

Sharon 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 Sharon.

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 Sharon 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.

Sharon Town Plan (adopted 3/15/05) – Objectives/Goals that support Hazard Mitigation

- Future land use needs to allow appropriate access to the natural environment but protect it from degradation (page 65).
- To minimize the loss of life and property, disruption of commerce, and demand for extraordinary public services and expenditures that result from flood damage (page 49).
- To prohibit construction of new buildings and structures in designated flood hazard areas, to amend the flood hazard bylaw to reflect this prohibition, and to regulate existing land use activities to reduce the potential for flood damage (page 49).
- To enhance and maintain wise use of flood hazard areas as open space, greenways, non-commercial recreation and/or agricultural land, and to protect these natural resources (page 49).
- To maintain a transportation system that is safe, efficient and complements the other goals and policies of this Plan (page 78).
- To ensure that future development does not unnecessarily or unreasonably endanger the public investment in town and regional transportation systems or facilities, including highways, bikeways, trails, and rail (page 78).

Community Background

The Town of Sharon is located along the banks of the main stem of the White River. Bordered by mountains on three sides, Sharon consists of approximately 40 square miles of fertile land. Interstate 89 and Routes 14 and 132 transport visitors and residents alike into and out of town.

According to the U.S. Census Bureau, Sharon's 2000 population was 1,411 compared to 1,211 in 1990, a growth rate of 16.5%. Compared to other towns in the Greater Upper Valley, Sharon experienced the highest percentage change. There were 663 housing units in Sharon in 2000. In 1990, there were 578 units. This marks a 14% growth in housing units in Sharon. The overall increase for the Two Rivers-Ottawaquechee Region during this period was 6%. The growth rate in new housing for Sharon was nearly twice the rate for Windsor County.

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

Fire protection services are provided in Sharon by the Sharon Fireman's Association, Inc. Through mutual aid agreements, the Town provides back-up services to Hartford, Norwich, Pomfret, and Royalton. Fire equipment and vehicles are housed in a 30' X 45' structure located on an approximately one-half acre site west of the village on Route 14. Both land and building are owned by the Town of Sharon. Emergency rescue services are provided by the South Royalton Rescue Squad. The Town annually appropriates funds to the Squad for services. The current level of service to the Town is good. The closest hospital is Dartmouth Hitchcock Clinic, located in Lebanon, NH. Medivac services are available by the DHART helicopter.

Starting in 1993, the Town contracted the Windsor County Sheriffs Department to enforce the Town's Traffic Control Ordinance. Otherwise, police protection is provided by the Vermont State Police headquartered in Bethel/Royalton on Route 107. Current levels of police protection adequately meet the town's present and prospective needs.

Community Hazards Inventory and Risk Assessment

In Sharon, the interviews and hazards analysis indicate that the following hazards are listed as probable (frequent to unusual) – Flash 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 – Flash Flood, HAZMAT, Hurricane/Tropical Storm, Drought and Structural Fire. Hazards to which the town is vulnerable (probable and damaging) include Flash Flood, HAZMAT, and Fire. Therefore, the mitigation measures in this Plan focus on these three hazards.

Flash Flood (Risk = Med-High/High)

Based on the results of overlaying the FIRM flood maps with the location of the E911 points, there are 29 residences and 6 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 \$7,437,385. This is about 5% of the grand list.

Recent flooding that had led to federal disaster declarations for Windsor 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.

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

Fire (Risk = Med-High/High)

Poor access to fires, limited water supply for firefighting outside the Village area, and distances of homes from the Fire Station are a few of the challenges that leave Sharon vulnerable to the impacts of structure fires. Some recreational and retirement homes with single access roads and no fire-fighting water supply are in jeopardy.

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

Based on available VT Tier II data, there are five sites in town that have sufficient types and/or quantities of hazardous materials to require reporting. The New England Central Railroad runs through the village of Sharon. At any given time, there can be hazardous materials aboard the train. Additionally, Sharon's village is located at the junction of Interstate 89 and Vermont Routes 14 and 132, which see a large amount of truck traffic by Vermont standards. Within 1,000 feet of the railroad tracks and state and interstate highways there are 271 residences and 29 commercial & industrial buildings. In the event that 5% of these structures were involved in a HAZMAT incident, the estimated damage would be \$3,088,289. 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.

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 Sharon is an NFIP participant. Sharon's initial Flood Hazard Boundary Map was identified on 2/4/77. The Town's initial Flood Insurance Rate Map (FIRM) was dated 9/28/07. The Town's FIRM has been updated, and the current effective map date is 9/28/07. No elevation is determined on this FIRM.

The Town of Sharon Administrative Officer serves as the NFIP Administrator. Sharon is located in Windsor County and completed an update of its flood hazard regulations in 2007. Beyond the Town's NFIP program, there are no additional erosion control or flood management regulations that apply in Sharon. There are no plans to enroll the community in the CRS 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. Proximity to I-89 creates special problems for Sharon. Sharon firefighters are first responders to any accidents which occur within the boundaries of the town. Furthermore, the passage of large cargo trucks, some carrying hazardous materials, poses a constant danger to the town.
2. As stated above, the railroad travels through Sharon, bringing not only the daily Amtrack passenger train but several freight trains, some carrying propane and other hazardous cargo. Railroads are not required to disclose the materials they transport through Towns and Cities in Vermont.
3. Many of Sharon's major roads run alongside the mainstem of the White River and its tributaries such as Broad Brook, Fay Brook, and Quation Brook. Moore Road, Broad Brook Road, and Fay Brook Road are especially vulnerable to erosion and washouts.

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 | |
| <u>FLOOD</u> 2. Continue the planned road maintenance program and update existing culvert inventory. Upgrade culverts and ditching. | Highway Department | Ongoing | Local resources | |
| 3. Work with FEMA to conduct a full flood study and update town flood maps | Selectboard | 2010 | FEMA and local resources | |
| 4. Consider adopting Fluvial Erosion Hazard regulations | Planning Commission and Selectboard | 2009 | Local resources, TRORC assistance | |
| <u>FIRE</u> 5. Study the need for additional water resources for the Fire Department. This could include underground water tanks, hydrants, dry hydrants or connections to ponds throughout town. | Fire Department | 2009 | Local resources, George Aiken RC&D | |
| <u>HAZMAT</u> 6. Pursue HAZMAT training for Fire Department | Fire Department | 2009 | Funded by Fire Service Training Academy | |
| 7. Develop emergency access points to the railroad corridor in locations where access is presently difficult in the event of a derailment. | Emergency Management Coordinator | 2010 | With state transportation agency assistance | |
| 8. Study dispatching options and improve communication with the Vermont State Police in an effort to be better prepared for a major accident on I-89. | Emergency Management Coordinator | 2010 | State or local resources | |
| 9. Study the need for a Hazard operations plan regarding the railroad and potential hazmat spills | Emergency Management Coordinator | 2009 | State or local resources | |