

Braintree Annex

Introduction

This appendix, when used with the Regional (multi-jurisdictional) PDM Plan, is an All-Hazard Pre-Disaster Mitigation Plan for the Town of Braintree.

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. Previous FEMA, State and Regional Project Impact efforts demonstrate the fact that it is less expensive to prevent disasters than to repeatedly repair damage after a disaster has struck. This plan recognizes that communities have opportunities to identify mitigation strategies. Hazards cannot be eliminated, but it is possible to determine what the hazards are, where the hazards are most severe and identify local actions that can be taken to reduce the severity of the hazard.

Hazard Mitigations strategies and measures **avert** the hazard by redirecting its impact by means of a structure or land treatment, **adapt** to the hazard by modifying structures or standards or **avoid** the hazard through improved public education, relocating/removing buildings in the flood zone, or ensuring development is disaster resistant. Measures and strategies could include projects such as:

- Flood-proofing structures
- Tying down propane/fuel tanks in flood-prone areas
- Elevating furnaces and water heaters
- Identifying & modifying high traffic accident locations and routes
- Ensuring adequate water supply
- Identifying & upgrading undersized culverts
- Proactive land use planning for floodplains and other flood-prone areas
- Proper road maintenance and construction
- Ensuring critical facilities are safely located
- Buyout & relocation of structures in harms way
- Establish & enforce appropriate building codes
- Public information and education

Purpose

The purpose of this Pre-disaster Mitigation Plan is to assist Braintree in identifying all hazards facing the town and list strategies to begin reducing risks from known hazards.

Two Rivers-Ottauquechee Regional Hazard Mitigation Goals

- Reduce the loss of life and injury resulting from all hazards.
- To lessen financial losses and property damage incurred by municipalities, businesses and private citizens due to disasters.

These overarching goals can be further refined as follows:

- The impacts of hazards should be first avoided, then reduced where they cannot be reasonably avoided. For flooding and riverine erosion, this can best be achieved by precluding development from hazard areas, and where development exists through property buyouts or flood protection sympathetic to the natural and human resources of the area.
- The connections between land use, development siting, drainage systems, building standards, and road design and maintenance and the effects of disasters on the Region should be recognized and incorporated into policy so that there is no adverse impact (increased hazard) from development.
- Mitigation actions should be part of larger, systematic efforts at disaster reduction based on the highest threats. Flooding should be addressed on a watershed scale. Structural fire and technological hazards should be lessened through statewide safety education and code compliance.

Braintree Town Plan (adopted 2/28/06) – Objectives/Goals that support Hazard Mitigation

- It is a goal to encourage safe, decent, adequate and suitable housing for all of Braintree's residents (page 30).

Community Background

The Town of Braintree, Vermont is situated in Orange County and comprises a total land area of approximately 22,700 acres or 35.5 square miles. Braintree is bounded by six towns: Randolph, Rochester, Granville, Roxbury, Brookfield, and Bethel. Braintree is located in the northern part of the Two Rivers - Ottauquechee Regional Commission's planning boundary. In 2000, the population of Braintree was 1,194, which nearly reaches the highs of the 1830's & 1840's. Although Braintree is a rural town, it neighbors the town of Randolph, which is a commercial and political hub in this area. Randolph's growing housing needs and its proximity to Interstate 89 will mean that Braintree is likely to experience more growth in the future.

According to the U.S. Census Reports, there were 498 year-round housing units and 69 seasonal housing units in Braintree in 2000, totaling 567. In 1990, there were 570 units. The decrease, although surprising (1990 – 2000) was negligible. It may, however signal a shift from year-round residences to seasonal housing. The overall increase for the Two Rivers-Ottauquechee Region during this period was 6%. Of all the residential buildings in Braintree, 27% were built prior to 1939.

The Town lays within the service area of Central Vermont Public Service (CVPS) that supplies electrical power to all sections of town.

Braintree has a contractual agreement, paid annually, with the Town of Randolph for fire services. Randolph has three satellite fire stations, the nearest being in Randolph Village which responds to Braintree fires. It is staffed with volunteers, and considering the approximately 40 volunteer firefighters at other area departments, it appears that sufficient fire protection services are available to the residents of Braintree.

A Constable is elected each year at Town Meeting. The Constable and Town residents may call upon the Vermont State Police (Troop D), with the station located in Royalton for assistance. Presently, the law enforcement procedures in Braintree are considered adequate for Braintree's present population.

Emergency medical services are responded to by the White River Valley Ambulance, Inc., located in Bethel. This is a non-profit ambulance/rescue service owned by Braintree and seven other towns. They have three ambulances and a rescue truck with extrication equipment used for assisting injured people. The closest hospital is Gifford Medical Center, located in Randolph. Emergency air transportation is available by the DHART helicopter.

Community Hazards Inventory and Risk Assessment

In Braintree, interviews with the town Selectboard and municipal Emergency Management officials, and hazards analysis indicate that the following hazards are listed as probable (frequent to unusual) – Flood, HAZMAT (Transportation Accidents), Winter Storm/Ice Storm and Structural Fire. In terms of potential severity of damage, the following hazards are rated as having the potential to produce serious to locally catastrophic damage –Flood, HAZMAT, Hurricane/Tropical Storm, Drought, and Structural Fire. Hazards to which the town is vulnerable (probable and damaging) include Flood, HAZMAT, and Fire. Therefore, the mitigation measures in this Plan focus on these three hazards.

Flood (Risk = Med-High/High)

Based on the results of overlaying the FIRM flood maps with the location of the E911 points, there are 7 residences and 3 commercial businesses in the town that are vulnerable to potential flooding. The estimated loss for damage to these properties from the 100 year flood, assuming average residential and commercial values (derived from 2008 Annual Report by the Vermont Department of Taxes, Division of Property Valuation and Review) would be \$1,782,151. This is about 2% of the grand list.

Recent flooding that had led to federal disaster declarations for Orange County occurred from June 17, 1998 to July 13, 1998 (DR 1228 VT), Sept. 16 through Sept. 21, 1999 (DR 1307 VT), July 14, 2000 through July 18, 2000 (DR 1336 VT), July 21, 2003, through

August 18, 2003 (DR 1488 VT), April 15-21, 2007 (DR 1698 VT), July 9-11, 2007 (DR 1715 VT) and July 21 through August 12, 2008 (DR 1790 VT). This list does not include flood events that were not federally declared. Flooding and flash flooding are the most likely and most frequently recurring natural disaster events in Vermont.

No development projects are planned in Braintree in areas that would be vulnerable to flooding. There are no repetitive loss properties in Braintree on FEMA's NFIP list. Areas subject to flooding are shown on the NFIP map of Braintree.

HAZMAT - Transportation Accidents (Risk = Med-High/High)

Based on available VT Tier II data, there are 2 sites in town that have sufficient types and/or quantities of hazardous materials to require reporting. However, the New England Central Railroad runs through Braintree, right along Route 12. At any given time, there can be hazardous materials aboard the train. West Braintree village is located on Vermont Route 12A and sees a small amount of truck traffic, and East Braintree village is located on VT RT 12 and sees a moderate amount of truck traffic by Vermont standards. Within 1,000 feet of the railroad tracks and Routes 12 and 12A, there are 256 residences and 6 commercial & industrial buildings. In the event that 5% of these structures were involved in a HAZMAT incident, the estimated damage would be \$2,040,364. It should also be noted that the State of Vermont currently has one fully trained HAZMAT response team, with vehicles located in Essex Junction, Brandon, and Windsor. The HAZMAT crew chief is available within minutes of a call for the team but on-scene response would be a matter of hours. In the event of a serious accident in town, there would be little time for evacuation and response would be difficult.

Fire (Risk = Med-High/High)

Poor access to fires, limited water supply for firefighting, and distances of homes from the Fire Stations in Randolph are a few of the challenges that leave Braintree vulnerable to the impacts of structure fires.

Existing Hazard Mitigation Measures in the Community

Ongoing efforts to mitigate hazards in the community include:

1. ditch and culvert maintenance.
2. administration of flood hazard regulations

National Flood Insurance Program

The Town of Braintree is an NFIP participant. Braintree's initial Flood Hazard Boundary Map was identified on 12/13/74. The Town's initial Flood Insurance Rate Map (FIRM) was dated 9/27/85. The Town's FIRM has been updated, and the current effective map date is 9/27/85. No elevation is determined on this FIRM.

The Braintree Zoning Administrator serves as the NFIP Administrator. Braintree is located in Orange County and has not completed an update of its municipal flood hazard regulations. Aside from the Town's NFIP program, there are no additional erosion control or flood management regulations that apply in Braintree. There are no plans to enroll the community in the Community Rating System program.

Based on the regional and local hazard assessment and analysis, this Annex identifies actions related to continued compliance with the NFIP. These actions are prioritized, along with the other actions developed in this Annex, using the method described on Page 21 of the Regional PDM Plan. The actions are included in the Implementation Schedule for Prioritized Mitigation Projects, which follows.

Areas of Local Concern

1. There is an erosion hazard along Riford Brook that may wash out Riford Brook Road and/or Route 12A where it meets Riford Brook. There was a washout in 1998 in this area, but the repair work conducted only covered a portion of the damaged area. Additional work to reinforce riverbanks is necessary.
2. The fuel storage tank at the Town Garage is unprotected and could be damaged in the event of a vehicular collision.
3. A 100 unit trailer park in town is built on a bank that might suffer serious erosion effects during a 500-year flood hazard event. The park has only one access route, over railroad tracks at a hard turn, with limited visibility. The major concern, then, is for a HAZMAT spill that would prevent evacuation of the trailer park.

Implementation Schedule for Prioritized Mitigation Projects

Tasks currently under way or under consideration – in order of priority:

MITIGATION ACTION	WHO (LEADERSHIP)	WHEN (TIMEFRAME)	HOW (FUNDING/ SUPPORT)	IMPLEMENTATION THROUGH EXISTING PROGRAMS
<u>ALL HAZARDS</u> 1. Ensure that RRP is current	Selectboard	Yearly	With TRORC assistance	
2. Use PDM plan for Hazard Identification and Mapping	Emergency Management Coordinator	Ongoing	With TRORC assistance	
<u>FLOOD</u> 3. Stabilize riverbanks on Riford Brook Road and Route 12A along Riford Brook.	Highway Department	2010	HMGP, PDM-C, state, and local resources	
4. Continue the planned road maintenance program to survey culverts, and conduct upgrading and ditching.	Highway Department	Ongoing	Local resources	
5. Consider adopting Fluvial Erosion Hazard (FEH) regulations to incorporate lands in danger of flash flooding and erosion.	Planning Commission and Selectboard	2009	Local resources, TRORC assistance	
6. Revise flood hazard regulations, integrating FEH regulations.	Planning Commission and Selectboard	2010	Local resources, TRORC assistance	
<u>HAZMAT</u> 7. Establish an additional access route to the Mobile Acres 100 unit trailer park.	Highway Department	2010	Local resources	
8. Install guardrail or barriers between Town fuel tank and route 12A.	Highway Department	2009	Local resources with state transportation support	
<u>FIRE</u> 9. Develop additional dry hydrant sites in rural locations.	Selectboard	Ongoing	Local resources, George Aiken RC&D	