

## APPENDIX B. CAPABILITY ASSESSEMENT

This section describes the overall capability of the Town of Fairhaven to implement hazard mitigation activities. It consists of the following five subsections:

- B.1. Overview
- B.2. Methodology
- B.3. Review of Existing Capabilities
- B.4. Previously Implemented Mitigation Measures
- B.5. Summary of Findings and Conclusions

### B.1. OVERVIEW

The purpose of conducting a capability assessment is to determine the ability of a local jurisdiction to implement a comprehensive mitigation strategy, and to identify potential opportunities for establishing or enhancing specific mitigation policies, programs, or projects. As in any planning process, it is important to try to establish which goals and actions are feasible, based on an understanding of the organizational capacity of those agencies or departments tasked with their implementation. A capability assessment helps to determine which types of mitigation actions are practical and likely to be implemented over time based on a local government's existing authorities, policies, programs, and resources available to support such implementation.

A capability assessment has two primary components: an inventory of a local jurisdiction's relevant plans, ordinances, programs, or activities already in place; and an analysis of its current capacity and resources to carry them out. A careful examination of local capabilities will detect any existing gaps, shortfalls, or weaknesses associated with ongoing government activities that could hinder proposed mitigation activities and possibly even exacerbate hazard vulnerability. A capability assessment also highlights the positive mitigation measures already in place or being implemented at the local government level, which should be leveraged and continue to be supported and enhanced if possible through future mitigation efforts.

The capability assessment serves as a critical part of the planning process, including the development of an effective hazard mitigation strategy. Coupled with the Hazard Analysis and Risk Assessment (Appendix A), the Capability Assessment helps identify and target meaningful mitigation actions for incorporation into the Mitigation Strategy. It not only helps establish the goals for the Town of Fairhaven to pursue under this Plan, but also ensures that those goals and the mitigation actions that follow are realistically achievable given current local conditions.

### B.2. METHODOLOGY

To facilitate the inventory and analysis of local government capabilities for Fairhaven, several survey instruments were first distributed and discussed with local community staff. These included a Capability Assessment Survey, Safe Growth Survey, and National Flood Insurance Program (NFIP) Survey as further described below.

#### ***Capability Assessment Survey***

The Capability Assessment Survey requested information on a variety of "capability indicators" such as existing local plans, policies, programs, or ordinances that may reduce, or in some circumstances, increase the community's hazard vulnerability. Other indicators included information related to each

jurisdiction's fiscal, administrative, and technical capabilities such as access to local budgetary and personnel resources necessary to implement mitigation measures. Survey respondents were also asked to comment on existing activities or capabilities to conduct public education and outreach, as well as the current political climate in their jurisdiction to implement mitigation actions, an important consideration for any local planning or decision making process.

At a minimum, survey results provide an extensive inventory of existing local plans, ordinances, programs, and resources in place or under development in addition to their overall effect on hazard loss reduction as perceived by local government staff. The survey instrument thereby not only helps to accurately assess the Town's current local capabilities, but also serves as a self-assessment for those local departments of staff wishing to improve their capability as identified gaps, weaknesses, or conflicts can be recast as opportunities to be addressed in the development of new mitigation actions.

### ***Safe Growth Survey***

As part of the planning process, the Town's Planning and Economic Development Director was asked to complete a Safe Growth Survey. This unique survey instrument was drawn from a technique recommended by David Godschalk, FAICP and professor emeritus of city and regional planning at the University of North Carolina at Chapel Hill, to help better evaluate the extent to which Fairhaven is positioned to grow safely relative to its natural hazards. The survey covered six distinct topic areas including the following:

- Land Use
- Transportation
- Environmental Management
- Public Safety, Zoning Ordinance
- Subdivision Regulations
- Capital Improvement Program and Infrastructure Policies

While somewhat of a subjective exercise, the Safe Growth Survey was used to provide some measure of how adequately existing planning mechanisms and tools for Fairhaven were being used to address the notion of safe growth as currently advocated by organizations such as FEMA and the American Planning Association (APA). In addition, the survey instrument was aimed at further integrating the subject of hazard risk management into the dialogue of local community planning and to possibly consider and identify new actions as it relates to those local planning policies or programs already in place or under development – including the Town's new Master Plan.

It is anticipated that the Safe Growth Survey will be used again during future plan updates to help measure progress over time and to continue identifying possible mitigation actions as it relates to future growth and community development practices, and how such actions may better be incorporated into local planning mechanisms.

### ***National Flood Insurance Program (NFIP) Survey***

The NFIP Survey was designed to help gather information from the Town of Fairhaven's designated floodplain administrator to describe the current status of its participation in the NFIP, including existing floodplain management programs and continued compliance with federal requirements and standards. The NFIP contains specific regulatory measures that enable government officials to determine where and how growth occurs relative to identified flood hazards. In return for meeting minimum regulatory standards, communities make the purchase of flood insurance through the NFIP available to its property

owners. Participation in the NFIP is voluntary, but is promoted by FEMA as a critical means to not only make flood insurance available to community residents, but also to implement and sustain an effective, long-term hazard mitigation program aimed at reducing future flood losses. The NFIP Survey was also supplemented by a separate, more detailed survey effort relating to the Town's potential future participation in the NFIP Community Rating System (CRS), an incentive-based program that encourages local communities to go above and beyond minimum federal requirements and standards under the NFIP.

Following the completion and discussion of these surveys with local staff, the planning team conducted a more detailed review of all the relevant plans, policies, and other related documents to gain a clear understanding on their existing or potential effects on hazard risk reduction. These included but were not limited to the following list of existing plans, studies, reports, and technical information:

- *Master Plan for the Town of Fairhaven (2017 DRAFT)*
- *Master Plan for the Town of Fairhaven (1996)*
- *Open Space and Recreation Plan (1996)*
- *Open Space and Recreation Survey (2016)*
- *Hurricane Plan (2016)*
- *Harbor Plan (2010)*
- *Town of Fairhaven Capital Improvement Plan, FY-18-22 (2017)*
- *Town Administrator Recommended Budget (2016)*
- *Fairhaven Housing Needs Assessment (2009)*
- *Fairhaven Affordable Housing Action Plan (2010)*
- *Town of Fairhaven Business Study (2010).*
- *Town of Fairhaven Tourism Study (2010)*
- *Town of Fairhaven Resident Survey (2008)*
- *South Coast Rail Corridor Plan, Five-Year Update of Community Priority Areas (2013)*
- *Strategy for Fairhaven's Economic Future (1996)*
- *Wastewater Management Plan (2013)*
- *Water System Capital Efficiency Plan (2011)*
- *2016 Regional Transportation Plan. SRPEDD. 2016.*
- *Transportation Improvement Program, 2017-2021. SRPEDD. 2016.*
- *Natural Hazard Pre-Disaster Regional Mitigation Plan. SRPEDD. 2014.*
- *City of New Bedford Local Multi-Hazard Mitigation Plan. City of New Bedford. 2015.*
- *Final Report: Results from a VCAPS Planning Workshop for Extreme Weather and Climate Change in New Bedford and Fairhaven, Massachusetts. Social and Environmental Research Institute. December 2012.*
- *Climate Change Vulnerability Assessment and Adaptation Planning Study for Water Quality Infrastructure in New Bedford, Fairhaven and Acushnet. Buzzards Bay National Estuary Program. 2014.*
- *Projected Expansion of the Floodplain with Sea Level Rise in Fairhaven, Massachusetts. Buzzards Bay National Estuary Program and Massachusetts Office of Coastal Zone Management. Technical Report SLR12-1. 2012.*

### B.3. REVIEW OF EXISTING CAPABILITIES

**Tables B-1 through B-4** provide a narrative summary of the plans, reports, and other information collected and reviewed as part of the Capability Assessment Survey and as discussed with the Local Planning Team during the assessment of the Town's existing hazard mitigation capabilities. The summary provides a better understanding of the relevant programs, regulations, resources, and practices in place as well as their general effectiveness for hazard risk reduction. They also provide insight into any identified opportunities to improve, expand, or enhance these capabilities for hazard risk reduction purposes.

The tables are organized according to the following four types of capabilities as defined by FEMA:

- *Table B-1: Planning and Regulatory Capabilities.* Includes capabilities based on the jurisdiction's implementation of ordinances, policies, local laws and State statutes, and plans and programs that relate to guiding and managing growth and development.
- *Table B-2: Administrative and Technical Capabilities.* Includes capabilities associated with the jurisdiction's staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions.
- *Table B-3: Financial Capabilities* – Refers to the fiscal resources that a jurisdiction has access to or is eligible to use to fund mitigation actions.
- *Table B-4: Education and Outreach* – Refers to education and outreach programs and methods already in place that could be used to implement mitigation activities and communicate hazard-related information.

Table B-1: Planning and Regulatory Capabilities

Planning/Regulatory Tool	Responsible Authority	General Description and Effectiveness for Hazard Risk Reduction
<i>Plans</i>		<i>Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?</i>
Master Plan	Planning Board	<p>Comprehensive master plan to guide future land use and development decisions for the Town. The current plan (1996) addresses flood hazards, both in terms of coastal storms and interior drainage problems. Existing protective features and some needed or recommended flood control projects are identified, including mostly through open space preservation (including through land acquisition). It also briefly discusses climate, noting that extremes of heat and cold are tempered by the Town's proximity to Buzzards Bay.</p> <p>The development of a new Master Plan (Fairhaven 2040) is underway, concurrent with the preparation of this Hazard Mitigation Plan. The two planning efforts are being coordinated in a manner that will more effectively integrate hazard mitigation policies and projects into the Master Plan. The new plan will have a new element focused on sustainability, including resilience, which will incorporate information from this plan on natural hazards and serve as an important tool to be leveraged to support the implementation of mitigation actions.</p>
Open Space and Recreation Plan	Planning Board	<p>This plan identifies current needs and establishes the community goals, objectives, and actions for acquiring, preserving, enhancing, and maintaining open space and recreation areas for the Town. The current plan (2010) addresses flood hazards, noting that the major flooding threat in Fairhaven occurs on low-lying coastal lands. It also notes the natural protective features of barrier beaches, wetlands, and salt marshes, and establishes that coastal areas along Buzzard's Bay are those requiring the highest priority in open space preservation. It briefly describes existing protective features and some recently completed or ongoing flood risk reduction projects, including drainage improvements and improved floodplain zoning requirements.</p> <p>The current plan is being updated in coordination with the Southeastern Regional Planning and Economic Development District (SRPEDD). At the time of this writing the Goals and Activities included in the existing plan were determined to still be relevant, but a survey effort suggested that Town residents remain very supportive of the preservation and expansion of open space and recreational areas. Nearly 84 percent of those surveyed indicated that more land should be set aside for conservation and open space, presenting an opportunity for potential multi-objective projects that can support the implementation of mitigation actions.</p>

Planning/Regulatory Tool	Responsible Authority	General Description and Effectiveness for Hazard Risk Reduction
Hurricane/Emergency Plan	Fire Department	<p>This plan provides basic information on hurricanes and detailed procedures relating to the Town's existing emergency preparedness and response activities and capabilities. The current plan (revised in June 2016) describes the responsibilities and actions various departments shall take during a hurricane emergency, including Fire, Police, Emergency Management, Public Works, Harbormaster, Schools, Council on Aging, Housing Authority, etc. The plan is more focused on hurricanes and emergency preparedness/response activities versus sustained hazard mitigation measures. It can support but should not be used as a primary mechanism to implement mitigation actions.</p>
Harbor Plan	Harbor Development Commission	<p>This is a regional harbor plan for the municipalities of New Bedford and Fairhaven prepared for the Massachusetts Executive Office of Energy and Environmental Affairs (EEA). It was developed under a voluntary process to promote and implement the community's planning vision for their waterfront and to inform and guide state agency decisions necessary to implement such a vision. The current plan (2010) includes a description of the process and framework used for planning, in addition to an economic analysis, watershed management plan, and summary of harbor-related issues and recommendations for future actions or projects.</p> <p>Although there is a general summary of flood hazards, most content on existing hazards is more focused on navigational hazards for vessels in the harbor. It also states that "the planning area addressed in this Harbor Plan is primarily located inside the Hurricane Barrier, which provides protection from coastal hazards, flooding and sea level rise." However, it goes on to say that "the Harbor Plan incorporates substantial proposals to repair, replace or develop structures to current engineering standards that provide for enhanced public safety," suggesting that the plan can also likely be used to implement mitigations actions, particularly for waterfront development and infrastructure.</p>
Economic Development Plan	Planning Board	<p>This plan was completed in 1996 as a strategy for Fairhaven's economic future, but is no longer considered relevant for current planning purposes aside from historical reference. The plan did not address hazards and isn't an appropriate mechanism to advance the implementation of mitigation actions.</p>

Planning/Regulatory Tool	Responsible Authority	General Description and Effectiveness for Hazard Risk Reduction
Capital Improvements Plan	Town Administrator	This five-year CIP plan is prepared annually by the Town Administrator, with input from all departments, and submitted to the Board of Selectmen to include a prioritized list and description of all capital improvements to be undertaken during the next five years including cost estimates, methods of financing, and recommended time schedules for implementation. The CIP is a planning tool that attempts to project into the future what our town's capital needs will be and to look at ways to fund those needs. The plan has been used to address hazards through structural improvements, engineering studies and projects, and equipment purchases and should be considered a source to support the implementation of mitigation projects. The current plan (2017, covering FY18-22) summarizes the general fund requests received from departments totaling approximately \$37 million.
Emergency Operations Plan	N/A	See <i>Hurricane/Emergency Plan</i> (above). No separate EOP maintained by Town.
Continuity of Operations Plan	N/A	The Town currently does not have a Continuity of Operations (COOP) or Continuity of Government (COG) plan. However, the Town has taken steps to protect critical IT systems and information including routine computer data backups.
Transportation Plan	Southeastern Regional Planning and Economic Development District (SRPEDD)	<p>The Town of Fairhaven does not maintain its own transportation plan but rather coordinates with SRPEDD, the state-designated Metropolitan Planning Organization (MPO) for Southeastern Massachusetts, on the development of a Regional Transportation Plan (RTP). The current RTP (2016) is the region's long-term plan for existing and future transportation system to the year 2040. It looks at every facet of transportation including roads and bridges, travel patterns, public transportation such as buses, commuter rail, freight and airports, as well as bicycles and pedestrians. It assesses transportation needs and identifies the necessary improvements to enhance the existing transportation system. The official implementation mechanism for the region's improvement projects is the Transportation Improvement Program (TIP), a five-year programming document that is developed annually and is available for amendment and adjustment at any time.</p> <p>The RTP and TIP do not explicitly address natural hazards in terms of mitigation projects, with exception of some minor flood mitigation projects, hurricane evacuation routing, and stormwater improvements along state and federal roads. As part of the TIP's Transportation Evaluation Criteria, emphasis is placed on projects that consider the impacts of climate change and flooding in addition to safety and traffic congestion.</p>

Planning/Regulatory Tool	Responsible Authority	General Description and Effectiveness for Hazard Risk Reduction
Stormwater Management Plan	N/A	The Town currently does not have a comprehensive, town-wide Stormwater Management Plan, but does require developers to submit a site-specific stormwater management plan for all subdivisions greater than three lots and commercial or multi-family developments subject to special permits as part of its subdivision and stormwater management regulations (further described below).
Wastewater Management Plan	Department of Public Works	This Wastewater Management Plan assesses the overall capacity and condition of the Town's wastewater collection and main water pollution control facility (WPCF), and includes priorities for rehabilitation and/or upgrades and improvements. The current plan (2013) addresses storm flooding at several remote pumping stations on the unprotected side of the Hurricane Barrier, and includes recommended flood mitigation actions that include modifications to provide the Town with the ability to shut down the stations remotely.
Historic Preservation Plan	N/A	The Town currently does not have a Historic Preservation Plan. There are no registered historic properties or districts located within the town.
Community Wildfire Protection Plan	N/A	The Town currently does not have a Community Wildfire Protection Plan; and at this time, it is not felt that such a plan is warranted.
Other special plans? (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)	Fairhaven Housing Authority  Southeastern Regional Planning and Economic Development District (SRPEDD)	<i>Affordable Housing Action Plan</i> – this plan, prepared in 2010, includes an affordable housing needs assessment for the Town of Fairhaven and recommend options to address those needs over the next five years. It does not address natural hazards and isn't considered an appropriate mechanism to advance the implementation of mitigation actions.  <i>Town of Fairhaven South Coast Rail Corridor Plan</i> – this plan, updated in 2013, presents the updated Priority Development Areas (PDAs) and Priority Protection Areas (PPAs) in the town of Fairhaven. This community-driven land use planning exercise first took place in 2008, when SRPEDD worked alongside local residents, business owners, officials, and organizations to designate the areas that were most important for development or preservation. PDAs are areas that are appropriate for increased development or redevelopment due to several factors including good transportation access, available infrastructure (primarily water and sewer), an absence of environmental constraints, and local support. Priority Protection Areas (PPAs) are areas that are important to protect due to the presence of significant natural or cultural resources, including endangered species habitats, areas critical to water supply, historic resources, scenic vistas, and farms.



Planning/Regulatory Tool	Responsible Authority	General Description and Effectiveness for Hazard Risk Reduction
<i>Building Code, Permitting, and Inspections</i>		<i>Are the codes adequately enforced?</i>
Building Code	Building Department	The Town of Fairhaven enforces the Massachusetts State Building Code (MSBC) as promulgated by the Board of Building Regulations and Standards (BBRS) pursuant to its authority in Chapter 143 of the Massachusetts General Laws, Sections 93 through 100. Currently in its eighth edition, the MSBC consists of a series of international model codes and any state-specific amendments adopted by the BBRS during the promulgation process. The BBRS regularly updates relevant provisions of the MSBC as new information and technology becomes available and a change is warranted. The MSBC includes very effective codes for hazard risk reduction, including construction and design standards that provide resistance to wind and snow loads, seismicity, and flooding (including higher regulatory standards for floodplain management that go beyond minimum federal requirements).
ISO Mitigation Ratings	Building Department	<i>Building Code Effectiveness Grading Schedule (BCEGS): 8</i> <i>Public Protection Classification (PPC): Class 3</i> <i>Community Rating System (CRS): N/A – however the Town will soon be pursuing participation in CRS as noted in the Mitigation Action Plan included in Section 4.</i>
Site Plan Review Requirements	Planning Board	Site plan reviews are required for review and approval by the Town to issue special permits for certain intensive non-residential and multi-family site developments as specified in Chapter 198-29 of the Town Code. The Planning Board is designated as the special permit granting authority (SPGA) for the Town. Required site plans are also transmitted for review and comment to the Department of Public Works, Fire Department, Board of Health, Assessor's Office, Finance Department, Building Department/Conservation Commissioner, and the Town Administrator's Office for the purpose of guidance to the Planning Board. A public hearing on all proposed site plans/special permits will also be held within 65 days after submission to the Planning Board, and a decision will be rendered within 90 days following the date of the hearing. The site plan review process provides a good opportunity to review and consider natural hazards and potential risk reduction strategies, including but also beyond those required under existing Zoning and Development regulations.

Planning/Regulatory Tool	Responsible Authority	General Description and Effectiveness for Hazard Risk Reduction
<i>Zoning and Development Regulations</i>		<i>Is the regulation an effective measure for reducing hazard impacts? Is the regulation adequately administered and enforced?</i>
Zoning Bylaws	Building Department, Planning Board, Zoning Board of Appeals	The Town of Fairhaven's Zoning Bylaws were first adopted by a Special Town Meeting in 1926 and continue to be amended as required, pursuant to the authority granted by Chapter 40A of the General Laws of the Commonwealth of Massachusetts. They include the establishment of specific zoning districts and applicable regulations on the use and intensity of use of land within those districts, in addition to other general regulations. Among the stated purposes of the Bylaws are (a) to promote the health, safety, convenience and general welfare of the inhabitants of the Town of Fairhaven and (b) to lessen the danger from fire, flood, panic and other natural or manmade disasters. These objectives are achieved through a series of effective implementing regulations, including particularly those further described below which are considered very effective measures for reducing hazard impacts. The Town adequately administers and enforces these regulations as required.
Subdivision Regulations	Planning Board	The Town of Fairhaven's subdivision regulations, first adopted in 1957, are specified under Chapter 322 of the Town Code to establish control procedures for the subdivision of land (the division of a tract of land into two or more lots). The purpose of the procedures is to secure for the Town certain benefits and protections, including the protection and treatment of surface and groundwater and the treatment and control of drainage, erosion and sedimentation. The powers of the Planning Board under these rules and regulations shall be exercised with due regard for provisions that include but are not limited to securing safety in the case of fire, flood, panic, and other emergencies; and for ensuring compliance with the Fairhaven Zoning Bylaws. Subdivision regulations can be very effective in reducing hazard impacts by requiring land developers to preserve certain natural areas or features that are not suitable for development, including known hazard areas or features that provide protection from natural hazards. Fairhaven's subdivision regulations also require developers to control stormwater runoff using methods to ensure proper drainage and flood control.

Planning/Regulatory Tool	Responsible Authority	General Description and Effectiveness for Hazard Risk Reduction
Floodplain Regulations	Building Department, Conservation Commission	<p>The Town of Fairhaven's floodplain regulations are specified under the Town's Zoning Bylaw in Chapter 198-28 (last amended in May 2014) with the purpose to (1) Ensure public safety through reducing the threats to life and personal injury; (2) Eliminate new hazards to emergency response officials; (3) Prevent the occurrence of public emergencies resulting from water quality, contamination, and pollution due to flooding; (4) Avoid the loss of utility services which, if damaged by flooding, would disrupt or shut down the utility network and impact regions of the community beyond the site of flooding; (5) Eliminate costs associated with the response and cleanup of flooding conditions; and (6) Reduce damage to public and private property resulting from flooding waters. They include the establishment of an overlay district (Floodplain District) that includes all special flood hazard areas as identified in the Town's effective Flood Insurance Rate Map (FIRM), along with applicable development regulations in compliance with existing state and federal regulations. Structural requirements for new construction or substantial improvements in flood zones are as provided in the State Building Code. These include the requirement for the lowest floor to be elevated not less than the specified elevations above mean sea level (MSL) as provided in the Flood Insurance Rate Map, and for coastal high-hazard areas (VE Zones), the lowest floor must be elevated not less than two (2) feet above MSL.</p> <p>The higher development standards for new or substantially-improved structures in identified flood hazard areas are effective in reducing flood hazard impacts based on current conditions, but may not adequately consider future changes in hydrologic conditions that could result in higher base flood elevations and/or more extensive floodplain areas.</p>
Stormwater Management Regulations	Planning Board	<p>The Town of Fairhaven has adopted regulations that exceed those of the EPA and requires that development projects take specific action to protect and improve water quality. The Town's stormwater management regulations are specified under Chapter 198-31.1 of the Zoning Bylaw and Appendix A of the Subdivision Regulations with the purpose of ensuring new developments do not exacerbate or create flooding conditions or negatively impact water quality. This is to be accomplished by reproducing, as nearly as possible, the hydrologic conditions in the ground and surface waters prior to the development. The regulations apply to new subdivisions or special permits for certain intensive developments that include additions or renovations which increase the impervious area of the property. They include the submittal of site-specific stormwater management plans and the design, construction and maintenance of stormwater systems as required by the Planning Board. The regulations are effective in terms of assuring the Town that new development projects will not result in adverse impacts to existing stormwater conveyance, flooding, and water quality – and that the costs of this assurance are borne by the developers versus the Town.</p>

Planning/Regulatory Tool	Responsible Authority	General Description and Effectiveness for Hazard Risk Reduction
<b>Opportunities to Improve, Expand, or Enhance for Hazard Risk Reduction Purposes</b>		
		<ol style="list-style-type: none"> <li>1. Ensure natural hazard risks and hazard mitigation/climate adaptation principles and practices are integrated into the Master Plan Update and all future iterations of this important policy document for the Town.</li> <li>2. Prepare a post-disaster recovery plan for the Town to address foreseeable issues related to the continuity of government, short-term recovery, and long-term community redevelopment following a major disaster event (e.g., major coastal storm similar to the Great Hurricane of 1938).</li> <li>3. Minimize or eliminate the potential for future damage and loss through the incorporation of best practices for hazard mitigation and climate adaptation into existing development regulations under the Town's authority.</li> <li>4. Require higher design flood elevations for new or substantially-improved <b>public facilities</b> located in coastal flood hazard areas to decrease their vulnerability to future conditions that may increase flood hazard risks including coastal erosion, sea level rise, and storm surge from coastal storms.</li> <li>5. Promote higher design flood elevations for new or substantially-improved <b>residential structures</b> located in coastal flood hazard areas to decrease their vulnerability to future conditions that may increase flood hazard risks including coastal erosion, sea level rise, and storm surge from coastal storms; and to decrease future flood insurance costs for property owners.</li> <li>6. Develop a tree preservation and maintenance plan that addresses risk reduction through hazard tree management as well as the preservation and expansion of the tree canopy on Town-owned and other public lands. Healthy tree cover can help moderate the damaging effects of high winds and help to mitigate the impacts of extreme heat events.</li> <li>7. Prepare an emergency evacuation and shelter operations plan that identifies specific actions to be taken before, during, and after a large-scale incident. The plan should include actions or improvements required to mitigate life/safety threats as well as the isolation and/or long-term displacement of Town residents, particularly in low-lying areas of Sconticut Neck, on West Island, and vulnerable locations seaward of the inland hurricane barrier. It should also ensure that the needs of individuals with household pets and service animals following a major disaster or emergency will be addressed, even if through pre-event agreements with non-profit organizations and private companies (NGOs). It should also aim to identify opportunities for local citizen volunteer groups to assist local fire and police in the event of a major disaster event that will tax the resources of these departments.</li> <li>8. Develop and submit an application for participation in FEMA's Community Rating System (CRS).</li> </ol>

**Table B-2: Administrative and Technical Capabilities**

Administrative/Technical Resource	Full-time (FT)/Part-time (PT)/Volunteer (V)	General Description and Effectiveness for Hazard Risk Reduction
<i>Administration</i>		<i>Describe capability. Is coordination effective?</i>
Planning Board	FT/PT/V	<p>The Planning Board studies the resources and needs of the Town, particularly conditions affecting public welfare and safety related to land use and development. The Board uses the Master Plan and related processes to plan and make recommendations for the development of the Town, with special attention to the proper housing of Town residents. The Board has total responsibility for all subdivisions, for the administration of the Subdivision Regulations, and for Special Permits required by the Fairhaven Zoning Bylaw. The Board also has the primary responsibility for the writing of Zoning Bylaws, reviewing amendments to the Zoning Map, which appear in the Warrant for any Town Meeting, and to present its recommendations to the Town for consideration at such Town Meeting.</p> <p>The Planning Board is an effective mechanism for handling all the above responsibilities and maintains the capability to integrate hazard risk reduction strategies into many other plans, processes, and decisions regarding future land use and development in Fairhaven.</p>
Local Planning Team (for Mitigation Planning)	FT/PT/V	<p>The Town established the Local Planning Team (LPT) in early 2017 to oversee the development of the Hazard Mitigation Plan. It includes a Steering Committee made up of Town staff from key departments as well as a Stakeholder Committee that includes a broad range of residents and representatives from non-municipal organizations or associations. This committee structure was followed primarily to maximize potential Community Rating System (CRS) credit points for this plan under Activity 510 (in anticipation of the Town's future participation in the program). The LPT has proven to be an effective group for purposes of Hazard Mitigation Plan development, and it is recommended they continue convening in the future as the primary organization for overseeing the monitoring, implementation, integration, and updating of this plan.</p>

Administrative/Technical Resource	Full-time (FT)/Part-time (PT)/Volunteer (V)	General Description and Effectiveness for Hazard Risk Reduction
Conservation Commission	FT/PT/V	<p>The purpose of the Conservation Commission is to protect Fairhaven's wetland resource areas in accordance with the Massachusetts Wetlands Protection Act (MGL Ch. 131, Section 40) and its Regulations (310 CMR 10.00) and the Fairhaven Wetlands Bylaw and supporting regulations. The protected resource areas include the town's rivers, streams, brooks, ponds, wetlands, banks and floodplains. Protection extends 100 feet from the edge of the wetlands, 200 feet from rivers and most brooks and streams, and to the entire floodplain. Under the Town Bylaw, certain activities within the Nasketucket River Basin are also subject to Conservation Commission Review.</p> <p>The Conservation Commission is effective at handling the above regulatory activities which are often integrated with coastal and riverine flood risk reduction strategies. The Commission holds public hearings, conducts site visits, issues permits, and conducts enforcement actions as required.</p>
Maintenance Programs to Reduce Risk	FT/PT	<p><i>Drainage system maintenance</i> – The Town's Department of Public Works ground crews clear the main public drainage ditches, and the BPW water/sewer crews maintain their own systems as required.</p> <p><i>Tree maintenance</i> – The Town employs a Tree Warden, who is responsible for removing hazard trees (including diseased and dying) in the public way, as well as planting and replacing trees throughout town.</p>
Mutual Aid Agreements	N/A	<p>The Town of Fairhaven has not opted into the Massachusetts Statewide Mutual Aid Agreement. Cities and towns that choose to opt in to this intrastate agreement can request emergency response assistance from any participating community in the state. Opt-in communities can send or request resources during any public safety event or incident. The mutual aid agreement is defined by Massachusetts General Law Chapter 40 Section 4J, which specifies the handling of legal issues related to the lending of resources between cities, towns, and government entities.</p>

Administrative/Technical Resource	Full-time (FT)/Part-time (PT)/Volunteer (V)	General Description and Effectiveness for Hazard Risk Reduction
Sustainability Committee ( <i>Green Fairhaven</i> )	PT/V	The mission of the Sustainability Committee of Fairhaven is to study, recommend and facilitate actions and systems that will educate and engage the community and lead to the responsible consumption of resources and the implementation of life sustaining practices in order to create a healthy environment and future for our community. The committee could be an effective mechanism for integrating traditional risk reduction and broader community resilience strategies into other related long-term community planning and outreach activities.
<i>Staff</i>		<i>Is staffing adequate to administer programs/enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?</i>
Chief Building Official	FT	Building Commissioner + 1 PT Assistant
Floodplain Administrator	PT	Building Commissioner ( <i>serves dual/part-time role as Floodplain Administrator</i> )
Emergency Manager	V	EMA Director
Community Planner	FT	Director of Planning and Economic Development
Civil Engineer	<i>Contracted</i>	Town contracts out with private engineer for engineering certifications, etc.
GIS Coordinator	<i>Contracted</i>	Town contracts with private vendors (CAI Technologies, PeopleGIS) for geospatial services.
Resource Development Staff or Grant Writers	PT	Director of Planning and Economic Development ( <i>serves dual/part-time role as the Town's primary grant writer</i> )
Public Information Officer	N/A	The Town does not have a PIO.
<i>Technical</i>		<i>Describe capability. Has capability been used to assess/mitigate risk in the past?</i>
Staff with knowledge of land development and land management practices	FT	Director of Planning and Economic Development is a certified planner with the American Institute of Certified Planners (AICP), and has successfully developed and implemented several risk mitigation projects in the past.

Administrative/Technical Resource	Full-time (FT)/Part-time (PT)/Volunteer (V)	General Description and Effectiveness for Hazard Risk Reduction
Staff trained in construction practices related to buildings and/or infrastructure	FT/PT	The Building Commissioner is trained and experienced in the administration and enforcement of the State Building Code but does not necessarily manage the Town's actual construction projects. Other Town staff, including the Director of Planning and Economic Development, do have some training and experience in the administration of building/infrastructure projects and will be tasked with such responsibilities as needed.
Staff with an understanding of natural hazards and risk mitigation	FT	The Director of Planning and Economic Development and the Building Commissioner have a good understanding of where natural hazard vulnerabilities and previous occurrences have impacted the Town. Each has been with the Town for a lengthy tenure and have continued to build on this knowledge through past hazards events and this hazard mitigation planning process.
Hazards data and information	Yes	Staff has access to a lot of open source data and information on natural hazards, including online mapping portals that show the location and extent of potential flooding for various storm and future sea level rise scenarios. Other documents including but not limited to the State Hazard Mitigation Plan are also readily available. Hard copies of local studies and maps are maintained in Town offices by appropriate departments and/or staff.
Warning systems/services (e.g., Reverse 911, outdoor warning signals, etc.)	Yes	<p>The Town does have an active Reverse 911 system and participates in the Bristol/Plymouth Emergency Alert System (EAS) for radio and television communications. Other specific emergency preparedness, notification, and warning procedures are outlined in the Town's Hurricane/Emergency Plan.</p> <p>The West Island Weather Station maintains an active website and is a well-known and National Weather Service Certified SkyWarn Spotter.</p>



Administrative/Technical Resource	Full-time (FT)/Part-time (PT)/Volunteer (V)	General Description and Effectiveness for Hazard Risk Reduction
<b>Opportunities to Improve, Expand, or Enhance for Hazard Risk Reduction Purposes</b>		
<ol style="list-style-type: none"> <li>1. Establish routine schedule for future meetings of the Local Planning Team as the primary organization for overseeing the monitoring, implementation, integration, and updating of the Hazard Mitigation Plan.</li> <li>2. Join the Massachusetts Statewide Mutual Aid Agreement to ensure the Town has access to additional support and resources from neighboring communities during and after future disaster or emergency events.</li> <li>3. Support additional training and professional development for staff as it relates to hazards management, including participation at FEMA's Emergency Management Institute and/or MEMA Headquarters, as well as future conferences or training/certification programs for local planners and floodplain managers (e.g., Certified Floodplain Manager).</li> <li>4. Build local capacity and resources for internal GIS functions and services, versus contracting out.</li> <li>5. Support the development of a new first responder facility for the Police and Fire Departments that includes a structurally hardened Emergency Operations Center (EOC) designed to resist extreme loading events and function properly for future Town emergencies.</li> </ol>		

**Table B-3: Financial Capabilities**

<b>Financial Tool/Source</b>	<b>Accessible for Hazard Mitigation (Yes/No)</b>	<b>General Description and Effectiveness for Hazard Risk Reduction</b> <i>Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?</i>
General funds	Yes	General funds have been used for a variety of projects and initiatives related to hazard risk reduction. This includes 100% funding for some projects in addition to local match for federal funds to develop and implement hazard risk reduction projects, such as stormwater drainage improvements. Most recently general funds were used to support the development of a Master Plan update for the Town, which includes a new “Sustainability” element that integrates hazard and climate resilience.
Capital Improvement Program (CIP) funding	Yes	Per Town Code, the Capital Improvement Program (CIP) is established for land purchases, construction and renovation of buildings, major equipment and machinery purchases, road and drainage reconstruction, and the construction and reconstruction of special facilities such as local school projects, sewer and water mains, and water treatment and sewage disposal facilities. The CIP has been used in the past to address hazards through structural improvements, engineering studies and projects, and equipment purchases and should be considered a source to support the future implementation of mitigation actions.
Special purpose taxes	No	The creation of any special purpose taxing authority or district would require a referendum to approve an override to annual statutory limits on how much the Town of Fairhaven can raise in tax revenue.
Fees for water, sewer, gas, or electric services	No	Water and sewer fees are collected via enterprise funds through the Town’s Department of Public Works to offset administrative expenses in addition to routine system maintenance and operations. An enterprise fund gives communities the flexibility to account separately for all financial activities associated with a broad range of municipal services. It establishes a separate accounting and financial reporting mechanism for municipal services for which a fee is charged in exchange for goods or services. New infrastructure or system improvements are to be funded through the Town’s CIP described above.
Stormwater utility fee	No	Not established by Town of Fairhaven.
Development impact fees	No	Not used by Town of Fairhaven.
Incur debt through general obligation bonds and/or special tax bonds	No	The Town of Fairhaven uses debt service for only a very small percentage of its current budgeting process, opting to maintain a structurally balanced budget where operating revenues meet or exceed operating expenses.

Financial Tool/Source	Accessible for Hazard Mitigation (Yes/No)	<b>General Description and Effectiveness for Hazard Risk Reduction</b> <i>Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?</i>
Incur debt through private activities	No	Not used by Town of Fairhaven.
FEMA Hazard Mitigation Assistance (HMA)	Yes	Annual application cycle for Pre-Disaster Mitigation (PDM) and Flood Mitigation Assistance (FMA) administered by MEMA, in addition to post-disaster Hazard Mitigation Grant Program (HMGP) funds following presidentially declared major disasters. The Town successfully applied for and received HMA funding to support the development of this Hazard Mitigation Plan (through HMGP). This and other HMA programs as administered by FEMA and MEMA were specifically designed to provide funding for eligible mitigation planning and projects that reduce disaster losses and protect life and property from future disaster damages.
HUD Community Development Block Grant (CDBG)	Yes	The Town has been extremely successful in obtaining CDBG funds, including a total of nearly \$9 million since 2005. This includes projects that improved stormwater drainage and conveyance in areas with a history of recurring flood problems (including areas where existing drainage systems were inadequate or non-existent). This also includes improvements to pump stations and the construction of larger underground box culverts to drain stormwater to the harbor.
State funding programs	Yes	<p>The Massachusetts Office of Coastal Zone Management (CZM) administers the Coastal Resilience Grant Program to provide financial and technical support for local efforts to increase awareness and understanding of climate impacts, identify and map vulnerabilities, conduct adaptation planning, redesign vulnerable public facilities and infrastructure, and implement non-structural (or green infrastructure) approaches that enhance natural resources and provide storm damage protection. Grants are available for a range of coastal resilience approaches—from planning, public outreach, feasibility assessment, and analysis of shoreline vulnerability to design, permitting, construction, and monitoring. To date this funding source has not been utilized by the Town of Fairhaven but it is being considered for activities that can support the implementation of projects or actions recommended in this Hazard Mitigation Plan.</p> <p>The Town is also researching future opportunities to apply for participation in the State's new Municipal Vulnerability Preparedness (MVP) grant program to build upon the Hazard Mitigation Plan with some more site-specific climate change vulnerability assessments and adaptation planning.</p>

Financial Tool/Source	Accessible for Hazard Mitigation (Yes/No)	<b>General Description and Effectiveness for Hazard Risk Reduction</b> <i>Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?</i>
<b>Opportunities to Improve, Expand, or Enhance for Hazard Risk Reduction Purposes</b>		
		<ol style="list-style-type: none"> <li>1. Upon completion of the Hazard Mitigation Plan, conduct more detailed project scoping and benefit/cost analysis for those mitigation actions that may be eligible for funding through existing state and federal funding sources (particularly those listed above). Research and develop the capacity of the Town to meet local match requirements through in-kind and/or cash contributions as required, including through general fund and/or CIP budget requests.</li> <li>2. Coordinate with SRPEDD and neighboring municipalities on the identification and development of fiscal resources that can be leveraged for the implementation of projects or activities that provide the benefits of hazard risk reduction on a regional and multi-jurisdictional scale.</li> <li>3. On an annual basis, and upon the release of federal or state notices of funding availability (including but not limited to FEMA's Hazard Mitigation Assistance programs), the Town will advertise and promote the types of financial assistance available to assist property owners in reducing the risk of natural hazards. Notices shall describe the eligibility of the Town of Fairhaven to apply for grant funds on the behalf other individuals or organizations in order to acquire financial support in the completion of technically feasible and cost-effective hazard mitigation projects.</li> </ol>

Table B-4: Education and Outreach

Program/Organization	Yes/No	<b>Description and Effectiveness for Hazard Risk Reduction</b> <i>Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?</i>
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Yes	<p><i>Green Fairhaven</i>, the Town's Sustainability Committee, has adopted a special emphasis to educate and engage the community in its efforts to create a healthy environment and future for the community. The committee could be an effective mechanism for integrating traditional risk reduction and broader community resilience strategies into other related long-term community planning and outreach activities.</p> <p>The Town's <i>Council on Aging</i> focuses on the needs of the elders and seniors in the community and provides appropriate programs and services to meet those needs. The Council serves as a unique conduit for education and outreach materials that can be specifically tailored for this segment of the population which may be more vulnerable to the effects of natural hazards.</p>
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	<p>Examples include:</p> <ul style="list-style-type: none"> <li>• Town website is regularly updated with public education/information materials on a variety of topics, including hurricane preparedness</li> <li>• Annual hurricane preparedness meeting is held at the West Island Improvement Association community center.</li> </ul>
Natural disaster or safety-related school programs	Yes	The Fairhaven Fire Department participates in a Massachusetts State Grant that funds the Fire Education of children in the school system. Each school year firefighters enter Fairhaven's pre-schools and elementary schools to teach children the dangers of fire.
<i>StormReady</i> certification	No	The Town of Fairhaven does not currently participate in the <i>StormReady</i> program.
<i>Firewise Communities</i> certification	No	The Town of Fairhaven does not currently participate in the <i>Firewise Communities</i> program.
Public-private partnership initiatives addressing disaster-related issues	No	

Program/Organization	Yes/No	<b>Description and Effectiveness for Hazard Risk Reduction</b> <i>Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?</i>
<b>Opportunities to Improve, Expand, or Enhance for Hazard Risk Reduction Purposes</b>		
		<ol style="list-style-type: none"> <li>1. Develop hazard-specific flyers/PSAs to address some of the Town's primary concerns, including hurricane evacuation/re-entry procedures, flood risk and insurance rate reduction, electrical/generator safety, etc.</li> <li>2. Consider outreach opportunities to the Town's farming community as it relates to anticipated affects and opportunities related to climate change (e.g., agricultural interests, beekeepers, etc.)</li> <li>3. Coordinate with the Millicent Library to establish an organized and easily accessible collection of educational material focused on natural hazards and risk reduction measures that can be taken by individuals and neighborhoods. This should include information on emergency preparedness and flood protection measures as well as locally pertinent documents such as copies of the Hazard Mitigation Plan.</li> <li>4. Consider developing a Program for Public Information (PPI) as credited under FEMA's Community Rating System (CRS), especially if/when the Town decides to join as an active participant in the CRS program.</li> <li>5. Develop a plan/program to promote the availability of flood insurance to all residents, including those property owners or tenants living in areas that are located outside of mapped special flood hazard areas (who are eligible for much lower premium rates through FEMA's preferred risk policies).</li> <li>6. Develop and distribute information to increase general community awareness of projected climate change impacts and adaptation strategies for Fairhaven. This could also include specific/targeted messaging for those people or sectors most vulnerable to the projected impacts (for example, to coastal property owners as it relates to sea level rise or to the farming community, beekeepers, etc. as it relates to increasing temperatures).</li> <li>7. Develop and distribute informational brochures on hazard risks and emergency preparedness and response procedures for West Island with particular focus on evacuation, sheltering, re-entry, and post-disaster recovery operations and guidance.</li> <li>8. Acquire or develop educational Public Service Announcements regarding electrical/generator safety for use by the Town immediately before and after major storm events that result in widespread power outages.</li> <li>9. Educate and increase the awareness of seniors on the Town's emergency preparedness and response operations through public outreach and training/drills at senior housing facilities. This should also include promotional outreach and education on the safety and relative comfort of the Town's emergency shelters to help make seniors and other residents less reluctant to evacuate and go there during emergency or disaster events.</li> <li>10. Upon plan approval, widely promote the Town's eligibility for future hazard mitigation project grants to assist owners of buildings that have experienced repetitive flood damages in reducing future risk. This may include structural elevation or property acquisition and/or relocation to areas outside of identified flood hazard areas.</li> </ol>

**Safe Growth Survey Results**

The results of the Safe Growth Survey are summarized in Table B-5. This includes describing how strongly the Town's Planning and Economic Development staff agrees or disagrees with 25 "Safe Growth Statements" as they relate to Fairhaven's current plans, policies, and programs for guiding future community growth and development, according to the following scale:

1=Strongly Disagree 2=Somewhat Disagree 3=Neutral 4=Somewhat Agree 5=Strongly Agree

**Table B-5: Summary of Safe Growth Survey Results**

<b>MASTER PLAN</b>					
<b>Land Use</b>					
1. The master plan includes a future land use map that clearly identifies natural hazard areas.	1	2	<b>3</b>	4	5
2. Current land use policies discourage development and/or redevelopment within natural hazard areas.	1	2	<b>3</b>	4	5
3. The master plan provides adequate space for expected future growth in areas located outside of natural hazard areas.	1	2	3	<b>4</b>	5
<b>Transportation</b>					
4. The transportation element limits access to natural hazard areas.	1	2	<b>3</b>	4	5
5. Transportation policy is used to guide future growth and development to safe locations.	1	<b>2</b>	3	4	5
6. Transportation systems are designed to function under disaster conditions (e.g., evacuation, mobility for fire/rescue apparatus, etc.).	1	2	3	<b>4</b>	5
<b>Environmental Management</b>					
7. Environmental features that serve to protect development from hazards (e.g., wetlands, riparian buffers, etc.) are identified and mapped.	1	2	3	<b>4</b>	5
8. Environmental policies encourage the preservation and restoration of protective ecosystems.	1	2	3	<b>4</b>	5

9. Environmental policies provide incentives to development that is located outside of protective ecosystems.	1	<b>2</b>	3	4	5
<b>Public Safety</b>					
10. The goals and policies of the master plan are related to and consistent with those in the Hazard Mitigation Plan.	1	2	3	4	5
			<b>N/A</b>		
11. Public safety is explicitly included in the plan's growth and development policies.	1	2	3	<b>4</b>	5
12. The monitoring and implementation section of the plan covers safe growth objectives.	1	2	<b>3</b>	4	5
<b>ZONING ORDINANCE</b>					
13. The zoning ordinance conforms to the master plan in terms of discouraging development and/or redevelopment within natural hazard areas.	<b>1</b>	2	3	4	5
14. The ordinance contains natural hazard overlay zones that set conditions for land use within such zones.	1	<b>2</b>	3	4	5
15. Rezoning procedures recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use.	1	2	<b>3</b>	4	5
16. The ordinance prohibits development within, or filling of, wetlands, floodways, and floodplains.	1	<b>2</b>	3	4	5
<b>SUBDIVISION REGULATIONS</b>					
17. The subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas.	1	2	<b>3</b>	4	5
18. The regulations provide for conservation subdivisions or cluster subdivisions in order to conserve environmental resources.	<b>1</b>	2	3	4	5
19. The regulations allow density transfers where hazard areas exist.	<b>1</b>	2	3	4	5



<b>CAPITAL IMPROVEMENT PROGRAM AND INFRASTRUCTURE POLICIES</b>					
20. The capital improvement program limits expenditures on projects that would encourage development and/or redevelopment in areas vulnerable to natural hazards.	1	2	<b>3</b>	4	5
21. Infrastructure policies limit the extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards.	1	2	<b>3</b>	4	5
22. The capital improvements program provides funding for hazard mitigation projects identified in the Hazard Mitigation Plan.	1	2	3 <b>N/A</b>	4	5
<b>OTHER</b>					
23. Small area or corridor plans recognize the need to avoid or mitigate natural hazards.	1	2	<b>3</b>	4	5
24. The building code contains provisions to strengthen or elevate new or substantially improved construction to withstand hazard forces.	1	2	3	4	<b>5</b>
25. Economic development and/or redevelopment strategies include provisions for mitigating natural hazards or otherwise enhancing social and economic resiliency to hazards.	1	2	<b>3</b>	4	5

### ***Participation in the National Flood Insurance Program (NFIP)***

The Town of Fairhaven actively participates in and remains in good standing with the NFIP. The Town has adopted and actively enforces local flood damage prevention regulations in compliance with the minimum state and federal standards for new construction located in identified special flood hazard areas (for more information, see “Floodplain Regulations” in Table B-1). These standards require that all new buildings and substantial improvements to existing buildings will be protected from damage by the 1-percent-annual-chance flood event, and that new floodplain development will not aggravate existing flood problems or increase damage to other properties.

No compliance issues with the NFIP were identified by the local floodplain administrator in response to the NFIP Survey. The Town’s last Community Assistance Visit (CAV) was held on April 23, 2014 and no compliance issues or violations were identified at the time by the Massachusetts Department of Conservation and Recreation (the State Coordinating Office for the NFIP). However, the lack of sufficient local staff and funding for flood mitigation projects was identified the primary impediments to running a more enhanced floodplain management program, including the implementation of those types of activities that could receive credit points under the Community Rating System (CRS). As noted in Table B-2, the Building Commissioner currently serves as the Town’s floodplain administrator in a secondary, part-time capacity. This arrangement is deemed adequate and appropriate at the current time and will continue for the near future, but it will be revisited again as the Town pursues participation in the CRS program through additional floodplain management activities.

Another key service provided by the NFIP is the mapping of identified flood hazard areas. Once prepared, the Flood Insurance Rate Maps (FIRMs) are used to assess flood hazard risk, regulate construction practices and set flood insurance rates. FIRMs are an important source of information to educate residents, government officials, and the private sector about the likelihood of flooding in their community. The Town has routinely coordinated with FEMA in the development and update of FIRMs to identify the regulatory special flood hazard areas for their jurisdictions. **Table B-6** provides a summary of some key NFIP statistics for the Town of Fairhaven since joining the program in 1976. More information on previous flood events and the general location of repetitive loss properties is provided in Appendix B (Section A.3.7.4).

**Table B-6: Summary NFIP Statistics for the Town of Fairhaven (as of September 25, 2017)**

<b>NFIP Entry Date</b>	March 16, 1976
<b>Current Effective FIRM</b>	July 16, 2014 <i>* Currently there are no requests for map updates.</i>
<b>Policies In-Force</b>	657
<b>Insurance In-Force</b>	\$148,441,300
<b>Written Premium In-Force</b>	\$1,230,399
<b>Total Losses</b>	420
<i>Claims Payments</i>	\$3,454,630
<i>Average Claim Payment</i>	\$8,225
<i>Substantial Damage Losses</i>	52
<b>Repetitive Loss Properties (RLPs)</b>	17
<i>Total Losses for RLPs</i>	49
<i>Claims Payments for RLPs</i>	\$649,822
<i>RLPs Reported as "Mitigated"</i>	4

Source: FEMA

As part of the NFIP Survey, the following list of possible new mitigation actions were identified in terms of opportunities to improve and enhance local floodplain management in Fairhaven as well as continued NFIP compliance:

- Evaluate permit application forms to determine possible modifications focused on flood hazard prevention.
- Establish a goal to have the floodplain administrator periodically attend related training (for example, conferences, webinars, or workshops sponsored by the Association of State Floodplain Managers or similar organizations).
- Maintain a list/map of problem areas that flood frequently (e.g., areas where repetitive loss properties are located) and prioritize those areas for inspection immediately after the next flood event. If outside FEMA special flood hazard areas, consider requiring existing NFIP regulatory standards (compliance with existing ordinance) through overlay zoning, etc.

- Update and improve re-entry policies for Sconticut Neck and West Island following major coastal storm events to allow for more time to complete proper damage inspections, substantial damage determinations, etc. before property owners begin the repair and rebuilding process.
- Provide information on existing flood hazards and promote the availability of flood insurance on the Town's website and potentially through regularly scheduled mailings (e.g., annual property tax notices, utility bills, etc.).

#### B.4. PREVIOUSLY IMPLEMENTED MITIGATION MEASURES

**Table B-7** provides a summary of some hazard mitigation measures that have previously been implemented by the Town of Fairhaven.

**Table B-7: Previously Implemented Mitigation Measures**

Mitigation Measure	Description and Effectiveness for Hazard Risk Reduction
Stormwater Drainage Improvements	Previous drainage projects were completed for Central Fairhaven and Cushman Park using the Town's general funds and CIP process as well as through federal CDBG grant funds. The Cushman Park area had been identified as one of the Town's most vulnerable locations to flooding from heavy rainfall events and inner harbor flooding. Drainage improvements including new storm sewer infrastructure, primarily funded through CDBG, have increased the capacity of wastewater pipes and culverts, reducing the severity of flooding in the entire area.
Underground Utilities	Underground utilities were put in place to West Island after Hurricane Bob toppled most of the utility poles that were exposed to the pounding waves and wind along the causeway.
Hurricane Barrier	The New Bedford-Fairhaven Hurricane Barrier was completed in May 1966 and is operated and maintained by the USACE, the City of New Bedford, and the Town of Fairhaven. The barrier consists of three separate structures: the main barrier, the Clarks Cove Dike, and the Fairhaven Dike. Fairhaven Dike is located across the tidal marshes at the head of Priests Cove and provides protection from coastal flooding to all but Sconticut Neck, West Island, and the northern shore of Nasketucket Bay. The barrier was accredited by FEMA in 2011 and is shown on the effective FIRM as providing protection from the 1-percent-annual-chance flood, but it has been assumed that the barrier would fail in a 0.2-percent-annual-chance flood event.

#### B.5. SUMMARY OF FINDINGS AND CONCLUSIONS

The Town of Fairhaven has some strong capabilities and resources to mitigate the effects of natural hazards, particularly as it relates to existing planning and regulatory measures that are designed to ensure new and/or substantially-improved construction is built to be more resilient to potential hazards. Some specific opportunities to improve, expand, or enhance these measures are provided in Table B-1 and were highlighted in response to the Safe Growth Survey as summarized in Table B-5. Most notably this includes strengthening existing zoning regulations in ways that can help discourage development and/or redevelopment within natural hazard areas. It is felt that the Town is on a path to achieving this through the ongoing update to its Master Plan which includes recommendations to incorporate existing

and projected future climate conditions into the Town's zoning bylaw to promote (re)development patterns that minimize exposure to known hazards.

While the Town of Fairhaven's planning and regulatory capacity is considered strong, the lack of adequate staff capacity in some areas in addition to available financial resources may potentially hinder its ability to more aggressively pursue and implement hazard mitigation actions and projects. Despite this lack of internal capacity, the Town has been quite successful in obtaining outside financial and technical assistance through federal and state grant programs, which should continue so long as those programs continue to exist. The Town will also continue to seek increasing its internal capacity to manage community-wide hazard mitigation programs in the future (for example, this includes aiming to join FEMA's Community Rating System as specified in the Mitigation Action Plan included in Section 4).

The Town has been successful with increasing its public education and awareness programs, a trend that continued through its efforts to prepare this plan as well as the Master Plan Update project. Many opportunities to improve and expand on these efforts as it relates to hazard risk reduction have been identified in Table B-4.

Finally, while the Town of Fairhaven has maintained its compliance with the National Flood Insurance Program (NFIP) for many years, there are many opportunities to improve and go above and beyond the minimum NFIP standards as required by FEMA. These actions were considered as part of the development of the Town's Mitigation Strategy and will continue to be through its application to join the CRS as noted above.

Overall the Town of Fairhaven is well positioned to mitigate risks from natural hazards, and it is believed that through the development of this plan and other concurrent efforts including but not limited to the Master Plan Update, it will begin to do so in a more deliberate and meaningful manner. This will be accomplished through many of the existing capabilities and resources described in the section, and the Town's ability to improve and expand on them as noted herein.