

Corinth 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 Corinth.

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 Corinth in identifying all hazards facing the town and list strategies to begin reducing risks from known hazards.

Two Rivers-Ottawaquechee 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.

Corinth Town Plan (adopted 6/25/07) -- Objectives/Goals that support Hazard Mitigation

- Protect the public health, safety and welfare of the Town of Corinth (page 3).
- Suitable emergency services are provided for town residents (page 13).
- A transportation system that is safe, efficient and complements the other goals and policies of this Plan (page 28).
- Maintain the ecological integrity and natural beauty of Corinth's natural resources through proper land use that will minimize or prevent adverse impacts (page 37).

Community Background

The Town of Corinth, Vermont is located in the central portion of Orange County and comprises an area of approximately 31,000 acres. It is bounded by eight towns, three of which share only a small segment of common boundary with Corinth. The four major neighboring towns are Topsham to the north, Bradford to the east, Vershire to the south, and Washington to the west.

Corinth is rural in nature with population being somewhat concentrated along existing main roads and in hamlet areas. The largest of these hamlets, East Corinth, serves as a community focal point and contains a store, library, health center, fire station, and post office. Town offices, a second post office, a fire station, and Town Hall are located in Cookeville. The other hamlets are Goose Green, Corinth Corners, South Corinth, Corinth Center, and West Corinth.

The Town's topography and the relatively undeveloped nature of the wooded landscape have attracted many residents and visitors to Corinth. In the rugged western portions of the Town, slopes are steep and elevations exceed 2,000 feet above sea level in certain places. The eastern part of town is more rolling with elevations dropping below 1,000 feet along the Town's three main waterways, the Waits River, the Tabor Branch and the South Branch of the Waits River.

The major roadway serving Corinth is Route 25, which ties in with Route 302 to the north and Route 5 and Interstate 91 in Bradford to the southeast.

The growth rate of the Town of Corinth in the period 1980-2000 has nearly tripled that of Orange County. Corinth has grown by 62% in that period; Orange County has grown by 24%. Population growth appears to be leveling off, however, since 2000.

The only public utilities available are electrical power and a telephone system. All domestic water systems and sewage disposal systems are owned and developed by the landowner. A vital local economic base will be dependent, especially in the coming years, on reliable, affordable, up-to-date public utilities. It will be necessary for the Town to work together with the utility companies to ensure this kind of service is available to its citizens. It may become necessary, especially in the villages, to consider developing water and sewer districts.

The community is served by the East Corinth Volunteer Fire Department. The department maintains two fire stations, one in East Corinth and one in Cookeville. The department has two tank trucks, two engines, one wildland truck, two external defibrillators, pumps, hoses, ladders, air packs, fire rakes, and other equipment for forest fires. The Fire Department has mutual aid agreements with other towns. Locatable addressing was established in 1998 and emergency help can now be summoned by calling 911.

The Town is served by a FAST squad, the CTERT, consisting of volunteers from Topsham and Corinth. Members carry beepers that are linked with a radio dispatch system. A Homeland Security grant was used to fund much needed repairs to the CTERT communication equipment. Members are certified by the American Red Cross in advanced first aid. They are emergency care attendants and carry CPR cards. Many, if not all of the members are EMT certified. The FAST squad is equipped with cardiac defibrillators and, when necessary, can summon a helicopter for air transport to Dartmouth Hitchcock Medical Center.

Some security, as allowed by state statute, is provided by a First Constable and a Second Constable, elected each year at Town Meeting. The Constable received a Homeland Security grant to purchase a radio to communicate better with the State Police, the Orange County Sheriff, and EMS organizations such as fire, fast squad and ambulance services.

Community Hazards Inventory and Risk Assessment

In Corinth, 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 damages, 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, Fire, and Winter Storm. Therefore, the mitigation measures in this Plan focus on these four 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 31 residences and 1 commercial business 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 \$4,518,963. This is about 3% 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 Corinth in areas that would be vulnerable to flooding. There are no repetitive loss properties in Corinth on FEMA's NFIP list. Areas subject to flooding are shown on the NFIP map of Corinth.

Hazardous Materials (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. Corinth's village is located just off Route 25, which does not see a large amount of truck traffic. There are 56 residential and 11 commercial buildings within 1,000 feet of a potential HAZMAT spill on Route 25. In the event that 5% of these structures were involved in a HAZMAT incident, the estimated damage would be \$469,692. 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 are a few of the challenges that leave Corinth vulnerable to the impacts of structure fires.

Winter Storm (Risk = Med-High/High)

These hazards have no specific damage estimate as their effect could occur anywhere in town.

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 Corinth is an NFIP participant. Corinth's initial Flood Hazard Boundary Map was identified on 6/28/74. The Town's initial Flood Insurance Rate Map (FIRM) was dated 6/30/76. The Town's FIRM has been updated, and the current effective map date is 9/27/91.

The Corinth Administrative Officer serves as the NFIP Administrator. Corinth 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 Corinth. 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. The rural nature of homes in Corinth poses a problem with regard to water supply. There are a limited number of locations that Firefighters can refill pumper trucks, making it difficult to properly fight fires in more remote areas.
2. The elevation in Corinth is higher than surrounding towns making it more susceptible to ice storms and their related damages.
3. Many of Corinth's major roads run alongside tributaries to the Waits River, such as South Branch, Meadow Brook and Cookeville Brook. Chelsea Road,

Cookeville Road and Goose Green Road are especially vulnerable to erosion and washouts. Tullar Road was heavily damaged in 2008 by flash flooding.

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 Planning Coordinator	2010	Local resources	
<u>FLASH FLOOD</u> 3. Continue the planned road maintenance program, conduct a culvert survey, and update undersized culverts and ditching.	Highway Department	Ongoing	Local resources	
4. Revise flood hazard regulations	Planning Commission and Selectboard	2009	Local resources, TRORC assistance	
5. Consider adopting Fluvial Erosion Hazard regulations	Planning Commission and Selectboard	2009	Local resources, TRORC assistance	
<u>HAZMAT</u> 6. Ensure that all emergency response and management personnel receive HAZMAT awareness training as a minimum.	Fire Department	2009	Funded by Fire Service Training Academy	
<u>FIRE</u> 7. Develop additional dry hydrant sites in rural locations.	Fire Department	Ongoing	Local resources, George Aiken RC&D	
<u>WINTER STORM</u> 8. Encourage utilities to continue regular tree trimming along power lines	Emergency Planning Coordinator	Yearly	Local resources	