

## Fairlee 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 Fairlee.

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 Fairlee 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.

## **Fairlee Town Plan (last adopted 6/18/01) – Objectives/Goals that support Hazard Mitigation**

- The specific purposes of this Plan are to enable efficient use and expenditure of public funds to support local governmental services;
- Serve as a basis for the Town's zoning and subdivision regulations which are intended to implement the Plan;
- Serve as a standard for the evaluation and review of developments proposed in the Town (page 4).

## **Community Background**

The Town of Fairlee including the Village of Ely, lies between the Connecticut River and New Hampshire and the foothills of the Green Mountains, with rocky ledges towering above. U.S. Route 5 and I-91 run through the center of Town. Its two scenic Lakes Morey and Fairlee attract visitors to vacation homes, summer camps and inns.

According to the U.S. Census Reports, there were 380 year-round housing units and 159 seasonal housing units in Fairlee in 1990. Total units combined there were 549. In 1980, there were 460 units. The overall increase during this period (1980 – 1990) was 19.8%. The overall increase for the Two Rivers-Ottauquechee Region during this period was 17.8%. The primary factor influencing population was due to families moving into Fairlee rather than unusual rates of births or deaths.

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

The town's Emergency Services Building has a four-bay space to house the Fairlee Fire Department, FAST Squad and the regional ambulance service. The building holds the fire trucks, ambulance, and the rescue truck. It is anticipated that the building will be adequate for both town and regional needs for at least five years. An addition was voted and approved in September of 2000.

The Fairlee Fast Squad consists of a dedicated group of trained volunteers. The Fast Squad members are the first to respond to emergency calls. Their efforts have been supported with the recent location of the regional ambulance service, Upper Valley Ambulance Inc., to the Emergency Services Building.

Upper Valley Ambulance Inc., a non-profit corporation, is located at the Emergency Services Building. There are two ambulances staffed by a team of paid professional emergency medical technicians (EMTs) and area volunteers certified as ambulance care providers. Purchase of a third ambulance for non-emergency transport is planned. The closest hospital is Dartmouth Hitchcock Clinic, located in Lebanon, NH. Medivac services are available by the DHART helicopter.

Police protection in Fairlee is provided by one Police Chief with provisions for the appointment of three special constables. The current Police Chief uses his home for office space and patrols in a privately owned vehicle. Most of the equipment used by Fairlee to provide police protection, except a mobile radio unit and radar unit, is owned by the chief. Local police efforts are augmented by the County Sheriff's office in Chelsea and State Police coverage from the Bradford barracks.

### **Community Hazards Inventory and Risk Assessment**

In Fairlee, the interviews and hazards analysis indicate that the following hazards are listed as probable (frequent to unusual) – Flash Flood, HAZMAT (Transportation Accidents including derailment), Winter Storm/Ice Storm, and Structural Fire and Wildfire/Forest 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 and Wildfire/Forest 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 72 residences and 0 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 \$14,616,551. This is about 7% 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.

No development projects are planned in Fairlee in areas that would be vulnerable to flooding. There are no repetitive loss properties in Fairlee on FEMA's NFIP list.

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

Based on available VT Tier II data, there are 4 sites in town that have sufficient types and/or quantities of hazardous materials to require reporting. The New England Central Railroad also runs through the village of Fairlee. At any given time, there can be hazardous materials aboard the train. Additionally, Fairlee's village is located at the junction of Interstate 91 and Route 5, both of which see a great deal of truck traffic by Vermont standards. Within 1,000 feet of the railroad tracks, Interstate 91, and Route 5 there are 270 residences and 55 commercial & industrial buildings. In the event that 5% of these structures were involved in a HAZMAT incident, the estimated damage would be \$4,231,862.

Additionally, in the event of such an incident, the Town's water supply could certainly be contaminated by any toxins that might infiltrate the groundwater, as the primary well for the town is located near route 5 and the railroad tracks. 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 outside the Village area, and distances of homes from the Fire Station are a few of the challenges that leave Fairlee vulnerable to the impacts of structure fires. Wildfires are possible during late spring, late summer, and early fall. The forests contain potential fuel for a serious conflagration with many wooded acres and difficult terrain. Some recreational and retirement homes with single access roads and no fire-fighting water supply are in jeopardy.

### **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**

Fairlee's initial Flood Hazard Boundary Map was identified on 12/17/76. The Town's initial Flood Insurance Rate Map (FIRM) was dated 6/3/91. The Town's FIRM has not been updated – the current effective map date is 6/3/91.

The Fairlee Zoning Administrator serves as the NFIP Administrator. Fairlee is located in Orange County and has not completed an update of its flood hazard regulations. Aside from the Town's NFIP program, there are no additional erosion control or flood management regulations that apply in Fairlee. 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. As stated above, the Railroad line that runs through the Village of Fairlee is a concern. A HAZMAT incident could pose a threat to the Village.
2. The Fairlee school is very near Interstate 91. Given the level of truck traffic on I-91, HAZMAT incidents are a concern there as well.
3. A structural fire in the village recently destroyed a multi-use building, emphasizing the threat of this hazard to the community.

**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	Local resources	
2. Use PDM plan for Hazard Identification and Mapping	Emergency Management Coordinator	Ongoing	Local resources	
3. Re-write and update existing Emergency Operations Plan	Emergency Management Coordinator	Yearly	Local resources	
4. Improve interoperability of emergency communications equipment	Emergency Management Coordinator	ongoing	Local resources	
<u>FLASH FLOOD</u> 5. Continue the planned road maintenance program and update existing culvert inventory. Upgrade culverts and ditching.	Highway Department	Ongoing	Local resources	
6. Revise flood hazard regulations	Selectboard	2009	Local resources and TRORC assistance	
<u>HAZMAT</u> 7. Pursue HAZMAT training for Fire Department	Fire Department	2009	Funded by Fire Service Training Academy	
<u>FIRE</u> 8. Develop additional dry hydrant sites in rural locations.	Fire Department	Ongoing	Local resources, George Aiken RC&D	