Town of Worcester, Vermont

2018 Local Hazard Mitigation Plan

Prepared by the Town of Worcester and

the Central Vermont Regional Planning Commission

Date of Town Adoption: , 2018

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Date of Final Approval by FEMA

Plan is effective for Five years from FEMA approval.

Funded in part by a Hazard Mitigation Grant Program grant from the Division of Emergency Management and Homeland Security.

Town of Worcester, VT
Hazard Mitigation Plan Update

Prepared by the Town of Worcester and CVRPC

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1. Introduction

The impact of expected, but unpredictable natural and human-caused events can be reduced through community planning. The goal of this Local Hazard Mitigation Plan is to provide a local mitigation plan that makes the Town of Worcester more disaster resistant.

Hazard mitigation is any sustained action that reduces or eliminates long-term risk to people and property from natural and human-caused hazards and their effects. Based on the results of previous project impact efforts, FEMA and state agencies have learned that it is less expensive to prevent disasters than to repeatedly repair damage after a disaster has struck. This plan addresses the opportunities to identify mitigation strategies and measures during all of the other phases of emergency management – preparedness, response, and recovery. Hazards cannot be eliminated, but it is possible to reduce their severity by identifying potential hazards and where they are most likely to strike. Local actions can be taken ahead-of-time to reduce the damage and losses from these hazards, and establish a coordinated process to implement the Plan. These actions and measures, also known as "hazard mitigation strategies," can 1) alter the hazard by eliminating or reducing the frequency of occurrence, 2) avert the hazard by redirecting the impact by means of a structure or land treatment, 3) adapt to the hazard by modifying structures or standards, or 4) avoid the hazard by preventing, limiting, or relocating development, improving public education, or ensuring development is disaster resistant.

2. Purpose

Purpose. The purpose of this Local Hazard Mitigation Plan is to assist Worcester in recognizing hazards facing the community and identify strategies to begin reducing risks from acknowledged hazards.

Worcester strives to comply with the strategies, goals and objectives of the State Hazard Mitigation Plan, including an emphasis on proactive pre-disaster flood mitigation for public infrastructure, good floodplain and river management practices, and fluvial erosion risk assessment initiatives.

The 2017 Worcester Local Hazard Mitigation Plan is an update of the town's 2012 plan. The town reviewed, evaluated, and revised the 2012 plan to reflect changes in development, progress in local mitigation efforts and changes in priorities. New information has been incorporated into this plan making it up to date, stronger and more useful for the Worcester town officials and residents who will implement the actions and measures going forward.

The 2017 Worcester Local Hazard Mitigation Plan includes:

- Current information since the last plan update done in 2012.
- A status update of the 2012 mitigation strategies/actions.
- A new mitigation strategies/action section to reflect the current priorities and intended actions of the community over the next five years.
- Updates have been made to the Hazard Analysis Map.
- Addition of a new Transportation Vulnerability Analysis Map (Vulnerability Assessment).
- The town has updated the hazards to reflect changes in the communities' priorities.

- Minor changes to the plan update and plan maintenance process to incorporate greater public participation and reflect scheduling changes of the Select board and Planning Commission since the last plan adoption.

Benefits of hazard mitigation planning include:

1) Increased public awareness and understanding of natural and manmade hazards,
2) Associated risks and community vulnerabilities,
3) Reduced physical, financial and emotional losses caused by disasters,
4) Improved understanding of potential risks and possible risk reduction measures associated with future development,
5) Increased community and voter support for specific actions the town may take to reduce future losses,
6) Strengthened partnerships and lines of communication among diverse interests, including opportunities to leverage and share resources,
7) Community eligibility for federal hazard mitigation grants and aid prior to and following federally-declared disasters.

Process. The previous Worcester Hazard Mitigation Plan was adopted September 2012 and this plan is an update within a 5-year cycle. Vermont's ongoing recovery efforts and the Federal Emergency Management Agency's (FEMA) new mitigation framework both focus on strengthening community "resilience"- to not only understand and reduce risks of future events, but to also empower communities to recover quickly and effectively when disasters occur. Of particular note- the state recently adopted new Emergency Relief and Assistance Fund (ERAF) rules, effective October 2014, that provide additional matching funds for federal disaster relief under FEMA's Public Assistance Program for municipalities that have adopted updated bridge and culvert standards, flood and fluvial erosion hazard area regulations, local emergency operation plans, a local hazard mitigation plan approved by FEMA, and river corridor protection standards. Worcester has an ERAF rating of 17.5%, the maximum under the program. Under changes to state planning law (24 V.S.A Chapter 117), as of July 2014, all Municipal Plans must include a "flood resilience" element that may reference a locally adopted and FEMA-approved local hazard mitigation plan.

This Plan represents the revision of the previous Worcester Local Hazard Mitigation Plan. It is a standalone, single jurisdiction hazard mitigation plan that updates and builds upon previous mitigation plans, and augments the adopted Worcester Town Plan. The process of developing the Plan has been as important as the plan itself, by drawing the community together to identify, prioritize, and agree on actions to be taken to reduce and mitigate hazards. The five parts of the plan update process included:

Planning Process (Public Involvement) - to receive and consider community-wide input from diverse stakeholders. To document how decisions were reached and who was involved in the planning process.

Hazard Identification and Risk Assessment- integrate current hazard data and studies to identify and plan for the most probable hazards, estimate the potential frequency and magnitude of hazard events and their potential impacts on both the built environment and the local community.

Mitigation Strategy- to reaffirm and develop goals, objectives and strategies aimed at mitigating future disaster losses that are cost-effective, technically feasible, and environmentally sound- and time to allow for strategic investment of scarce resources. To identify which actions will be taken by whom and by when. This Plan reflects local priorities for hazard mitigation, as determined from the community planning process, and currently available federal, state and local information. Action items are included to monitor the success or effectiveness of implementation and results, and to inform the next update of the Plan.

Plan Review, Evaluation, and Implementation- to review and revise prior plan to address changes in development, progress in local mitigation efforts, and changes in priorities with a 5-year cycle to reflect current conditions and maintain eligibility for FEMA funding.

Plan Adoption- to ensure Select board approval and adoption of the local hazard mitigation plan demonstrating community commitment to the plans hazard mitigation goals and actions.

3. Community Profile

The Town of Worcester is a small, rural, primarily residential community located in the Northwestern most portion of Washington County. According to the 2010 Census, Worcester has a total population of 891 people living in 413 housing units. The American Community Survey (ACS) 5 year estimates for 2012 – 2016 show a decrease in population for both the County and Worcester. The 2016 ACS 5-year population estimate for Worcester is 864. Approximately 17% of Worcester's workforce is employed within the Town, while the remaining 83% work outside of the community

With over 3,000 feet of topographic relief within its boundaries, Worcester ranks as one of the most rugged communities within Central Vermont. The Worcester Mountain Range dominates the Western third of the town. Vermont Route 12 follows the North Branch River in a North-South direction and provides connection to Montpelier and Morrisville. The Village of Worcester is located along the south eastern section of the town along Vermont Route 12. The Town's limited commercial development is focused primarily within this area, along with its densest residential development. The largest numbers of private residences, however, are widely dispersed throughout the Town's rural lands. This pattern of rural development surrounding a dense Village is reinforced by the Town Plan. Worcester does not have zoning bylaws or a subdivision ordinance. As of writing this plan, there are no planned commercial or residential developments for Worcester. In March of 2013 Worcester updated its road standards and follows the Vermont Road and Bridge Standards 2013. Over the past ten years new development has been minimal (ten residential structures) and has not increased the communities' vulnerabilities.

In Worcester, electricity is provided by Green Mountain Power to those residents who are situated along Vermont Route 12. Those in the hills and along other secondary roads are served primarily by the Washington Electric Cooperative. The Worcester community is completely dependent upon groundwater for its domestic water supply and industrial uses, with a storage and distribution system known as Worcester Fire District No. 1 providing service to much of the Village area. Worcester has no public sewage disposal system. The State of Vermont Regional Office issues water/waste water permits for soil based wastewater systems with flows less than 6500 gallons per day, for potable water supplies (water supplies that are not public), and for municipal water and sewer connections.

The Town's fire coverage is provided by the volunteer Worcester Fire Department, which provides support to the inter-municipal Capital Fire Mutual Aid System. During the year of 2015, the Fire Department responded to 18 calls for assistance. Also housed within the Worcester Fire Department is the Worcester Fast Squad, a non-profit corporation which provides medical care under the Vermont Emergency Medical Services system. The Fast Squad works in conjunction with the Montpelier Ambulance Service, which provides emergency transportation within the Town's boundaries. The FAST Squad responded to 21 calls in 2015. In regards to law enforcement, the Vermont State Police provide first response support and the Washington County Sheriff monitors the speed of traffic on Worcester's major thoroughfare.

The Town of Worcester has an approved Local Emergency Operations Plan (LEOP), (formerly known as the Rapid Response Plan), that is updated and adopted annually. The current LEOP was adopted on April 16, 2018. The town coordinates with the Central Vermont Regional Planning Commission who provides technical support and guidance with the plan update. The town requires the certifying officer to be trained in ICS 402 or ICS 100 at a minimum. It is the policy of the town to have the Chair of the Select board serve as the Emergency Management Director (EMD). In conjunction with the LEOP, on May 21, 2012 the town adopted the use of the National Incident Management System (NIMS) as the standard for management and systematic approach involving all threats and hazards, regardless of cause, size, location, or complexity, in order to reduce loss of life, property, and harm to the environment.

The town has a Source Protection Plan for the Worcester Fire District #1 last updated October 2016. In addition to the water supply, there are 8 dry hydrants installed using grant funding from the Rural Resources Water Supply Grant program of the Vermont Association of Conservation Districts. The development of one dry hydrant off the Norton Road is desired to complete the rural water suppression system in the community. Accessing grant funding will be necessary to complete this.

The Doty Memorial School follows the Vermont School Crisis Guide and has an Emergency Evacuation Plan in place. Drills are performed on a regular basis. The current school principal is Matt Young.

The Town Plan was adopted in 2007 and has expired. The Worcester Planning Commission is actively in the process of updating and revising the current Plan. A draft Town Plan was prepared in 2017 and continues to be finalized. The Town Plan "is designed to promote the health, safety, and welfare of Worcester residents; to prevent overcrowding of land and foster its wise and sound use; to avoid undue concentrations of population, industry, and commercial activity; and to facilitate the adequate provision of transportation, water, waste disposal, schools, recreational area and other public needs." (2007 Town Plan) The 2007 Town Plan includes a description, discussion, goals, and policies in regards to land resources, utilities, facilities and services, transportation, energy, housing, economics, and the village, rural and forest districts. The Town Plan specifically encourages the development of a local hazard mitigation plan under the Emergency/Health Services policies section stating, "The Worcester Planning Commission highly encourages the Town to coordinate with state and Regional Planning Commission efforts to develop a local All Hazards Mitigation Plan in conjunction with state and federal requirements so as to become eligible for federal and state disaster mitigation funds and grants under Hazard Mitigation Assistance." By updating the 2012 LHMP with this Plan, Worcester continues to meet the goals and priorities of the Town Plan. The Town does not have a zoning by-law, but has adopted a Flood Hazard Bylaw (updated in 2010). Worcester will incorporate the goals and objectives of this local hazard mitigation plan and the Flood Hazard Bylaw into the Town Plan update and vis versa when this plan is again updated.

Worcester is eligible under the Vermont Emergency Relief and Assistance Fund (ERAF) to receive state funding to match Federal Public Assistance funds after a federally declared disaster. Communities that take specific steps to reduce flood damage can increase the percentage of state funding they receive from 7.5% up to a maximum of 17.5%. At the time of this Plan development, Worcester has an ERAF rating of 17.5%. Worcester has taken the specific steps to reduce flood damage by 1) participating in the National Flood Insurance Program, 2) adopting standards that meet or exceed the current Vermont Roads and Bridge Standards, 3) adopting a Local Emergency Operations Plan which is renewed and adopted annually, 4) adopting a Local Hazard Mitigation Plan approved by FEMA, and 5) adopting Interim River Corridor protection standards (River Corridor Plan criteria).

In order to maintain the 17.5 % rating, Worcester will need to adopt river corridor standards that meet the Agency of Natural Resources (ANR) criteria within two years of ANR publishing a statewide river corridor map updated to include existing Phase 2 Stream Geomorphic Assessment (SGA) data. The data release, expected to occur at the end of 2016, has been delayed and the agency has not announced a new release date. The other option to qualify for the maximum ERAF rate is for Worcester to enroll in the NFIP Community Rating System (CRS) and adopt a bylaw that prohibits new structures in the Flood Hazard Area.

Once the Phase II River Corridor data is released by the State of Vermont, Worcester plans to begin the process of updating the Flood Hazard Bylaw and explore the adoption of a River Corridor Ordinance. The Central Vermont Regional Planning Commission is posed to assist with this effort once the data is released by the state. Worcester participates in the National Flood Insurance Program and enrolled 4/3/1978. There are no repetitive loss properties in Worcester. The current effective map date (FIRM date) is 3/19/2013.

Much of the work of town government is accomplished by local volunteers. Worcester is governed by an elected, three member Select board. The Select board is responsible for the general supervision of Town affairs. Among its duties are the enactment of local ordinances, the preparation of an annual budget, the board of Health and Liquor Control, the maintenance of Town roads, real estate and equipment; the appointment of all non-elected positions, and the hiring of all Town employees except the Assistant Town Clerk/Treasurer (Judith A. Knapp). The Town also has an appointed Road Commissioner (Brian Powers), Fire Warden (Steve Land), Health Officer (Ted Lamb), and an active three member Planning Commission. Town Clerk/ Treasurer Katie Winkeljohn, maintains regular town office hours Monday through Thursday. A complete listing of Town officials (elected and appointed is found in the Attachments).

Elected Lister's (Richard Christopher Lyon, Peter Strobridge, and Alan Edrossy) track and assess property values in Town. Worcester, as all Vermont towns, relies almost solely on the local property tax base and state aid to fund town government- including town offices and facilities, schools and local roads. The Town's property tax also supports local fire and rescue services through annual appropriations. The Town doesn't have the ability to expand its resources. Worcester is an active member of the Central Vermont Regional Planning Commission and the 23-town Local Emergency Planning Committee #5.

4. Planning Process and Maintenance

4.1 Planning Process

The Central Vermont Regional Planning Commission (CVRPC) assisted the town with their Worcester Hazard Mitigation Plan update process. In early February of 2016, CVRPC Senior Transportation Planner Steve Gladczuk contacted the Town Select Board Chair, Roger Strobridge, and sent him Town specific mitigation materials for his review. A kick off meeting was held on March 21, 2016 between Senior Transportation Planner Steve Gladczuk and the Select board. This was a public meeting which was posted on the Town's website, CVPRC website, and three other places. Robert Strobridge, Cheri Goldstein, Ted Lamb, and Steve Gladzcuk, plus three other individuals from the public. Steve Gladzcuk outlined the steps the Select Board needed to take in order to update and adopt the Hazard Mitigation Plan.

After assessing the material, an initial first draft was developed and Mr. Strobridge and CVRPC staff met with members of the Select board at a second public meeting held on July 18, 2016. Input from the Select board members (Roger Strobridge, Ted Lamb, and Cheri Goldstein), Planning Commission Chair Bill Arrand, Road Commissioner Brian Powers, Fire Chief Will Sutton, and Town Clerk Katie Winkeljohn was collected for incorporation into the draft plan update. After the July 18th meeting, notice of the initial draft plan update was made available on the CVRPC blog and copies of the updated draft plan were available at the Worcester Municipal or CVRPC offices for review and comments. NO comments on this initial draft were received.

In June of 2016, CVRPC GIS Planner, Ashley Andrews, CVRPC Emergency Management Planner L. Ranker, and Senior Transportation Planner Steve Gladczuk worked with the Town on the Transportation Vulnerability Assessment. A meeting with the Town Road Commissioner Brian Powers took place later that month to review the computer generated Transportation Vulnerability Assessment Map prior to CVRPC staff field verifying the data. Critical infrastructure and hazardous sites were reviewed and priority areas identified. Data included identification of adequate and undersized culverts and bridges; road modifications for areas with low spots or high spots; identification of areas with steep slopes; and road alterations required to improve drainage such as ditches, swales, and cross bars. Later that month CVRPC staff A. Andrews, L. Ranker, and S. Gladczuk drove all the roads in Worcester to field verify the vulnerable assessment data and prioritize vulnerable sites and those at risk. Photos and notations were made. A. Andrews updated the maps generated to reflect on the ground conditions and identify priority sites which were then delivered to the Town of Worcester planning team with the accompanying photos and list of priority sites. This vulnerability assessment information was considered in updating this Plan. See attachment for this map.

CVRPC experienced significant changes in staffing with the medical leave in late summer 2016 and then passing on January 4, 2017 of Steve Gladczuk, Senior Transportation Planner. CVRPC reached out to the Town Clerk and arrangements were made to schedule a status meeting with the Select board prior to submitting the final draft to VEM and FEMA. A status meeting was called and scheduled for a Select board meeting on November 21, 2016. Those in attendance were members of the Select board (Chair

Roger Strobridge, Cheri Goldstein, and Ted Lamb), Fire Chief (Mark "Will" Sutton), Town Clerk (Katie Winkeljohn), CVRPC staff (Laura Ranker, EM Planner and Ashely Andrews, GIS Planner) and members of the public. CVRPC was directed to make edits to the plan based on input gathered at this meeting and then present an updated draft of the plan at the February 6, 2017 meeting of the Select board. During the meeting the Select board reviewed The North Branch Corridor Plan recommendations found in the study. Due to the nature of the recommendations requiring easements from private land owners, ease of access and land ownership, the Town decided they don't have the resources to implement recommendations in this Plan update. A final draft plan was presented to the Board of Selectmen on February 21, 2017. The Town Clerk then posted the final draft plan at the Worcester Town Offices, on Front Porch Forum, and on the Worcester Town website for public comment. A copy was also sent to Matt Young, Principal of the Doty Memorial School. The Worcester town website is also linked to the CVRPC website increasing the potential for distribution and the draft plan was posted on the CVRCP website. Front Porch Forum and the town website reach over 500 active subscribers. Copies of the plan were also distributed and made available to the town clerks of all the adjoining municipalities, LEPC #5, and the Agency of Natural Resources Certified Flood Plan Manager, Rob Evans, CVRPC requested comments back by email. The specific Town Clerks are: Calais- Donna Fitch Calais.townclerk@gmail.com; Elmore- Sharon Draper sdraper@elmorevt.org; East Montpelier- Terri Conti eastmonttct@comcast.net; Middlesex- Sarah Merriman middlesxtwnclrk@comcast.net; Morristown- Mary Ann Wilson mawilson@morristownvt.org; Stowe- Alison Kaiser townclerk@townofstowevermont.org; Waterbury- Carla Lawrence clawrence@waterburyvt.com; and Woodbury- Diana Peduzzi woodburyclerk@comcast.net.

CVRPC received public comment on March 15, 2017 from one Worcester businessman and homeowner. The comments were incorporated into the plan as applicable. No further comments have been received. A final draft Plan was submitted to Stephanie Smith at VEM in March 2017. This started the review and adoption process with VEM and FEMA.

In the future, the plan may also be shared at informal meetings between local, regional and state officials. Comments will be reviewed by the Select Board and CVRPC Planners until the plan is submitted to FEMA for "Approval Pending Adoption." Public comments submitted will be reviewed by the Select Board Chair (and CVRPC Staff dependent on funding) and attached as an appendix. In the future, the draft plan will be made available during Town Meeting Day and local meetings with State and local officials to allow for more public comment and review. Once the plan is conditionally approved by FEMA, the plan will go before the Select Board for adoption.

Upon FEMA written notice of FEMA Approval Pending Adoption, the Select board will hold a warned Public hearing on a date to be determined, to get public comment on the final Plan. Following the warned Public Hearing, the Worcester Select board will hold a regular warned public Select board meeting to approve and adopted the hazard mitigation plan by resolution. Upon adoption, the Select board will submit the adopted plan and signed certification to VEM/FEMA for issuance of the final Plan approval letter from FEMA. This Plan will expire 5 years from the date of final FEMA approval.

Preparation for the plan review meetings included a review of the Worcester Town Plan, Worcester Local Emergency Operations Plan, 2015 Worcester Town Report, Phase 1 Stream Assessment of the North Branch of the Winooski River, North Branch Corridor Plan, the 2016/2017 Highway Equipment Schedule and the Fire Department Equipment Schedule, the 2008 Worcester Purchasing policy, the 2010 Worcester Flood Hazard Bylaw, Vermont State Hazard Mitigation Plan Nov. 2013, and Vermont State Forest Management Plan. The Worcester Hazard Mitigation Meetings focused on assessing past mitigation projects and compiling information on its current and future hazard mitigation programs, projects and activities.

Worcester hazard mitigation planning group included the following persons:

- Roger Strobridge, Worcester Select Board Chair and past EMD
- Cheri Goldstein, Worcester Select Board
- Ted Lamb, Worcester Select Board and current EMD
- William Arrand, Worcester Planning Commission Chair
- Brian Powers, Worcester Road Commissioner
- Mark "Will" Sutton, Worcester Fire Chief
- Matt Young, Principal Doty Memorial School
- Katie Winkeljohn, Town Clerk
- CVRPC Staff: Steve Gladczuk, Senior Transportation Planner, Laura Ranker, Emergency Management Planner, and Ashley Andrews, GIS Planner.

During the planning process, the town identified its most vulnerable hazards; flash floods, floods/fluvial erosion, wildfire/forest fire, and school safety issues. Wildfire and Flash Flooding are new hazards.

4.2 Plan Update Process

The Worcester Local Hazard Mitigation Plan was originally adopted by the Town as an Annex to the Central Vermont Regional Local Hazard Mitigation Plan in October 2005 and received FEMA final approval in January 2006. In 2011, Worcester updated its plan as a standalone Local Hazard Mitigation Plan which was adopted by the Select board on November 21, 2011 and received FEMA approval on March 12, 2012. This Plan is an update to the March 2012 FEMA approved plan.

This Plan reflects changes from the 2012 plan related to the town's vulnerabilities to hazards and how Worcester addresses them based on changes in priorities and the effects of the implementation of past mitigation actions and strategies. The implementation of mitigation actions over the past five years, some not listed because the town considers them to be regular maintenance and program implementation measures, have reduced the town's vulnerability to specific hazards. Worcester has benefitted from the collaborative approach to achieving mitigation on the local level, by partnering with Agency of Natural Resources (ANR), Vermont Agency of Transportation (VTrans), Agency of Commerce and Community Development (ACCD), Vermont Emergency Management, Central Vermont Regional Planning Commission (CVRPC), Federal Emergency Management Administration (FEMA) Region 1 and other agencies, all working together to provide assistance and resources to pursuing mitigation projects and planning initiatives in Worcester.

The entire plan was updated in this update process.

General Updates

- General reorganization/restructuring of the plan according to future FEMA/VEM checklist
- Update of all data and statistics using the 2015 Town Report and US Census Data
- Reevaluation, identification and analysis of all significant hazards identified from the 2011 Plan, including flash flooding and forest fires.
- Acknowledgement of implemented mitigation strategies since 2011 – see matrix below
- Identification of on-going mitigation projects and strategies – see Existing Mitigation Programs, Projects and Activities section
- Identification of new mitigation projects and strategies – see Hazard Mitigation Activity matrix in appendix.
- Update of all hazard data and historical records since 2011 to present day.
- Consideration of changes in development in the community and in development regulations.

Hazard Analysis

- New hazards added - Forest Fire & Flash Flooding
- Added location/vulnerability/extent/impact/likelihood table for each hazard to summarize hazard description
- Review of current forest map to identify camps and other areas which are at risk of forest fire
- Review of information on State Forest website and 2010 State Forest Management Plan
- Review of Phase I North Branch Assessment, March 31, 2007 – new information included in flood/flash flood sections
- Review of North Branch Corridor Plan, 2009, – new information included in flood/flash flood and mitigation activities sections
- References to North Branch Corridor Plan 2009 for future flood/flash flood mitigation projects
- Updated federal declarations in flooding/flash flooding occurrences

Maps

- Review of 2011 Plan maps - added which combines the Hazard Analysis and Areas of Local Concern Maps in the Hazard Analysis Map. The information is still relevant.
- A Transportation Risk Analysis Map (aka Vulnerability Assessment Map).

No changes were made to the section pertaining to School Safety.

2006-2011 Mitigation Action	2018 Status
Improving drainage within Town and construct controls to prevent contact with water/floating debris	Major fixes on Calais Rd. and Brown Rd. bridges. Major roadwork done on Frazier Rd., Kimball Rd., Norton Rd. 7 others roads have had hydraulic studies and fixes performed. Ditching Program implemented on Hampshire Hill, Norton Road and Gould Hill. This work is completed
Develop a post-flood clean up, decontamination, and recovery procedure/plan	Select Board still interested – not yet performed due to lack of funding and town capacity.

Remove structures from risk nearest to Minister Brook	Strategy outlined in North Branch Corridor Plan – has not yet been performed due to lack of funding and town capacity
Develop and implement an education program for residents and property owners of flood risk and mitigation activities/programs	Started by creating 2010 flood hazard bylaws.
"Harden" utility services within the town through the replacement/burying of above-grade utility services and strengthening utility poles/conductor fixtures	Ongoing upgrades of utility poles by both Green Mountain Power and Washington Electric Cooperative; Select Board is still interested in project, but has not happened due to lack of funds
Conduct a tree removal/tree trimming program	Taken care of by road crew as part of regular Town maintenance program, but not formally organized with a set schedule or plan. Brush cutting also performed in right-of-ways. Road foreman is still interested in program.
Conduct an engineering study on the Town's wind vulnerability	Will no longer be considered due to lack of interested parties.

Existing Mitigation Programs, Projects and Activities

The Town of Worcester is currently engaged in the following ongoing or recently completed programs, projects and activities that are listed by mitigation strategy and were reviewed during the update process. They share and incorporate the overall goals of the local hazard mitigation plan. Worcester has the capacity to maintain these programs and initiatives using the staff and volunteers described in the Community Profile. Unless otherwise noted, there is no need to expand or improve on these programs, projects and activities.

It is important to note, there is an increasing need to spend more time with administrative duties of the Road Commissioner. This is in part due to new requirements and regulations the Town is subject to from Act 64 (the Clean Water Act) and the need of the Town to secure funding from both non–emergency and emergency grants which help to increase their capacity for implementation of mitigation strategies and actions.

Community Preparedness Activities

- Current Local Emergency Operations Plan adopted 4/16/18 and renewed annually. No need to expand or change process
- Worcester Fire District #1 Source Protection Plan 10/2016. Recently updated, no need to expand or change process
- Doty Memorial School Emergency Evacuation Plan. Reviewed and adopted annually. No need to expand or change process.
- Appointment of a Town Fire Warden to serve a five year term. Steven Lang currently serves as Fire Warden, no further action needed.

Hazard Control & Protective Works

- Maintenance Programs (Culvert Survey & Replacement), last completed 2015. Updated every three to five years. No need to expand or change the process.

- Participant in the Capital Mutual Aid System, ongoing and no need to expand or change the process.
- Capital Equipment Plan and Replacement Schedule. This requires annual review and approval. Funding from Town budget. Process is satisfactory and there is no need to expand or improve program/policy.
- School disaster/emergency/evacuation plans, reviewed and adopted annually. No need to expand or change process.

Insurance Programs

- Participation in NFIP. Worcester participates in the NFIP since 4/3/1978. It has adopted Flood Hazard regulations (lasted updated in 2010) and enforces the regulations. It uses the most recent FEMA FIRMs for Worcester in Washington County, VT. Katie Winklejohn, Town Clerk serves as the NFIP administrator. Assistance is provided from ANR and CVRPC as requested. Funding from Town Budget. The Towns current Flood Insurance Rate Map was updated effective 3/19/2013. No need for expansion or improvement.

- Vermont League of Cities and Towns Liability and Insurance Program, ongoing. No need for expansion or improvement.

Land use Planning/Management

- Flood Hazard Bylaw 2010
- Municipal Plan, 2007, currently under review and update process. Town Planning Commission is actively working on revising and updating Town Plan with support from CVRPC. Town Plan needs to be completed for review and adoption by Town.
- Local Hazard Mitigation Plan, reviewed annually and updated and adopted every five years through VEM/FEMA approval process. Plan is currently under review for FEMA approval and adoption by Select board. No need to change process.

Protection/Retrofit of Infrastructure and Critical Facilities

- Town Complex backup generator
- Dry Hydrant Program, ongoing dependent upon funding grants (8 completed, 1 more to add)
- Worcester Purchasing Policy adopted 2008 (follows VLCT model) No need to change process.
- Major fixes on Calais Rd. and Brown Rd. bridges.
- Major roadwork done on Frazier Rd., Kimball Rd., Norton Rd.
- 7 others roads have had hydraulic studies and fixes performed.
- Ditching Program implemented on Hampshire Hill, Norton Road and Gould Hill.

Public Awareness, Training & Education

- Fire safety educational programs for town residents
- CPR & Hazmat Trainings
- School Fire Awareness Week
- FAST Squad

4.3 Plan Maintenance Process

The Worcester Local Hazard Mitigation Plan is updated and evaluated annually at an April Select Board meeting along with the review of the Local Emergency Operations Plan. An annual report on the process of the implementation elements of the Plan and progress made on reaching the goals of this plan will be presented to the Select board by the Emergency Management Director or Coordinator. Updates and evaluation by the Select Board will also occur within three months after every federal disaster declaration that affects Worcester and as updates to Town Plan and river corridor plans come into effect. This Plan will be reviewed by the Select Board, Planning Commission, Emergency Management Committee, and public at the above mentioned April Select Board meeting. An annual report on the process of the implementation elements of the Plan will be presented to the Select Board by the Emergency Management Director or Coordinator.

The process of evaluating and updating the plan will include continued public participation through public notices posted on the municipal website, notice in the municipal building, the Times-Argus, Front Porch Forum and CVRPC newsletter inviting the public to the scheduled Select Board (or specially scheduled) meetings. Additional stakeholders invited to the meeting will be a representative from the Doty Memorial School. Also invited in the future will be the VT Agency of Natural Resources (VT ANR), as they are able to provide assistance with NFIP outreach activities, models for floodplain zoning regulations, delineation of fluvial erosion hazard areas, and other applicable initiatives. These efforts will be coordinated by the Select Board.

Monitoring of plan progress, implementation, and the five-year update process, will be undertaken by the Select Board in conjunction with the Road Commissioner, and the Emergency Management Committee. The Select Board will discuss the Plan maintenance activities. Monitoring updates may include changes in community mitigation strategies; zoning and planning strategies; progress of implementation of initiatives and projects; effectiveness of implemented projects or initiatives; and evaluation of challenges, priorities, and opportunities. If new actions are identified in the five year interim period, the plan can be amended without formal re-adoption during regularly scheduled Select Board meetings. After a five year period, the plan will be submitted for re-adoption following the process outlined the schematic found in the Attachments section. In order to maintain a current up to date unexpired plan, within one year of this plan expiration data, the plan update process with FEMA should begin. The Town of Worcester is responsible for the update and maintenance of this Plan.

Worcester shall also incorporate mitigation planning into their long term land use and development planning documents. It is recommended the Town review and incorporate elements of the Local Hazard Mitigation Plan when updating the Town Plan, and flood hazard/FEH bylaws and when considering the development and adoption of river corridor regulations, zoning regulations, storm water management or road plans. The incorporation of the Local Hazard Mitigation Plan into these planning tools will also be considered after declared or local disasters. The Town shall also consider reviewing future North Branch Corridor planning documents for ideas on future mitigation projects and hazard areas as town capacity, funding, and political will dictate. The Town may consider reviewing any future CVRPC planning documents and studies for ideas on future mitigation projects and hazard areas.

In 2013, the Vermont Legislature passed a law requiring all towns to incorporate a flood resiliency element into their municipal/town plan as of July 2014. As part of meeting this requirement, Worcester will identify flood hazard and fluvial erosion hazards, strategies, and recommendations to mitigate risks to public safety, critical infrastructure, historic structures, and public investments. This Plan will help Worcester comply with the new community flood resilience requirements for Town Plans adopted after July 2014 and will assist the Planning Commission in their work as they update the 2007 Worcester Town Plan.

5. Community Vulnerability by Hazard

5.1 Hazard Identification and Analysis

- The team identified terrorism, nuclear power plant, infectious disease, drought, ice jams, rockcuts, invasive species, expansive soils, sea level rise, storm surge, subsidence, tsunami, avalanche, earthquakes, extreme heat, landslide/ debris flow, structure fire, tornados, and hurricanes as a low probability of occurrence and low impact. Accordingly, and due to a lack of resources and capacity at the town, these hazards will not be discussed in detail in this plan. Hazards not identified as a "worst threat" may still occur. Greater explanations and mitigation strategies of these threat hazards can be found in the State of Vermont's Hazard Mitigation Plan. Like the State of Vermont Hazard Mitigation Plan, Worcester did not include the following hazards in the risk and vulnerability assessment due to the low occurrence, low vulnerability, and or geographic proximity: civil disturbance, coastal erosion, expansive soils, karst topography, sinkholes, tsunami, and volcano.

In determining the likelihood of a hazard happening in Worcester the following method was used:

--High likelihood of happening: Near 100% probability in the next year

--Medium likelihood of happening: 10% to 100% probability in the next year or at least once in the next 10 years.

--Low likelihood of happening: 1% to 10% probability in the next year or at least once in the next 100 years.

In determining the community vulnerability to a hazard in Worcester the following method was used:

--Does the hazard present the threat of disaster (Yes)?

--Or is it just a routine emergency (No)?

The following natural disasters were discussed and the top priority hazards were identified based upon the likelihood of the event and the community's vulnerability to the event. The Hazard Assessment Table reflects the hazards Worcester feels can be expected, or at least are possible, to occur in Town.

Hazard Identification Table.

Hazard			Worst Threat

	Likelihood [1]	Community Vulnerability[2]	
Avalanche/ Landslide	Low	No	X
Dam Failures	Low	No	X
Drought	Low	No	X
Earthquake	Low	No	X
Extreme Cold/Winter Storm/Ice Storm	Med	No	X
Flash Flood	Med	Yes	✓
Flood/Fluvial Erosion	Med	Yes	✓
High Wind	Low	No	X
Ice Jam	Low	No	X
Hurricane	Low	No	X
Structure Fire	Med	No	X
Tornado	Low	No	X
Water Supply Contamination	Low	No	X
Wildfire/Forest Fire	Med	Yes	✓
Other – School Safety	Low	Yes	✓

Just because the town has not identified a hazard as a top priority or significant threat, does not mean the hazard will not occur in the future, they are just not the focus of this Plan.

The Town of Worcester identified the following disasters as presenting the worst threat to the community:

- Flooding/Fluvial Erosion
- Flash Flooding
- Wildfire/Forest Fire
- School Safety Issues

The Town is interested in focusing a majority of mitigation efforts into reducing impacts from floods, fluvial erosion, and flash floods, as the events occur most frequently, severely and cause the most damage to public and private infrastructure.

Moderate threat hazards include:

- Extreme Cold/Winter Storm/Ice Storm
- Structure Fire

Other Hazards with Low Likelihood, and Low Community Vulnerability considered are:

- Terrorism
- Nuclear Power Plant
- Infectious Disease

- Severe Thunder Storms
- Hail
- Drought
- Ice Jams
- Rockcuts
- Invasive Species
- Extreme Temperatures
- Expansive Soils
- Lightning
- Sea Level Rise
- Storm Surge
- Subsidence
- Tsunami
- Avalanche
- Earthquakes
- Landslide/ debris flow
- Structure fire
- Tornadoes
- Hurricanes

The other hazards listed directly above were not addressed in this planning process due to their low likelihood, low community vulnerability and a lack of resources to address all hazards.

A discussion of each significant hazard is included in the proceeding subsections and a map identifying the location of each hazard is attached (See map titled Hazard Analysis.) Each subsection includes a list of past occurrences based upon County-wide FEMA Disaster Declarations (DR-#) if available, plus information from local records, a narrative description of the hazard and a hazard matrix containing the following overview information:

Hazard	Location	Vulnerability	Impact	Likelihood
Type of hazard	General areas within municipality which are vulnerable to the identified hazard.	Types of structures impacted	**Minimal:** Limited and scattered property damage; no damage to public infrastructure contained geographic area (i.e., 1 or 2 communities); essential services (utilities, hospitals, schools, etc.) not interrupted; no injuries or fatalities. **Moderate**: Scattered major property damage (more than 50% destroyed); some minor infrastructure damage; wider geographic area (several communities) essential services are briefly interrupted; some injuries and/or fatalities. **Severe:** Consistent major property damage; major damage to public infrastructure (up to several days for repairs); essential services	**High**: near 100% probability within the next year. **Medium:** less than 10% to 100% probability within the within the next year or less than once in the next 10 years. **Low:** 1% to 10% probability in the next year or at least once in the next 100 years.

			are interrupted from several hours to several days; many injuries and fatalities.	

5.2 Worst Threat Hazards

A. FLOODING/FLUVIAL EROSION & FLASH FLOODING

Flood- An overflowing of a large amount of water beyond its normal confines **(rivers, streams, drains and lakes),** especially over what is normally dry land **due to excessive rain, rapid snow melt or ice.**

Fluvial Erosion- Fluvial processes include the motion of sediment and erosion or deposition on the river bed. Fluvial erosion processes occur more quickly and severely during flood events. Fluvial erosion extent data is not available for Worcester.

Flash Flooding- (see Flood) flash flooding is a rapidly occurring flood event usually from excessive rain.

History of Occurrences (within Central Vermont, town specific data not available): need to update with recent history of flooding. There hasn't been any documented flooding since 2014.

Date	Event	Location	Extent
6/11/2014	Flooding	Washington County	Montpelier flood gauge at N.A.
8/2/2013	Flooding	Washington County	Montpelier flood gauge at 4.23 feet
11/8/2011	Flooding	Washington County	Montpelier flood gauge at 4.05 feet DR 4043
8/28/2011	Flood/Tropical Storm	Statewide	Winooski Flood gauge knocked out – above 423.3 feet (flood stage is 419 feet) – DR 4022
5/27/2011	Flood	Washington County	Winooski flood gauge at 423.3 feet DR 4001
4/11/2011	Flood	Washington County	2-4" of rain and heavy snowmelt, Winooski flood gauge at 421.0 feet DR 1995
8/2/2008	Flash Flood	Washington County	3-5" of rain, not a historical crest in Montpelier
7/11/2007	Flash Flood	Washington County	3-6" of rain in 2 hrs – DR 1715, not a historical crest in Montpelier

6/26/2006	Flood	Washington County	3-4" of rain, not a historical crest in Montpelier
9/16/1999	Tropical Storm Floyd	County Wide	Montpelier flood gauge at 9.30 feet, 5-7" rain county wide DR 1307
6/17/1998	Flash Flood	County Wide	3-6" of rain over 2 day period - DR 1228, not a historical crest in Montpelier
8/5/1976	Flood	County Wide	Montpelier flood gauge at 12.31 feet – DR 518
6/30/1973	Flood	County Wide	Montpelier gauge at 17.55 ft DR 397
9/22/1938	Flood/Hurricane	County Wide	Montpelier flood gauge at 14.11 feet
11/03/1927	Flood	County Wide	Montpelier flood gauge at 27.10 feet

The most prominent body of water within Worcester is the North Branch of the Winooski River, which originates in Elmore and flows in a southerly direction along Vermont Route 12, finally converging with the Winooski in the City of Montpelier. Several streams originating in Worcester's upland areas converge with the North Branch in the Worcester Valley. Flowing east from the Worcester Range are Minister, Hancock and Catamount Brooks. From the eastern hills flow the Hardwood, Worcester and Russ Pond Brooks.

Two studies have been conducted on the North Branch of the Winooski River and associated tributaries (Minister Brook, Worcester Brook, Hancock Brook, Catamount Brook and Harwood Brook) located in Worcester. The first study is a Phase I Stream Geomorphic Assessment done in 2009. The second 2009 study is the North Branch Corridor Plan which evaluates the condition of the North Branch and larger tributaries and identifies and prioritizes 92 projects to remediate the river. Of these 92 projects, more than half are recommended along the stretches in Worcester. The Corridor Report identifies numerous stretches of the river that are in fair and poor condition due to road or field encroachment on floodplains or banks, highly incised reaches, and increased loads and flows due to surrounding land use activities. Table 33 of the North Branch Corridor Report summarizes all potential projects and their benefits. It would be advisable for the Town of Worcester to begin performing some of the high priority projects in Worcester's stretch of the river corridor to restore the river's health and prevent future flooding events and reduce fluvial erosion. However, implementation is dependent upon identifying viable funding sources and grant awards. In addition, many identified projects involve private property and will require the cooperation and commitment of the private landowner. A matrix of prioritized projects and related maps are attached as an appendix for the Town to reference and to help guide, direct and prioritize future mitigation projects. Fluvial erosion extent data is not available for Worcester.

The roads and fields most impacted by these waters are the Minister Brook Road, Jim Dawson's field, Downs Road, and "the ledges" and field along Route 12 near the southern loop of the North Branch (see

Areas of Local Concern map.) Additional maps of impacted areas and potential future restoration projects can be found in the North Branch Corridor Study.

According to the National Flood Insurance Program, Worcester has 5 structures and 99 properties located within the designated 100-year floodplain. The total loss value for floodplain properties is $18,324,900 based on the median property value of the grand list. There are no recurring loss properties in Worcester, and no critical facilities in the floodplain. As previous events have made clear, even areas beyond the NFIP designated 100-year floodplain may be vulnerable to flood related hazards. Channel adjustments with devastating consequences have frequently been documented wherein such adjustments are linked to historical channel management activities, floodplain encroachments, adjacent land use practices and/or changes in watershed hydrology associated with conversion of land cover and drainage activities, within and beyond the NFIP floodplain. There are no future residential or commercial developments planned within floodplain areas. Flood bylaws enacted in 2010 also limit development in flood prone areas. It is important to note that Vermont has experienced a majority of their flooding in areas along upland streams and in road drainage systems that do not adequately convey the amount of water they are receiving. Flooding in these areas should be expected and planned for. The National Weather Service has seen a trend in recent years of more intense, locally severe storms with high intensity rain and flooding associated with them. Worcester has experienced the damage caused by these severe storms.

The Hazard Analysis Map (attached) identifies the Worcester Methodist Church, Doty Memorial School, Fire House, and other government buildings to be outside the designated flood plain, but near the river. The attached Transportation Risk Analysis map highlights 11 stretches of road or bridges that have experienced either flood-induced washouts and/or significant fluvial erosion.

Within the past 5 years, there have been ongoing road maintenance and repair projects to help mitigate past and help prevent future flooding in Worcester. Route 12 by the North Hancock Brook was rebuilt in summer 2010. Crushed rock for improved drainage and erosion prevention has been placed in several areas – Collar Hill, Gould Hill, Hampshire Hill and Frazier Road off West Hill. In 2007, a flooding event occurred on Brown Road which caused $88,000 worth of damages that the town spent to repair the road.

Hazard	Location	Vulnerability	Impact	Likelihood
Flooding	Route 12, Downs Road, Minister Brook Road, Brown Rd. 327 acres in flood plain, 391 acres in FEH zone	Municipal infrastructure – bridges, culverts transportation routes along North Branch, Minister Brook, and Worcester Brook.	$18, 324,900- possible floodplain damages; $88,000 from 2007 event; continuous funding from general maintenance activities	Medium

B. FLASH FLOODING

Flash Flooding–A sudden local flood, typically due to heavy rain.

History of Occurrences (within Central Vermont, town specific data not available. See above Table):

According to FEMA, floods are one of the most common hazards in the United States; this is also the case in Worcester. Flooding occurs when rapidly rising water inundates an area beyond the body of water's normal or accepted channel or basin. Floods can affect a neighborhood, a community or an entire river basin and it should be noted not all floods are alike. Some floods develop slowly over a period of days due to rain fall or snowmelt; others can develop quickly due to a sudden rain burst and are commonly referred to as flash floods.

According to the State of Vermont Hazard Mitigation Plan, updated November 2013, "recent studies have shown most flooding in Vermont occurs in upland streams and road drainage systems that fail to handle the amount of water they receive. Due to steep gradients, flooding may inundate these areas severely, but only briefly." Flash flooding in Worcester most often occurs in areas where tree roots and branches block the path of the water. These areas are located along Downs Road and Minister Brook Road where tree growth is close to the edge of the waters. The town flooding bylaw follows the NFIP minimum guidelines to limit flooding of structures nearby.

The North Branch Corridor Plan identifies several areas in Worcester where roads/field encroach the river's floodplain. Also identified in the Plan are structures which constrict the flow of the River and Minister Brook. Minister Brook has 2 private undersized structures over it which constricts the flow of the brook. These structures are located between Route 12 and Minister Brook Rd. Several berms along the Brook also limit access to the floodplain. Similar conditions are occurring on the Worcester Brook as well. Table 33 in the North Branch Corridor Plan outlines remediation actions for each stretch of the North Branch and its tributaries. It would be advisable for Worcester to implement high priority projects to reduce future impacts of flooding and restore the overall health of the North Branch. However, implementation is dependent upon identifying viable funding sources and grant awards as well as garnering cooperation and commitment from the private landowners.

Hazard	Location	Vulnerability	Impact	Likelihood
Flash Flood	Along North Branch, Upper Minister Brook, Worcester Brook, Downs Road 327 acres in flood plain, 391 acres in FEH zone	Municipal infrastructure, private property transportation routes, undersized culverts and bridges	$88,000 - 2007 event; continuous funding from general maintenance activities	Medium

C. WILDFIRE/FOREST FIRE

Wildfire/ Forest Fire -A large, destructive fire that spreads quickly over woodland or brush.

FEMA indicates there are three classes of wild land fires – surface fires, ground fires and crown fires, with the most common type indicated as a surface fire. Surface fires burn slowly along the forest floor, killing and damaging trees. Ground fires burn on or below the forest floor and are usually caused by lightning. Crown fires move quickly by jumping along the tops of trees. Crown fires can spread quickly during windy conditions.

C.C. Putnam State Forest is approximately 13,000 acres and covers roughly 1/3 of the western portion of Worcester and is shown as conserved land on the attached Hazard Analysis Map. This forest is located in the Worcester Range and spans across 5 adjoining towns. The protection of C.C. Putnam State Forest is essential in protecting the water quality of the region as it is located in the headwaters of the Winooski watershed.

According to the Vermont Forest Parks and Recreation, burning debris is the most common cause of wildfires in Vermont. In Vermont, wildfires are most prevalent in the spring and late summer and early fall when conditions are most favorable. Drought conditions also increase the threat of wildfires. The State of Vermont does have a Forest Management plan in place which addresses forest fire concerns. The 2010 State Forest Management Plan includes several goals regarding forest fire prevention. The Plan states that although the risk of forest fire is low in the State of Vermont, that the State still performs controlled burns on a small scale during the spring season. To help prevent local forest fires, the State works with local planning commissions to develop Community Wildlife Protection Plans. These plans help towns to identify and mitigate wildfire risk. A common mitigation measure prescribed in the plan is through controlled burns with onsite State support.

The Forest Division also runs the Town Forest Fire Warden program. This program requires towns to have appointed fire wardens. In Worcester, the Fire Warden is Steven Lang. The forest fire program focuses on prevention, fire awareness and fire fighter safety.

The Town Forest Fire Warden program is the backbone of the wild land fire program in Vermont. When the town forest fire warden system started, Vermont was mostly rural and roughly 40% forested. Agriculture and logging were the primary industries. Thousands of acres of forested land, often recently logged, burned annually due to remote, contiguous forest stands primarily consisting of softwoods, unregulated logging practices, lack of early detection and quick response, and little knowledge of safe burning practices. A particularly devastating fire season in 1903 (which was when the Worcester Mountain burned) prompted the Vermont legislature to create the town forest fire warden system the following year. The initial intent of the warden system was to eliminate the destruction to the forests from fire by providing forest fire control at the local level. The 1904 law authorized the first selectmen in each town to be appointed as the fire warden. In 1939, an amendment to the law required the use of burning permits, issued by the local fire warden. In Vermont, forest fire wardens issue 20,000 burning permits annually. In 1966, 1999, 2000, and 2005 the state issued statewide bans on open burning due to the extreme vulnerability to the wildfire/forest fire hazard. In March of 2012, the threat of fire was severe due to the

low humidity, warm temperatures, and strong winds prevalent in Vermont. The low occurrence of wildfires in Vermont is attributable to the local forest fire warden program, early detection measures, trained and equipped fire departments, and public education and outreach. The fires that do ignite tend to be small.

Access to the State lands from the town is VERY limited. In the Forest are roughly 20 private camps. Given the limited access to the forest itself and water resources in the forest, the ability to put out a large fire quickly and efficiently is limited. The greatest threat of a forest fire comes from human error – such as smoking and improper campfire etiquette. However, lightning is also a threat as the forest is very dense and is said to contain dense undergrowth. Although Worcester has no large or small scale developments planned in the future, encroachment on forest lands presents greater threats of forest fire. A buffer between future residential development and forest land should be maintained to reduce the threat of forest fire and also protect important watershed areas.

Date	Event	Location	Extent
1903	Forest Fire	Worcester Mountain	600 Acres

Hazard	Location	Vulnerability	Impact	Likelihood
Wildfire/Forest Fire	State Forest lands 13,000 acres of State Forest	Private camps	$2 million ($100,000/house x 20)	Medium

In Vermont, wildfires are not a common occurrence. The Vermont State Hazard Mitigation Plan states there has not been a major wildfire in Vermont in the last 50 years. According to the Northeast Wildfire Organization, Vermont averages 200 - 400 fires a year with an average size of 1.5 to 2 acres. Back in 1908, the average fire size was 150 acres. The area of acres burned in Vermont has consistently gone down each year. The table to the right shows this decline and was taken from the Northeast Wildfire Organization website.

http://www.northeastwildfire.org/vermont.

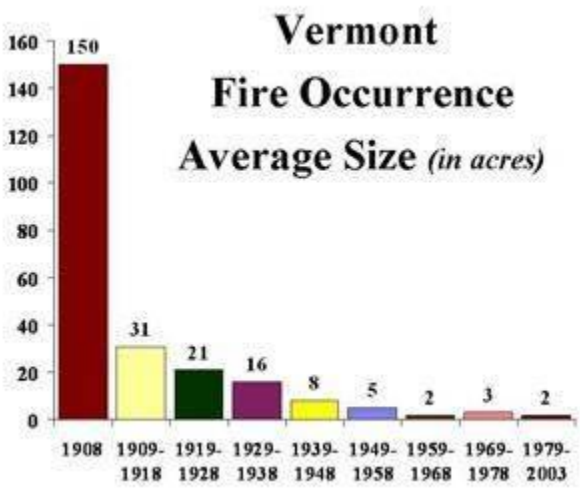


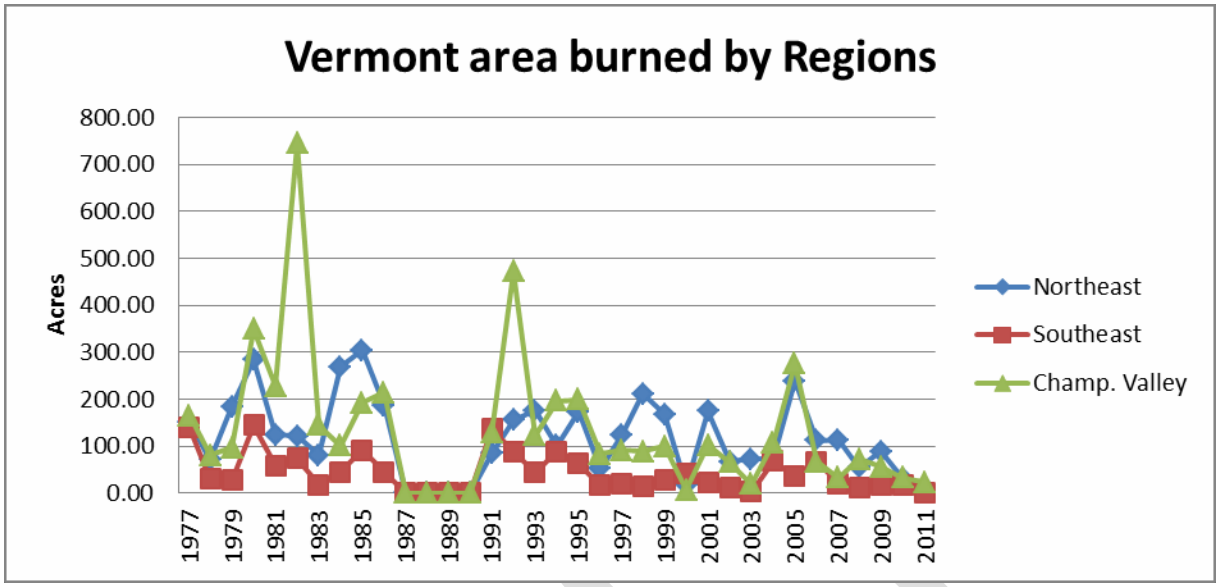
Table 1 Vermont fire history, Decadal Averages.

Decade	Area burned	No. fires	Ave. fire size
1901-1910	2,941	35	84
1911-1920	2,683	83	32
1921-1930	3,036	169	18
1931-1940	2,611	192	14
1941-1950	1,581	219	7
1951-1960	609	142	4
1961-1970	389	181	2
1971-1980	458	169	3
1981-1990	545	231	2
1991-2000	370	171	2
2001-2011	214	117	2

Note: first decade averages only 5 years; last decade includes 11 years.

Causes of all reported fires

TOTAL	**1977-**			TOTAL	**2002-**	
Cause	Avera Fire	No.			Average Fire Size	No. Fires
TOTAL	**2.1**	**17**	**TOTA**		**1.8**	**1012**
9 – misc/unknown (includes	2.3	70	4 – debris burning (including		1.3	481
4 – debris burning (including	1.7	45	9 – misc/unknown (includes		2.7	276
3 – smoking	1.2	14	6 –		2.0	92
8 – children	1.1	14	2 – campfire		1.7	46
5 – arson	5.1	98	3 – smoking		0.8	36
2 – campfire	1.4	64	7 – railroad		1.9	30
6 – equipment	2.9	62	5 –		1.8	21
7 – railroad	1.1	50	8 – children		1.2	17
1 – lightning	1.9	36	1 – lightning		4.7	13



D. SCHOOL SAFETY

School Safety-- "school safety" consists of a variety of programs and services that are designed to contribute to the maintenance and establishment of safe and positive learning environments.

Worcester's elementary school children attend Doty Memorial School, located on Calais Road near the center of the Village. Constructed in 1978, the school serves approximately 80 children from Kindergarten thru 6th grade.

The boiler for the School's furnace is located on the second floor. The Town mitigation meeting highlighted the location of the School's boiler as a potential hazard, given that a leak could cause a dangerous situation. The boiler has not had any history of defects.

The School suffered a bomb threat in 1999. The threat was deemed to be a prank, but the threat to the community is genuine as the School contains the Town's highest population density.

The Doty Memorial School Emergency Evacuation Plan addresses the following threats: bomb, fire, weather related closings, and general disaster emergencies. Doty Memorial School follows the Vermont School Crisis safety guidelines.

Hazard	Location	Vulnerability	Impact	Likelihood
School Safety	Doty Memorial School Boiler room and adjacent rooms	Municipal infrastructure, transportation routes.	$500,000	Medium

E. LOCAL AREAS OF CONCERN

The Community Meeting provided input on Hazard Analysis Map (Map Attached). Eleven roads or bridges within the Town have been highlighted for their susceptibility to flood hazards. Among them are two sections of Eagle Ledge Road, Bridge # 4 on the Calais Road, Bridge #13 on the Norton Road, two sections of Vermont Route 12, washouts at two points on Minister Brook Road, the intersection of Hancock Brook Road and Hampshire Hill Road and flooding at Downs Road.

5.3 Moderate Threat Hazards

A. EXTREME COLD/WINTER STORM/ICE STORM

Extreme Cold- Below normal weather temperatures that may lead to serious health problems.

Winter Storm- A winter storm is an event in which varieties of precipitation are formed that only occur at low temperatures, such as snow, sleet or a rainstorm where ground temperatures are low enough to allow ice to form.

Ice Storm- A storm of freezing rain that leaves a coating of ice.

History of Occurrences (county wide)

Extreme cold/Snow and/or ice events occur on a regular basis. Recent significant events have included: Add some additional events/dates

Date	Event	Location	Extent
12/22/2017	Winter Storm	Washington County	A widespread 5 to 10 inches of snow fell across central VT. The timing and intensity of the snowfall lead to hundreds of vehicle accidents and blocked highways for several hours.
12/12/2017	Winter Storm	Washington County	A widespread 6 to 12 inches of snow fell across Washington county
3/14/2017-3/15/2017	Winter Storm	Statewide	Major Nor'easter with heavy intense snowfall. Snowfall totals across Washington county generally ranged from 14-24 inches with isolated higher totals. Blizzard conditions during heaviest snow fall. Snow rates at times 4/5 inches/hour. Numerous schools, businesses and local

			government offices closed, and numerous vehicle accidents and stranded vehicles.
2/1/2015-2/28/2015	Extreme Cold	Statewide	In February many sites recorded 15 to 20+ below zero with wind chills of 30 below zero or colder. Many communities witnessing the coldest month since December 1989 or January 1994. Damage to infrastructure.
1/7/2015-1/8/2015	Extreme Cold	Statewide	15-25 below with winds 15-30 mph, created wind chills colder than 20-30 below. School opening delays
12/9/2014-12/13/2014	Winter storm	County wide	6-24” of snow, widespread power outages DR4207VT. FEMA totals of $3949028.50 in state damages.
11/26/2014-11/27/2014	Winter Storm	County wide	8-14’’ of snow, with 9 inches in Worcester
3/12/2014	Winter storm	County wide	12-24” of snow
2/13/2014	Winter Storm	County wide	10-24 inches of snow, with 1-2inches an hour.
3/19/2013	Winter storm	County wide	6-14” of snow
12/26/2012	Winter storm	County wide	9-18” of snow
2/24/2012	Winter storm	County wide	3-36” of snow
11/23/2011	Winter storm	County wide	5-12” of wet snow
3/6/2011	Winter storm	County wide	12-18” of snow, 10,000 customers lost power statewide
2/23/2010	Winter Storm	County wide	20” of snow and 50,000 customers lost power statewide
2/22/2009	Winter Storm	County Wide	16” of snow, 30 mph wind gusts

2/1/2008	Winter storm	County wide	3-7" of snow and ice ¼-1/2"thick, 50 mph wind gusts
2/14/2007	Winter storm	County wide	22" of snow
2/14/2006	Winter storm	County Wide	30" of snow
1/4/2003	Winter storm	County wide	19" of snow
3/5/2001	Winter storm	County wide	15-30" of snow
12/31/2000	Winter storm	County wide	10" of snow
1/15/1998	Winter storm	County wide	10-12" snow (not a DR in Washington County)
12/29/1997	Winter storm	County wide	21" of snow
12/7/1996	Winter Storm	County wide	12" of snow
3/21/1994	Winter storm	County Wide	5-11" of snow
11/1/1993	Winter storm	County wide	15" of snow
1/3/1993	Freezing Rain	Statewide	1/4-1/2" freezing rain

A winter storm is defined as a storm that generates sufficient quantities of snow, ice or sleet to result in hazardous conditions and/or property damage. Ice storms are sometimes incorrectly referred to as sleet storms. Sleet is similar to hail only smaller and can be easily identified as frozen rain drops (ice pellets) that bounce when hitting the ground or other objects. Sleet does not stick to wires or trees, but in sufficient depth, can cause hazardous driving conditions. Ice storms are the result of cold rain that freezes on contact with the surfaces coating the ground, tress, buildings, overhead wires and other exposed objects with ice, sometimes causing extensive damage. Periods of extreme cold tend to occur with these events.

One of the major problems associated with ice storms is the loss of electrical power. Major electric utility companies have active, ongoing programs to improve system reliability and protect facilities from damage by ice, severe winds and other hazards. Typically, these programs focus on trimming trees to prevent encroachment of overhead lines, strengthening vulnerable system components, protecting equipment from lightning strikes and placing new distribution lines underground.

Other major problems include closed roads and restricted transportation.

By observing winter storm watches and warnings, adequate preparations can usually be made to lessen the impact of snow, ice and sleet, and below freezing temperature conditions on the Town of Worcester. Providing for the mass care and sheltering of residents left without heat or electricity for an extended time and mobilizing sufficient resources to clear broken tree limbs from roads, are the primary challenges

facing community officials. Worcester should plan and prepare for these emergencies. That planning and preparedness effort should include the identification of mass care facilities and necessary resources such as cots, blankets, food supplies and generators, as well as debris removal equipment and services. Doty Memorial School is the town shelter. The Barre Auditorium in Barre, Vermont serves as the Regional American Red Cross Shelter for Central Vermont when activated by the State of Vermont in a declared disaster and has the ability to shelter pets.

Hazard	Location	Vulnerability	Extent	Impact	Likelihood
Winter Storm/Ice Storm	Town Wide	Utilities, trees, roads, old/under insulated structures	18+" snow in March 2011 storm, depends on severity; 1/4-1/2" freezing rain	5-10% damages –routine emergencies	Medium

B. STRUCTURE FIRE

Structure Fire- A Structure fire is a fire involving the structural components of various types of residential, commercial or industrial buildings. Residential buildings range from single-family detached homes and townhouses to apartments and tower blocks, or various commercial buildings ranging from offices to shopping malls.

Although many structures in Worcester are less than 100 years old, many residents heat their homes with wood or pellet burning stoves. The remoteness and distance from fire and emergency services of many homes also increases the likelihood of a home being completely, opposed to partially, destroyed by a fire. The Town has invested in a dry hydrant system to reduce the risk from fire in the rural and remote reaches of Town. To date, there have been no large structure fires.

Hazard	Location	Vulnerability	Impact	Probability
Structure Fires	Town Wide	Wood structures, especially older than 100 yrs, homes that use wood burning stoves for heat	$140,000 per home based on median grand list value Less than 1 house/year	Med

6. Mitigation

Goals and Policies

The goal of this Plan is to update the local mitigation strategy that makes Worcester more disaster resistant and reduces its risk from all hazards. Further, it is the goal of this Plan to take actions to reduce or eliminate the long-term risk to human life and property from:

1. To reduce injury and losses from the natural hazard of Flooding.
2. To reduce injury and losses from the natural hazard of Flash Flooding.
3. To reduce injury and losses from the natural hazard of Wildfire/ Forest fire.
4. To reduce injury and losses from a manmade hazard of School Safety.

6.1 Town Plan (proposed update 2017) Goals that Support Local Hazard Mitigation

- To ensure that the nature and degree of land resource uses do not have negative impacts on the quality of the land and the resources or on adjoining property values
- To ensure swift and adequate emergency and health services
- To provide a transportation infrastructure that will enable the quick, efficient and safe movement of people, goods and services

The Draft Worcester Town Plan (2017) will have a five year life span after adoption. It is anticipated that the Town Plan will be approved and adopted in 2018 with an expiration date of 2023. The goals and objectives of the Worcester Hazard Mitigation Plan will be incorporated into the Town Plan as it is revised and updated. As Worcester updates its Town Plan, it may consider adding additional mitigation goals.

- To take actions to reduce or eliminate the long-term risk to human life, property, and the environment from natural hazards.

Specific hazard mitigation strategies related to goals of the Town Plan include:

- Ensure existing and future drainage systems are adequate and functioning properly.
- Preserve and prevent development in areas where natural hazard potential is high.
- Ensure that all residents and business owners are aware of the hazards that exist within Worcester and ways they can protect themselves and adequately insure their property.
- Ensure that emergency response services and critical facilities functions are not interrupted by natural hazards.

The town also looked at previous mitigation actions from 2006.

6.2 Proposed Hazard Mitigation Programs, Projects and Activities

The Hazard Mitigation Activities Matrix (Attached) lists mitigation activities in regards to local leadership, possible resources, implementation tools, and prioritization. Prioritization was based upon the economic impact of the action, the Community's need to address the issue, the action's cost, and the availability of potential funding. The committee reviewed the actions considering these things and decided on the priority scores.

Vermont Emergency Management emphasizes a collaborative approach to achieving mitigation on the local level. As such, the town will continue to partner with state agencies (Vermont Emergency Management, Vermont Agency of Natural Resources, Vermont Agency of Transportations, Agency of Commerce and Community Development), Central Vermont Regional Planning Commission, our Local Emergency Planning Committee (#5), FEMA Region 1 and other agencies to obtain needed assistance and resources to pursue identified mitigation projects and planning initiatives. It is understood that, in

order to apply for FEMA funding for mitigation projects, the Town must have a FEMA-approved hazard mitigation plan, and a project must meet FEMA benefit cost criteria.

The team considered how these various factors balanced each other, in a spectrum from highly important projects, to projects that should be pursued after the others. Highest priority projects had a very high risk to the community and a mitigation solution that was likely to mitigate most of the problem. The costs of the high priority projects were attainable by the municipality, or funding assistance was readily available. Highest priority projects also enjoyed strong community support and staff capacity was available to carry them out. Medium priority projects had a moderate risk to the community and a mitigation solution that was likely to mitigate some of the problem and the action is less critical. The municipality had a limited ability to cover the cost of a medium priority project and usually funding required a significant match. Medium priority projects had some community support and limited staff capacity to carry them out; usually having to shift work loads. Lowest priority projects were of lower risk to the community, had solutions that did not mitigate very much of the problem, or were extremely expensive or with no financial assistance available. Projects for which there was little community support or available staff capacity would also be low priority.

Hazard mitigation programs, projects and activities that were identified for implementation at the Town mitigation planning meetings:

<u>Flooding and Flash Flooding</u>

- Replacement and upgrade of bridges and culverts on Minister Brook Road, Jim Dawson's field, and Downs Road.
- "Harden" utility services within the Village area and to Doty School through the replacement/burying of above-ground utility services.
- Extend Fluvial Erosion Hazard zone in the next review of flooding bylaw or river corridor ordinance.

<u>Forest Fire</u>

- Work with State Forest, Parks and Recreation, Vermont Association of Conservation Districts and the CVRPC to develop alternative water supplies in State Forest for wildfire suppression purposes.
- Remove taller and dead trees from land surrounding camps in State Forest.

<u>School Safety</u>

- Continue to perform routine inspections on the boiler.
- Retrofit and strengthen boiler room to better contain an explosion.
- Participate in the VEM School Crisis Planning and be familiar with and access the resources available of the VEM School Crisis Planning website. (VEM is the Vermont Emergency Management)

<u>NFIP</u>

- Work with elected officials, CVRPC, the State and FEMA to assess the town's understanding of and needs under the NFIP and promote educational trainings and

workshops for town officials and landowners to promote the program and ensure compliance under it.

Extreme Cold/Winter Storm/ Ice Storm

- "Harden" utility services within the Village area and to Doty School through the replacement/burying of above-ground utility services.
- Provide educational materials to residents about insulating their homes.

All Hazards

- Work with elected officials, the State and FEMA to provide education and training on the NFIP to ensure compliance and understanding of the program by the Worcester community.
- Explore developing a citizen group with a Coordinator to activate volunteers as needed to assist with Town wide emergencies such as traffic control, help open roads where debris, tress have blocked roadways, and similar matters.
- Initiate school age programs on Emergency Preparedness. Use VEM School Crisis Planning Team resources. Student Tools for Emergency Planning (STEP) is for 4th & 5th grade students and includes a series of vides called "Disaster Dodgers" and subject specific worksheets. Be a Hero includes educator lessons for grades 1-12, Disaster master and Build a Kit web-based games, and parent aids create a family plan and emergency checklist

Attachments

A. Hazard Mitigation Strategy Matrix
B. Hazard Analysis Map
C. Transportation Map
D. Town Directory
E. 5-year Plan Maintenance and Review Process
F. Mitigation Action Tracker
G. Certificate of Adoption

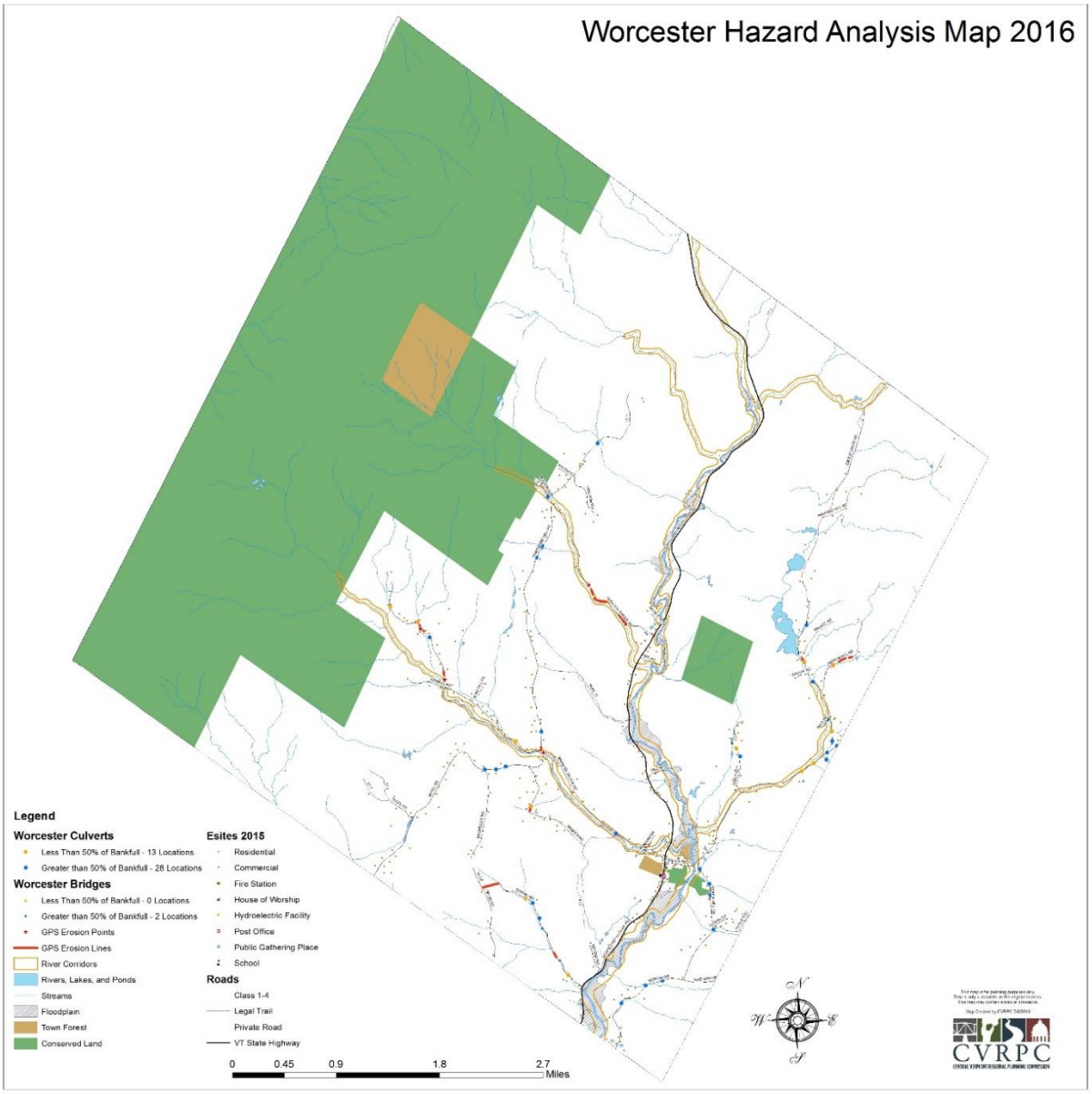
A . Hazard Mitigation Strategy Matrix

Hazard	Mitigation Action/ Preparedness Actions	Local Leadership	Prioritization (High, Med)	Possible Resources	Time Frame
Flooding	(MA)Replacement and upgrade of Minister Brook Rd, Jim Dawson's field, Downs Rd bridges and culverts	Select Board, Planning Commission, Fire Chief	High	HMPG, AOT DOD Flood Controls Projects	1-3 years (2019-2021)
Extreme Cold/ Winter storm/ Severe weather	(MA/PA) "Harden" utility services within the town through the replacement/burying of above-ground utility services.	Select Board	Low	WEC, GMP	4-5 years (2022-2023)
Flooding	(MA) Update and adopt River Corridor regulations including the state map Fluvial Erosion Hazard zone.	Planning Commission Select Board	Med	EMGP, ANR, ACCD, HMGP	3-5 years (2021-2023)
Forest Fire	(PA) Work with State to develop alternative water supplies in State Forest for wildfire suppression purposes	Planning Commission VT ANR	Med	EMGP, VACD, USDA, FPR	2 years (2020)
Forest Fire	(PA) Remove taller and dead trees from land surrounding camps in State Forest	VT ANR	Low	FPR Youth Core	3-5 years (2021-2023)
School Safety	(PA) Perform routine inspections on the boiler	School Board	High	Town Budget	Yearly
School Safety	(MA) Retrofit and strengthen boiler room to better contain an explosion	School Board	Low	HMGP, Town/School budget, bond	5 years (2023)
All Hazards	(MA/PA) Work with elected officials, the State and FEMA to provide education and training on the NFIP to ensure compliance and understanding of the program by the Worcester community.	Select board	Med	HMGP, ANR, VLCT, CVRPC	1-3 years(2019-2021)
Flooding	(MA) Upgrade or improve culverts and ditches along sections of road on Hampshire Hill Rd, Norton Rd, Hancock Brook Rd, Downs Rd, Ira B Rd, Eagle Ledge Rd, Harris Hill Rd, Gould Hill Rd, Ledge Rd, Minister Brook Rd to help prevent stream erosion.	Select board	High	Town Budget, AOT, HMGP	1-3 years(2019-2021)

All Hazards	PA- Explore Town participation in VTAlert as a notification system for use in emergency management	Select board, Town Clerk, ANR, all town staff	High	Local funds, VEM- technical support	1-3 years (2019- 2021)
Winter/Storms/Severe Cold/ Ice Storm	MA/PA Provide educational materials to residents and sensitive populations on how to insulate homes (pipes, attics) for extreme cold spells; protect against snow loads; inform residents about Capstone Community Action	Select board, Town Clerk	Medium	Local funds, Weatherization Program, WEC, GMP	Annually, ongoing
All Hazards	PA- Explore developing a citizen group with a Coordinator to activate volunteers as needed to assist with Town wide emergencies such as traffic control, help open roads where debris, tress have blocked roadways, and similar matters	All town staff	Medium	VEM, Local funds.CERC, ARC	2-3 years (2020-2021)
All Hazards	PA- initiate school age programs on Emergency Preparedness. Use VEM School Crisis Planning Team resources. Student Tools for Emergency Planning (STEP) is for 4th & 5th grade students and includes a series of vides called "Disaster Dodgers" and subject specific worksheets. Be a Hero includes educator lessons for grades 1-12, Disaster master and Build a Kit web-based games, and parent aids create a family plan and emergency checklist	School Principal, Town Clerk, and Select board	Medium	Emily Harris, VEM, School Crisis Planning Team	September 2019- September 2023; annually during school year
Wildfire/ Forest Fire	PA- Explore purchasing two-way radios for Worcester Town Fire Warden and assistant to enhance communication capabilities and increase efficiency with response in an emergency	Select board, Worcester Town Fire Warden, Town Clerk, Fire Chief	High	Local resources, VT Association of Conservation Districts, George Aiken Resource Conservation and Development Grants, HEMG, Rural fire/Wildfire	Winter 2019/ Spring 2020 to Summer/Fall 2020

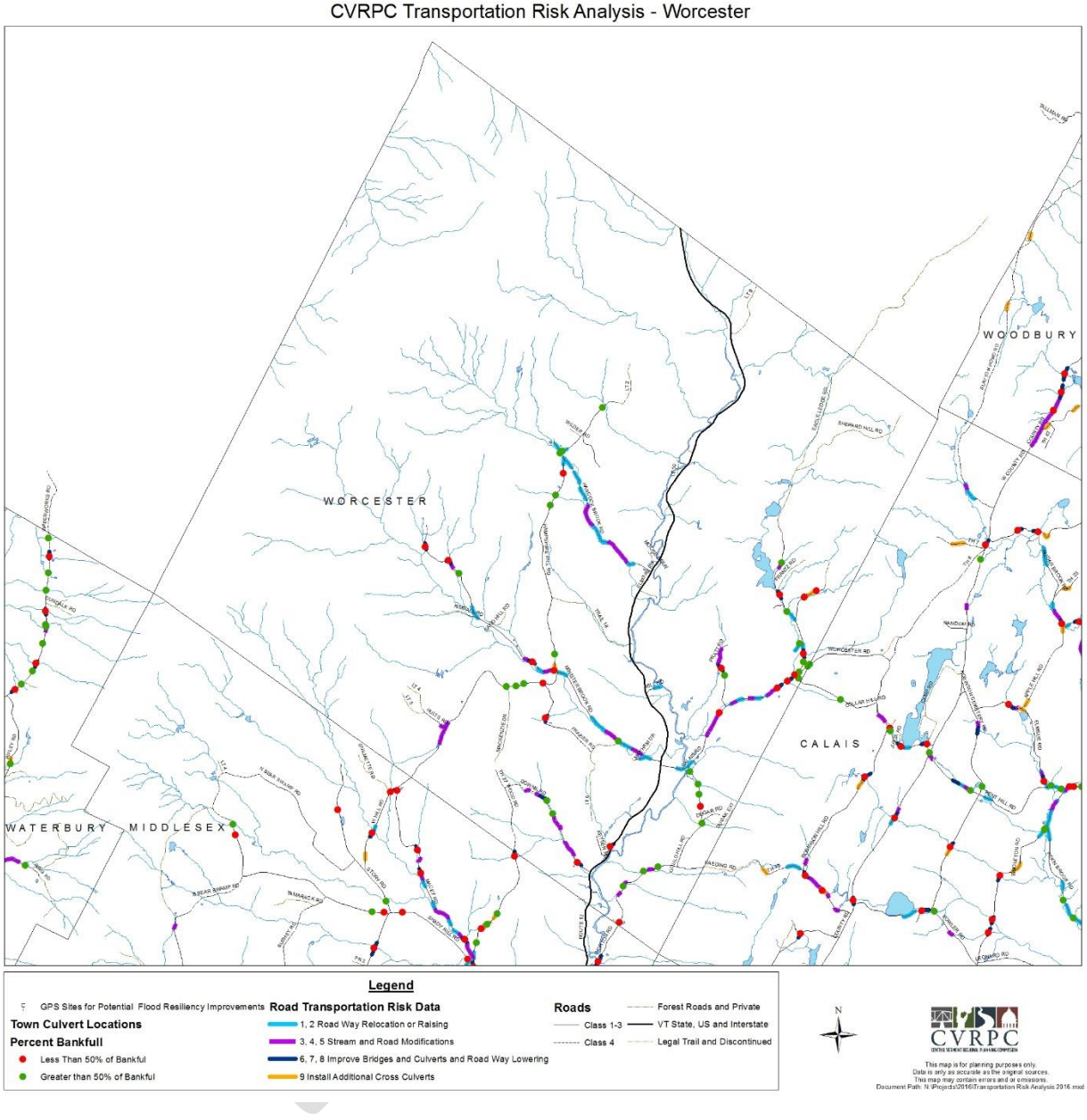
				Protection grants, NFS	
Wildfire/ Forest Fire	MA- Budget for and Updated the 2010 Town Forest Management Plan including incorporation of a silviculture schedule	Select board, Town Clerk	Medium	Local resources, FPR UVM Extension Service, Washington County Forester (Dan Singleton)	Fall 2020- Fall 2021
Structure Fire; Wildfire/ Forest Fire	MA- Develop one- two additional dry hydrant site in rural area of Town to increase protection from fire for residents and infrastructure	EMC and Select board with consultation from Troy Dare, VACD	Low	Rural Fire/Wildfire Protection grants NFS; VACD rural water supply grants. CVRPC	Winter 2020- Summer 2021
Structure Fire; Wildfire/ Forest Fire	PA- Gather GIS data points on all dry hydrants for incorporation into Town data set and map productions. This will assist in emergency response and provide an historical record of the dry hydrant system in Town	EMC and Town Road Foreman, Fire Warden, Fire Chief	Low	CVPRC, Municipal Roads General Permit, local resources	Summer 2019- Summer 2020 (gather points while doing field work for Road Inventory Plan)

B. Hazard Analysis Map



C. Transportation Risk Analysis Map

CVRPC Transportation Risk Analysis - Worcester



Town of Worcester, Vermont

Directory

MAILING ADDRESS

Drawer 161 Worcester VT 05682

TOWN OFFICIALS

Clerk/Treasurer:

Town Clerk/Treasurer: Katie Winkeljohn, 223-6942 xtn 1 (Home 223-2748) **email** worcestertclerk@comcast.net

Assistant Clerk/Treasurer: Judith A. Knapp, 223-6942 xtn 1

Roads

Commissioner: Brian Powers, 223-6903 (Home 223-2831)

Crew: Tim Cane, 229-0851

Listers

Christopher Lyon, 225-6699

Peter Strobridge, 229-5822

Alan Erdossy, 223-5125

Justices of the Peace

Paul Hanlon (Chair), 223-3591

Fran Cerulli, 229-9827

Michele Hill, 223-3312

Roger Hill, 223-3312

Richard Thibodeau

Delinquent Tax Collector: Katie Winkeljohn, 223-6942 xtn 1
Health Officer: Ted Lamb, 229-1891
Constable: Shawn M. McManis, 223-6867
Animal Control Officer: Erika Holm, 249-2127
Moderator (Town & School): Paul P. Hanlon, 223-3591
Town Service Officer:
Transfer Station / LRSWMD Supervisor: Carl Witke, 229-0259
Wrightsville Beach: Carl Witke, 229-0259
Central Vermont Regional Planning Commission: William Arrand, 223-9014
Conservation Commission Chair: Mark Powell, 229-4053
Green-Up Chair: Coleen Kutin, 229-0173
Tree Warden: Jeff Salvador, 223-4206

SELECTBOARD

Chair: Ted Lamb, 229-1891
Cheri Goldstein, 223-6942 (please contact through Town Office)

Chris Casey

SCHOOLS

Doty Memorial School

Chair: Chani Waterhouse, 223-3705

Matthew DeGroot,

Roberta Jackes, 223-2457

Will Baker, 793-3361

Rachael Young

U-32

Carl Witke, 229-0259

VOLUNTEER FIRE & RESCUE DEPARTMENT

Chief: Will Sutton, 223-6942 xtn 4 (H 229-0249)
FAST Squad Director: David DeRosia, 223-3238

Fire Warden: Steven Lang, 223-5996
Chair: Wayne Holland, 229-1582

PLANNING COMMISSION

Chair: Bill Arrand, 223-9014

Toni Keading, 229-0176

Stewart Clark, 223-2570

LADD FIELD/HAYMEADOW COMMITTEE

Chair: Coleen Kutin, 229-0173

Michele Hill, 223-3312

J. David Book, 223-5625

Ted Lamb, 229-1891

CEMETERY COMMISSION

Chair: Earlene Forbes, 229-9372
Clerk: Fran Cerulli, 229-9827
Cheri Goldstein, 229-0109

SOCIAL CONCERNS COMMITTEE

CHAIR: Stewart Clark 802-223-2570 Hm. 413-584-6047 Hadley, MA

Christina Goodwin 802-793-7443 Hm. 802-479-8549 Wk.

Myles Chater 802-224-1399 Hm. 802-522-7886 Cell

WORCESTER FIRE DISTRICT / TOWN WATER

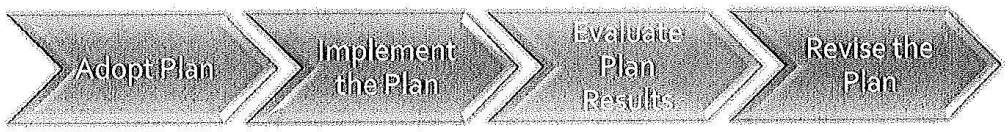
Chair 802-431-0287 email: worcesterfiredistrict@gmail.com

STATEHOUSE**, 828-2228**

Sen. Ann Cummings (D), Washington District
Sen. Francis Brooks (D), Washington District
Sen. Anthony Pollina (P/D/W), Washington District
Rep. Gary Noan (D), Lamoille-Washington District
Rep. David Yacovone (D), Lamoille-Washington District

E. 5-year Plan Maintenance and Review Process

5-Year Plan Review/Maintenance



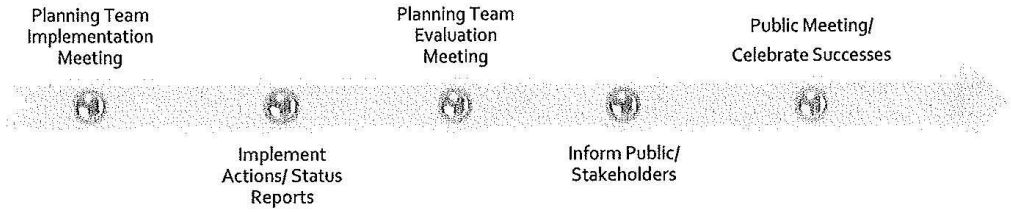
- Brief local leadership on plan approval
- Formally adopt plan
- Publicize plan approval and adoption
- Celebrate success

- Confirm/clarify responsibilities
- Integrate mitigaction actions
- Monitor and document implentation of projects and actions
- Establish indicators of effectiveness or success

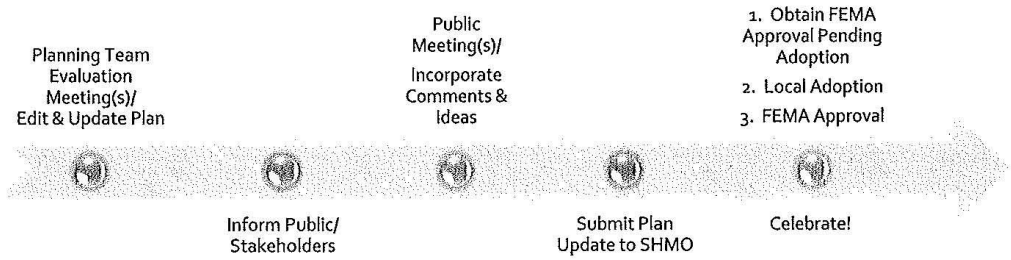
- Effectiveness of planning process
- Effectiveness of actions
- Document success & challenges of actions
- Update and involve community
- Celebrate successes

- Review factors affecting community's context
- Analyze findings; determine whether to revise process or strategy
- Incorporate findings into the plan

After Plan Adoption-Annually
Implement and Evaluate



Fifth Year, and After Major Disaster
Evaluate and Revise



F. Mitigation Action Tracker

	MITIGATION ACTION TRACKER										
	Action	Information in Hazard Mitigation Plan				Current Status				Other notes; Difficulties encountered
		Responsible Party	Timeframe for Completion	Funding Source	Project Priority	Date Began	Current Status	Completion Timeframe	Completion Goal	
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										

G. Certificate of Adoption

CERTIFICATE OF ADOPTION
<<DATE>>
TOWN OF Worcester, Vermont Select board
A RESOLUTION ADOPTING THE _____, Vermont 2018 Local Hazard Mitigation Plan

WHEREAS, the Town of Worcester has historically experienced severe damage from natural hazards and it continues to be vulnerable to the effects of the hazards profiled in the **2018 Worcester, Vermont Local Hazard Mitigation Plan,** which result in loss of property and life, economic hardship, and threats to public health and safety; and

WHEREAS, the Town of Worcester has developed and received conditional approval from the Federal Emergency Management Agency (FEMA) for its **2018 _____, Vermont Local Hazard Mitigation Plan (Plan)** under the requirements of 44 CFR 201.6; and

WHEREAS, the **Plan** specifically addresses hazard mitigation strategies, and Plan maintenance procedures for the Town of Worcester; and

WHEREAS, the **Plan** recommends several hazard mitigation actions (projects) that will provide mitigation for specific natural hazards that impact the Town of Worcester with the effect of protecting people and property from loss associated with those hazards; and

WHEREAS, adoption of this **Plan** will make the Town of Worcester eligible for funding to alleviate the impacts of future hazards; now therefore be it

RESOLVED by Town of Worcester Select board:

1. The **2018 _____, Vermont Local Hazard Mitigation Plan** is hereby adopted as an official plan of the Town of Worcester;

2. The respective officials identified in the mitigation action plan of the **Plan** are hereby directed to pursue implementation of the recommended actions assigned to them;

3. Future revisions and **Plan** maintenance required by 44 CFR 201.6 and FEMA are hereby adopted as part of this resolution for a period of five (5) years from the date of this resolution; and

4. An annual report on the process of the implementation elements of the Plan will be presented to the Select board by the Emergency Management Director or Coordinator.

IN WITHNESS WHEREOF, the undersigned have affixed their signature and the corporate seal of the Town of Worcester this ____ day of _____ 2018.

_____
Selectboard Chair

_____
Selectboard Member

ATTEST

_____
Town Clerk