsfield considered the effects of future conditions, like climate change, on the type, location, and range of intensities of identified hazards when they conducted the risk assessment in 2024. The highest risk hazard impacts that the Town believes they are most vulnerable to remained essentially the same as those from 2017:

Floods associated with thunder and/or winter storms and ice jams.
Extreme cold, snow, and ice associated with severe winter storms;
Landslides, slope failure, severe erosion
Invasive Species, plant and animal

In addition to the traditional natural hazards assessed in 2024, the Town also considered infectious disease and invasive species to align with the hazards identified in the 2023 State Hazard Mitigation Plan.

The primary mitigation goal in the 2024 Plan is to increase the Town's resilience to natural hazards by advancing mitigation investment to reduce or avoid long-term risk to people, homes, neighborhoods, the local economy, cultural and historic resources, ecosystems, and Community Lifelines.

When evaluating mitigation actions, the Town selected actions that support the mitigation goal and are acceptable and practical for the community to implement. Actions that directly benefit a vulnerable population were assigned a high prioritization score – see Table 6.

[2] FEMA Hazard Mitigation Assistance Program and Policy Guide, March 23, 2023.

5. HAZARD IDENTIFICATION AND RISK ASSESSMENT

Local Vulnerabilities and Risk Assessment

One of the most significant changes from the 2017 Plan is the way hazards are assessed. To be consistent with the approach to hazard assessment in the 2018 State Hazard Mitigation Plan, the Hazard Mitigation Planning Team conducted an initial analysis of known natural hazard events* to determine their probability of occurring in the future (high probability events are **orange** in **Table4**).

The Team then ranked the impacts associated with the natural hazard events based on 1) probability of occurrence and 2) potential impact to people, infrastructure, the environment, and local economy.

This assessment considered the effects of future conditions, like climate change, on the type, location, and range of intensities of identified hazards.

Table 4: Community Hazard Risk Assessment

The ranking results are presented in **Table 4** and reflect the following **highest risk hazard impacts** that the Town believes they are most vulnerable to:

***Floods** associated with thunder and/or winter storms and ice jams.*

***Extreme cold, snow, and ice** associated with severe winter storms.*

Each of the **highest risk hazard impacts** are profiled in this section. Lower risk hazard impacts do not justify mitigation due to a low probability of occurrence and/or low impact and are not profiled in this Plan. See the State Hazard Mitigation Plan for information on the lower risk hazards.

2024 Hazard Mitigation Plan - Hazard Assessment							
Hazard Impacts	**Probability**	**Potential Impact**					**Score*:**
		Infrastructure	Life	Economy	Environment	**Average:**	
Fluvial Erosion	**4**	**4**	**3**	**4**	**4**	**3.75**	**15**
Inundation Flooding	**4**	**4**	**3**	**4**	**4**	**3.75**	**15**
Ice	**3**	**3**	**3**	**3**	**2**	**2.75**	**8.25**
Snow	**4**	**2**	**3**	**3**	**1**	**3.00**	**12.00**
Wind	**3**	**2.5**	**2**	**2**	**2**	**2.125**	**6.38**
Heat	**3**	**1**	**2**	**1**	**1**	**1.25**	**3.75**
Cold	**3**	**1**	**2**	**1**	**1**	**1.25**	**3.75**
Drought	**3**	**1**	**1**	**3**	**3**	**2**	**6.00**
Landslides	**3**	**3**	**1**	**3**	**2**	**3.00**	**9.00**
Wildfire	**2**	**2**	**2**	**2**	**2**	**2.00**	**4.00**

*This plan defines a natural hazard as a source of harm or difficulty created by a meteorological, environmental, or geological event.

Da… Failu…	**2**	**3**	**2**	**3**	**3**	**2..75**	**5.5**
Inv… Species	**4**	**2**	**1**	**2**	**4**	**2.25**	**9.00**
Infectious Disease Outbreak	**2**	**1**	**3**	**2**	**1**	**2.25**	**4.50**
Ice Jam Flooding	**3**	**3**	**2**	**3**	**2**	**2.75**	**8.25**

*Score = Probability x Average Potential Impact

Other hazards removed from list

- Earthquakes-minimal risk in region
- Hail- most damages in region come from associated strong wind (severe storm)

*Score = Probability x Average Potential Impact

	Frequency of Occurrence: Probability of a plausibly significant event	Potential Impact: Severity and extent of damage and disruption to population, property, environment, and the economy
1	**Unlikely:** <1% probability of occurrence per year	**Negligible:** isolated occurrences of minor property and environmental damage, potential for minor injuries, no to minimal economic disruption
2	**Occasionally:** 1–10% probability of occurrence per year, or at least one chance in next 100 years	**Minor:** isolated occurrences of moderate to severe property and environmental damage, potential for injuries, minor economic disruption
3	**Likely:** >10% but <75% probability per year, at least 1 chance in next 10 years	**Moderate:** severe property and environmental damage on a community scale, injuries or fatalities, short-term economic impact
4	**Highly Likely:** >75% probability in a year	**Major:** severe property and environmental damage on a community or regional scale, - multiple injuries or fatalities, significant economic impact

IMPACT DEFINITIONS

INFRASTRUCTURE IMPACTS: (Effects on Roads, Bridges, Structures, Homes)

- 1—Minor: Localized/Isolated impacts to Infrastructure (Temporary loss of use)
- 2—Moderate: Neighborhood level impacts (1-2-day loss of use)
- 3—Severe: Community-wide impacts (2-5-day Loss of use)
- 4—Disastrous: Regional losses of roads, bridges, homes (Extensive replacement/rebuild)

LIFE SAFETY ISSUES: (Health and Welfare of Population)

- 1—Minor scrapes/injuries
- 2—Occasional Hospitalization required due to injuries
- 3—Multiple hospitalizations required and/or fatality
- 4—Community-wide hospitalizations and/or fatalities

ECONOMIC IMPACTS: (Direct recovery costs to municipality and residents)

- 1— < $10,000 in damages (Can generally be handled within budget or via insurance)
- 2—$10,000-$100,000 (May require assistance for the uninsured or large impact on local budget)
- 3—$100,000-$1,000,000 (Requests of assistance/FEMA eligible)
- 4— > $1,000,000- (All resources used, Possible National Guard use)

ENVIRONMENTAL IMPACTS: (Effects to municipal operations and environment)

- 1 – Negligible: Short term impacts, low clean-up costs for spills
- 2 – Minor: Moderate clean-up costs, temporary redirection of municipal resources
- 3 – Moderate: Extended redirection of local resources/ impacts to normal operations, high clean-up costs
- 4 – Major: Long-term recovery efforts (could take years for full recovery or permanent loss of use)

Highest Risk Hazard Profiles

Floods can damage or destroy property; disable utilities; destroy or make impassable roads and bridges; destroy crops and agricultural lands; cause disruption to emergency services; and result in fatalities.

People may be stranded in their homes for a time without power, heat, or communication or they may be unable to reach their homes. Long-term collateral dangers include the outbreak of disease, loss of livestock, broken sewer lines or wash out of septic and wastewater systems causing water supply pollution, downed power lines, loss of fuel storage tanks, fires, and release of hazardous materials.

As noted in the 2023 State Hazard Mitigation Plan and 2021 Vermont Climate Assessment, the most common recurring hazard event impacting Vermont communities is flooding. There are two types of flooding: inundation and flash flooding. Inundation is when water rises onto low lying land. Flash flooding is a sudden, violent flood which often entails stream bank erosion (fluvial erosion).

Inundation flooding of land adjoining the normal course of a stream or river is a natural occurrence. If these floodplain areas are in their natural state, floods likely would not cause significant damage. However, most business districts within Vermont are built within this floodplain due to the historical significance of water power.

While inundation-related flood loss can be a significant component of flood disasters, the more common mode of damage in Vermont is fluvial erosion, often associated with physical adjustment of stream channel dimensions and location during flood events. These dynamic and often catastrophic adjustments are due to bed and bank erosion of naturally occurring unstable stream banks, debris and ice jams, or structural failure of or flow diversion by human-made structures.

Flood of 1998

Damage from high flows is the single most costly type of disaster in Vermont, primarily due to the erosive power of water. Many roads and culverts conflict with the room needed by streams and rivers."
2021 Vermont Climate Assessment

Several major flooding events have affected the state in recent years, resulting in multiple Presidential Disaster Declarations. From 2003 to 2019, Washington County experienced roughly $88.82 million in municipal property damage due to flood events. The totals from the most recent July 2023 flood event are still being totaled at the time of this writing.

The worst flooding event in recent years to strike the town of Waitsfield came in August of 2011 from Tropical Storm Irene (DR4022), which dropped up to 5-7+ inches of rain in some areas of Washington County. Irene caused 2 deaths and $60 million in reported property damages and $2.5 million in crop damage in Washington County alone. Luckily the July 2023 flooding event that is the worst to affect the State and region since the Flood of 1927 primarily missed the Mad River valley, where the town only received ~5" of rain during this event and had minimal flooding within the town.

The December 2023 rain on snow flooding caused localized flooding in the town but the mitigations actions that were implemented post Irene helped to prevent any large damages, limiting the effects to minor flooding of low-lying areas and road closures due to inundation. For a short period of the event the town was almost cut off and had to adjust medical transport to the local hospital to avoid inundation areas. The effects of these storms are profiled in this flooding section.

The town is concerned with the increased temperatures in winter seasons brought on by climate change. The increase in temperature fluctuations and associated precipitation is worrisome of rain on snow events impacting the region and specifically the town of Waitsfield due to its location and associated mountains. The snowpack can become hazardous due to the rapid melting from rain on snow and sudden warming, fueling extreme and rapid runoff.

Waitsfield is vulnerable to inundation flooding primarily along the Mad River. A wide range of assets are at risk from inundation flooding in these areas. There are 14 buildings in the FEMA floodway; as well as roads, culverts, bridges well as roads, culverts, bridges, and two water wells listed for public establishments on the Vermont ANR map viewer.

With inundation flooding, there are cascading impacts involving infectious disease as floodwater can contain numerous types of infectious agents and host insects that transmit disease. Mosquitos, for example, breed in standing water and when their population increases, so does the risk of diseases they transmit – such as West Nile Virus.

Flash flooding can occur any time the area has heavy rain. It can impact areas that are located outside of designated floodplains, including along streams confined by narrow valleys (also known as River Corridors). Again, a wide range of assets are at risk from flash flooding. There are 50 buildings in the State-mapped River Corridors (outside of designated floodplains); as well as roads, culverts, bridges, and dams.

The most common type of flash flood damage is road washouts. When runoff volumes exceed the capacity of the stormwater collection system (ditching and culverts), washouts can occur.

Brook Road Storm Damage – May 2011

The town's structures and road erosion inventories as well as VTrans highway flood vulnerability and risk tools were used to help identify locations and assets at risk from flash flooding.

Sections of several roads have a history of flash flooding – Route 100 in 2 locations Folsom Brook and Mill Brook, Meadow Road, and Tremblay Road. The locations all show as at risk of inundation or fluvial erosion in the Vermont Transportation Resiliency Planning Tool.

Culvert failures and road washouts can have a significant negative impact on the Town. Especially if they occur on roads considered locally important routes for through-traffic, short-cuts, detours, and/or access to critical facilities – such as VT Route 17, VT Route 100, East Warren Road, North Road, and Common Road.

When roads are impacted by flooding, the Town coordinates with the fire department, town road crew and State dispatch to close roads and set up detours. Road closures can create longer commute times and longer emergency service response times.

In addition to stormwater runoff from roads, ice jams and dam failures can result in flash flooding in Waitsfield. Ice jams on the Mad River and Mill Brook in the vicinity of VT Route 17/100

intersection and in the Waitsfield Village just upstream of the covered bridge are possible, with impacts to the roads and the Waitsfield Village.

There are two dams in Waitsfield listed in the Vermont Dam Inventory (a database managed by the VT Dam Safety Program containing spatial, structural, historic, and regulatory information on dams in the state). One is classified as low hazard potential and one is a breached dam. None of the dams are owned by the town and there are no high hazard potential dams in Waitsfield. The low hazard potential dam is the Sugarbush Snowmaking pond dam which is owned and maintained by the Sugarbush resort.

There is one high hazard potential dam upstream of Waitsfield in the town of Warren. It is the Warren Lake Dam, an earthen dam on the Mills Brook a tributary of the Mad River. This dam was built in 1983 and is 530 ft long and 35 ft high and has a normal storage of 350-acre feet and a maximum storage of 1567 acre feet. The drainage for the lake is 595 acres. The last reported inspection of the dam on the ANR dams inventory site was 11/13/2020 and lists the dam as in fair condition.

Community survey respondents ranked damages to roads and bridges as particularly important (7 out of 7) to protect against future severe weather impacts.

Flash flooding often entails stream bank or fluvial erosion. Several existing studies were used to help identify locations and assets at risk from fluvial erosion, specifically, a 2008 Phase 2 Stream Geomorphic Assessment for the Mad River watershed and the Central Vermont Stormwater Master Plan completed in 2019.

Stream Geomorphic Assessments (SGAs) provide information about the physical condition of streams and factors that influence their stability. The 2008 Mad River watershed SGA identifies priority locations for river corridor protection, planting stream buffers, stabilizing stream banks, removing berms, and removing/replacing human-placed structures (i.e., dams, bridges, culverts).

Stormwater Master Planning (SWMP) involves identifying stormwater, sediment, nutrient, and septic inputs to waterways and designing projects to mitigate those inputs; either eliminating them at the source through green stormwater infrastructure, septic system improvements, back road projects or improving floodplain access within the stream network to increase sediment attenuation.

The 2019 Central Vermont SWMP (Waitsfield) recommended 20 projects to reduce environmental impacts of nutrient and sediment loading to the Mad River, as well as mitigate flood vulnerability to municipal or state road and drainage infrastructure.

As demonstrated in the above referenced studies, environmental impacts from flooding can be significant, especially to the water quality in the Mad River and the Winooski River. This can in turn have an adverse impact on local tourism and recreation. Flood events with associated road closures can also have a short-term impact on the local economy due to fewer shopping trips and commuter delays.

Floods Hazard History

These are the most up to date significant events impacting Waitsfield. Federal declarations are depicted in **bold**.

12/18-19/23: 2" of rain on snow event
7/11/2023: DR4720 5-9"" rain: $Still to be determined
7/20/2021: Heavy rain: $50,000 county damages
7/14/2020: 3-4" rain: $5,000 town damages
11/1/2019: 2-4" rain: $250,000 county damages
6/20/2019: Heavy rain: $25,000 county damages
5/20/2019: Heavy rain: $25,000 county damages
4/15/2019: DR4445 1" rain with significant snow melt:
7/1/2017: DR4330 3-4" rain the previous 3-4 days with flash flooding on 7/1/17: $240,000 county damages
7/19/2013: Heavy rain: $1,000,000 county damages
4/15-18/2014: DR 4178 heavy rain on snow event $250,000 county damages
6/25-7/10/2013: DR4140 1-3" of heavy rain over a half hour: $625,000 county damages
8/28/2011: DR4022 Tropical Storm Irene with 3-7+" rain: $75,000,000 Public county damages
5/26-27/2011: DR4001 3-5+" rain on snow event: $5,500,000 county damages
5/20/2011: DR4043: Heavy rain: $400,000 county damages
4/23-5/9/2011: DR4043 rain on snow event: $1,000,000 county damages

As weather patterns shift and we see larger storms and more frequent freeze-thaw cycles, the town will monitor for signs that rivers that have historically been stable becoming less stable, with increased erosion, widening, trees falling in from its banks, etc.

19 buildings are in the Special Flood Hazard Area (2% of community structures); mostly single family dwellings and businesses.

According to FEMA, 74% of these properties have flood insurance. In total, these 14 policies cover $350,000 in value.

There are 4 repetitive loss properties with 2 of them being insured.

Landslide on Mill Brook at town boundary

Total damages for landslides are not tracked well within the State of Vermont since often landslides are in association with Fluvial Erosion the damages are often lumped together there. With increase in precipitation trends due to climate change the risk from landslides is increasing. This can be addressed through land use regulations and mitigation of surface runoff from human actions and development.

Landslides: A landslide is the sliding of a large mass of rock, earth, or debris, down a slope. Landslides can be caused by a variety of factors, including freezing or thawing and/or by the steepening of slopes by erosion or human modification. In Waitsfield, landslides tend to occur are exacerbated by fluvial erosion as most landslides occur on or near a stream bank, during extreme wet conditions in areas of clay substrate.

Landslides have three major causes: geology, morphology, and human activity. Geology refers to characteristics of the material itself. The earth or rock might be weak or fractured, or different layers may have different strengths and stiffness.

Morphology refers to the structure of the land. For example, slopes that lose their vegetation to fire or drought are more vulnerable to landslides. Vegetation holds soil in place, and without the root systems of trees, bushes, and other plants, the land is more likely to slide away.

Human activity, such as agriculture and construction, can increase the risk of a landslide. Irrigation, deforestation, excavation, and water leakage are some of the common activities that can help destabilize, or weaken, a slope.

Extreme Cold, Snow, and Ice Hazard History

These are the most up to date significant events impacting Waitsfield. Federal declarations are depicted in **bold**.

1/11-14/2022: 10-40 below zero with winds: no reported damages
12/18/2021: 5-7" snow $10,000 county damages
1/16/2021: 3-6" wet snow: $50,000 county damages
3/23/2020: 7-10" snow: $5,000 county damages
2/7/2020: 10-16"; ¼" ice: $20,000 county damages
1/16/2020: DR 4474 6-10" snow: $10,000 county damages
3/22/2019: 9" snow: $25,000 county damages
2/12/2019: 7-15" snow: $10,000 county damages
1/29/2019: 6-10" snow: $10,000 county damages
1/19/2019: 10-18" snow: $25,000 county damages
1/8/2019: 8-20+" snow: $25,000 county damages
11/26/2018: 6-14" heavy snow: $125,000 county damages
3/13/2018: 12-30" snow: $20,000 county damages
3/7/2018: 7-13" snow: $10,000 county damages
1/7/2015: 0-10 degrees with wind of 15-30 mph creating wind chills colder than 20-30 below zero: no reported local damage
12/9/2014: DR4207 10-20" snow: $250,000 county damages

Severe Storms with Snow, Wind and Ice events typically occur between the months of December and March in the Central Vermont Region. They can include snow, sleet, freezing rain, or a mix of these wintry forms of precipitation. Events can also be associated with strong wind or floods, increasing the potential hazard.

The costs of these storms come in the form of power outages due to heavy snow or ice, damaged trees, school closings, and traffic accidents. From

2014 to 2022, Washington County experienced $585,000 in property and crop damage from winter storms.

There have been two winter storm-related federally declared disasters in the county (the ice storm of January 2020 – DR 4474; and December 2014 DR 4207, respectively (see table at right).

Extreme cold can have impacts on public health and safety, especially if extreme temperatures coincide with power outages, which can cut off heat and communication services. Severe winter storm impacts can put vulnerable populations (e.g., older adults, children, sick individuals, pets) at even greater risk.

See the strong wind profile below for more information about the town's vulnerability to power outages.

Snow accumulation typically does not result in loss of road accessibility. The town's fleet of snowplows ensures all roads are accessible, even in major accumulation events. Roads adjacent to critical facilities are well maintained and along with connector routes, are prioritized in winter storm events.

Environmental impacts are predominantly tree damage. Extreme snow and ice events typically have a short-term impact on the local economy – fewer shopping trips and commuter delays.

Strong wind can occur alone, such as during straight-line wind events, or it can accompany other natural hazards, including severe thunder and/or winter storms.

FEMA's National Risk Index defines strong wind as damaging winds that exceed 58 mph. Strong wind poses a threat to lives, property, and vital utilities primarily because of flying debris or downed trees and power lines.

From 1996 to 2022, wind events caused more than $1.270 million in property damage in Washington County, with $450,000 due to one event in December 2022.

Strong wind is possible here; Waitsfield is susceptible to high directional winds town wide. Many storms with high winds result in downed trees as well as damaged phone and power lines, buildings, and other property.

Downed trees within the road right-of-way are the root cause of many power outages. Roads that pass through dense wooded areas are prone to downed trees, which often can lead to fallen power lines.

Power outages are the main reason for disrupting communications, which are crucial in times of crisis. For example, the loss of phone service is of particular concern for Waitsfield's vulnerable populations and residents. Landline phones that have been converted from copper wire to fiber rely on an in- home battery back-up. The battery life is typically less than eight hours, whether the phone is used or not. Though many residents use cell phones, longer power outages and damage from high winds further complicating the problem of contacting emergency services during power outages.

Telecommunications are also needed for warning systems before a disaster, as well as for response during and recovery after. During a disaster, municipal response is managed by the local Emergency Operations Center (EOC), this would include all communications – from phone calls to internet browsing and 2-way radio.

To mitigate the impacts of power outages, the following public buildings/critical facilities have been equipped with backup power or generator hookup: Water supply pump house, fire station, Mad River ambulance, and Waitsfield elementary school (as emergency shelter).

The public buildings lacking backup power are the town garage.

In addition to power outages, downed trees during strong wind (and heavy snow/ice) events can damage buildings and other property and in rare cases result in fatality. One hundred percent (100%) of community survey respondents reported having seen areas in the community damaged during a past severe weather event. The most common type of damage that survey respondents reported seeing was downed trees. Seventy-one percent (71.4%) of community survey respondents reported having experienced damage during a past severe weather event.

Environmental impacts are predominantly tree and roof damages. Strong wind events with associated power outages can have a short-term impact on the local economy due to business closures.

Vermont's Emerald Ash Borer infestation was first detected in 2018 in northern Orange County. The potential risk to public and private structures and impacts on the local economy have not been quantified. But the impact of invasive pests has a real economic effect on landowners and utilities in dealing with dead trees and their potential to cause damages.

As weather patterns shift and we see larger storms and more frequent freeze-thaw cycles, the Town will monitor for signs that rivers and streams that have historically been stable are becoming less stable, with increased erosion, widening and trees falling in from its banks, etc.

Strong Wind Hazard History

These are the most up to date significant events impacting Waitsfield. Federal declarations are depicted in **bold**. Damages are to Washington County.

12/23/2022: 50-60+ wind gusts: $450,000
10/30/2017: 40 mph wind: $250,000
2/26/2010: 55 mph wind: $15,000
2/17/2006: 37 mph wind: $10,000
9/29/2005: 35 mph wind: $50,000
11/13/2003: 35 mph wind: $10,000
10/15/2003: 50 mph wind: $10,000
3/10/2002: strong wind: $5,000
12/12/2000: strong wind: $5,000
3/28/2000: strong wind: $5,000
9/17/1999: strong wind: $75,000
11/23/1998: strong wind: $10,000
2/22/1997: 50 mph wind: $15,000

Droughts in the Northeast. We frequently experience what are referred to as "flash" droughts, defined as rapid onset of intense dry periods that can follow periods of normal or above normal precipitation. These may last from 2-6 months, and can have profound impacts within the region, on agricultural losses, shortages of water supply and very low stream flows. This pendulum often swings from a dry year to a wet year.

The Town's risk of droughts is mainly addressed through the Ordinances for the Town water supply. Most residents of the Town are on private wells and bear the costs and risks of mitigation themselves. The Town's Water Ordinance has the appropriate language for conserving water and limiting non-essential usage during a drought emergency.

Wildfires are not often much of a concern within our region, although the spring and fall can be times when dry hazardous conditions exist. Opportunity for wildfires occurs due to the lack of foliage in these seasons, before spring green up or in the fall after foliage has died back when combined with dry conditions. Historically,

Vermont has seen the most wildland fires between March and June. These are generally times when dry conditions exist for an extended period causing drought conditions. Ignition of wildfires is predominantly caused by human activity and mainly from debris fires that are not contained or not supervised. Thus, messaging when conditions exist is very important to convince individuals not to make mistakes in relation to ignition sources. This messaging is handled by the town fire warden in association with the fire department.

Infectious Disease and Invasive Species

This Plan must assess the risk of all hazards identified in the 2018 Vermont State Hazard Mitigation Plan, including infectious disease and invasive species. Due to the different nature of these hazards, the Planning Team assessed them separately from the natural hazards in **Table 4**.

Infectious diseases and invasive species are diverse categories of hazards. So, while their probability of occurrence in Waitsfield may be likely, potential impacts will be highly dependent on the specific infectious agent or invasive.

The Planning Team acknowledges that impacts to Waitsfield's people, environment, and local economy from infectious disease and/or invasive species could be significant. However, given the diverse nature of these hazards, they cannot be fully explored in this plan. This plan does include information about the potential hazards and risks associated with a specific infectious agent (West Nile Virus) and invasive species (Emerald Ash Borer) due to cascading impacts associated with flooding and storm-related tree damage.

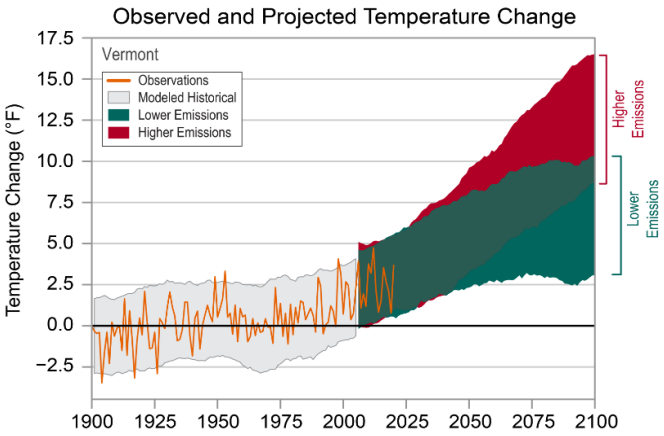
Readers should look to the Vermont Department of Health for more information on significant infectious disease outbreaks, such as epidemics and pandemics and the Vermont Agency of Natural Resources for more information on invasive species, including terrestrial invasives, forest pests, and aquatic invasives.

Extreme heat and cold warnings are becoming increasingly more prevalent due to our shifting climate. Vermont has been seeing an

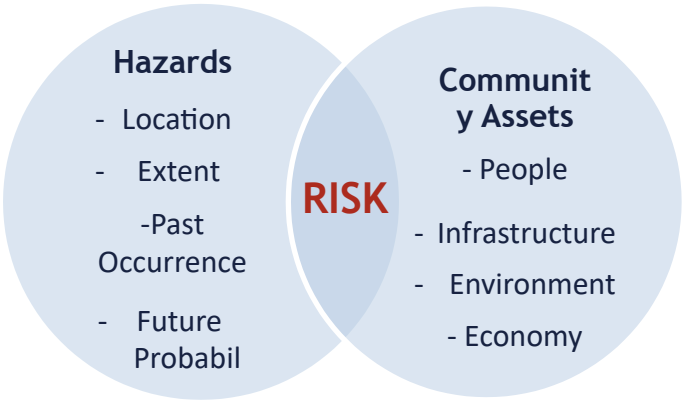
Increase in 90+ degree temperature days. This trend is expected to continue. Most of our housing stock and individuals are well adapted to dealing with cold temperature, but the quick swings to higher temperatures do not allow for acclimation,

and many of our structures are designed to retain, rather than shed, heat. Due to the climate of our region the high temperatures and high humidity often create situations that negatively affect older individuals and those with preexisting conditions.

Due to the instability of the jet stream from climate changes, extreme cold can still be an issue. If it is a long-lasting cold without snow cover, frost can migrate deep into the ground freezing pipes and heaving roadways. Most of this would be dealt with by the town either through their utility contracts or by the town road crew in keeping the transportation infrastructure in usable condition. Loss of power during one of these cold snaps may require use of the town shelter and is planned for in the town Local Emergency Management Plan.



-NOAA 2022 Vermont Climate summary



The Hazard Identification and Risk Assessment is the foundation for the Mitigation Strategy to reduce future risk.

With the increasing risks of events from our changing climate, all weather-related natural events are expected to have an increase in both frequency and in intensity. Vermont is predicted to experience increases in heat waves, downpours and flooding.

The Northeastern United States has already seen an increase of seventy one percent precipitation totals increase since 1950 and an increase in extreme weather events. It is imperative that we have solid plans of mitigating future disasters proactively to minimize risk.

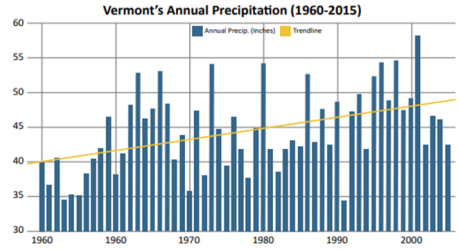


Figure 26: Vermont's annual precipitation (1960-2015)
Source: climatechange.vermont.gov

-precipitation data showing increased precipitation trends from VT state climate action plan

6 HAZARD MITIGATION STRATEGY

The highest risk natural hazards and vulnerabilities identified in the previous section of this Plan directly inform the hazard mitigation strategy outlined below, which the community will strive to accomplish over the coming years. The mitigation strategy chosen by the Town includes the most appropriate activities to reduce future risk from potential hazards.

Mitigation Goals

The Hazard Mitigation Planning Team identified the following as the community's primary mitigation goal:

Increase the Town of Waitsfield's resilience to natural hazards by advancing mitigation investment to reduce or avoid long term risk to people, homes, the local economy, cultural and historic resources, ecosystems, and community lifelines such as transportation, water, sewer, energy, and communications.

See Community Survey results in Appendix C for which assets survey respondents thought were most important to protect against potential future severe weather impacts.

Community Capabilities

Each community has a unique set of capabilities, including authorities, programs, staff, funding, and other resources available to accomplish mitigation and reduce long-term vulnerability. Waitsfield's mitigation capabilities that reduce hazard impacts or that could be used to implement hazard mitigation activities are listed below:

Administrative & Technical This capability refers to the Town's staff and their skills and tools that can be used for mitigation planning and to implement actions. In addition to the Emergency Management staff described in Section 3, municipal staff that can be used for mitigation planning and to implement specific mitigation actions include: Town Administrator, Town Treasurer, Town Clerk, Assistant Town Clerk, and Planning and Zoning Administrator.

In addition to paid staff, there is a 5-member Selectboard, 5-member Planning Commission, Fire Warden, Town Health Officer, Conservation Commission and Constable.

To augment local resources, the Town has formal mutual aid agreements for emergency response – fire and EMS. Technical support is available through the CVRPC in the areas of land use planning, emergency management, transportation, GIS mapping, and grant writing. Technical support is also available through the State ANR for floodplain bylaw administration and VTrans Districts for hydraulic analyses.

Planning & Regulatory These capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Examples of planning capabilities that can either enable or inhibit mitigation include: land use plans, capital improvement programs, transportation plans, stormwater management plans, disaster recovery and reconstruction plans, and emergency preparedness and response plans. Examples of regulatory capabilities include the enforcement of zoning ordinances, subdivision regulations, and building codes3 that regulate how and where land is developed, and structures are built.

Town Plan: December 2023

Description: A framework and guide for how future growth and development should proceed.

Relationship to Natural Hazard Mitigation Planning: Includes goals and policies related to flood resilience and land use.

Zoning Ordinance with Flood Hazard Area and Fluvial Erosion Overlay District Requirements: September 2016 Description: Provides for orderly community growth promoting the health, safety, and general welfare of the community.

Relationship to Natural Hazard Mitigation Planning: Site plan review requirements and zoning districts, including Flood Hazard and River Corridor Overlay Districts, with specific standards for proposed development. Requirements are designed to prevent overdevelopment; to mitigate negative impacts to the natural and human environment; minimize effects to the historical and aesthetic character of the community; and ensure design and construction of development in flood and other hazard areas are accomplished in a manner that minimizes or eliminates the potential for flood loss or damage to life and property.

Road and Bridge Standards: July 2019

Description: Provide minimum codes and standards for construction, repair, maintenance of town roads and bridges.

Relationship to Natural Hazard Mitigation Planning: Standards include management practices and are designed to ensure travel safety, minimize damage to road infrastructure during flood events, and enhance water quality protections.

Road Erosion Inventory Report: 2020

Description: Prioritizes those infrastructure projects necessary to improve transportation network resiliency and water quality.

Relationship to Natural Hazard Mitigation Planning: Improvements are designed to minimize or eliminate flood impacts on hydrologically connected road segments.

Local Emergency Management Plan: April 2023

Description: Establishes lines of responsibility and procedures to be implemented during a disaster and identifies high risk populations, hazard sites, and available resources.

Relationship to Natural Hazard Mitigation Planning: Includes actions for tracking events and response actions including damage reports to facilitate funding requests during recovery. The following information can be essential to preparing hazard mitigation project applications for FEMA funding.

Fire Department ISO Rating: Issued in 2015 Description: Where municipal water is available, the rating is 7.7. This rating is a score from 1 to 10 that indicates how well- protected the

community is by the local fire department. Will be coming up for renewal in ~2 years and may be able to improve.

Community Lifelines

Community Lifelines enable the continuous operation of critical government and business functions and are essential to human health and safety or economic security. The goal of the lifeline concept is to focus response efforts on stabilizing or re-establishing these most fundamental services during and after a disaster. Mitigating lifelines should reduce cascading impacts across government and business functions and lessen system-wide damage.

Community Lifelines are organized into seven categories:

1. Law Enforcement
2. Fire Service
3. Search & Rescue
4. Government Service
5. Community Safety

1. Food
2. Water
3. Shelter
4. Agriculture

1. Medical Care
2. Public Health
3. Patient Movement
4. Medical Supply Chain
5. Fatality Management

1. Power Grid
2. Fuel

1. Infrastructure
2. Responder Communications
3. Alerts, Warnings, & Messages
4. Finance
5. 911 & Dispatch

1. Highway/Road/Motor Vehicle
2. Mass Transit
3. Railway
4. Aviation
5. Maritime

1. Facilities HAZMAT, Pollutants, Contaminants

used to implement mitigation activities and communicate hazard-related information:

- Waitsfield-Fayston Fire Department Mad River Ambulance, Waitsfield Elementary School, Waitsfield Conservation Committee, Friends of the Mad River
- Town website, Front Porch Forum, Valley Reporter

National Flood Insurance Program Compliance

The Town joined the National Flood Insurance Program (NFIP) in 1978. The effective date of the current Flood Insurance Rate Map (FIRM) is March 18, 2013. The Zoning Administrator enforces NFIP compliance through permit review requirements in its Flood Hazard Area regulations. Waitsfield's regulations outline detailed minimum standards for development in flood hazard areas defined as FEMA Special Flood Hazard Areas and Floodway Areas. The regulations also require administering Substantial Improvement and Substantial Damage (SI/SD) requirements in accordance with FEMA P-758 SI/SD Desk Reference, May 2010.

The town is currently awaiting the new flood insurance maps that are being compiled by FEMA and will be reviewed and accepted to maintain the town's NFIP status once the process has been completed.

The Town discussed the following as possible actions to continue NFIP compliance:
1) Prepare, distribute, or make available NFIP insurance explanatory pamphlets or booklets.
2) Participate in NFIP training offered by the State and/or FEMA.
3) Establish mutual aid agreements with neighboring communities to address administering the NFIP following a major storm.

Mitigation Action Identification

The Hazard Mitigation Planning Team discussed the mitigation strategy, reviewed projects from the 2018 Plan, and identified possible new actions from the following categories for each of the highest risk natural hazards identified in Section 5.

Local Plans & Regulations These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.

Structure & Infrastructure Projects These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This applies to public or private structures as well as critical facilities.

Natural Systems Protection These actions minimize damage and losses and preserve or restore the functions of natural systems.

Outreach & Education Programs These actions inform and educate the public about hazards and potential ways to mitigate them. Although this type of action reduces risk less directly than structure projects or regulation, it is an important foundation. Greater awareness is more likely to lead to community support for direct actions.

Local Plans & Regulations Examples

Integrate Mitigation into Capital Improvement Programs: Incorporate risk assessment and hazard mitigation principles into capital planning.

Reduce Impacts to Roadways: The leading cause of death and injury during winter storms is automobile accidents, so it is important to plan for and maintain adequate road and debris clearing capabilities.

Develop a Road Right-of-Way Vegetation Management Plan: Identify community priorities and plan of action for site-specific tree and roadside forest management to increase roadside resilience.

Improve Flood Resilience with a Flood Study: The aim of a flood study is to define existing flood

State Incentives for Flood Mitigation Vermont's Emergency Relief Assistance Funding (ERAF) [illegible]s state funding to match FEMA Public [illegible]ce after federally declared disasters. Eligible p[illegible] costs are generally reimbursed by FEMA at 75% with a 7.5% State match. The State will increase its match to 12.5% or 17.5% if communities take steps to reduce flood risk as described below.

12.5% funding for communities that have adopted four (4) mitigation measures:

1) NFIP participation;
2) Town Road and Bridge Standards;
3) Local Emergency Plan; and
4) Local Hazard Mitigation Plan.

17.5% funding for communities that also participate in FEMA's Community Rating System OR adopt Fluvial Erosion Hazard or other river corridor protection bylaw that meets or exceeds the Vermont ANR model regulations.

Waitsfield's current ERAF rate is 7.5%. Upon adoption of the 2024 Local Hazard Mitigation Plan, their ERAF rate will increase to 17.5% because the Town has adopted Flood Hazard regulations that are strong enough to receive interim status as River Corridor Bylaws.

behavior for a particular catchment, river, or creek. The study helps inform building, land use planning, community awareness and disaster management.

Improve Stormwater Management Planning: Rain and snowmelt can cause flooding and erosion in developed areas. A community-wide stormwater management plan can address stormwater runoff-related flooding.

Manage Development in Erosion Hazard Areas: The intent of River Corridor Bylaws is to allow for wise use of property within river corridors that minimizes potential damage to existing structures and development from flood-related erosion.

Structure & Infrastructure Project Examples

Protect Power Lines: Protect power lines by 1) inspecting and maintaining hazardous trees in the road right-of-way and 2) burying power lines.

Protect Critical Roadways: Use snow fences or living snow fences (e.g., rows of trees) to limit blowing and drifting of snow.

Retrofit Critical Facilities: Critical facilities can be protected from the impacts of high winds and winter storms by 1) retrofitting them to strengthen structural frames to withstand wind and snow loads; 2) anchoring roof-mounted mechanical equipment; and 3) installing back-up generators or quick connect wiring for a portable generator.

Remove Existing Structures from Flood Hazard Areas: FEMA policy encourages the removal of structures from flood-prone areas to minimize future flood losses and preserve lands subject to repetitive flooding.

Improve Stormwater Drainage Capacity: Minimize flooding and fluvial erosion by 1) increasing drainage/absorption capacities with green stormwater management practices; 2) increasing dimensions of undersized drainage culverts in flood- prone areas; 3) stabilizing outfalls with riprap and other slope stabilization techniques; and 4) re- establishing roadside ditches.

Conduct Regular Maintenance for Drainage Systems: Help drainage systems and flood control structures function properly with 1) routine cleaning and repair; 2) cleaning debris from support bracing underneath low-lying bridges; and 3) inspecting bridges and identifying if any repairs are needed to maintain integrity or prevent scour.

Protect Infrastructure and Critical Facilities: Minimize infrastructure losses and protect critical facilities from flooding by 1) elevating roads above base flood elevation to maintain dry access; 2) armoring streambanks near roadways to prevent washouts; 3) rerouting a stream away from a vulnerable roadway; and 4) floodproofing facilities.

Natural Systems Protection Examples

Protect and Restore Natural Flood Mitigation Features: Natural conditions can provide floodplain protection, riparian buffers, groundwater infiltration, and other ecosystem services that mitigate flooding. Preserving such functionality is important. Examples include 1) adding riparian buffers; 2) stabilizing stream banks; 3) removing berms; 4) minimizing impervious area development; 5) restore floodplain; and 6) restore incision areas.

Outreach & Education Program Examples

Educate Residents about Extreme Winter Weather: Winter storms create a higher risk of car accidents, hypothermia, frostbite, carbon monoxide poisoning, and heart attacks from overexertion. Educational outreach can help minimize these risks.

Assist Vulnerable Populations: Measures can be taken to protect vulnerable populations from natural hazards, such as

1) organizing outreach and
2) establishing and promoting accessible heating or cooling centers in the community.

Mitigation Action Evaluation

For each mitigation action identified, the Planning Team evaluated its potential benefits and/or likelihood of successful implementation. Actions were evaluated against a range of criteria, including a planning level assessment of whether the costs are reasonable compared to the probable benefits. Results of this evaluation are presented in **Table5**.

See Community Survey results in **Appendix D** for which category of mitigation actions survey respondents wanted the Town to prioritize.

Mitigation Action Plan for Implementation

After careful evaluation, the Planning Team agreed on a list of actions that support the Mitigation Goals of this Plan and are acceptable and practical for the community to implement.

Actions without overall public support/political will were not selected for implementation. Actions whose costs were not reasonable compared to probable benefits were also not selected.

For the selected actions, the Planning Team then 1) assigned a responsible party to lead the completion of each action; 2) identified potential grant funding; defined a timeframe for implementation; and ranked each action's priority (high, medium, low).

Natural hazards pose a unique threat to the Town's vulnerable populations. Data has shown that underserved and marginalized populations tend to live in at-risk hazard-prone areas or in homes with substandard construction. The data also suggests that this segment of the community is less likely to fully recover after a disaster. [4] When ranking an action's priority, those that directly benefit a vulnerable population were ranked high.

The action plan is presented in **Table 6**

Table 5: Mitigation Action Evaluation and Prioritization

Mitigation Action	Life Safety	Prop Protect	Tech	Political	Admin	Other Obj	Benefit Score	Est Cost	C/B
Local Plans & Regulations									
Integrate Mitigation into Capital Improvement Programs and Planning									
Plan for and Maintain Adequate Road and Debris Clearing Capabilities									
Update Road Erosion and Culvert Inventories									
Identify and prioritize roads for base/drainage upgrades to stabilize mud season conditions									
Inspect Town Short-Structures and Review VTrans Bridge Inspection Reports[5] for Town Long-Structures and Plan for Repairs to Prevent Flood-related Impacts like Scour									
Plan for Road Right-of-Way Vegetation Management									
Hot and Cold Weather Planning									
Update Zoning Ordinance to Require New Subdivision Development to Bury Power Lines									
Burn Bans and outreach for fire danger									
Adopt Local Building Codes for Roof Wind and Snow Loads									
Adopt Flood Hazard Area and/or River Corridor Bylaws	Planning Team did not evaluate this action because the Town has already adopted both FHA and received interim status for river corridor bylaws.								
Emergency Action Plan for Waste Water system as part of the development process									
Study areas of concern for flood mitigation									
Incident Command System training for municipal officials ICS-402									
Structure & Infrastructure Projects									
Protect Power Lines and Roads by Inspecting and Removing Hazardous Trees in Road ROW									
Install Back-up Generators at the town garage									
Increase Drainage/Absorption Capacities with Green Stormwater Management Practices									

Stabilize Outfalls									
Install/Re-establish Roadside Ditches									
Routinely Clean and Repair Stormwater Infrastructure									
Routine Clear Debris from Support Bracing Underneath Low-Lying Bridges									
Increase Dimension of Drainage Culverts to Bank full width standard									
Remove Existing Structures from Flood-Prone Areas									
Center Fayston Road Stream culvert 36" needs upgraded to bank full width # 21416-6									
Create process for rebuilding prioritized roads to alleviate mud season conditions									
Common Road High Bridge Brook culvert 5' upgraded to bank full width # 21480-3									
Elevate Route 100 to maintain access along Mill Brook									
Bury Power Lines									
Stabilize slide at slope near town line on Mill Brook along Bragg Hill Road									
East Warren Road Folsom Brook Tributary culvert 6' upsize to bank full width #21481-35									
North Road-South of North Ridge Road culvert 2' upsize to bank full width # 21479-1									
North Road-South of Tremblay Road culvert 6' upsize to bank full width # 21479-7									
River View Road-1st stream culvert 4' upsize to bank full width standard # 21415-2									
Sherman Road tributary of Folsom Brook culvert 4.5' upsize to bank full width #21477-8									
Tremblay Road- by town garage culvert 7.5' upsize to bank full width #21419-6									
Old Center Fayston Road-1st stream culvert 6' upsize to bank full width # 21418-3									
North Road-South of Tannery Road culvert 6' upsize to bank full width #21479-11									
Retrofit Critical Facilities to Strengthen Structural Frames to Withstand Wind and Snow Loads									
Anchor Roof-Mounted Mechanical Equipment on Critical Facilities									

Floodproof Critical Facilities, town buildings									

Natural Systems Protection

Stabilize Stream Banks									
Remove Berms and/or Accumulated Debris from Stream to Restore Flood Capacity									
Streambank buffer plantings									
Identify and restore wetlands in appropriate locations									

Remove Significant Hazard Potential Dams									
Reconnect Floodplain on Town owned Austen Parcel									
Reconnect Floodplain on the Town owned Tardy Parcel									
Reconnect Floodplain on the Town owned Lower Fairground Parcel									
Study and possibly reconnect Flood chute just south of Tremblay road on private property									
Establish Vegetative Buffers in Riparian Areas									
Floodplain Restoration									
Restore Incision Areas									

Outreach & Education Programs

Educate the Public About the Risks of Infectious Disease and/or Invasive Species and How to Protect Against Them									
Educate DPW Staff to Recognize the Presence of Large Mosquito Populations Around Standing Water and How to Report this Information to the VDH District Office to Improve Vector Control									
Education campaign to landowners of benefits of wetlands and wetland restoration for flood mitigation									

Not Recommended for Implementation

Educate the Public About How to Prepare for Extreme Winter Weather	Planning Team did not evaluate this action because the Town already does outreach/education on how to prepare for extreme winter weather.
Assist Vulnerable Populations	Planning Team did not evaluate this action because the Town already has a procedure for assisting vulnerable populations in its Local Emergency Management Plan.
Keep the Ditches Clean Campaign	Planning Team did not evaluate this action because the filling of ditches by adjacent property owners is not a problem in the community.

Table 5 Evaluation Criteria:
Life Safety –Will the action be effective at protecting lives and preventing injuries?
Property Protection –Will the action be effective at eliminating or reducing damage to structures and infrastructure?
Technical – Is the action a long-term, technically feasible solution?
Political – Is there overall public support/political will for the action?
Administrative – Does the community have the administrative capacity to implement the action?
Other Community Objectives – Does the action advance other community objectives, such as capital improvements, economic development, benefit a vulnerable population, environmental quality, or open space preservation?

Rank each of the above criteria in Table 5 with a -1, 0, or 1 using the following table:
1 = Highly effective or feasible
0 = Neutral
-1 = Ineffective or not feasible

Estimated Cost – 1 = less than $50,000; 2 = $50,000 to $100,000; 3 = more than $100,000
C/B – Are the costs reasonable compared to the probable benefits? Yes or No

Table 6: Mitigation Action Plan

This area will be filled by mitigation actions once presented and reviewed by the town planning commission.

Integrating into Existing Plans and Procedures

For Waitsfield to succeed in reducing long-term risk, information from this Plan should be integrated throughout government operations. When activities are connected, they can not only reduce risk and increase resilience, but also accomplish other objectives such as environmental protection, economic development, financial stability, and land use planning.

There are several ways the Town can achieve integration into existing plans and procedures to support risk-informed community planning. They can include the community's primary mitigation goal as stated on page 18, information from the risk assessment, and mitigation actions as follows:

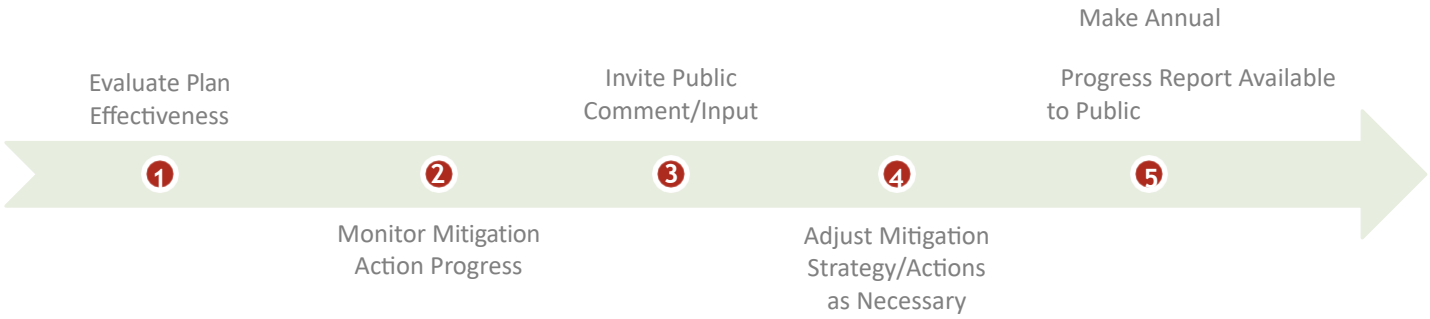
- The mitigation goal and risk assessment information can be considered when prioritizing capital improvements. Mitigation actions listed in this Plan can be included in the annual budgeting process.
- Funding for mitigation actions can be prioritized in the annual budget process.
- The mitigation goal and risk assessment information can be incorporated into the next Town Plan update (Land Use and Flood Resilience chapters in particular) to help steer growth and redevelopment away from high-risk locations.
- The mitigation goal and risk assessment information can be incorporated into future zoning ordinance updates. Ideally incorporating this while doing zoning updates for the acceptance of new flood maps.
- The mitigation goal and risk assessment information can be incorporated into any plans to expand public water and sewer utilities to ensure they are not expanded into high-hazard areas.
- Several flood-related mitigation actions for increasing road resiliency can be implemented under the existing Municipal Road General Permit (8054-9040) for controlling stormwater discharges from town roads.
- Several flood-related mitigation actions for increasing road resiliency can be implemented under the existing Municipal Road General Permit (8054-9040) for controlling stormwater discharges from town roads.

7 PLAN MAINTENANCE

This Plan is dynamic. To ensure it remains current and relevant, it should be annually evaluated and monitored and updated every five years, in accordance with FEMA guidelines in effect at the time.

Annual Evaluation and Monitoring

Within 12 months of FEMA Final Approval, the Plan will be annually evaluated and monitored as follows:



1. The Selectboard will evaluate the effectiveness of the Plan in meeting the stated goals. Things to consider during this evaluation:

   - What disasters has the town (or region) experienced?
   - Should the list of highest risk natural hazard impacts be modified?
   - Are new data sources, maps, plans, or reports available? If so, what have they revealed, and should the information be incorporated into this plan?
   - Has development in the region occurred and could it create or reduce risk?
   - Has the town adopted new policies or regulations that could be incorporated into this plan?
   - Have elements of this plan been incorporated into new plans, reports, policies, or regulations?
   - Are there different or additional community capabilities available for mitigation implementation?

2. Next, the Selectboard will monitor mitigation action progress. Things to consider:

   - Is the mitigation strategy being implemented as anticipated?
   - Were the cost and timeline estimates accurate?
   - Should new mitigation actions be added?
   - Should proposed actions be revised or removed?
   - Are there new funding sources to consider?

   The status (e.g., in progress, complete) of each action should be recorded in **Table 7**. If the status is "in progress" note whether the action is on schedule. If not, describe any problems, delays, or adverse conditions that will impair the ability to complete the action.

3. The Selectboard will seek public comment from the Whole Community on plan implementation. Things to consider:

   - Are there any new stakeholders to include?
   - What public outreach activities have occurred?
   - How can public involvement be improved?

4. Based on input received, the mitigation strategy and/or actions will be modified, if needed.

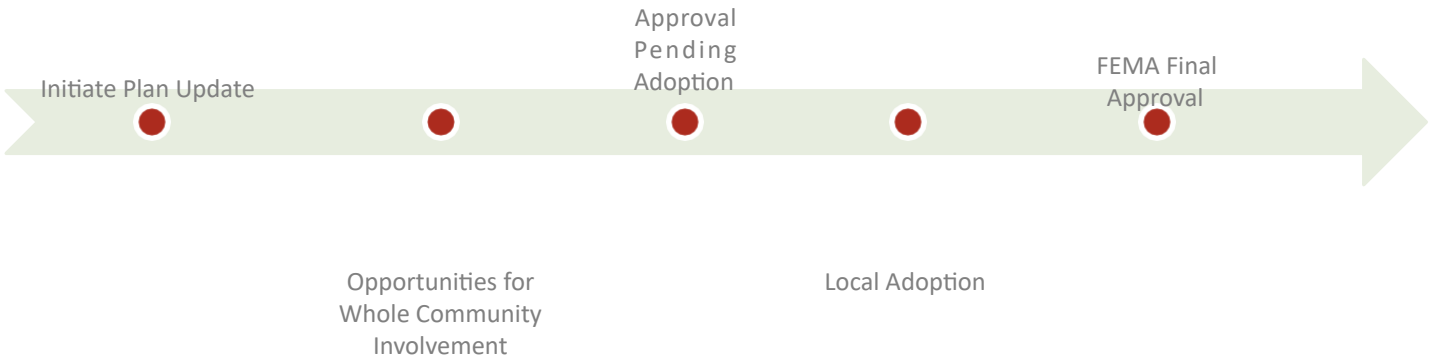
5. A report (or record in the form of meeting minutes) of the annual evaluation and monitoring will be made available to the public.

Table 7: Mitigation Action Status

Mitigation Action	2024	2025	2026	2027	2028
Local Plans & Regulations					
Plan for and Maintain Adequate Road and Debris Clearing Capabilities					
Update Road Erosion and Culvert Inventories					
Road Right-of-Way Vegetation Management Plan					
Plan for Bridge Repairs					
Stormwater Master Plan					
Flood Study					
Structure & Infrastructure Projects					
Remove Hazard Trees in Road Right-of-Way					
Install Back-up Power at Critical Facilities					
Install Green Stormwater Management Practices					
Stabilize Culvert Outfalls					
Install/Re-work Roadside Ditches					
Routinely Clean and Repair Stormwater Infrastructure					
Routinely Clear Debris from Low-Lying Bridge Support Bracing					
Adequately Size Culverts in Flood-Prone Areas					
Remove Structures from Flood-Prone Areas					
Install Live Snow Fence or Equivalent Technique on Critical Roadways					
Natural Systems Protection					
Stabilize Stream Banks					
Remove Accumulated Debris to Restore Flood Capacity					
Outreach & Education Programs					
Infectious Disease and/or Invasive Species Awareness					
Disease Vector Control Training					

5-Year Updates

This Plan will be updated at a minimum every five (5) years as follows:



1. Currently, funding to assist municipalities in paying for planning services to update the Local Hazard Mitigation Plan is available through FEMA's Building Resilient Infrastructure and Communities grant program. If using this grant, Waitsfield should contact Vermont Emergency Management (VEM) to apply for funding in 2027 – approximately 2 years before the Plan expires.

   Once funding is secured and the grant agreement between the Town and State is in place, the Town Manager can issue a request for proposals (RFP) to procure planning services in accordance with the grant agreement. The RFP should be issued approximately 14 months before the Plan expires.

   Once a consultant is procured, the Plan update can begin with a kick-off meeting including the consultant and local hazard mitigation planning team. The kick-off meeting should be scheduled approximately 12 months before the Plan expires. The Town should allot approximately 8 months for the Plan update process.

2. Opportunities for Whole Community involvement throughout the Plan update process need to be factored into the schedule. These opportunities may include a community survey, planning workshop, and public meetings at critical milestones agreed to at the project kick-off meeting.

3. Once the local hazard mitigation planning team has prepared a final draft, they can seek authorization from the Selectboard to submit the Plan for VEM/FEMA approval. Plan approval is accomplished in two steps – the first is Approval Pending Adoption. The Town should submit for Approval Pending Adoption approximately 4 months before the Plan expires to allow for time to respond to any review comments received from VEM/FEMA.

4. Once the Town receives Approval Pending Adoption, the Selectboard should adopt the Plan as soon as their next regular meeting.

5. Once adopted, the Town can submit the Plan for VEM/FEMA Final Approval. The Town should submit for Final Approval approximately 1 month before the Plan expires to ensure there is no gap in coverage between updates. The FEMA Final Approval date starts the clock on the effective dates of the 5-year Plan.

CERTIFICATE OF ADOPTION

Town of Waitsfield, Vermont Selectboard

A Resolution Adopting the Waitsfield, Vermont 2024 Local Hazard Mitigation Plan

WHEREAS the Waitsfield Selectboard recognizes the threat that natural hazards pose to people and property within the Town of Waitsfield; and

WHEREAS the Waitsfield Selectboard has prepared a natural hazard mitigation plan, hereby known as the Waitsfield, Vermont 2024 Local Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS the Waitsfield, Vermont 2024 Local Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the Town of Waitsfield from the impacts of future hazards and disasters; and

WHEREAS adoption by the Waitsfield Selectboard demonstrates its commitment to hazard mitigation and achieving the goals outlined in the Waitsfield, Vermont 2024 Local Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED BY THE TOWN OF WAITSFIELD, VERMONT, THAT:

Section 1. In accordance with 24 VSA §872, the Waitsfield Selectboard adopts the Waitsfield, Vermont 2024 Local Hazard Mitigation Plan. While content related to the Town of Waitsfield may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Town of Waitsfield to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

ADOPTED by a vote of_____ in favor and____ against, and____ abstaining, this _____ day of_____, 2024.

By:_____(print name)
Selectboard Chair

ATTEST: By:_____(print name)

MITIGATION ACTIONS FROM 2017 PLAN

Stormwater Management Planning:

Participate with the 5 Mad River Valley towns in stormwater management planning for the Mad River Valley watershed
Who: Zoning Administrator, Floodplain Manger Partners: MRVPD, Friends of the Mad River When: Summer 2015-Winter 2017 Priority: High
How: Municipal Planning Grant, High Meadows fund, HMGP

2024 Update: This master plan project was completed in 2019

Communications:

Complete enrollment in VT Alert program
Who: Emergency Management director Partners: Fire Department
When: Complete Summer 2016 Priority: High
How: Vermont Emergency Management

2024 Update: The town is enrolled and currently has both the EMD and EMC trained.

Flood mapping:

Create a flood model meeting FEMA specification to update existing floodplain boundaries along the Mad River, including Waitsfield.
Who: Zoning Administrator, Floodplain Manger Partners: CVRPC, MRVPD, Planning Commission, Selectboard, FMR, ANR
When: June 2017 Priority: High
How: CDBG-18 Disaster recovery

2024 Update: The town chose not to pursue this work at this time due to staff/volunteer limitations.

Upgrade Culverts:

Continue to evaluate and upgrade high priority culverts. Seek funding for culvert and bridge upgrades.
Who: Select Board Partners: Road Commissioner, CVRPC, Town administrator
When: 2016-2020 Priority: High
How: Municipal Budget, AOT Town Highway Structures Program, Better Roads

2024 Update: The town has continued to upgrade culverts as necessary to state standards.

Roads:

Identify vulnerable road segments and necessary improvements to prevent failure during flood episodes.
Who: Road Commissioner Partners: CVRPC
When: summer 2017-Fall 2020 Priority: High
How: Municipal Budget, Municipal Planning Grant

2024 Update: The town has identified vulnerable segments and areas and been acquiring necessary funding for improvements as necessary and available.

Flood-proof the Waitsfield Village Meeting House and the library
Who: Town Administrator Partners: MRVPD, CVRPC
When: Fall 2017 Priority: High
How: HMGP, CDBG-DR

2024 Update: The library is already a flood proofed structure and the town may still pursue the floodproofing of the village meeting house.

Shepard Brook

Conduct restoration on lower Shepard Brook to repair damaged river banks and remove bar of debris and sediment.
Who: Private landowners, Z.A., Floodplain manager Partners: ANR, CVRPC
When: Fall 2017 Priority: Medium
How: Vermont Community Foundation, Vermont Disaster Relief Fund

2024 Update: The town has chosen not to pursue this action.

Evaluate fluvial erosion hazard regulations and maps and discuss with key stakeholders to determine maintenance of eligibility for highest state share of post-disaster FEMA Public Assistance.
Who: Z.A., Floodplain Manager Partners: ANR, Planning commission, Town Administrator, Selectboard
When: Summer 2016-summer 2017 Priority: Medium
How: Municipal Budget

2024 Update: The town has received the highest ranking from the Vermont Emergency Relief and Assistance Funding program due to achieving interim status of River Corridor bylaws.

Ronk Road

Upgrade one culvert and one bridge on Ronk Road.
Who: Selectboard Partners: Road Commissioner, Town administrator
When: Summer 2017-2019 Priority: Medium
How: Municipal Budget, AOT Town Highway Structures Program, Better Backroads

2024 Update: The town has replaced one of the Ronk Road culverts but has chosen not to replace the bridge at this time.

Dams:

Develop a dam failure notification system, including increased communication regarding the Warren timber crib dam and Sugarbush snowmaking pond.
Who: Emergency Management Director Partners: Fire Department
When: Summer 2017-winter 2019 Priority: Medium
How: Municipal Budget, Fundraising

2024 Update: The town chose not to pursue this and will rely upon VTalert as the message system used by Emergency Management Director to communicate dam failures to residents.

Obtain generator for town garage for resiliency planning.
Who: Emergency Management Director Partners: Selectboard, Road Commissioner When: Winter 2017-2019 Priority: Medium
How: DEMHS Generator Grant program, Municipal Budget

2024 Update: The town has not obtained a generator.

Shepard Brook

Evaluate feasibility of alternative mitigation options to protect properties along lower Shepard Brook, such as flood chutes or property acquisitions.
Who: Z.A., Floodplain Admin., Town Admin. Partners: CVRPC, DEMHS, ANR, landowners When: Fall 2018 Priority: Medium-Low
How: HMGP

2024 Update: The town has chosen not to pursue this action.

NFIP

Investigate cost-effectiveness of enrollment in NFIP community rating system.
Who: Town Administrator Partners: Selectboard, Z.A., ANR, CVRPC
When: Summer 2016-Summer 2019 Priority: Low
How: Municipal Budget

2024 Update: The town is enrolled in the NFIP but has chosen to not pursue the Community Rating System due to the administrative costs to enroll being higher than the financial benefits currently.

CARE outreach

Conduct outreach to vulnerable residents about CARE: Citizens Assistance Registration for Emergencies.
Who: Town Clerk & Administrative Staff Partners: United Way, 211, VT E911
When: 2017 Priority: Low
How: Municipal Budget

2024 Update: The town is registered and promotes the use of the CARE registry for individuals who may be in need of assistance.

Develop a plan for ice monitoring and coordination with local contractors, ANR & AOT for removal.
Who: Emergency Management Director Partners: Local contractors, ANR, AOT
When: 2108-2020 Priority: Low
How: Municipal Budget

2024 Update: The Emergency Management Director monitors Ice levels and coordinates with necessary individuals and entities.

Coordinate with partners to seek out opportunities to purchase river channel management rights through river conservation easements.

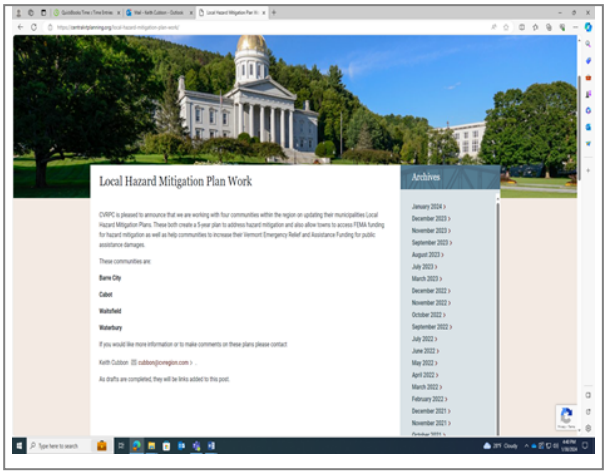
Who: Town Administrator Partners: Conservation Commission, Mad River Conservation Partnership (MRVPD, VLT, FMR)
When:2016-2020 Priority: Low

How: High Meadows Fund / VCF, ANR Ecosystem Restoration Program, CDGB, ANR Rivers Management Program

2024 Update: The town has chosen not to pursue this action.

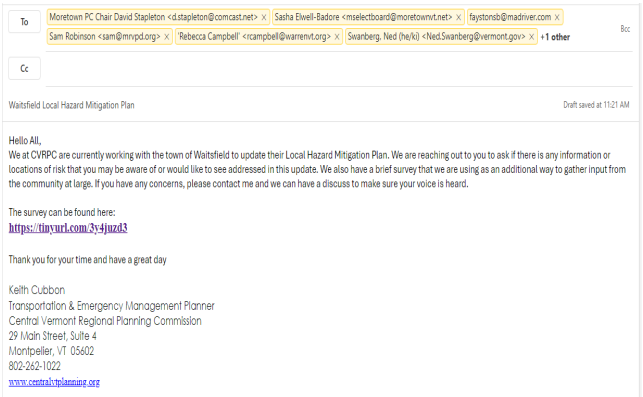
SUMMARY OF PUBLIC COMMENTS ON DRAFT PLAN

Public comments received throughout the plan development process are summarized here. For detailed information about how the Whole Community was invited to participate reference **Table 2**.



Example Plan update kick-off public notice from Central Vermont Regional Planning Commission website.

No inquiries received in response to the kick-off notice.



To: Moretown PC Chair David Stapleton <d.stapleton@comcast.net> | Sasha Elwell-Badore <mselectboard@moretownvt.net> | faystonsb@madriver.com | Sam Robinson <sam@mrvpd.org> | Rebecca Campbell' <rcampbell@warrenvt.org> | Swanberg, Ned (he/ki) <Ned.Swanberg@vermont.gov> | +1 other

Bcc

Cc

Waitsfield Local Hazard Mitigation Plan — Draft saved at 11:21 AM

Hello All,
We at CVRPC are currently working with the town of Waitsfield to update their Local Hazard Mitigation Plan. We are reaching out to you to ask if there is any information or locations of risk that you may be aware of or would like to see addressed in this update. We also have a brief survey that we are using as an additional way to gather input from the community at large. If you have any concerns, please contact me and we can have a discuss to make sure your voice is heard.

The survey can be found here:
https://tinyurl.com/3y4juzd3

Thank you for your time and have a great day

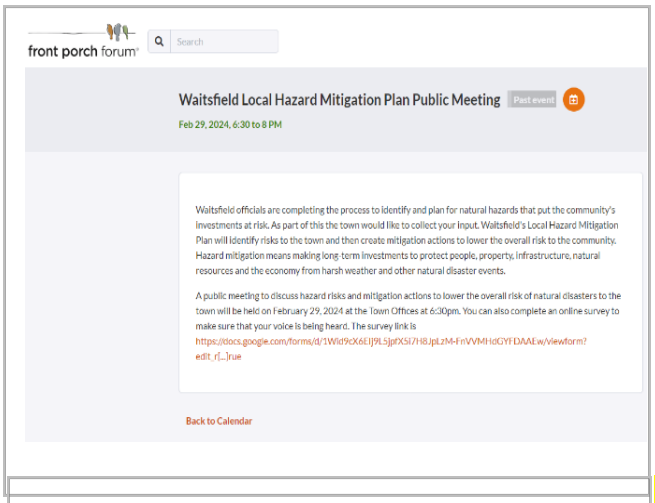
Keith Cubbon
Transportation & Emergency Management Planner
Central Vermont Regional Planning Commission
29 Main Street, Suite 4
Montpelier, VT 05602
802-262-1022
www.centralvtplanning.org

Example email to Key Partners announcing Plan update dated January 31, 2023.

Example Local Hazard Mitigation Planning Community Survey poster used in town, on town Facebook and Front Porch Forum, posted on March 1, 2024.

See **Appendix D** for copy of survey and results.

Waitsfield Hazard Mitigation Planning Workshop advertisement posted at locations throughout town.



front porch forum

Search

Waitsfield Local Hazard Mitigation Plan Public Meeting Past event

Feb 29, 2024, 6:30 to 8 PM

Waitsfield officials are completing the process to identify and plan for natural hazards that put the community's investments at risk. As part of this the town would like to collect your input. Waitsfield's Local Hazard Mitigation Plan will identify risks to the town and then create mitigation actions to lower the overall risk to the community. Hazard mitigation means making long-term investments to protect people, property, infrastructure, natural resources and the economy from harsh weather and other natural disaster events.

A public meeting to discuss hazard risks and mitigation actions to lower the overall risk of natural disasters to the town will be held on February 29, 2024 at the Town Offices at 6:30pm. You can also complete an online survey to make sure that your voice is being heard. The survey link is https://docs.google.com/forms/d/1Wid9cX6EIJ9L5JpfX5I7H8JpLzM-FnVVMHdGYFDAAEw/viewform?edit_r[...]rue

Back to Calendar

Example: Waitsfield Hazard Mitigation Planning Workshop advertisement on Front Porch Forum, posted on February 22, 2024 and repeated multiple times in days leading up to meeting

Example: Waitsfield Mitigation Public Meeting to discuss Mitigation

available for public comment at during plan development process from Central Vermont Regional Planning Commission website, including link to draft plan, posted on February 5, 2024.

Minor editorial comments received from the Waitsfield Planning Commission were incorporated into the Plan.

Waitsfield Local Hazard Mitigation Plan

Keith Cubbon <cubbon@cvregion.com>
Tue 5/14/2024 2:48 PM

To: Northfield Town Manager TAC Appointee - Jeff Schulz <jschulz@northfield.vt.us>; Town of Fayston <FaystonSB@madriver.com>; Jeff Campbell <jcampbell@warrenvt.org>; spratt.moretownvt@gmail.com <spratt.moretownvt@gmail.com>; Moretown Selectboard Chair - Tom Martin <tjmar106@gmail.com>; Swanberg, Ned (he/ki) <Ned.Swanberg@vermont.gov>; ira@friendsofthemadriver.org <ira@friendsofthemadriver.org>; Lisai, Jason <jason.lisai@greenmountainpower.com>; Gadapee, Kevin <Kevin.Gadapee@vermont.gov>; Brian Voigt <Voigt@cvregion.com>; Chace, Diana <Diana.Chace@vermont.gov>

1 attachments (5 MB)
!Draft working.docx;

Hello all,

The town of Waitsfield has been busy working on an update to the town Local Hazard Mitigation Plan. As most of you are aware these plans primarily focus on natural hazards and striving to make the town more resilient to damage from natural disasters and hazards. If you could please review the attached draft of the town plan and make any comments it would be greatly appreciated. The mitigation actions presented will be reviewed, and the town will choose the actions to proceed with at the next planning committee meeting on 5/21. If you have any questions or concerns, please contact me.

Thank you for your time and have a great day

Keith Cubbon
Transportation & Emergency Management Planner
Central Vermont Regional Planning Commission
29 Main Street, Suite 4
Montpelier, VT 05602
802-262-1022
www.centralvtplanning.org

Example email to Key Partners and local officials in neighboring towns seeking comments on draft plan as draft was completed in plan development process – dated May 14, 2024.

Final Draft of the Waitsfield LHMP was posted to the town website on May ????, 2024. ? comments were received.

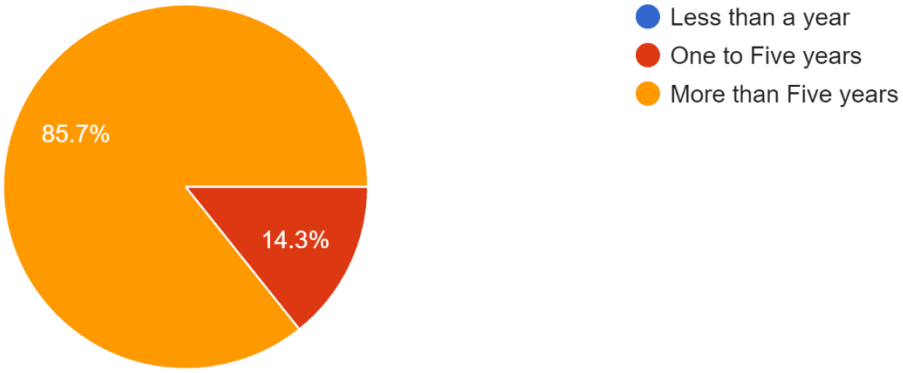
[placeholder for any VEM/ FEMA comments to plan and how they were addressed.]

COMMUNITY SURVEY RESULTS

The Town of Waitsfield utilized a survey to solicit public input on 1) potential natural hazard impacts and 2) mitigation strategies to reduce these impacts in the future. The survey was made available online as well as hard copy over the course of 8 weeks between February and April 2024. The Town received 7 responses and a summary of the input received is provided below, followed by a copy of the actual survey.

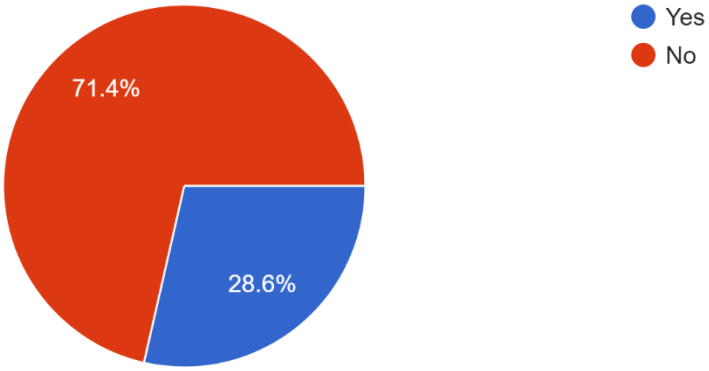
1) How long have you lived in or owned a business or property in Waitsfield?

7 responses



2) Have you experienced damage during a past severe weather event?

7 responses



3) Is your home or business property located in a FEMA designated floodplain? If yes, do you have insurance through the National Flood Insurance Program (NFIP)?

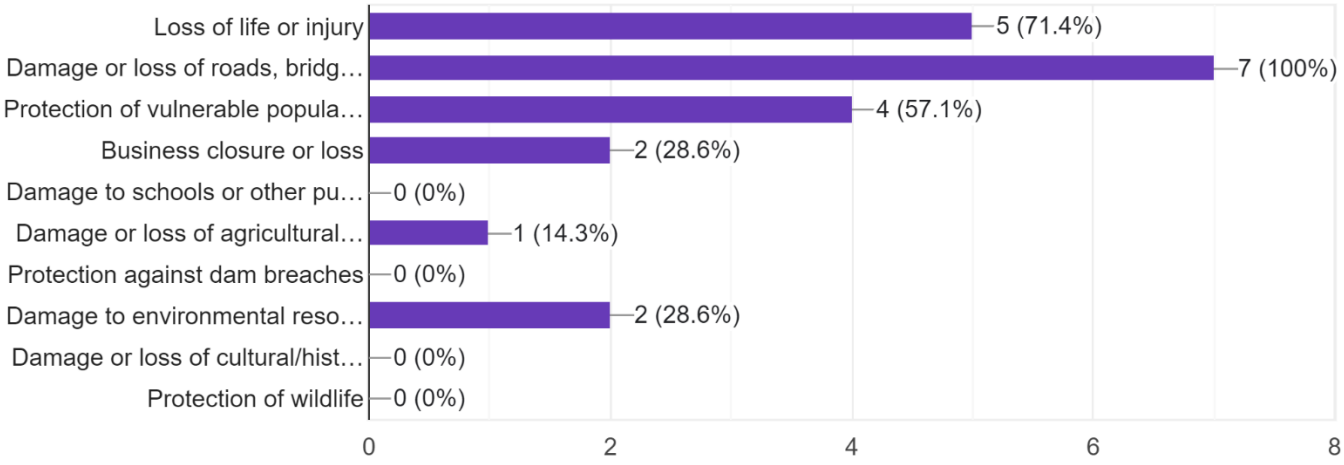
7 responses

4) Have you seen areas in the community damaged during a past severe weather event?

7 responses

5) In your opinion, which of the following are most important to protect against potential future severe weather impacts in Waitsfield? Please check up to 3 boxes.

7 responses



6) In this context, hazard mitigation is a sustained measure that reduces or eliminates long-term risk to people and property from the effects of nat...res would you like to see the community prioritize?

7 responses

7) Anything else you would like to provide for consideration and incorporation into the Waitsfield Local Hazard Mitigation Plan?

1 response

We need to focus more on how to contain the river; such as dredging! the river, building berms & walls! Our rivers are overflowing into towns (MRV, Montpelier, etc.) and dredging would not kill off wildlife- it would enhance it! For example~ the Mad River in town is so shallow that we now see islands of loose sand/stones that blocks the natural flow it used to have!

Waitsfield LHMP community survey

This is an opportunity for the residents of Waitsfield to have their voices heard for prioritizing hazard mitigation projects for the town and strategies for the next 5 years.

1. 1) How long have you lived in or owned a business or property in Waitsfield?

   Mark only one oval.

   - ◯ Less than a year
   - ◯ One to Five years
   - ◯ More than Five years

2. 2) Have you experienced damage during a past severe weather event?

   Mark only one oval.

   - ◯ Yes
   - ◯ No

3. 3) Is your home or business property located in a FEMA designated floodplain? If yes, do you have insurance through the National Flood Insurance Program (NFIP)?

   Mark only one oval.

   - ◯ Yes
   - ◯ No
   - ◯ I don't know

4. 4) Have you seen areas in the community damaged during a past severe weather event?

   Mark only one oval.

   - ◯ Yes
   - ◯ No
   - ◯ Did not answer

5. 5) In your opinion, which of the following are most important to protect against potential future severe weather impacts in Waitsfield? Please check up to 3 boxes.

   Check all that apply.

   - ☐ Loss of life or injury
   - ☐ Damage or loss of roads, bridges, utility infrastructure
   - ☐ Protection of vulnerable populations
   - ☐ Business closure or loss
   - ☐ Damage to schools or other public property (e.g., parks, buildings)
   - ☐ Damage or loss of agricultural operations
   - ☐ Protection against dam breaches
   - ☐ Damage to environmental resources (e.g., wetlands, ponds, rivers, forests)
   - ☐ Damage or loss of cultural/historic properties
   - ☐ Protection of wildlife

6. 6) In this context, hazard mitigation is a sustained measure that reduces or eliminates long-term risk to people and property from the effects of natural hazards (defined as severe weather events). What types of hazard mitigation measures would you like to see the community prioritize?

7. 7) Anything else you would like to provide for consideration and incorporation into the Waitsfield Local Hazard Mitigation Plan?

REQUEST FOR QUALIFICATIONS

Environmental Consultant / Municipal Planning Professional
is requested for a Village Master Plan for Irasville, Vermont
Waitsfield, Vermont
[FEBRUARY 14, 2024]
RFQ Due on [MARCH 15, 2024]

PROJECT DESCRIPTION

Overview

This project is to create a Village Master Plan for Irasville, with the goal of increasing housing, improving natural resources and increasing resilience against a changing climate. The Village Master Plan will include current conditions, community attitudes, identification of wetland enhancements, realistic design scenarios, and next steps for phased revitalization and resilience.

Context and Background

Waitsfield's Town Plan identifies Irasville as the growth area for the Mad River Valley, accommodating the majority of new residential and commercial development in a traditional VT village form.

The lack of municipal infrastructure, coupled with the lack of an integrated stormwater management and wetlands approach, has resulted in a fragmented development pattern and limited capacity to accommodate growth.

The town has recently made substantial progress on a variety of stumbling blocks keeping Irasville from realizing its potential:

- Municipal water system installed in '12
- Municipal wastewater system planning is currently underway, final design in '24
- Irasville Wetlands Analysis, '21

Building off this progress, as well as leveraging lessons learned from the town's previous Irasville visioning efforts, the town is well positioned to undertake a process focused on two overarching objectives: 1) enhance Irasville's absorptive capacity while also meeting municipal goals; 2) enable and promote Irasville's development as a compact, mixed-use, and pedestrian-oriented growth center.

Extensive conversations with our region's DEC Wetlands Ecologist have resulted in an understanding of the key role that Irasville's existing wetlands complex plays in flood storage,

water quality improvement, and more. In a time of climate change-induced weather patterns, their role is increasing in significance. Waitsfield is committed to utilizing the lessons of its 2021 Wetlands Analysis to guide master planning, focusing first and foremost on how to enhance and support the functioning of Irasville's wetlands complex. The town is fully committed to evolving Irasville's automobile-centric development pattern into a bustling pedestrian-oriented growth center while also increasing the natural functioning of its landscape.

Funding

A total of $49,990 is available for consultant services from the Municipal Planning Grant Program administered by the Vermont Agency of Commerce and Community Development.

Work Plan

The overarching objectives of the Irasville Master Planning project are to enhance the landscape's absorptive capacity while also meeting municipal goals that enable and promote the development of a compact, mixed-use, and pedestrian-oriented growth center. We aim for a future Irasville that is home to the bulk of the Mad River Valley's housing and commercial needs at a pedestrian scale, resulting in a critical mass that supports a diversity of viable businesses in the village, as well as ample ridership for a commuter bus connecting Irasville to neighboring population centers. This future Irasville has a highly functioning environment where critical wetlands have been enhanced and storm water captured, intercepting rainwater that would otherwise end up in the Mad River and exacerbate flooding. The natural functions of the immediate landscape are understood, strengthened, and protected.

In order to achieve this projected future Irasville, we will need to start with a plan. The Irasville Master Plan will provide strategic recommendations for advancing the housing and mixed-use development of Irasville in a manner that increases the absorptive capacity of its wetlands. The project will include an engaged public process to ensure that the broad community envisions a future that's mutually beneficial, as well as incorporate implementable design approaches that build off of the existing momentum.

The long-term outcome of this project is a more resilient Waitsfield, where the town's long-standing commitment to smart-growth principles is realized, one that welcomes changing demographics, all in a location that is safe from, and minimizes the likelihood of flooding.

Proposed Timeframe

Contract Awarded, Proposed Start Date: May 1, 2024

Existing Conditions Analysis: May – July 2024

Community Development Goals: July – August 2024

Wetland Enhancement Opportunities: August – October 2024

Community Engagement: As appropriate May 2024 – August 2025

Design (including State Wetlands review): November 2024 – August 2025

Strategic Recommendations: November 1, 2025

Project Outline and Deliverables

0) Project Management - Project management activities including internal coordination, project communications, and invoicing.

1a) Existing Conditions Analysis - Summarize Conditions Drawing from recent Vibrant Villages project, summarize relevant plans, reports, and data to describe current conditions in Irasville

1b) Existing Conditions Analysis - Base Map - Prepare base mapping of existing facilities, buildings, wetlands and other natural features

1c) Existing Conditions Analysis - Present Findings Share findings to PC, Project Website, & Public Meeting Presentation

2a) Community Development Goals – Identify - Coordinate with Steering Committee, PC, & SB to identify specific development goals (consultant & staff)

2b) Community Development Goals – Articulate - Share goals and hear feedback from PC/SC (post to Project Website)

3a) Wetland Enhancement Opportunities – Identify - Based on existing Irasville wetland rankings (functions and values), identify areas for restoration, expansion, and encroachment (no site visit anticipated)

3b) Wetland Enhancement – Prioritize - Develop a prioritized list and map of wetland restoration, expansion, and encroachment

3c) Wetland Enhancement - Implementation Identify responsible parties for wetland restoration, expansion, and easement holding.

4a) Community Engagement - Steering Committee - Develop and facilitate a project steering committee consisting of Planning Commission, Selectboard representative, PZA, and local stakeholders.

4b) Community Engagement – Website - Develop an informative and engaging project website that tells the context and story of prior planning efforts (including wastewater plans, flood resilience efforts, bylaw modernization)

4c) Community Engagement – Charrette - Informed by wetlands opportunities and constraints, host a design charrette to identify village design ideas and priorities for Irasville

4d) Community Engagement – Materials - Include educational materials and discussions as well as sketchwork and visioning exercises to articulate design vision and goals for Irasville

5a) Design - Charrette Refinement - Working with project advisory committee, refine initial design from charrette (anticipated at one overhead sketch and one perspective sketch).

5b) Design – Feedback - Put initial design into an online community survey to receive resident feedback

5c) Design - Design Refinement - Based on survey results and input from Steering Committee, refine and finalize design based on resident/committee feedback

6a) Strategic Recommendations - Prepare recommendations for advancing and implementing design and wetland considerations in Irasville, including bylaw changes, circulation, stormwater, wetland improvements, and wayfinding. Develop a concise, graphically-rich planning document.

SUBMISSION REQUIREMENTS

All responses to the RFQ shall include the following information:

1. Cover Letter - A letter of interest for the project.
2. Statement of Qualifications and Staffing – Provide a qualifications profile of the lead consultant and sub-consultants, including indication of the lead consultant, the proposed role of each consultant on the team. Also provide detailed information on each consultant, including the name of the firm, year established, and contact information.
3. Summaries of relevant projects – Describe relevant experience on similar projects for each firm and list the work experience of the individuals expected to be involved in the project. Include a minimum of three (3) professional references for whom a similar project has been completed within the last ten (10) years.
4. Page Limit - The proposal, encompassing items 1-3 above, shall not exceed 15 double-sided pages (30 total pages) including cover letter, project lists and contacts.

All information submitted becomes property of the Town of Waitsfield, Vermont. The municipality of Waitsfield reserves the right to issue supplemental information or guidelines relating to the RFQ as well as make modifications to the RFQ or withdraw the RFQ.

Respondents should submit one (1) digital copy (PDF) and five (5) printed copies of the proposal by March 15, 2024 to:

Town of Waitsfield
Attn: JB Weir, Planning & Zoning Administrator
4144 Main Street
Waitsfield, VT 05673

For questions, please contact JB Weir, Planning & Zoning Administrator, at (802) 496-2218 x 4, or via email at pza@gmavt.net. We will respond to all questions within 48 hours. Both the question and response will be shared with the other consultants.

Please expect a confirmation email upon receipt of the qualifications by the Town of Waitsfield.

Selection Process

Qualifications will be reviewed by a selection committee composed of representatives from *the Waitsfield Planning commission, Waitsfield Selectboard, and Waitsfield community-at-large.* A short- list of consultants will be selected to submit detailed proposals for the project with a project approach, scope of services, schedule and budget with details on staffing, hourly costs and overhead. Proposals will be presented in-person by the consultants at interviews.

RFQ Schedule Summary:

Qualifications due March 15, 2024.

Consultants selected for short-list: March 22, 2024

Interviews and Proposal Presentations: April 15 – April 19, 2024

Consultant selection by April 26, 2024

Project work to begin May 8, 2024

Complete project on or by November 30, 2025.

Evaluation of Qualifications

Respondents will be evaluated according to the following factors:

1. Consultant Qualifications (experience with similar projects, ability to work with municipalities to attain desired outcomes, and knowledge of the topic) - 85%
    - Experience with master planning and wetlands analysis
    - Ability to solicit input, build community engagement, and solve problems creatively.
    - Knowledge of infill development and natural resource protection
    - Understanding of current housing issues, resort communities and flood resilience.
    - Proven ability to work with committees and conduct public meetings
    - Availability to begin work on project start date
2. Quality, completeness and clarity of submission - 15%

Interview Framework

The Town of Waitsfield reserves the right to select the top three highly scored consultants and invite them for an interview. In this process, the selection committee may ask the respondents to give an oral presentation of their respective proposals. The purpose of this oral presentation is to provide an in-depth analysis of qualifications, experience in performing similar services, and an opportunity for the consultant to clarify or elaborate on their qualifications without restating the proposal.

The interview and presentation is merely to present facts and explanation to the review committee and allow the selection committee to ask targeted questions of the consultant team. The interview and presentation, if deemed necessary by the review committee, will be held at the Town Offices in

Waitsfield, Vermont and via Zoom. The day and time will be notified to the respondents at least one week prior to the meeting. All costs and expenses incurred in traveling for the purpose of interview and presentation shall be the responsibility of the consultant.

Final Consultant Selection

Following the selection process, one team will be selected to negotiate a final contract for services. The final scope of work with specified deliverables may be modified through negotiation of the final contract. The final project team may also be modified through negotiation of the final contract. Any expenses resulting from the interview and proposal process will be the sole responsibility of the consultant.

Contract Requirements

The consultant contract will be subject to the terms of Attachment D of the Municipal Planning Grant Agreement (Procurement Procedures and Other Grant Requirements). A sample contract meeting these requirements is available here.

STATEMENT OF QUALIFICATIONS FOR IRASVILLE VILLAGE MASTER PLAN

Prepared for:
The Town of Waitsfield

SE GROUP

CONTACT
Alex Belensz
abelensz@segroup.com
802-862-0098

CORPORATE ADDRESS
4609 South 2300 East
Suite 204
Salt Lake City, UT 84117
www.segroup.com

TABLE OF CONTENTS

“

The Town of Waterville Valley is small, but highly influenced by its setting near the Waterville Valley Resort and the White Mountain National Forest. These recreation and tourism influences make planning very complex with a large number of seasonal residents, visitors and guests. Recognizing this, SE Group prepared a public engagement strategy that sought insight from this broad constituency. Using stakeholder meetings, online surveys, public open houses, informational booths at special events and interactions with the Planning Board, a significant amount of insight in community attitudes and opinions was captured. SE Group did a terrific job of encapsulating the community attitudes and opinions in ways that illustrated unique challenges and opportunities for the community.

-Mark Decoteau, Town Manager
Waterville Valley, NH

March 15, 2024

Town of Waitsfield
Attn: JB Weir, Planning & Zoning Administrator
4144 Main Street
Waitsfield, VT 05673

Dear Selection Committee members,

We are pleased to provide you with our submittal for the Village Master Plan for Irasville RFQ. Our team is deeply familiar with the planning challenges and opportunities present in Irasville. We recently assisted the Waitsfield Planning Commission with a successful year-long process to modernize zoning bylaws for the Town's village areas. This project was dubbed the Vibrant Villages Initiative to help spotlight the goals identified for the Town's village identified in the Waitsfield Town Plan for increasing housing options, walkability, and overall vibrancy in alignment with plans to create a community wastewater system. We are excited by this potential opportunity to continue to assist the Town with this logical and critical next step in this initiative.

To this partnership, we would bring decades of experience in municipal planning in Vermont, as well as a national perspective informed by our work with small resort communities in Colorado and other western states. Our team includes community planners, landscape designers, and Certified Wetland Scientists. Some recent examples of our work with Vermont communities includes:

- Guiding the Town of Essex through the development of a comprehensive Town Center Master Plan covering infill development, pedestrian connectivity, and environmental resources.
- Assisting the Town of Waterbury to prepare 3D visuals displaying the impact of proposed zoning bylaw changes for their downtown area and integrating these visualizations into a thorough community engagement approach.
- Working with the Town of Lyndon to develop a streetscape improvement plan for the Route 5 corridor through downtown Lyndon that identifies strategies and designs for improved pedestrian connectivity, public space activation, stormwater management, and beautification.

Through this diversity of experience, we are deeply qualified to assist the Town with evaluating potential pathways for future infill development and pedestrian connectivity in Irasville in ways that are respectful of its sensitive natural setting. We appreciate the deep commitment to public engagement laid out in the RFQ and will be an enthusiastic strategic partner in bringing in Waitsfield residents to each step of the planning process.

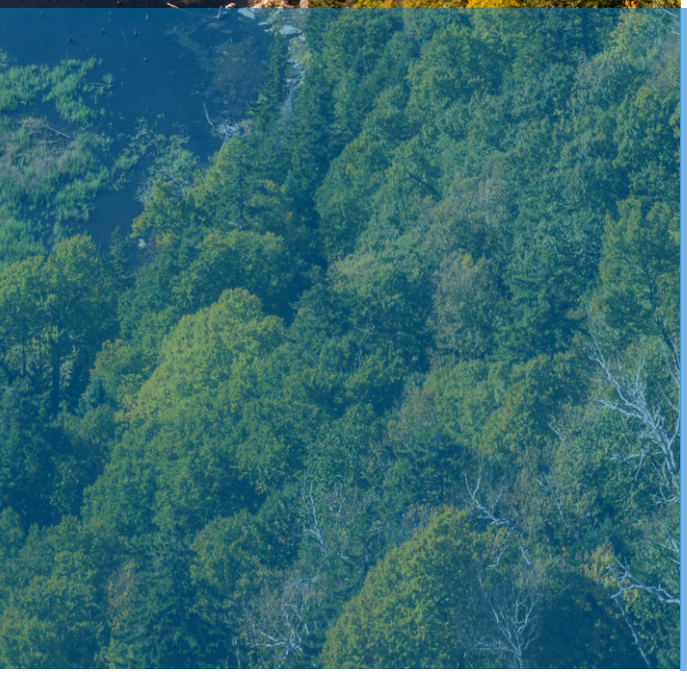
SE Group confirms that we have the necessary resources and capacity to fulfill the requirements of the project outlined in this proposal. Our team is available to begin work on the project immediately upon receipt of a signed contract and any necessary project specifications.

Sincerely,

SE Group

Alex Belensz | **Primary Contact**
Project Manager | Associate Analyst & Planner
abelensz@segroup.com | 802-862-0098

Mark Kane | **Director**
Community Planning
mkane@segroup.com | 802-881-1989



QUALIFICATIONS & STAFFING

SE GROUP

The Value of Experience.

SE Group's corporate entity was formed in 1958 as the first company established for the sole purpose of designing ski resorts, including the consideration of how regulatory factors influence—and are affected by—ski area design.

Since that time, our company has evolved to include comprehensive community planning, environmental and land-use planning, multi-season recreation and trails planning, community planning and design, parks and open space planning, and public lands cooperative planning for natural areas, rural communities and recreational development.

Through the years, we have become leading experts in working with communities in attractive and sensitive environments where short-term choices have profound long-term effects. We bring that experience to our clients, and to every planning project.

We work in rural & mountain communities, where growth pressures, the protection of natural resources, and housing affordability shape priorities and decision-making.

Planning Experts for Rural & Mountain Communities

Our work is focused on rural communities—often surrounded by public lands, established tourism and resort destinations, and where outdoor recreation is an economic driver. Growth in outdoor recreation has brought growth in both visitorship and new residents to communities in some of our country's most beautiful locations. Irasville—as the crossroads of the Mad River Valley and with its proximitatey to Sugarbush and Mad River Glenn—is a popular area for tourists, and an increasingly desirable residence to those who value natural beauty and recreational opportunities. With such growth careful and thoughtful analysis and planning is imperative. We work with many communities to navigate the complex decisions that are required to forge a future that will continue to support economic vitality and a high quality of life. We provide plans that are pragmatic, sustainable, and implementable, while making sure each community we work with feels a stronger sense of place, connection and pride.

Team Introduction

We help communities reimagine their future. Our integrated planning and design services identify opportunities for communities to grow and thrive in profound ways. Our work is informed by our national experience but is always rooted in local knowledge and close collaboration with our clients. As a trusted partner, we consider the environmental, social, and economic factors of a project – the whole picture. The value of our experience goes far beyond the know-how we've gained from thousands of projects. The real value is the wisdom that comes with it, and our proven ability to find opportunities in rapid and continuous change. We bring that experience to our clients and to every project.

Our work includes:

- Comprehensive & Community Master Planning
- Subarea and Corridor Master Plan
- Affordable Housing Planning & Analysis
- Grant Program Planning
- Suitability Modeling and Land Use Mapping
- Community Engagement & Visioning
- Site Planning & Design
- Environmental Planning
- Outdoor Recreation Planning & Design
- Landscape Design & Architecture
- Connectivity & Mobility Planning
- Market Analysis & Economic Development
- Branding & Wayfinding Systems
- Project Management
- Recreation Planning & Design
- Landscape Design & Architecture
- Connectivity & Mobility Planning
- Market Analysis & Economic Development

Mark Kane
Principal-in-Charge

Alex Belensz
Project Manager

Julia Randall
Planner

Hannah Loope
Associate Landscape Architect

Tucker Gordon
Environmental Planner & Certified Wetlands Scientist

Margaret Carlin
Landscape Designer

Full resumes of our team members can be found on p. 24

Engagement & Outreach is Our Expertise

Our approach to equitable and attentively curated engagement is the product of decades of engaging with the communities we serve. We understand that each community requires a distinct approach to engagement, and we offer a full menu of virtual and in-person engagement opportunities to satisfy the needs of our diverse client base. We embrace the idea of providing more than the standard open house by providing mechanisms to uncover the voices of the unheard and unrepresented, often through targeted outreach and "outside the box" strategies. We prioritize drawing parallels between group interests to achieve a unified vision with decision-making criteria which comes directly from community input. We have learned that finding shared values and perspectives is essential—these are what help align priorities within a community and enable to move it forward. We also know that this is not always an easy task. Building an engagement process that enables robust community dialogue is paramount.

WE PROVIDE

- Consistent and transparent communication with staff & elected officials, stakeholders, and the public
- Engagement materials including interactive maps, meeting flyers, and surveys—just to name a few!
- Impactful and easy to use Project Websites
- Meeting-in-a-box opportunities
- Specially tailored focus groups and stakeholder discussions to develop and verify community needs
- Mapping and graphics to identify and support findings
- Illustrations and Infographics to communicate data and results

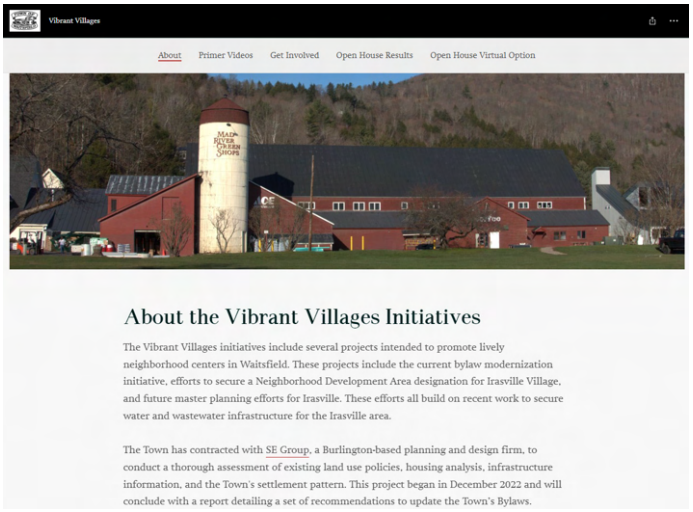
MEETING PEOPLE WHERE THEY ARE AT

What does it mean to "meet people where they are at" and why is it so important to us? In our experience, community engagement yields the strongest results when the process is brought to the people. Most people are passionate about their community in one way or another, but may avoid participating in traditional public input processes for a variety of reasons. We love to find those local spots when we can engage with a broad cross section of the community at events or as they go about their daily business.

SE GROUP STORY MAPS

A story can effect change, influence opinion, and create awareness—and maps are an integral part of storytelling. SE Group uses StoryMaps to give your narrative a stronger sense of place, illustrate spatial relationships, and add visual appeal and credibility to your ideas.

During SE Group's work with Waitsield Village and Irasville Village to modernize their bylaws to support economic and housing vitality, known as "Vibrant Villages", SE Group leveraged the StoryMap platform to inform the community of the project details and goals, distribute project updates, notify the community of public engagement opportunities, post Open House boards and poll results, along with the opportunity to participate in a virtual Open House. Using StoryMaps allowed more community members to be involved in the process, which creates a more informed and meaningful outcome.



StoryMaps & Public Engagement

SE Group uses ESRI StoryMaps to gather public opinion, encourage citizen involvement, and propel a data-driven approach to problem solving —providing a more collaborative and inclusive process when shaping the vision of a community.

A StoryMap website not only provides a portal for accessing surveys, important public meeting details and information, but also serves as a public bulletin board to communicate the results of these efforts and to keep the community informed as the project progresses and evolves. The StoryMaps platform encourages innovation and allows us to think of interesting, accessible, and engaging ways to present complicated spatial data, dense survey results, and intricate planning processes.

Stakeholders use our websites to learn about planning projects, explore interactive maps, view recommendations and designs spatially, and provide review as the process develops.

EXPERIENCE WITH COMMUNITIES LIKE WAITSFIELD HAS TAUGHT US:

Great communities know who they are.

They have a vibe and character that defines why people live there. Their uniqueness and authenticity are essential to their being. We know that great long-term plans are built by focusing on what brings a community together.

Just as no two communities are alike, no two community planning projects are alike.

We listen and work closely with clients to tailor the approach that makes the best sense for their community, customizing our processes and public engagement efforts, accordingly.

The best processes balance the interests of people, property, and place.

Doing this takes deep listening, experience, and a highly thoughtful approach that examines multiple scales of decision-making: long and short term, fine and large grain, local as well as regional.

Planning is about pragmatism wrapped around a clear vision.

We work with communities to develop and communicate that vision in a clear, inspiring way. Compelling graphics, clear maps, succinct policies, and easy-to-use documents are hallmarks of SE Group's work.

We've had the distinct honor of working with the following Vermont communities and regions:

- Waitsfield
- Waterbury
- Montpelier
- Lyndonville
- Essex Junction
- Burlington
- Enosburgh
- East Hardwick
- East Burke
- Vernon
- Northfield
- St. Albans
- Chester
- Richmond
- Montgomery
- Newport
- Mount Ascutney Regional Commision
- Mad River Valley Planning District
- Northeastern Vermont Development Association

RELEVANT PROJECT EXPERIENCE

The table below is a list of recent relevant projects that showcase the project team's experience as it relates to this plan. Full project descriptions of select projects are provided on the following pages.

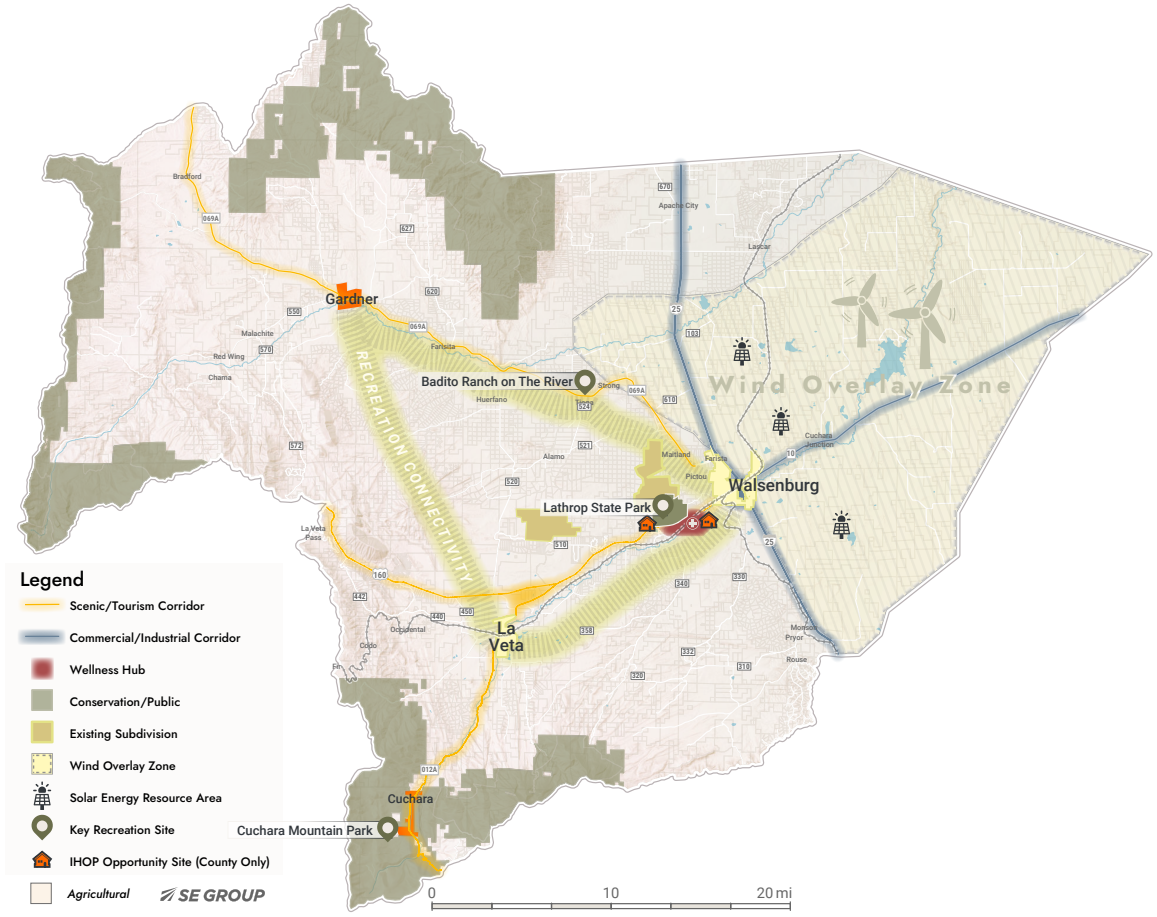
	Project Features					
	Master Planning	Community Engagement	Natural Resource Planning	Housing	Active Transportation	Scenarios & Opportunities
PAST PERFORMANCE PROJECTS (WITHIN THE LAST 10 YEARS)						
Town of Waitsfield Bylaw Modernization, VT		●	●	●	●	
Town of Waterbury Bylaw Modernization, VT		●		●	●	●
Essex Town Center Master Plan, VT	●	●	●	●	●	●
City of Montpelier Downtown Core Master Plan, VT	●	●	●	●	●	
Enosburgh Falls "Vital Village" Master Plan, VT	●	●		●	●	
Town of Lyndon Route 5 Corridor Master Plan, VT	●	●	●	●	●	●
Town of Conway Master Plan, NH	●	●	●	●	●	
Mad River Valley Active Transportation Plan, VT	●	●		●	●	

References

PROJECT	CLIENT	CONTACT
Chester Village Center Master Plan	Chester Village	Julie Hance Town Manager jhchester@vermontel.net 802.875.2173
Enosburg “Vital Village” Master Plan	Northwest Regional Planning Commission & Town of Enosburg	Greta Brunswick Senior Plannger gbrunswick@nrpcvt.com 802.524.5958 x16
Town of Waterbury Bylaw Modernization	Town of Waterbury	Neal Leitner Planning Director nleitner@waterburyvt.com 802.244.1018

VISUALIZING CHANGE

Future Land Use Map

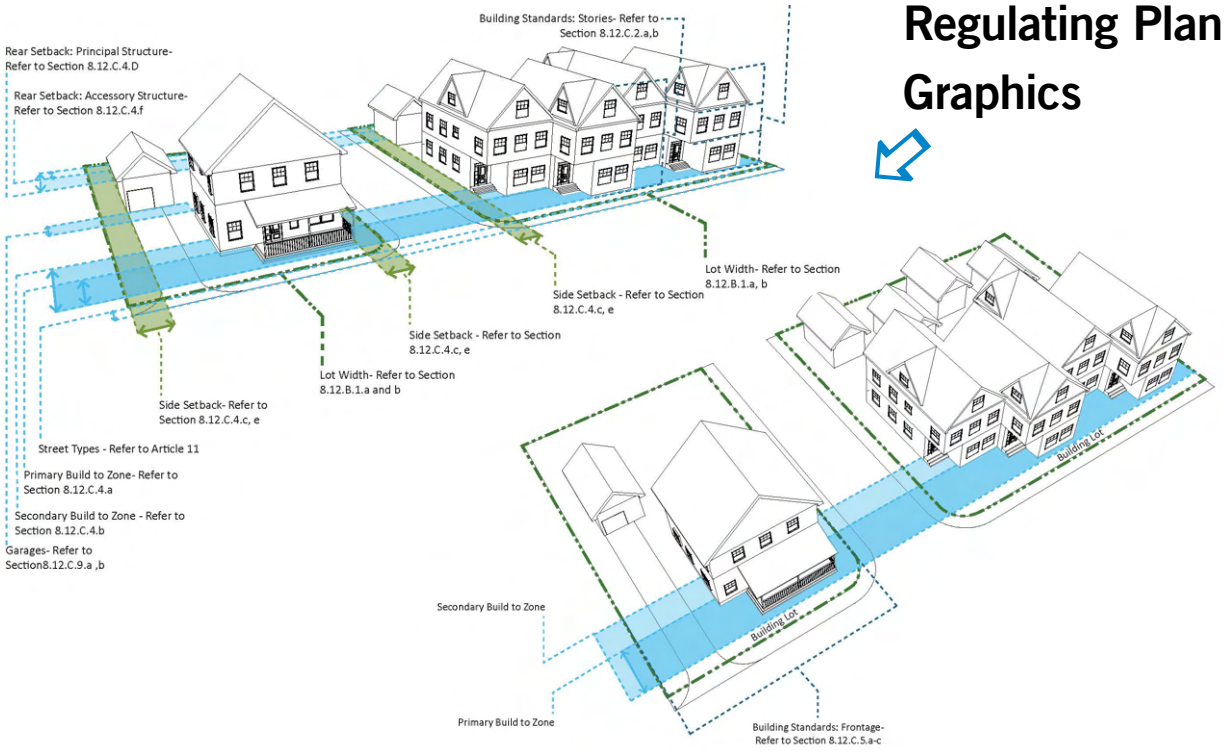


Massing Model

Massing Study

Rendered Image

Regulating Plan Graphics

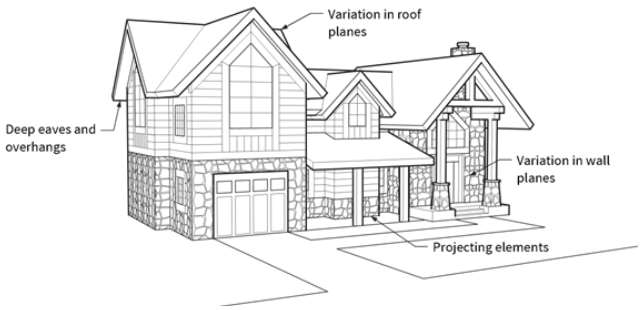


Rendered Images

Design Standards User Guide

Animating Features, Projecting Elements and Architectural Detailing

Development should provide a variety of architectural elements that "animate" the building and are features generally found within the Frisco community that help define the appropriate design character for Frisco. Providing animating features, projecting elements and architectural detailing will further preserve and strengthen the small mountain character of Frisco.



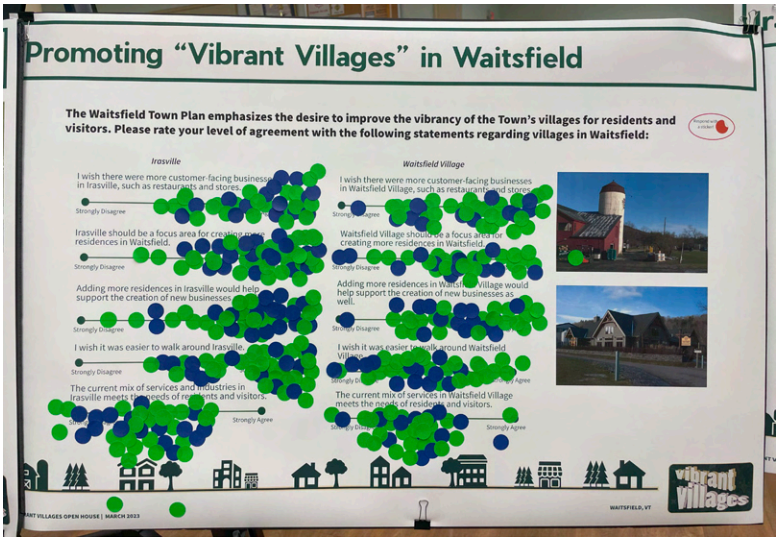
Regulating Plan Graphics

Town of Waitsfield Bylaw Modernization

Waitsfield, Vermont

SE Group recently assisted the Town of Waitsfield with updating zoning bylaws to align with Town Plan goals for village revitalization, housing development, and pedestrian connectivity. This project focused on evaluating permitted land uses, lot sizes, dimensional standards in Waitsfield Village and Irasville. The Irasville village area, with its mix of shopping plazas, residences, and critical wetlands, was a particular focus for this work.

Working closely with the Waitsfield Planning Commission, we began this project with a site visit and thorough analysis of existing land use patterns, local and regional housing needs, and existing land use regulations. To support our public involvement process, we developed an engaging project website with educational information about the purpose and impact of zoning regulations and the Waitsfield Town Plan. As the project progress, this website was updated with educational videos narrated by Planning Commission members. A well-attended open house event provided critical input on initial strategic priorities identified by the project team. As the project progressed, high-level needs were distilled into specific proposed bylaw revisions through a series of iterative work sessions with the Planning Commission. The final series of proposed bylaw revisions were subsequently adopted by the Town of Waitsfield Selectboard. A final project memorandum included additional recommendations for potential bylaw revisions and pedestrian connectivity improvements.



Town of Waterbury Bylaw Modernization

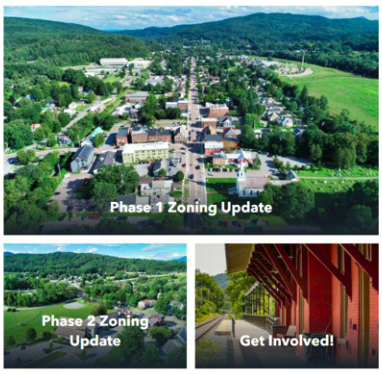
Waterbury, Vermont

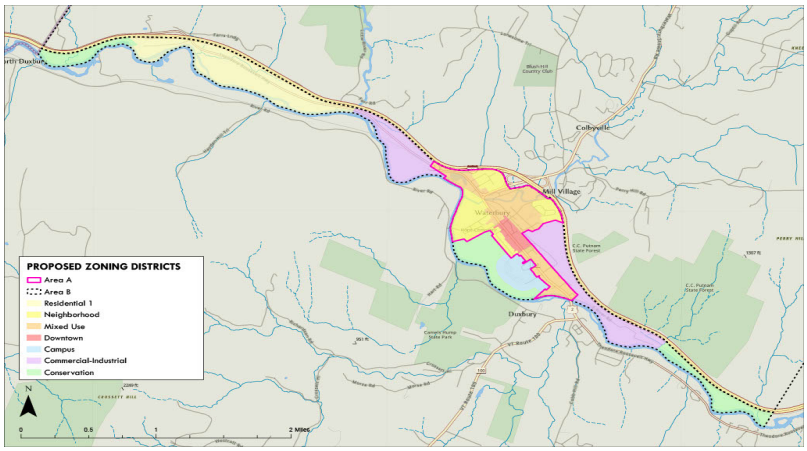
We worked with the Town of Waterbury to update their Unified Development Bylaws (UDBs), which dictate zoning regulations for the town. These updates sought to unify the Town and former Village of Waterbury by promoting economic vitality and increased housing in this vibrant community. Waterbury Village used to be a separate municipality with its own bylaws. Now combined with the Town, these bylaws were required to be updated to better integrate with the Town's bylaws, while also reflecting the desired uses, densities, and dimensional standards in the vibrant village core.

The goals of Waterbury's Bylaws Update project were to:

- Be more clear, understandable, and user-friendly to all
- Be adaptable for existing, new, and expanding uses across the town zoning districts
- Allow for increased downtown density to support local housing needs
- Facilitate strategic commercial, industrial, and mixed-use development
- Protect the scenic and natural resources of the rural districts

We conducted two open houses in Waterbury to show the proposed changes in the bylaws and gather feedback from the community. Massing models of the dimensional standards were created for all zone districts, giving community members a sense of how future buildings would look on lots changed by the zoning.

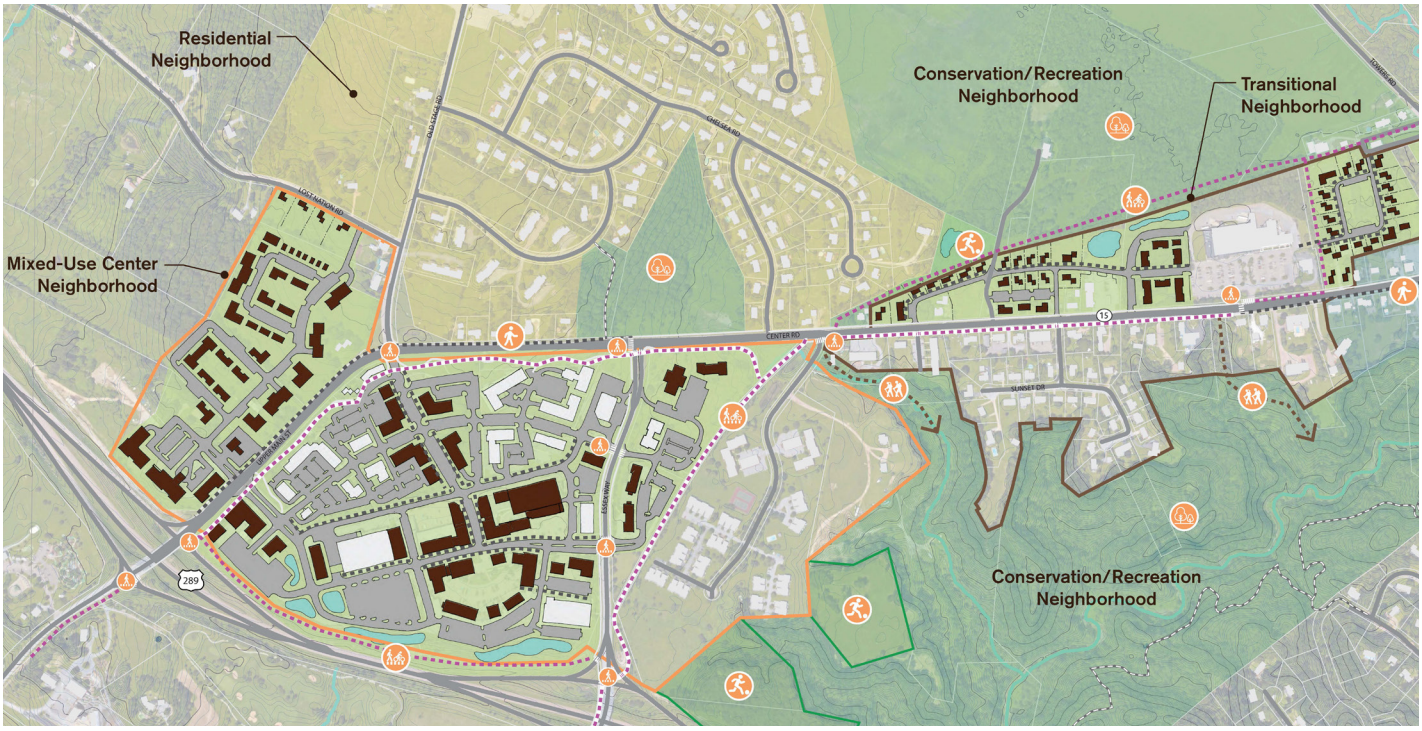




Essex Town Center

Essex, Vermont

In 2016 SE Group started working with the Town of Essex on an updated version of its Town Center Master Plan. SE Group led a community-based Steering Committee and sought focus from the public on what the vision for this area should be. In a location dominated by large retailers and relatively poor mobility, the public's concerns were varied, but architectural character and connectivity were the two most pressing. As this project has evolved, SE Group began exploring how form-based code might provide guidance to the evolution of the ETC as it is known. SE Group prepared buildout analyses and conceptual design plans that explored a vision and provided recommendations on specific form-based code elements (public realm, open space types, building types, street typology) that the Planning Commission is just beginning to digest into a workable regulatory model.

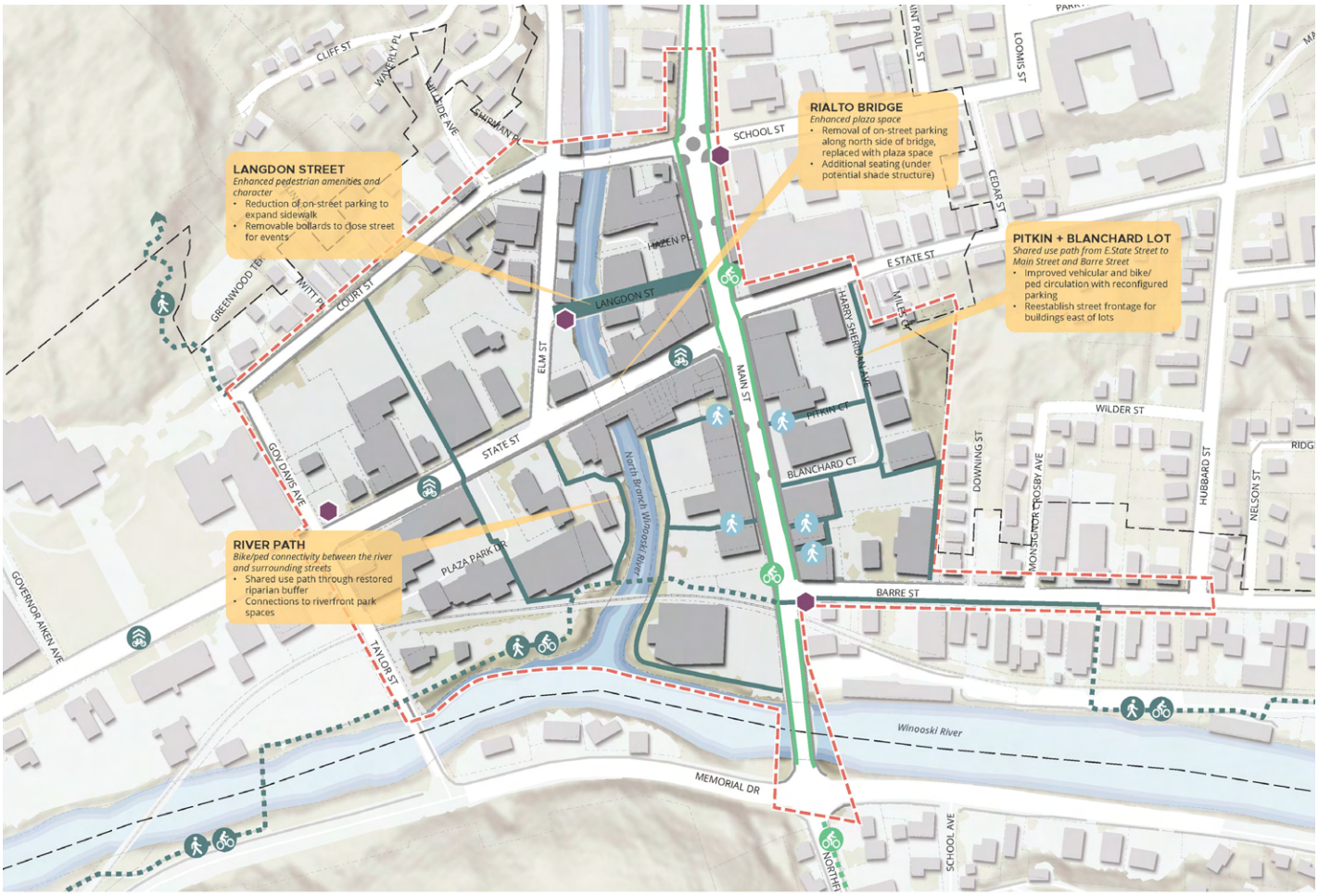


Montpelier Downtown Core Master Plan

Montpelier, Vermont

Montpelier, the capital of Vermont, has long sought to improve its downtown through updating of its streetscape and better integration with the adjacent Winooski River. SE Group, leading a team with Stantec Engineers and Watershed Consulting, completed a planning process focused specifically on the downtown core with the goal of establishing a vision for the streetscape and land uses within the study area. Building upon the best ideas from earlier planning efforts, SE Group led a robust public engagement process to gain new perspectives from the community. A number of key priorities were established, including providing a dynamic, accessible and attractive pedestrian environment, comfortable bicyclist accommodations, and improved open space and connectivity to the river. Finding the right balance of convenient parking, while allowing for critical enhancements to the pedestrian realm, was a key challenge that the project successfully addressed. In addition to potential park/plaza spaces, opportunities for urban infill were explored on under utilized parcels. Through creative design explorations that responded to community desires and client concerns, the design team established a compelling vision for how the downtown core should look, function, and feel.

Stormwater management, with the goals of improving water quality and reducing flooding, was another focus of the project. Watershed Consulting and SE Group worked collaboratively to explore ways to integrate progressive detention and filtration practices into the fabric of the downtown core. With an overview of streetscape implementation recommendations, which include order of magnitude cost estimates, the final document will help inform future city decisions related to specific streetscape design projects, support continued community dialogue around future land use policy, and provide a strategic framework for the management of urban stormwater.



Enosburg Falls "Vital Village" Master Plan

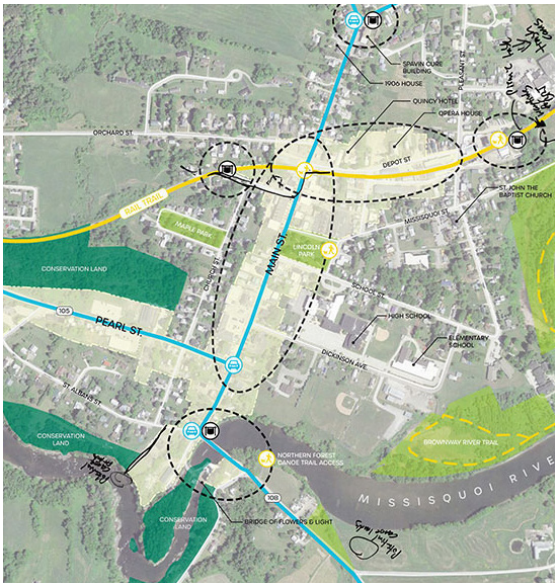
Enosburg Falls, Vermont

2020 VPA PLAN OF THE YEAR!

SE Group worked with the Northwest Regional Planning Commission and Enosburg Falls to engage the community and create a collaborative vision for a vibrant and healthy village center. The purpose of this effort was to promote economic development and community health with a focus on strengthening the tourism and recreation economy and developing a coordinated marketing identity for the village.

Concepts explored streetscape and community enhancements such as promoting complete streets, access management, improved multi-modal connections, beautification, wayfinding, and storefront/façade enhancements. Exploring opportunities to build upon the recreational assets in town—most notably the Missisquoi Valley Rail Trail and the Northern Forest Canoe Trail—was an important aspect of the project. Summer and winter trail counts were conducted on the rail trail and we were able to engage local high school students to conduct a trail intercept survey which received over 185 responses. We also collaborated with local residents and artists to install temporary bump-outs, planters, and public art as part of a streetscape enhancement demonstration project utilizing Local Motion's Pop-up Trailer supplies.

The project also utilized a number of innovative public engagement techniques, including project branding and a project "StoryMap" to help bring together project information and distribute it via an online presentation. This cutting-edge technology enabled the integration of narrative, graphic, and mapping products into a visually compelling story that could be shared far and wide.



Lyndonville Route 5 Corridor Master Plan

Lyndonville, Vermont

SE Group supported the Town of Lyndon and the Northeast Regional Development Association (NVDA) in envisioning new streetscape designs and public space opportunities for downtown Lyndonville. Previously, the downtown streetscapes were automobile-oriented and had the opportunity to enhance walkability, support local businesses, and provide more activities for residents. Lyndonville also serves as the southern gateway to high-profile outdoor recreation destinations such as Kingdom Trails and Burke Mountain. Much of the vehicular traffic headed for these destinations passes through downtown Lyndonville without stopping, meaning that the Town is losing out on a key economic development opportunity.

The Town of Lyndon retained SE Group to help identify current challenges related to multi-modal transportation, public space activation, stormwater management, connections to outdoor recreation, and downtown vibrancy. Our team was tasked with developing conceptual designs and implementation strategies that were right-sized and achievable using local capacity. We worked with the Town and local partners to plan and host a large downtown event that showcased the potential of Lyndonville to be a vibrant, active, and attractive community hub. The event included various stations showing 3D-modeled views of potential streetscape and public space improvements in order to show residents what is possible in their community and solicit their feedback.

The final plan includes detailed visuals of desired streetscape and public space designs, and a detailed implementation section with strategies for completing short-term and long-term improvements. The document provides both an aspirational vision for a vibrant downtown Lyndonville, as well as practical “low-hanging fruit” strategies that are achievable in the near-term.

“Conway Forward” Town of Conway Master Plan

Conway, New Hampshire

SE Group is currently engaged with the Town of Conway, NH to update the Town’s Master Plan. Housing, land use policies, conservation, and water and sewer infrastructure a primary focus of this Master Plan update. The Town has long grappled with providing an adequate supply of affordable and attainable long-term housing, and is need of enhanced water and sewer service to enable needed housing development and protect water quality. In partnership with a robust project steering committee, we have undertaken an iterative public engagement process consisting of an open house, tabling at community events, focus groups, and community “pulse” surveys. We are currently in the process of assembling a concise, thematic, and actionable Master Plan with plan adoption anticipated in spring 2024.

Mad River Valley Active Transportation Plan

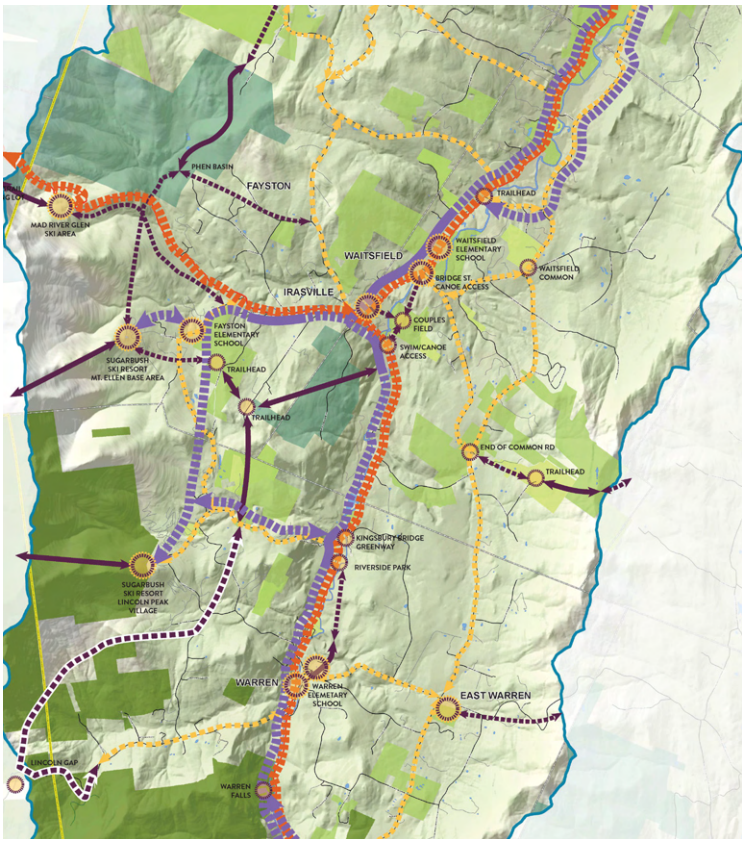
Mad River Valley, Vermont

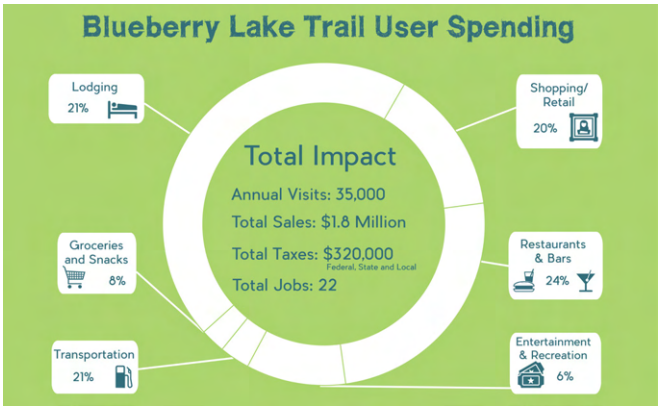
The MRV Moves Active Transportation Plan is a multi-agency planning process funded through the Vermont Stronger Communities, Better Connections Program, a partnership of the Vermont Agency of Transportation (VTrans) and the Vermont Agency of Commerce and Community Development (ACCD).

Through a robust public involvement process, the MRV Moves Active Transportation Plan articulates a unified, multi-town, watershed-wide vision for recreational trails and non-motorized transportation facilities in Vermont's Mad River Valley. The plan explores how trails and active transportation integrate with economic development, enhance both visitor experiences and residents' quality of life, and improve transportation choices.

The Valley is blessed with a myriad of non-profit and government agencies working together on trails and active transportation. A critical component of this Plan was to create an advisory board consisting of all these partners to establish a cohesive and collaborative vision for the future, while building upon decades of their individual projects. Public engagement was also a cornerstone of the Plan, utilizing a variety of events (walking and biking tours) and techniques (surveys and project websites) for the community to get involved and explore ideas.

The primary product of the plan is a map of important connections and routes in the Mad River Valley. The plan also provides guidance for trail design and management standards, implementation, funding, permitting and approvals to carry the project into reality. The plan includes an important discussion of the unique definition of active transportation in the MRV, which blends both recreation and transportation, as well as the economic and social benefits of walking and biking, including an IMPLAN economic analysis and consideration of a progressive learning network to serve users of all ages and abilities. In the short time since the plan has been completed the IMPLAN economic analysis has already proven useful in making an effective case for active transportation improvements to the individual select boards in the region and to bring more supporters into the fold.progressive learning network to serve users of all ages and abilities.





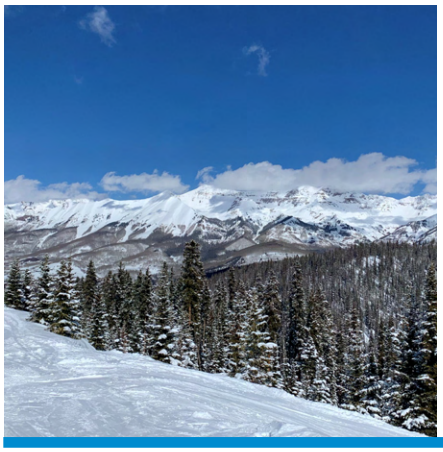
RECENT HOUSING PLANNING PROJECTS

SE Group has completed a number of other projects related to housing. These include feasibility studies, zoning change applications, and helping the state evaluate municipalities' affordable housing strategies.

Leadville/Lake County Affordable Housing Site Analysis Colorado

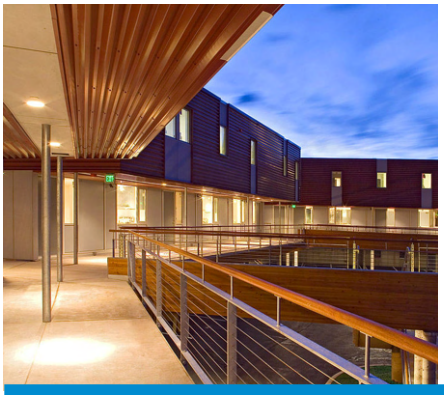
SE Group assisted the City of Leadville and Lake County with a site analysis process that examined several potential locations for affordable housing in the City of Leadville. In collaboration with Shape Architecture and TetraTech, we developed a report that summarized conditions, infrastructure needs, and potential design programs for each site. The City and the County are now poised to leverage grant funding to implement these projects. This process also involved a multi-step public engagement process that solicited input from English and Spanish speakers in the community. The results underscored the acute need for housing in the area as well as residents' feelings of stress related to housing.

Telluride/San Miguel County Rezoning & Housing Assistance Colorado



SE Group assisted the Town of Telluride and San Miguel County through a rezoning process of 39 acres to a new affordable housing zone designation. This work included putting together the entire rezoning application, attending Planning Commission and Board of County Commissioner hearings, and strategizing with Town and County staff on how to make the rezoning a successfully passed initiative. It passed and is now in the site plan development stage.

HB21-1271 Affordable Housing Strategies Assessment Colorado



SE Group assisted the Colorado Department of Local Affairs (DOLA) with an initial screening process for a new affordable housing grant program created by **Colorado House Bill 21-1271**. Our team worked with DOLA and Loveland-based firm Plan Tools to develop a framework to evaluate communities' compliance with the bill.

TEAM RESUMES

MARK D. KANE, APA
DIRECTOR OF COMMUNITIES & PUBLIC LANDS

Areas of Expertise

- Regional and Land Use Planning
- Aesthetics and Environmental Impact Analysis
- Permitting & Entitlement

Affiliations/Memberships

- American Planning Association/Vermont Planners Association, Past-President
- American Planning Association, Northern New England Chapter
- American Planning Association, Colorado Chapter
- American Society of Landscape Architects, Affiliate

Awards

- Merit Award for Outstanding Project, APA Colorado, Town of Ridgway Land Use Plan Update, 2012
- Honor Award for Sustainability and Environmental Planning, APA Colorado, Town of Nederland Comprehensive Plan Update, 2014.
- Merit Award for Innovation/Creative Partnerships, Colorado APA, Emerald Mountain Park Master Plan, 2014

Presentations

- Sun Valley Economic Development (SVED) - Future of Mountain Towns Conference 2017

Mark helps communities defined by outdoor recreation, the rural lifestyle, and tourism unlock and maximize economic, environmental, aesthetic, and recreational character—and potential—through community and land use planning, permitting, and entitlement. Mark brings together deep community planning expertise; an intuitive and informed understanding of how to bring together diverse communities for long-term consensus and gain; and a profound commitment to helping small communities find, articulate, tap into, and retain what makes them special.

Experience

Mark has been with SE Group since 2000 and has over 30 years of experience in environmental and land use planning and analysis.

Mark is an expert in the intersection of outdoor recreation and communities. He is currently leading the Communities and Public Lands teams at SE Group. Mark's focus is to utilize data, stakeholder perspective, and community input to improve the quality of life, sense of place, and economic outcomes of the communities he serves.

Mark has a Bachelor of Science, School of Natural Resources – Environmental Studies from the University of Vermont.

Projects

- City of Lebanon Master Plan, New Hampshire
- City of South Burlington Underwood Park Vision Framework and Master Plan, Vermont
- Clear Creek County Master Plan 2020, Colorado
- Cumberland Plateau Outdoor Recreation Plan, Virginia
- Emerald Mountain Park Master Plan, Colorado
- Essex Town Center Master Plan, Vermont
- Estes Valley Recreation and Parks District Master Trails Plan, Colorado
- GIS-Based Regional Open Space Study, Northwest Vermont
- Glacier-Winner Creek Land Use Plan – Girdwood 2020, Alaska
- Lake Chelan Multi-Season Recreation Destination Feasibility Study, Washington
- Mad River Valley Active Transportation Plan, Vermont
- Mad River Valley Economic Study, Vermont
- Maidstone State Park Master Plan, Vermont
- Milton Town Core Master Plan, Milton, Vermont
- Pagosa Springs 2018 Comprehensive Plan, Colorado
- Quechee Lakes – Long-Range Community Plan, Vermont
- Red Lodge Alternative Transportation Study, Montana
- Town of Chester Village Center Master Plan, Vermont
- Town of Frisco Development Code, Colorado
- Town of Nederland Comprehensive Plan, Colorado
- Town of Ridgway Land Use Plan 2011 Update, Colorado

ALEX BELENSZ
ASSOCIATE ANALYST & PLANNER

Areas of Expertise

- Community Planning
- Public Engagement
- Recreation Planning & Management
- GIS Analysis

Appointments

- New Hampshire Complete Streets Advisory Committee, At-large Member (2018-2022)

Speaking Engagements

- 2023 Conference of the Northern New England Chapter of the American Planning Association: "Transportation & Community Development"
- 2019 Conference of the Northern New England Chapter of the American Planning Association: "The Value Chain: Supporting the Outdoor Recreation Economy by Leveraging Shared Assets."
- 2017 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites: "Evaluating the Effects of Crowding on Interpretive Experience at Castillo de San Marcos National Monument."

Alex helps communities think differently about modern planning challenges. An interdisciplinary planner, he offers a blend of creative and analytical abilities to each planning project. Alex continually challenges himself and those around him to think beyond "business as usual" when working to develop plans that are equitable, actionable, and effective.

Experience

Alex joined SE Group in 2022 and brings a unique blend of planning experience. He spent five years as a regional planner in northern New Hampshire focusing on transportation planning, housing, and recreation, and has worked with public land managers across the country on issues of recreation, transportation, and visitor use management.

Alex has a Master of City and Regional Planning from Rutgers University and a Bachelor of Arts in Geography from SUNY Geneseo.

Projects

- Conway Master Plan Update, New Hampshire
- Waitsfield VT Zoning Bylaw Modernization, Vermont
- Lyndonville Route 5 Corridor Streetscape Plan, Vermont
- Mount Ascutney Regional Housing Suitability Analysis, Vermont
- North Elba/Lake Placid Community Master Plan, New York
- Keys to the Valley Regional Housing Study, New Hampshire*
- New Hampshire Outdoor Recreation Assessment, New Hampshire
- Marshall Mountain Park Master Planning/Design & Financial Analysis, Montana
- Minnesota All-Terrain Vehicle Master Plan, Minnesota
- Clear Creek Recreation in the Outdoors Management Plan, Colorado
- Lebanon, NH Complete Streets and Multi-Modal Transportation Plan, New Hampshire*
- Upper Valley – Lake Sunapee Regional Corridor Transportation Plan, New Hampshire*
- Downtown Littleton Parking Plan, New Hampshire*
- Castillo de San Marcos National Monument Visitor Use Study, Florida*
- Cadillac Mountain Visitor Use Study, Maine*
- Cape Cod National Seashore Visitor Study, Massachusetts*
- Niobrara National Scenic River Visitor Study, Nebraska*
- Big Wood River Travel Management Plan, Idaho*
- Highlands Region Master Plan, New Jersey*
- Gloucester County Farmland Preservation Plan, New Jersey*

**Signifies project was completed while with previous employer*

JULIA RANDALL
PLANNER

Full of curiosity, Julia loves getting to know the communities she works in and enjoys the challenge of building consensus among stakeholder groups. With every project, Julia seeks to develop innovative land use and policy solutions that reflect a community's values, build resiliency, and improve overall quality of life. Julia's considerable skill as a writer and passion for sustainable, inclusive recreation make her an asset to any project team.

Experience

Julia specializes in land use and policy analysis, public engagement, and environmental permitting. Julia is a member of the Community Planning and Design team and also supports all practice areas at SE Group.

Prior to joining SE Group, Julia studied recreation and tourism internationally and close to home – she completed a research fellowship on ecotourism in Thailand, and she has produced two reports analyzing visitor use management in the Adirondack High Peaks.

Julia holds a Bachelor of Arts in English from Williams College.

Areas of Expertise

- Technical Writing & Research
- Community Engagement & Visioning
- Policy Analysis
- Permitting

Appointments

- Commissioner, City of Burlington, VT Planning Commission (2022-present)
- Champlain-Adirondack Biosphere Network Youth Board

Awards

- Colorado APA Merit Award: West Vail Master Plan (2022)

Long-range Planning Projects

- City of Mena Vision Plan, AS
- Velomont Trail & VT Huts Master Plan, VT
- Northeast Kingdom Regional Plan Update, VT
- Huerfano County Cooperative Planning Projects, CO
- City of Montpelier Web-Based Plan, VT
- Lyndonville Route 5 Corridor Assessment, VT
- Town of Waitsfield Bylaw Modernization, VT
- Town of Conway Master Plan, NH
- West Vail Master Plan, CO
- City of Chisholm Comprehensive Plan Update, MN
- Minturn Community Plan Update, CO
- Colorado Department of Local Affairs Affordable Housing Strategy Evaluation, CO
- Leadville/Lake County Affordable Housing Site Analysis, CO
- City of South Burlington Land Development Regulations Review and Support, VT
- Allen Street Solar Permitting Support, VT
- Bridge Street Solar Permitting Support, VT
- Chelsea Solar Permitting Support, VT
- Gilman Hydro Solar Permitting Support, VT
- Rockingham Solar Permitting Support, VT

Outdoor Recreation Planning Projects

- Marshall Mountain Park Master Plan, MT
- Grant County Comprehensive Outdoor Recreation and Trails Master Plan, NM
- Norwood Trails Assessment, CO
- Leddy Park Comprehensive Plan, VT
- Bromley Ski Act 250 Permit Support, VT
- Bolton Valley Act 250 Permit Support, VT
- Minnesota Off-Road Vehicle Master Plan, MN
- Cumberland Plateau Outdoor Recreation Plan, VA
- Rib Mountain State Park Recreation Needs Assessment, WI
- Brandywine/Boston Mills Lift Replacement Planning
- Jack Frost/Big Boulder Lift Replacement Planning

TUCKER GORDON

ENVIRONMENTAL PLANNER & CERTIFIED WETLANDS SCIENTIST

Areas of Expertise

- Project Management
- NEPA Process & Documentation
- Regulatory Agency Coordination
- Natural Resource Inventory & Evaluation

Registration

- New Hampshire Certified Wetland Scientist #322

Appointments

- Board of Directors, Upper Saco Valley Land Trust

Tucker is an experienced environmental planner and project manager who enjoys working on complex and impactful projects. He enjoys working at the intersection of outdoor recreation and environmental planning and permitting, two worlds that he is passionate about. Tucker prides himself on his problem solving skills, dedication to his work, and ability to deliver results for clients.

Experience

Tucker joined SE Group in 2024 with 5+ years of experience in the environmental consulting arena at an engineering firm based in northern New Hampshire. Tucker's experience includes managing projects, NEPA process and documentation, state and federal environmental permitting, technical report generation, and environmental field work.

Tucker has a Bachelor of Arts in Earth & Planetary Science from Johns Hopkins University and is a New Hampshire Certified Wetland Scientist (CWS).

Projects

- Cranmore Mountain Resort Base Area Development & Permitting, New Hampshire*
- Fairfield Inn & Suites North Conway Environmental Permitting & Compliance, New Hampshire*
- Wildcat Pedestrian Bridge State & Federal Permitting, New Hampshire*
- Berlin Riverwalk Multiuse Trail Environmental Permitting, New Hampshire*
- Academy Street Bridge Replacement Environmental Permitting, New Hampshire*
- Lake Waukewan Bridge Environmental Permitting, New Hampshire*

**Signifies project was completed while with previous employer*

HANNAH LOOPE
ASSOCIATE LANDSCAPE ARCHITECT

Intent on revealing each site's intrinsic qualities, Hannah enjoys the challenge of translating complex site-specific challenges into clear design solutions and in observing how a site evolves over time. Her nimble graphics and technical knowledge bring her projects to life – whether it's in public outreach, permitting, client review, or through construction. Hannah often communicates with a sketch and a smile - and an exclamation point! Her ideal project is built work that creates lasting memories by forging an emotional connection between people and place.

Areas of Expertise

- Site Planning & Design
- Construction Documentation & Administration
- Graphic Representation
- Recreation Planning, Design & Management

Registrations

- Registered Landscape Architect, Montana (2016-Present)

Awards

- 2019 Vermont Public Places Award Merit Award, Taylor Park Master Plan*
- 2018 Vermont ASLA Award of Excellence, Design for Resilience, Brattleboro's Lower Whetstone Brook Corridor*
- 2017 Potomac ASLA Honor Award, Design for Resilience, Brattleboro's Lower Whetstone Brook Corridor*
- *received at prior firm

Experience

An experienced designer and project manager, Hannah has worked on a wide range of project types, including design for urban riverfronts, public parks, and greenroofs; planning for campuses, public greenspaces, streetscapes, transportation; and restoration for riparian, forest, and wetland areas. Hannah's recent work has focused on improving civic spaces in both institutional and public environments, and she is dedicated to designing for ecological and community resiliency.

Hannah holds a Master of Landscape Architecture from the University of Minnesota-Twin Cities and Bachelor of Science in Geology from University of Nebraska. She practiced landscape architecture in Minnesota, Massachusetts, and Vermont prior to her work at SE Group.

Projects

- Lyndon Route 5 Corridor Assessment, Vermont
- Basin Recreation Strategic Service, Utah
- Kingdom Trails Welcome Center Design, Vermont
- Winnesquam Resort Site Design, New Hampshire
- University of Utah Research Park/Trails, Utah

Urban / Housing / Streetscape Projects

- 101 Cambridgepark Drive, Cambridge, Massachusetts
- First Street Assemblage, Cambridge, Massachusetts
- Eagles Landing / Great Streets, Burlington, Vermont

Parks Design / Parks Master Planning / Public Engagement Projects

- Whetstone Brook Design for Resilience, Brattleboro, Vermont
- Taylor Park Master Plan, St Albans, Vermont
- Oakledge Park Master Plan, Burlington, Vermont
- Water Works Park, Burlington, Vermont
- Tom Hanafan River's Edge Park, Council Bluffs, Iowa
- Smale Riverfront Park, Cincinnati, Ohio

MARGARET CARLIN
LANDSCAPE DESIGNER

Areas of Expertise
- Site Planning & Design
- Graphic Representation
- Community Engagement

Margaret is passionate about designing and developing shared spaces that anchor communities. This was instilled during her upbringing in Alabama, where she witnessed just how important these places were to people's mental and physical health (no matter their background). On projects, Margaret is dedicated to helping her team succeed – and she is equally happy to jump into hyper-technical problem solving or step back to wrestle with big, conceptual questions.

Experience

Margaret joined SE Group in 2022 with experience in solving social and environmental problems through design. Margaret has a Bachelor of Science in Environmental Design with a minor in Philanthropy and Non-Profit Studies and a Master of Landscape Architecture from Auburn University. During her capstone at Auburn, Margaret led a design process that reimagined an old mill site outside of Auburn as a multi-use recreational and camping facility

Projects

- Lyndon Route 5 Corridor Assessment, Vermont
- Creekside Park Master Plan, Colorado
- Leddy Park Master Plan, Vermont
- Basin Recreation Strategic Service, Utah
- Kingdom Trails Welcome Center Design, Vermont
- Chester Wayfinding Plan, Vermont
- Stackman Property Concept Design, New York State
- Vermont State Community Stormwater Master Plan, Vermont
- Winnesquam Resort Site Design, New Hampshire

WAITSFIELD COMMUNITY WASTEWATER PROJECT

BOND VOTE - TUES. JUNE 11, 2024

Polls Open 7AM to 7PM
Waitsfield Village Meeting House
4355 Main Street
Waitsfield, VT 05673

Ballots will also be mailed to all registered voters

What is the bond vote for?

The ballot asks if voters will allow the Selectboard to pursue the $15 million in funding necessary to proceed with the wastewater project.

What funds are the Selectboard planning to pursue?

The Town has identified over $13 million in federal and state grants that could support the project but a positive bond vote is required for a majority of the identified funding.

How will the Town fund the remaining $1.7 million?

The Town will apply for a low interest loan through USDA Rural Development. The loan would be paid back by the users of the system at an affordable user rate.

What does that mean for taxpayers?

As proposed, the Selectboard plans for **no impact to the Waitsfield municipal tax rate** to fund this project.

Join us for a Bond Vote Information Hearing on Monday, June 3rd at 6:00pm at the Waitsfield Town Office or via Zoom

TOWN OF WAITSFIELD
4144 MAIN STREET
WAITSFIELD, VT 05673

scan here

Visit the Town's Website for more details on the Waitsfield Community Wastewater Project using the QR code

www.waitsfieldvt.gov/departments/projects/wastewater

TOWN OF WAITSFIELD

Waitsfield Community Wastewater Project

Coffee Hour Open House

Three Mountain Cafe

10:30am to 12pm

Fridays 5/17, 5/24, 5/31, & 6/7

Stop by to chat with a team member and ask any questions you have about the project and upcoming bond vote on June 11th.

Letter of Support

Dear Waitsfield voters,

We, the undersigned residents and voters of the town of Waitsfield, sign this public letter to **show our support for the Waitsfield Community Wastewater project.**

We support community wastewater because **we believe in the project's goals stated below**:

- **Protect water quality** in the Mad River
- **Safeguard human health** near drinking water wells
- **Avoid high costs** of private septic system replacements
- **Build more housing** in Irasville and Waitsfield Village
- **Avoid sprawl** and preserve historic settlement patterns
- Build and maintain a modern wastewater system with affordable user rates **at no cost to taxpayers**

If you support these goals too and want to help make this project happen, **please sign this public letter here in ink, or digitally by clicking the QR Code below.**

We also encourage you to **join us in voting YES in the June 11 special election,** which would authorize the Selectboard to secure the maximum amount of federal and state funding for construction of the project.

You can **vote in person on June 11** at the Village Meeting House at 4355 Main Street, **or by mail in ballot on or before June 11** (all registered voters will receive a ballot by mail).

Date	Printed Name	Signature

Date	Printed Name	Signature

Date	Printed Name	Signature

Date	Printed Name	Signature

HEALTHY WAITSFIELD

Waitsfield Community Wastewater Project

SURVEY

LETTER OF SUPPORT