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INTRODUCTION AND PURPOSE

This Single Jurisdiction Hazard Mitigation Plan is an update to a FEMA approved and town adopted annex to the Windham Region Multi-Jurisdiction All Hazard Mitigation Plan that expired on December 5, 2012. The town has decided to update to a Single Jurisdiction Plan.

The purpose of this plan is to assist the Town of Jamaica in identifying all of the hazards facing the town and to identify strategies to begin reducing risks from identified hazards.

Hazard 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. Based on the results of previous Project Impact efforts, FEMA and state agencies have come to recognize 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 and measures during all of the other phases of Emergency Management – preparedness, response and recovery. 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 mitigation strategies and measures alter the hazard by eliminating or reducing the frequency of occurrence, averting the hazard by redirecting the impact by means of a structure or land treatment, adapt to the hazard by modifying structures or standards or avoid the hazard by stopping or limiting development, and could include projects such as:

- Flood-proofing structures
- Tying down propane/fuel tanks in flood-prone areas
- Elevating furnaces and water heaters
- Identifying and modifying high traffic incident locations and routes
- Ensuring adequate water supply
- Elevating structures or utilities above flood levels
- Identifying and 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
- Establish and enforce appropriate building codes
- Public information

WINDHAM REGION GEOGRAPHY

The Region includes the towns of Athens, Brattleboro, Brookline, Dover, Dummerston, Grafton, Guilford, Halifax, Jamaica, Londonderry, Marlboro, Newfane, Putney, Rockingham, Stratton, Townshend, Vernon, Wardsboro, Westminster, Whitingham, Wilmington, and Windham in Windham County; the neighboring towns of Readsboro, Searsburg, and Winhall are in Bennington County; and Weston is in Windsor County. Situated in Vermont's southeastern corner, the Region is bordered by Bennington and Windsor Counties to the west and north, Massachusetts to the south and New Hampshire to the east. The Region's area is nearly 600,000 acres, or over 900 square miles.

The topography is generally hilly, with steep slopes on the river valleys on the east slopes on the Green Mountains. The Connecticut River Valley contains areas of relatively flat and gently rolling land. The Green Mountains form the western edge of the region with a landscape of ridges and mountain peaks with narrow stream valleys. Stratton Mountain is the highest point in the region at 3,936 feet. The lowest point is along the Connecticut River in Vernon at 200 feet.

In addition to the Connecticut, other major rivers of the region are the Deerfield, Green, North, Saxtons, West, and Williams, all tributaries of the Connecticut. There are two major flood control reservoirs on the West River, Ball Mountain and Townshend, and two major storage reservoirs for hydropower generation on the Deerfield River, Somerset and Harriman.
JAMAICA GEOGRAPHY & TOWN PROFILE

The Town of Jamaica is situated in the eastern foothills of the Green Mountains. It is an area of steep forested hills and narrow river valleys. The town consists of approximately 31,000 acres, approximately 90 percent of which are forestland. The forest cover is quite diverse. An estimated 70 percent of the forestland is hardwood and 30 percent is softwood. Many stands are mixed hardwood and softwood. Elevations rise to between 2,000 and 3,000 feet on Turkey Mountain, College Hill, Mundal Hill, Sage Hill and The Pinnacle. The little remaining open land in town is located along the West River in East Jamaica and Jamaica village, along the Winhall River in Rawsonville and at three locations where land is still actively managed for agriculture. These open areas and an area near the old hamlet of West Jamaica contain the only sizable areas of relatively flat land in town. Much of the development that has occurred in Jamaica is located along or near Vermont Routes 30 and 100. Other developed areas are found along Pikes Falls, West Jamaica and Turkey Mountain Roads and in the Cole Pond and West Hill areas. Of the developed land in Jamaica, the principal land use is for residences. As of 2000, 64 percent of the 935 housing units in town were seasonal or vacation homes. Most of the town's commercial development is concentrated in Jamaica Village and Rawsonville. Other commercial development is scattered along Route 30.

Jamaica Village is the town's cultural, civic, religious and educational center. Most of the town owned facilities, church, post office, Masonic Hall, bank, two inns, an art center, several restaurants and shops are located in the town center. The land in Jamaica Village is already heavily subdivided and built up. There are 110 parcels within the village district, totaling approximately 141 acres. Most of these existing lots are already developed with one or more residential units, and some contain commercial-residential or multi-unit residential buildings. Of the 110 existing parcels, 13.6% contain one-tenth acre or less, 50.8% contain one-half acre or less, 74.4% contain 1 acre or less, and 25.4% contain between one and ten acres. On-site sewage disposal systems and individual water supplies are closely spaced in many parts of the village. This situation has been and remains of great concern to the town, and indications are that the village district is probably at, or very close to, its carrying capacity for development utilizing on-site wastewater disposal systems.
Jamaica is geographically positioned in a valley which experiences high winds as a result, in particular on its high peaks. The area is also defined by numerous brooks, streams and rivers, which have naturally also become the location of settlement and the built environment. The structures in the village center of Jamaica are different from most village centers in southern Vermont in that they are closely packed onto the flatter strip of land along Ball Mountain Brook. A few years ago in the summer months, a small fire started under the floorboards of a house in town. Fortunately the fire was discovered in time and extinguished. However, it still remains that the close proximity of the numerous wood frame buildings in the village center are perpetually faced with the threat of fire, which if started during a time of high winds, could be dastardly for the entire village.

There are two water storage units in the village. One is next to the town office with a new hook up, and the other is across Rt. 30 from the old bank. That particular water storage unit has no hook up and needs to be updated. There is also a main hydrant which is a dry hydrant, coming out of the Ball Mountain Brook. In addition to Ball Mountain Book, which runs through the north end of the village, there is a 3,000 gallon cistern at the intersection of Pikes Falls Road and VT Rt. 30, and a 4,000 gallon cistern adjacent to the property at 3611 VT Rt. 30 at the south end of the village.

Jamaica has no town water or sewer system. In Jamaica, many rural homes have fire ponds. Fire trucks and equipment in this area are designed for narrow driveways, have smaller turn radiuses, and hoses which are all adapted to work in these rural conditions.

During Tropical Storm Irene on August 28, 2011, the water level in Ball Mountain Brook rose over 20 feet from its normal depth of approximately 2 feet. Four old, wood frame homes in the village center were washed out from the flash flooding, and carried down the brook. The bridge on Rt. 30 the crosses the brook in the village center was also washed out causing a road closure for more than 5 weeks on a major thoroughfare from Brattleboro to northwestern destinations in the state.

Jamaica is also in close proximity to three ski resorts. There is continuous encroachment of development from Stratton Mountain toward Jamaica of second home owners. The summer and winter population is much higher than in the off season. The percentage of competent people knowing something about emergency management during the tourist seasons becomes much smaller. During Presidents Day weekend and Christmas week, the population of Jamaica goes from approximately 1000 to approximately 10,000. The number of trained professionals in emergency management to support people in crisis situations during these times does not change. However, the number of people needing emergency assistance potentially sky-rockets.

Jamaica's most likely hazard occurrence is power outages. Power is lost 2-3 times every year. It is most notable if it is lost as long as 72 hours. Most people are self-sufficient and have enough wood, water, food, and gasoline to survive 72 hours.
PREREQUISITES

Adoption by the Local Governing Body

Certificate of Adoption
Town of Jamaica, VT
Selectboard

A Resolution Adopting the Single Jurisdiction Hazard Mitigation Plan for the Town of Jamaica, VT

WHEREAS, the Town of Jamaica, VT has worked with the Windham Regional Commission to identify natural hazards, analyze past and potential future damages due to natural disasters, and identify strategies for mitigating future damages; and

WHEREAS, this single jurisdiction plan is an update to an annex to a multi-jurisdictional regional all hazards mitigation plan formerly adopted and since expired; and

WHEREAS, The Town of Jamaica, VT Hazard Mitigation Plan analyzes natural hazards and assesses risks within the community; and

WHEREAS, the Town of Jamaica, VT Hazard Mitigation Plan recommends the implementation of action(s) specific to the community to mitigate against damage from natural hazard events; and

NOW, THEREFORE BE IT RESOLVED that the Town of Jamaica, VT adopts the Hazard Mitigation Plan for the Town of Jamaica, VT.

Duly adopted this 26\text{th} day of Jan, 2015.

Selectboard

Alexandra Clark, Chair

Andy Coyne

Paul Fraser

Judy Flower

ATTEST

Patricia Meulemans, Town Clerk
PLANNING PROCESS

Planning Participation

Town residents who took part in the planning process for developing the Hazard Mitigation Plan for Jamaica tend to be affiliated with more than one association for the town. In rural areas of Vermont, it is typical that people who are most interested in the safety, health and welfare of their community will preside on more than one board -- and for example, hold the role of Fire Chief, or school teacher, or be a small business owner, in addition to owning personal property in the town. Therefore, although the meeting may not have as many in attendance as in a more populated community, those present at the meeting are representing not only a variety of roles, but many roles that would be held by individuals in a more populated town or city.

The following stakeholder group was formed to work on the single jurisdiction hazard mitigation plan. See Appendix A for sign-in sheets.

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<tr>
<th>Committee Member</th>
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<tr>
<td>Ken Johnson</td>
<td>Jamaica 2nd Assistant Fire Chief</td>
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<td>Jamaica Fire &amp; Rescue</td>
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<tr>
<td>Paul Fraser</td>
<td>Jamaica Disaster Management Coordinator</td>
<td>Jamaica, VT</td>
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<td>Jamaica Selectboard</td>
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<td>Joel Beckwith</td>
<td>Jamaica Assistant Fire Chief</td>
<td>Jamaica, VT</td>
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<td>Jamaica Fire &amp; Rescue</td>
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<td>Stewart Barker</td>
<td>Jamaica Selectboard</td>
<td>Jamaica, VT</td>
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<td>Jamaica Forest Fire Warden</td>
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<td></td>
<td>Jamaica Fire &amp; Rescue</td>
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<tr>
<td>Edward Flower</td>
<td>Jamaica Planning Commission</td>
<td>Jamaica, VT</td>
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<tr>
<td>Valerie Pantorno</td>
<td>Jamaica Flood Zone Administrator</td>
<td>Jamaica, VT</td>
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<td>Jamaica Lister</td>
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<td>GIS Specialist</td>
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<tr>
<td>Charlie Peck</td>
<td>Citizen-at-Large</td>
<td>Jamaica, VT</td>
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<td></td>
<td>Former Windham Regional Commissioner</td>
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<tr>
<td>Jim Todd</td>
<td>Jamaica Planning Commission</td>
<td>Jamaica, VT</td>
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<td>Jamaica ZBA Flood Zone</td>
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<tr>
<td>Dale West</td>
<td>Jamaica Fire &amp; Rescue</td>
<td>Jamaica, VT</td>
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<td></td>
<td>Jamaica Fire Chief</td>
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<tr>
<td>Dana S. West</td>
<td>EP Coordinator Grace Cottage Hospital</td>
<td>Jamaica, VT</td>
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<td>Jamaica Fire &amp; Rescue</td>
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<tr>
<td>Lexa Clark</td>
<td>Jamaica Selectboard</td>
<td>Jamaica, VT</td>
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<td>Jamaica Fire &amp; Rescue</td>
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Documentation of the Planning Process

A current stakeholder group met in the Jamaica Town Offices on January 9, 2013 to talk about updating the plan to a Single Jurisdiction Hazard Mitigation Plan. The group spent a few hours going over the risk assessment and vulnerabilities sections, as well as the mitigation strategies of the previous plan that had just recently been approved by FEMA and adopted by the town in 2012. Numerous additions and changes were made that include involvement with state agency representatives over the past two years, and much more involvement planning proactively with neighboring towns.

Past planning efforts: On September 27, 2010 a rather large committee of twelve people from the Town of Jamaica met to have the preliminary discussion about risks and vulnerability of all hazards affecting the town. The committee met again on October 28, 2010 to talk about mitigation strategies for the town.

Work commenced with the Local Emergency Management Organization of Jamaica, acting as the local Hazard Mitigation Planning Committee. A complete list of participants is listed above, and the sign-in sheet(s) are included in the Appendices.

The following hazard mitigation planning meetings were held:

- September 27, 2010 – Townshend Elementary School, Townshend, VT
- October 28, 2010 – Jamaica Town Hall, Jamaica, VT
- January 9, 2013 – Jamaica Town Offices, Jamaica, VT
- On February 3, 2014, WRC Staff met with Paul Fraser, Emergency Management Director (EMD) and Selectboard member, Chrissy Legge, Planning Commission Chair, and Greg Meulemans, Planning Commission member, to address the comments made by FEMA Region 1 from the Local Mitigation Plan Review Tool on 1/29/2014.

The Town is presently implementing a process for documenting all actions done by the road crew, and any responses by the fire department. These department heads will report to the Selectboard each month. These regular reports will inform the priorities for mitigation strategies each year.
Public Participation

Making the Single Jurisdiction Hazard Mitigation Plan for the Town of Jamaica available for public comment includes the following efforts:

- Flyers advertising the draft plan were posted in public places in downtown Jamaica advertising where a hard copy was available for review and comment.
- Hard copies were made available at the Town Office and Library.
- Plan was made available on their town website www.jamaicavermont.org
- A public participation forum was held on Jan. 15th with the Local Emergency Planning Committee 6 (LEPC) to include several towns in the Windham Region where towns could talk together about issues with bordering communities.
- During calendar year 2012, FEMA Public Assistance, John Alexander from District 2 DOT, Todd Menees and Barry Cahoon -- both River Management Engineers VT Agency of Natural Resources (ANR), Stacey Pomeroy with ANR (debris management), Bill Creamer of Dauchey-Creamer Surveyors, Bob Stomski with Clough Harbour & Associates, SAIC representatives, Whitt & Associates, Rebecca Pfeiffer NFIP Community Outreach with ANR -- met with Town Officials to discuss impacts that already occurred and future possible negative impacts. The ANR staff were very informative by explaining the hydro morphology of the river systems in Jamaica which has influenced their land use decisions going forward in updating their town plan.

Additionally, all plan review meetings will be publicized and open to the public. Public hearings will be held prior to any significant revisions to the Plan. The Plan and any proposed revisions will be on the jurisdiction’s website with information on how the public can direct questions/comments to the stakeholder group.

Planning Process with Neighboring Towns

On the evening of January 15, 2013, representatives from eleven towns in the Windham Region came together to talk about proactive planning mechanisms they should consider doing to become better informed about making infrastructure decisions and land use decisions as they relate to hazard mitigation planning. The following towns were represented:

Westminster – County Sherriff
Londonderry – Emergency Mgmt. Director (EMD), Selectboard member, Town Administrator
Windham – EMD
Marlboro – EMD
Jamaica – EMD, Selectboard member
Townshend – EMD, Environmental Consultant, CERT/RACES
Guilford – EMD, Selectboard Chair, Road Foreman
Grafton – EMD
Vernon – County Fire Fighter
Newfane – EMD
Brattleboro -- Brattleboro Retreat

The invitation for the meeting went out to all members of the LEPC 6 (Local Emergency Planning Committee), and to all Town Clerks and Town Managers, and all EMDs in the Windham region. The email asked that they bring anyone from their respective towns that they know to participate.

The first part of the meeting was to look at a series of maps of the region. There were two very large maps displayed of the entire region, showing hydrology, relief, development patterns, public land, conservation land, wetlands, resort centers, villages and hamlets, and all classes of roads.
Several other smaller theme maps of the region were displayed showing; utilities, broadband and cell coverage, government facilities, watersheds, and health and social services facilities. Participants were asked to use sticky notes to write down problem areas and post them on those locations on the maps. Most of the problems identified were local, smaller, but reoccurring problem areas. The map exercise was followed by a group discussion with WRC staff prompting the group with questions. Main points from the discussion are as follows:

1) An exchange of contact information needs to take place between towns so they have one another’s phone numbers.
2) An inventory of resources available by adjacent towns would be very useful. Sometimes towns reach out further than they need to when it might be next door. Knowledge of smaller companies that can help towns; such as, environmental firms, contractors, etc.
3) Communication from upstream towns to downstream towns about debris in streams that pose a problem during the next hard rain. A debris pile in their town may cause ponding, and once it releases it could potentially wreak havoc on roads, culverts and/or bridges in downstream towns.
4) Contact list of who to call regarding hazardous debris in streams.
5) Coordinating future road construction projects so there is always a through path from town to town.
6) MOU’s regarding emergency shelter space – if one town cannot provide enough, that adjacent towns can take in folks as overflow.
7) Mapping of tanks for regulated substances that are on personal property. Many towns do not have a clear understanding of where propane tanks are located in relationship to water ways that could potentially pose a problem during flash flood events.
8) Working with towns in adjacent counties, Regional Planning Commissions and/or bordering states.

There was also discussion about the major intersection in Townshend, VT, of Rt. 30 and Rt. 35. If a major hazard spill shut down that intersection – the area would have to evacuated and it would result in a cut off of access to and from seven surrounding towns.

There were EMDs and Selectboard officials in adjacent towns who met for the first time. As they were departing, several people stated they felt the meeting was very important, and did not really realize the positive impact they would have by having a cross-town discussion about proactive planning for hazard events.

See Appendix C for documentation on the evening forum.

RISK ASSESSMENT

The risk assessment portion of a Hazard Mitigation Plan contributes to the decision-making process for allocating available resources to mitigation projects. 44 CFR Part 201.6(c)(2) of FEMA’s mitigation planning regulations requires local municipalities to provide sufficient hazard and risk information from which to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.
Identifying and Profiling Hazards

The community has identified and focused mitigation action items on the following hazards: Flood, Winter Storm/Ice Storm, and High Wind events. It should be noted that Earthquake, Avalanche and Extreme Heat, Drought, Wildfire, Landslides and Tornado/Microburst, are profiled in the State All Hazard Mitigation Plan. This local plan will only profile and analyze natural hazards that have been deemed as having a “highly likely” impact on the Town of Jamaica.

In the “Assessing Vulnerability: Overview” section on page 17, a “Highly Likely” occurrence is one that has a 100% probability of occurring every year. The methodology is fully explained in that section.

According to the NOAA website 0 WILD & FOREST FIRE event(s) were reported in Windham County, Vermont between 01/01/2000 and 08/31/2011. Source: http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms

According to local knowledge the Town of Jamaica has not witnessed Earthquake, Avalanche, Extreme Heat, Drought, Wildfire, Landslides or Tornado to any dangerous or notable extent in the last 50 years.

The following hazards include a narrative explaining Location/Geographic Area and Extent (magnitude or severity), Probability, and discussion of Past Occurrences of all natural hazards that affect the planning area.

REGIONAL FLOODING
Aug. 28, 2011 – The Federally Declared Disaster DR-4022, Tropical Storm Irene, tracked northeast across eastern New York and western New England during Sunday, August 28th, producing widespread flooding, and damaging winds across the region. The greatest impact from Irene across southern Vermont was due to heavy to extreme rainfall, which resulted in catastrophic flooding. Rainfall amounts generally averaged 4 to 8 inches. Much of the rain which fell occurred within a 12 hour period, beginning early Sunday morning, and ending Sunday evening. Route 9, the main route across southern Vermont was closed. Numerous evacuations were reported.


The Vermont Flood of 1927 was the deadliest natural disaster in the history of the State; eighty-four people were killed with over $28 million in property damage. The Spring Floods of 1936, which had an effect on all of New England, caused $113 million in damage, killed 24 people and made 77,000 people homeless. During this flood alone, the main street of Hooksett, New Hampshire was 18 to 20 feet underwater.

LOCAL FLOODING
Description and Geographic Area of Hazard
Some of the highest hazard areas in Jamaica associated with flash floods are Pikes Falls Road and Ball Mountain Brook, as well as areas along the West River floodplain corridor. These areas were devastated by Tropical Storm Irene in August 2011, taking out several homes on Water Street in the village center, the bridge on Rt. 30 in the village center, and major sections of Pikes Falls Road.

Flash floods are a locally probable hazard event. Flash floods typically occur during summer when a large thunderstorm or a series of rain storms result in high volumes of rain over a short
period of time. Damage from flash floods is difficult to predict since flash flood areas are not mapped at this time. Higher-elevation drainage areas and streams are particularly susceptible to flash floods. Flash floods are likely in Jamaica, and potential damage to Route 30 or Route 100 could limit access to town, as they are the major transportation corridors through the community. Drainage ditches and culverts are the biggest concern for local flash flooding events. There are no recent records of ice jams.

Extent
The worst flooding event to be recorded in the Town of Jamaica occurred during the latest Tropical Storm Irene event of August 2011. A total of approximately 8 inches of rain fell in a timeframe of 12 hours. Ball Mountain Brook runs through the Village of Jamaica and the normal flow of water over a course of a year is approximately 30 inches. At low flow it’s 6 inches and during spring run off it rises to 36 inches. During the Tropical Storm Irene event the water in the brook rose between 16-23 feet on August 28, 2011. Debris jams occurred in the river where houses crashed into the bridge causing Ball Mountain Brook to jump its banks and have torrential flow into the floodway. Four houses were washed away in this flood event on Water Street in the Village of Jamaica. The brook does not have a gauge, so the number of feet of flood water is based on the distance from the stream bed to the height of the bridge.

Probability
The Town of Jamaica’s emergency committee has deemed flood as a Highly Likely hazard that occurs nearly every year to some extent.

Past Occurrences
West Jamaica Road between Forester Road and the Stratton Town Line has a swampy area where twin culverts are inadequate in size, and with hard rains or in the spring, the spot needs to be checked for flooding.

The first culvert on Goodahlville Road is inadequate and causes flooding during rain events.

The Wilkin’s Mobile Home Park on River Road near Rt. 30 floods to the first steps during high water events (spring thaw, heavy rains, etc.)

West Jamaica Road approximately 3 miles from the Village center, has inadequate ditching because of ledge and terrain, therefore floods easily.

The latest Presidentially Declared Disaster, DR-4022, resulted from Tropical Storm Irene in August 2011. The bridge on Rt. 30 in the village of Jamaica was closed for five weeks. Traffic was eventually re-routed along Ball Mtn. Brook on a newly created road bed, as the original road along the brook, Water Street, was totally wiped out along with several homes. Tropical Storm Irene tracked north northeast across eastern New York and western New England during Sunday, August 28th, producing widespread flooding, and damaging winds across the region. Irene tracked from a position over New York City around 8 AM EST Sunday, to approximately 65 miles south of Rutland, VT at 4 PM EST. The greatest impact from Irene across southern Vermont was due to heavy to extreme rainfall, which resulted in catastrophic flooding. Rainfall amounts generally averaged 4 to 8 inches. Much of the rain which fell occurred within a 12 hour period, beginning early Sunday morning, and ending Sunday evening. This heavy to extreme rainfall resulted in widespread flash flooding and river flooding across southern Vermont. Strong winds also occurred across southern Vermont, with frequent wind gusts of 35 to 55 mph, along with locally stronger wind gusts exceeding 60 mph. The strongest winds occurred from the north to northeast during the morning hours, then from the west to northwest during Sunday evening. The combination of strong winds, and extremely saturated soil led to numerous downed trees and power lines across the region. This also resulted in widespread long duration power outages. In particular, the approximate number of customers affected by power outages included: Windham County, 18000.
There have been several other Presidentially Declared Disasters in recent years for Windham County which have included severe thunderstorms and associated flooding. Windham County, including the Town of Jamaica, experienced nearly constant rain and thunderstorms from the period of July 21 through August 18, 2003. FEMA Declaration DR – 1488 was associated with this event. Many roads were washed out and culverts needed replacing throughout town. The following year, another severe period of flooding and thunderstorms, which lasted from the period of August 12- September 12, 2004 engendered Presidential Disaster Declaration DR – 1559.

In 2007, a flooding event occurred which was associated with flash floods and inundation flooding over a period of several days in the spring (April 15-21). Rain and snow caused damage to roads and utility lines across Windham County and Jamaica. Across, the State, nearly 3.6 million dollars was obligated as part of the FEMA Public Assistance Program. While it is not normal for the town to receive this type of damage from severe flooding and thunderstorms on an annual basis, road washouts and culvert repairs from these associated events have ranged in the ballpark of $200,000 to $400,000.

Sources used
Local town knowledge and records

REGIONAL SEVERE WINTER STORM
The Region has a long history of severe winter storms and blizzards and usually experiences at least one or two Nor'easters each year with varying degrees of severity. There have been 114 winter storms in the Region since March 1960 that have resulted in $5,133,582.00 in property damages. A typical event begins as a low-pressure system that moves up the Atlantic Coast on a December morning and into the Canadian Maritimes dumping heavy snow across parts of Vermont. Snow typically begins in the morning and then changes over to sleet and rain in the valleys during the day, and then changes back to snow during the evening. Snowfall accumulations are generally three to six inches in the valleys and 6 to 12 inches in the mountains.

LOCAL SEVERE WINTER STORM / ICE STORM
Winter storms, resulting in snow, ice and freezing temperatures in varying combinations, are fairly commonplace in Jamaica and can occur throughout the town. Heavy wet snows of early fall and late spring, as well as ice storms, often result in loss of electric power, leaving people without adequate heating capability. The other threat from these storms is downed trees, resulting in power failures and impassable roads or driveways.

- **Power Failure**
  Power failure is a common condition that is typically the result of power lines damaged by high winds or heavy snow/ice storms and can occur anywhere in town. The higher elevation locations in town are most susceptible to power failures. River Road and Old Route 8 in East Jamaica and Pikes Falls Rd in Jamaica Village are areas of town where it would be common for power line failures to occur and cause power disruptions to residential dwellings. Power failures may also result from disruptions in the New England or national power grid, as indicated by the widespread power outages in 2003. Dead or dying trees in close proximity to power lines pose a particular threat for power failure. Potential loss estimates are difficult to predict for power failures, which typically are isolated in geographic areas and short in duration. Therefore, they often have only minimal impact to people and property. Power failures usually result in minor inconveniences to residents; however, longer duration events might result in the loss of perishable items and business losses. Power outages in winter months could result in the loss of home heating, bursting water pipes and resulting structural water damage.

*Extent*
The worst anticipated snowfall to happen to date occurred in the winter 2010-2011 exceeded 120 inches in southeast VT. Typical snowfall in southeast VT ranges from 60-85 inches. Snow
and ice come every year to the town where the extent is typically fairly high given we are in the Northeast corner of the continent. It depends on how fast it comes and whether or not it melts off in between snowfalls as to whether it not it poses a threat to the community.

**Probability**
The Town of Jamaica’s emergency committee has deemed winter storm/ice storm as a Highly Likely hazard that occurs nearly every year to some extent.

**Past Occurrences**
- **Jan. 12, 2011** - Low pressure developed along the southeast coast Tuesday, January 11th, and explosive deepening, cyclogenesis, occurred Tuesday night as the low tracked northeastward. The storm passed over eastern Long Island and Cape Cod Wednesday morning, January 12th, then continued to strengthen during the day as it gradually moved up the New England coast. Heavy snow fell across southern Vermont with snowfall accumulations ranging from 14 inches up to 3 feet. A mesoscale snowband set up across the western New England, including southern Vermont, Wednesday resulting in snowfall rates of 3 to 6 inches an hour.

- December 2009 - An ice storm crossed the region in December of 2008 causing widespread downed trees and power outages in Windham County. The total cost of damages across the region surpassed the one million dollar threshold triggering a Presidential Disaster Declaration DR-1816. Damage across the region consisted of roads being blocked for short periods of time due to downed trees and utility lines. Thousands lost power for varying lengths of time and several shelters were opened in Windham County. Compared to neighboring southern New Hampshire communities, Jamaica and Windham County fared relatively well from the damage inflicted by the ice storm.

- **April 9, 1996** - A spring storm rapidly intensified as it moved northeast along the Atlantic coast during April 9 and 10. The system produced a general snowfall of 6 inches across Bennington and Windham Counties of southern Vermont.

- **Nov. 26, 1996** - On November 26, a low pressure system brought a combination of snow and freezing rain to southern Vermont. Over Bennington and Windham Counties, snow and heavy freezing rain downed trees and power lines and caused numerous accidents. Across southern Vermont approximately 10,000 customers lost power.

Damage from heavy snow and ice storms can vary depending upon wind speeds, snow or ice accumulation, storm duration, and structural conditions (such heavy snow and ice accumulation on large, flat roofed structures). The assessed value of all residential and commercial property is ($232,741,534). Assuming a range of town-wide damage of 1% to 5%, a heavy snow or ice storm could result in ($2,327,415) to ($11,637,076) of total damage.

**FEMA Dollars Received from past hazard events**
In calendar year 2012, Jamaica received approximately $2.2 million from FEMA for the damages caused by T.S. Irene in Aug. 2011. Additionally, the Town received approximately $140,000 from the Federal Highway Commission to compensate for the damage caused to South Hill Rd. while it was being used as a detour to replace State Rt 100.

Jamaica received money from FEMA for the December 2008 ice storm in the amount of approximately $60,000, for the April 2007 flood event in the amount of approximately $44,000, and for a July 2002 flood event in the amount of approximately $8,000.

**Sources used**
- www.usatoday.com/wheather/storms/winter/2011-03-08-vermont-snow-records
- Local knowledge and town records
REGIONAL HIGH WIND / TROPICAL STORM / HURRICANE

Windstorms are high-wind events that are sufficient enough to cause damage to property and can occur at anytime during a year. These include high winds in conjunction with a thunderstorm and high winds that sweep through the Region after the passage of a weather front. During the past forty-six (46) years, the Region has had seventy (70) windstorms that have caused significant damages.

LOCAL HIGH WIND / TROPICAL STORM / HURRICANE

Description and Geographic Area of Hazard

High wind events are highly likely in Jamaica, with the potential for limited resulting damage. The most likely local threats for high winds are from nor’easters, hurricanes, downbursts or wind shear. Trees downed by high winds can block roads, and down power and communications lines. Mobile home parks and houses on ridge lines are at greater risk from wind damage. Most high winds events in Jamaica have resulted in damage from downed trees and power lines.

Extent

Records show that in 2006, winds exceeded 60 miles per hour which are the worst wind hazard events to date that can be anticipated in the Town of Jamaica. Extent/magnitudes of Hurricanes and Tropical Storms are ranked using the Saffir-Simpson Scale in the Western Hemisphere, as follows: CAT1=74-95 mph winds, CAT2=96-110 mph winds, CAT3=111-130 mph winds, CAT4=131-155 mph winds, Tropical Storm=39-73 mph winds, Tropical Depression=0-38 mph winds.

During Tropical Storm Irene in August 2011, strong winds occurred across southern Vermont, with frequent wind gusts of 35 to 55 mph, along with locally stronger wind gusts exceeding 60 mph. The strongest winds occurred from the north to northeast during the morning hours, then from the west to northwest during Sunday evening.

September 30th. Winds gusts of up to 50 to 60 mph occurred across southern Vermont.

In February, 2006 widespread wind gusts in excess of 60 miles an hour resulted in loss of electricity to about 5,000 homes and businesses across southern Vermont.

Probability

Highly Likely – as determined by the locals living in Jamaica, VT.

Past Occurrences

When Hurricane Sandy hit the East Coast in October of 2012, Jamaica experienced numerous downed trees and power lines, but no other significant damage. The power at the Town Office, for example, was out for less than 24 hours.

August 28, 2011 - The latest Presidentially Declared Disaster, DR-4022, resulted from Tropical Storm Irene in August 2011. The bridge on Rt. 30 in the village of Jamaica was closed for five weeks. Traffic was eventually re-routed along Ball Mtn. Brook on a newly created road bed, as the original road along the brook, Water Street, was totally wiped out along with several homes. Tropical Storm Irene tracked north northeast across eastern New York and western New England during Sunday, August 28th, producing widespread flooding, and damaging winds across the region. Irene tracked from a position over New York City around 8 AM EST Sunday, to approximately 65 miles south of Rutland, VT at 4 PM EST. The greatest impact from Irene across southern Vermont was due to heavy to extreme rainfall, which resulted in catastrophic flooding. Rainfall amounts generally averaged 4 to 8 inches. Much of the rain which fell occurred within a 12 hour period, beginning early Sunday morning, and ending Sunday evening. This heavy to extreme rainfall resulted in widespread flash flooding and river flooding across southern Vermont. Strong winds also occurred across southern Vermont, with frequent wind gusts of 35 to 55 mph, along with locally stronger wind gusts exceeding 60 mph. The strongest winds occurred from the north to northeast during the morning hours, then from the west to...
northwest during Sunday evening. The combination of strong winds, and extremely saturated soil led to numerous downed trees and power lines across the region. This also resulted in widespread long duration power outages. In particular, the approximate number of customers affected by power outages included: Windham County, 18000.

Sept. 30, 2010: Widespread power outages were reported across Windham County. 312 reports countywide. The combination of an intensifying low pressure system moving northward along the east coast and high pressure off the New England and mid Atlantic Coast created a very strong pressure gradient across the region. Strong and gusty southerly winds developed as the low approached during Thursday September 30th. Winds gusts of up to 50 to 60 mph occurred across southern Vermont. This event continued through October 1st, 2010 bringing very heavy rainfall to the area. Storm total rainfall of 3 to 6 inches occurred across southern Vermont resulting in widespread urban and small stream flooding.

Oct. 29, 2006: Trees down on Route 100 in Jamaica. A low pressure system moved northeast from the Tennessee Valley into the eastern Great Lakes by Saturday evening on October 28th, and intensified rapidly before moving into eastern Canada on Sunday, October 29th. Strong southeast winds ahead of the low developed Saturday morning, with some gusts exceeding 60 mph, particularly across the higher elevations, and within channeled valley locations. Once the storm lifted into eastern Canada, strong west to northwest winds developed, with some gusts locally reaching or slightly exceeding 60 mph. The winds finally diminished across the region by Sunday evening.

Feb. 17, 2006 - At daybreak an intensifying low pressure was over the St Lawrence Valley of New York. It traveled rapidly down the St Lawrence Valley. An associated cold front moved across southern Vermont around noon. A strong pressure gradient was over the region as the cold front moved through. Widespread wind gusts in excess of 60 miles an hour resulted in loss of electricity to about 5,000 homes and businesses across southern Vermont. Some of the strong winds were associated with thunderstorms and some were not. Although, official estimates of damage were not available, based on the cost of power restoration in central Vermont from the same storm, damage may be on the order of a quarter million dollars. The strongest wind occurred at mountain top locations. A wind gust of 143 miles an hour was measured at the ski resort on Stratton Mountain, nearly 4,000 feet above sea level.

Sources used
Local knowledge
http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~ShowEvent~642313
http://gis.ncdc.noaa.gov/maps/snowfall.map?view=daily

Assessing Vulnerability: Overview

Methodology
A vulnerability analysis for each community begins with an inventory of possible natural hazards and an assessment of the risk that they pose. These are the questions to be answered. What hazards can affect your community? How bad can it get? How likely are they to occur? What will be affected by these hazards? How will these hazards affect you? The magnitude (percentage of the community affected) of the impact of the hazard can be classed as follows:

- Negligible: < 10% of properties damaged/Minimal disruption to quality of life.
- Limited: 10% to < 25% of properties damaged/Loss of essential facilities/services for up to 7 days/few (< 1% of population) injuries possible.
- Critical: 25% to 50% of properties damaged/Loss of essential facilities/services for > 7 days < 14 days/Major (< 10% of population) injuries/few deaths possible.
- Catastrophic: > 50% of properties damaged/loss of essential facilities/services for > 14 days/Severe (> 10% of population) injuries/multiple deaths possible.

The frequency of occurrence (Likelihood) is classified as shown:
- Unlikely: < 1% probability in the next 100 years.
- Possible: 1% to 10% probability in the next year, or at least one chance in the next 100 years.
- Likely: 10% to 100% probability in the next year, or at least one chance in the next 10 years.
- Highly Likely: Near 100% probability in the next year.

Additionally, seasonal patterns that may exist are considered, what areas are likely to be affected most, the probable duration of the hazard, the speed of onset (amount of warning time taking into consideration the existing warning systems).

The combination of the magnitude of the hazard and the frequency was used to determine the community vulnerability as HIGH, MODERATE or LOW. For example, a flood event is highly likely (nearly 100% probability in the next year) in many communities but the degree of impact varies. A highly likely flood with critical or catastrophic impact rates the community vulnerability as HIGH. Another community with a highly likely or likely (at least one chance in the next 10 years) flood with a limited impact would receive a vulnerability rating of MODERATE. The vulnerability of a community having the occurrence of an event as possible or unlikely with limited or negligible impact would be LOW.

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>U = unlikely</td>
<td>N = negligible</td>
</tr>
<tr>
<td>P = possible</td>
<td>L = limited</td>
</tr>
<tr>
<td>L = likely</td>
<td>CR = critical</td>
</tr>
<tr>
<td>HL = highly likely</td>
<td>CA = catastrophic</td>
</tr>
</tbody>
</table>
Possible Hazard | Likelihood | Impact | Community Vulnerability | Most vulnerable facilities and populations
--- | --- | --- | --- | ---
Flood | HL | L | Low | Low lying hills, Ball Mountain Brook, West River Corridor, drainage ditches, culverts, bridges, residences, businesses, all other streams or brooks
Winter & Ice Storm | HL | L/CR | Moderate | Residences, Businesses
High Wind / Tornado / Microburst | HL | L | Low | Residences, Businesses
Hurricane | U | CR | Low | Town-wide
Earthquake | L | CR | Low | Town-wide
Drought | P | L | Moderate | Residents Private Wells, Farms, Businesses
Fire (Structure and Wildfire) | L | L | Moderate | Residents, Businesses
Landslide | L | L | Low | Roads, Stream blocking

Assessing Vulnerability: Addressing Repetitive Loss Properties

According to the State Hazard Mitigation Officer, Jamaica has no repetitive loss properties.

The definition of severe repetitive loss as applied to this program was established in section 1361A of the National Flood Insurance Act, as amended, 42 U.S.C. 4102a. An SRL property is defined as a residential property that is covered under an NFIP flood insurance policy and:

(a) That has at least four NFIP claim payments (including building and contents) over $5,000 each, and the cumulative amount of such claims payments exceeds $20,000; or

(b) For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.

For both (a) and (b) above, at least two of the referenced claims must have occurred within any ten-year period, and must be greater than 10 days apart. [http://www.fema.gov/severe-repetitive-loss-program](http://www.fema.gov/severe-repetitive-loss-program)

Assessing Vulnerability: Identifying Structures

There are 1,045 Houses on the Grand List in the Town of Jamaica. Total assessed value is $277,444,365.00.

Below is a list of the most critical structures in Jamaica:

- Fire Station 4017 VT Rt. 30 In the flood plain
- Town Garage Town Shed Road In the flood plain
- Village School 347 Depot St. In the flood plain
- Town Office Town Office Road
- Village Grocery Store Downtown Jamaica
- Cota & Cota Fuels  VT Rt. 30 south of town
- Community Church  Downtown Jamaica  has cell tower on it
- Masonic Hall  South edge of Downtown  Emergency shelter
- Three Mountain Inn  Downtown Jamaica  Emergency shelter

Map showing transportation and community facilities in Jamaica Village.
Assessing Vulnerability: Analyzing Development Trends

The 2010 Census indicates a population of 1,035 and a growth rate of 9.4 percent over the 2000 population of 946 individuals.

<table>
<thead>
<tr>
<th>Town name</th>
<th>County</th>
<th>1990 Total</th>
<th>2000 Total</th>
<th>90-00 Absolute Change</th>
<th>90-00 % Change</th>
<th>2010 Total</th>
<th>00-10 Absolute Change</th>
<th>00-10 % Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAMAICA</td>
<td>Windham</td>
<td>754</td>
<td>946</td>
<td>192</td>
<td>25.5</td>
<td>1,035</td>
<td>89</td>
<td>9.4</td>
</tr>
</tbody>
</table>

The Town of Jamaica faces a few issues with development trends, most of which relate to negative impacts on streams, Ball Mountain Brook and the Winhall River. The majority of culverts on the dirt back roads along Ball Mountain Brook are undersized. As a mitigation strategy, more appropriate sizing for these culverts could alleviate problems associated with hydraulic sediment and debris passage. Additionally design guidelines for culverts should be taken into account, where the current orientation of many culverts disrupts stream flow, causing fluvial erosion, negative impacts to wildlife and the riparian zone. Simply changing the orientation of the culverts to follow the bend in the road or the natural path of the stream can alleviate negative environmental impacts. In some cases a bridge, box or arch culvert would be more beneficial allowing the stream bottom to remain natural. This type of culvert allows ease of wildlife passage and for debris to flow more naturally without causing blockages in the stream channels.
The town needs to be cautious to prevent any new development along the Winhall River and a desirable objective should be to monitor what already exists with the intent to protect the property and the river.

The most current Proposed Land Use map for Jamaica. No significant development has occurred in the last year.

Ball Mountain Dam

Ball Mountain Dam, a federally owned flood control dam on the West River above Jamaica, is being observed by the Army Corps of Engineers because of sediment accumulation and seepage issues. Sediment accumulation in the pool behind Ball Mountain Dam poses a continuing serious risk to water quality and aquatic and riparian habitat in the West River both upstream and downstream of the dam. Ball Mountain Dam was not designed to impound a permanent pool, but a pool has been maintained behind the dam since shortly after it was constructed in 1960. Several hundred thousand cubic yards of sediment have accumulated in and near the historic river channel underneath the surface of the pool. In the mid 1990’s two successive accidental sediment releases from the dam caused severe damage to aquatic and riparian habitat along the West River. Major fish kills resulted from both of these releases, and ecological and economic losses were significant.  

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1 Excerpt from the 2012 Jamaica Town Plan
The Corp is currently working on an Interim Risk Reduction Plan for Ball Mountain Dam. The Town of Jamaica is kept informed by the Army Corp. The Town is maintaining a relationship with the Corp so they will know how to effectively inform their citizens and proactively plan for a possible dam failure.

There is currently a Ball Mountain Dam Emergency Evacuation Plan being developed, and the current status of that plan is 30%. They have recently updated their 911 maps. They are currently exploring evacuation options. They have obtained the Army Corps of Engineers emergency inundation charts and are actively working on evacuation plans. They are also weighing options of a notification scheme that will include the Jamaica State Park campgrounds and the Jamaica Elementary School. Depending on the type of breach the dam suffers, there may have as little as 5 or 10 minutes to evacuate the camp ground, and not much more than that for the school. Further into the planning they will closer coordinate with adjacent towns.

MITIGATION STRATEGY

Local Hazard Mitigation Goals

The Hazard Mitigation Goals as outlined below were developed by consensus among the emergency management committee during meetings for the town of Jamaica local hazard mitigation plan.

**Problem Statement 1:** There is inadequate documentation of culverts, roads, ditches, and bridge maintenance in town.

**Goal 1:** Establish standard operating procedures for scheduling of maintenance and documentation of work.
  - *Action Item:* The Road Commissioner to implement action plan.

**Problem Statement 2:** Town needs a replacement dry hydrant at the fire house because it was washed out during Tropical Storm Irene. It was the primary water supply for fighting fires in the Village.

**Goal 2:** To replace dry hydrant as soon as possible and to research additional locations for additional dry hydrants.
  - *Action Item:* Fire Department, EMD and Selectboard are charged with this problem.

**General Ongoing Goals:**

- Reduce the loss of life and injury resulting from all hazards.
- Reduce the impact of hazards on the town’s water bodies, natural resources, and historic resources.
- Reduce the economic impacts from hazard events.
  - Minimize disruption to the road network and maintain access,
  - Mitigate financial losses incurred by municipal, residential, industrial, agricultural and commercial establishments due to disasters,
  - Ensure that community infrastructure is not significantly damaged by a hazard event.
  - Being proactive in implementing any needed mitigation projects for public infrastructure such as roads, bridges, culverts, municipal buildings, etc.
- Encourage hazard mitigation planning to be incorporated into other community planning projects, such as the Town Plan, Capital Improvement Plan, and Town Basic Emergency Operation Plan.
• Ensure that members of the general public continue to be part of the hazard mitigation planning process.

Identification and Analysis of Mitigation Actions

The Jamaica hazard mitigation stakeholder group identified the following new hazard mitigation activities based on an evaluation of hazard event vulnerability not addressed by existing hazard mitigation initiatives and the feasibility of new activities.

Strategies emphasizing existing buildings and infrastructure:

1) Ball Mountain Dam Stability –
   New studies and floodplain mapping need to be drawn based on current functioning levels of the dam. Questions should be raised jointly to FEMA and the Army Corps of Engineers to create these new floodplain maps.

2) Culverts –
   Replacement or improvements to Dalewoods Road area, and back roads along Ball Mountain Brook.

3) Adding Dry Hydrants

4) Town needs a generator for the Town Office/Emergency Operations Center

Strategies emphasizing new buildings and infrastructure:

5) Resident Survey to attain information on vulnerable populations and populations with extra resources –
   Conduct a survey that is twofold: 1) ask residents about their daily special needs, and 2) ask what surplus resources they may have to offer (extra bed, food, snowmobile, etc.) -- in the case of hazards and/or emergency situations.

6) Flood Zone Administrator communication –
   In the absence of zoning regulations in Jamaica, an education workshop or informational meeting needs to be provided by the town Flood Zone Administrator to town officials and home owners residing on the floodplain or in fluvial erosion hazard zones, regarding zoning and permitting requirements in the flood zone. All Flood Zone related info is available on the Towns’ web site. Additionally, because a significant portion of our property is owned by people that do not live in town, the FZA uses mailings to get the info out.

7) Communication Issues –
   The Town has no emergency call procedures between the road crew, Town EMD and Constable. A system needs to be put into place that can notify all entities 24/7. Training needs to be provided so the different response crews, the road crew and Town Office are familiar with the same procedures. Additionally, interoperability between the Fire Department (VHS) and the Road Crew (UHF) by using the same radio frequencies needs to be put into place. In 2012 the Town replaced the road crew radios to become complaint with the new narrowband requirements. With the new radios, the procedures for them to connect with emergency personnel were clarified. The Town will not operate on the same frequencies as the FD and Mutual aid. Should the Road Crew need to communicate an emergency they will phone 911. If there is no phone coverage at their location, they will radio their supervisor, who will contact 911. When conditions dictate, the EMD will have, and monitor, a town radio, and can be contacted directly. Non-emergent communications between Jamaica personnel and adjacent communities can be accomplished using standard phone and e-mail channels.
8) Village of Jamaica, Mountain Acres Development, East Jamaica, and Cole Pond –
Water shortage in the case of structure fire warrants either underground water storage
tanks, or pipes from ponds with dry hydrants, in all of these locations.

Identification and Analysis of Mitigation Actions: National Flood Insurance
Program (NFIP) Compliance

NFIP Description: The Town of Jamaica has Flood Hazard Area Regulations as a stand-alone
ordinance and currently participates in the National Flood Insurance Program which was updated
Sept. 28, 2007. Additionally, Jamaica has no repetitive loss properties per FEMA’s definition.

NFIP Action: The Town works with the elected officials, the state and FEMA to correct existing
compliance issues and prevent any further NFIP compliance issues through continuous
communications, training and education.

Implementation of Mitigation Actions

Mitigation actions are listed in priority order, with the most critical needs listed at the top of the list.
The following criteria were used in establishing project priorities. The ranking of these criteria is
largely based on the best available information and best judgment as many projects are not fully
scoped out at this time.

- Does the action reduce damage?
- Does the action contribute to community objectives?
- Does the action meet existing regulations?
- Does the action protect historic structures or structures critical to town operations?
- Can the action be implemented quickly?
- Is the action socially acceptable?
- Is the action technically feasible?
- Is the action administratively possible?
- Is the action politically acceptable?
- Is the action legal?
- Does the action offer reasonable benefits compared to its cost of implementation?
- Is the action environmentally sound?

The following list of mitigation strategies/action items, shown on the Mitigation Actions Table on
page 28, were discussed in the fall of 2010 and again after Tropical Storm Irene. For each action,
the column to the left of the “Action” column shows if the action is either a preparedness action or
a mitigation action.

Mitigation strategies that have not been completed are still included in the matrix. Many strategies
are contingent on FEMA funding and are moving along as soon as we receive funding.

The “Costs” and “Benefits” measures are shown below and are to be used in association with the
“Cost/Benefit” column in the Table on page 28. The Table of Actions (Cost / Benefit) addresses
the priorities for the mitigation strategies in the Matrix below. Priorities for the strategies did not
change, however progress has been made and the status of each action is shown in the “Status”
column of the Mitigation Actions Table. Project priority is shown in the “Priority” column of the
table and listed in order of priority. The priorities were developed for this plan.

<table>
<thead>
<tr>
<th>Table of Actions - Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
</tr>
<tr>
<td>Medium</td>
</tr>
</tbody>
</table>
Table of Actions – Benefits

| Low | $< 25,000 |

| High       | Public Safety |
| Medium     | Infrastructure/General Maintenance/ Functionality |
| Low        | Aesthetics    |

- P = Preparedness Action
- M = Mitigation Action
<table>
<thead>
<tr>
<th>HAZARD BEING MITIGATED</th>
<th>ACTION</th>
<th>RESPONSIBLE PARTY</th>
<th>TIMEFRAME</th>
<th>FUNDING SOURCE</th>
<th>PROJECT PRIORITY</th>
<th>COST / BENEFIT</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood</td>
<td>Upsizing culverts on Dalewoods Road area, and back roads along the North Branch of the Ball Mountain Brook.</td>
<td>Road Foreman and Selectboard</td>
<td>0-24 months</td>
<td>VTrans Funding or HMGP</td>
<td>High</td>
<td>High / High</td>
<td>75% Completed; Funding Awarded</td>
</tr>
<tr>
<td>Flood</td>
<td>Replacement of culvert 32 on Pikes Falls Road</td>
<td>Road Foreman and Selectboard</td>
<td>Completed in 2014</td>
<td>FEMA disaster recovery funds</td>
<td>High</td>
<td>Medium/High</td>
<td>Completed</td>
</tr>
<tr>
<td>Flood</td>
<td>Acquisition/Demolition of 4 homes on Water Street in the village of Jamaica</td>
<td>Selectboard</td>
<td>2014</td>
<td>CDBG and Town Match</td>
<td>High</td>
<td>Medium / Low</td>
<td>90% Completed</td>
</tr>
<tr>
<td>Winter Storm / Ice Storm</td>
<td>Provide back up power supply for emergency shelter and critical facilities</td>
<td>Selectboard, Town Officials</td>
<td>0-24 months, hopeful completion by Winter 14/15</td>
<td>Community Grant</td>
<td>High</td>
<td>Medium / High</td>
<td>Bids accepted; 75% Complete</td>
</tr>
<tr>
<td>Flood</td>
<td>Ball Mountain Dam Emergency Evacuation Plan (see relevant section above)</td>
<td>Selectboard, Road Comm; Fire Chief</td>
<td>0-12 months</td>
<td>Town Budget</td>
<td>High</td>
<td>Low / High</td>
<td>30% Complete</td>
</tr>
<tr>
<td>All-Hazards</td>
<td>Install an emergency alert horn for community notification, particularly in relation to Ball Mtn dam failure</td>
<td>Selectboard</td>
<td>12 months, expected mid 2015 completion</td>
<td>Town Budget / grant funding in progress</td>
<td>High</td>
<td>Low/High</td>
<td>10% Complete</td>
</tr>
<tr>
<td>Flood</td>
<td>Flood Zone Administrator communication/education outreach to residents - Floodplain maps will be printed and distributed to residents in SFHA with documentation stating where to get further info on safe floodplain devilmnt</td>
<td>Flood Zone Administrator</td>
<td>Fall 2014</td>
<td>Town Budget or Federal Assistance</td>
<td>Medium</td>
<td>Low / Medium</td>
<td>Getting started now – mapping complete</td>
</tr>
<tr>
<td>High Winds &amp; Winter Storm/Ice Storm</td>
<td>Potentially Hazardous Tree Assessment – Removal dead or dangerous tree limbs near power lines</td>
<td>Road Foremen / Green Mountain Power</td>
<td>Continual Basis - Annually</td>
<td>Town’s Highway General Fund</td>
<td>Medium</td>
<td>Low / Medium</td>
<td>Ongoing</td>
</tr>
<tr>
<td>High Winds</td>
<td>Maintenance of municipal buildings and infrastructure vulnerable to structural damage from wind or ice.</td>
<td>Selectboard</td>
<td>Continual Basis - Annually</td>
<td>Town’s Building Maintenance Fund</td>
<td>Medium</td>
<td>Medium / Medium</td>
<td>As needed</td>
</tr>
<tr>
<td>Winter Storm / Ice Storm, Flood</td>
<td>Education to citizens to keep emergency kits in cars, at home, etc. Education to location of emergency shelter. Fire Dept. does system checks or resources prior to storms; information provided at Town Meeting</td>
<td>Schools, Town Officials, EMD, Assistance from National Weather Service for preparations of weather and flood warning plans.</td>
<td>Information continually available at Town office and included in annual report</td>
<td>Selectmen Budget</td>
<td>Medium</td>
<td>Low / High</td>
<td>Ongoing</td>
</tr>
<tr>
<td>All Hazards</td>
<td>Interoperability of communications between Road Crew, Town Office/ EMD/ Command Post</td>
<td>EMD and Road Foreman</td>
<td>0-24 months</td>
<td>State or VTrans Funding</td>
<td>Medium (completed)</td>
<td>Low / High</td>
<td>Complete</td>
</tr>
<tr>
<td>All Hazards</td>
<td>Quarterly meeting with Fire Chiefs in region to realign Mutual Aid, based upon road conditions.</td>
<td>Fire Chief</td>
<td>Quarterly each year</td>
<td>Tri-Mountain Fire &amp; Rescue Assoc.</td>
<td>Medium</td>
<td>Low / Medium</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Flood</td>
<td>Maintenance for purpose of an Emergency Access Road – Stratton Gate Rd. to Cole Pond</td>
<td>Fire Chief</td>
<td>Maintained as needed for emerg access</td>
<td>Town’s Highway General Fund</td>
<td>Low</td>
<td>High / Low</td>
<td>Ongoing</td>
</tr>
<tr>
<td>All Hazards</td>
<td>Resident Survey to assess vulnerable populations and populations with surplus resources</td>
<td>EMD</td>
<td>36 months</td>
<td>Selectmen Budget</td>
<td>Low</td>
<td>Low / High</td>
<td>On-hold</td>
</tr>
</tbody>
</table>
At the time of applying for FEMA’s PDM-C, FMA or HMGP grant programs, each project listed below will undergo the full benefit-cost analysis methodology (BCA version 4.5 and higher) to maximize savings. Mitigation strategies were very fully identified in the last version, as a result of the extraordinary damages due to Tropical Storm Irene. The town is still working on them and the town has not identified any new mitigation strategies since this list was created in February 2013.

**Fluvial Erosion Hazard Zones (FEH)**

Fluvial Erosion Mapping has not yet been done for the Town of Jamaica. A request to the Department of Environmental Conservation has been submitted. In acknowledgement that existing technical resources and land use guidance or regulatory authorities, such as the National Flood Insurance Program, do not adequately identify high risk areas for development along riparian corridors with respect to fluvial erosion hazards it is therefore deemed a high priority of this Hazard Mitigation Plan to provide the technical support for, and to develop and implement protection mechanisms at the local level that will serve to avoid land use investments that would be, over time, endangered by, incompatible or in conflict with fluvial adjustment and erosion processes. Fluvial assessments shall be conducted as guided by the VT ANR Fluvial Geomorphic Assessment Protocols, in the Town of Readsboro, as VT ANR deems necessary.

No later than one year after completion of the fluvial geomorphic assessment, the town, under contract with the Regional Planning Commission, or other GIS mapping service provider, shall develop a fluvial erosion map. Such map shall be consistent with mapping standards and protocols developed by VT ANR.

The Windham Regional Commission has recently been awarded grant funding for FY 2013-2014 under the Ecosystem Restoration Grant Program to conduct Phase 1 & Stream Geomorphic Assessments on the Winhall River, Wardsboro Brook and the Green River, all within the Windham Region. The Winhall River flows through the most northwesterly corner of the town.

**PLAN MAINTENANCE PROCESS**

**Monitoring, Evaluating, and Updating the Plan**

The Town of Jamaica will continue to work with the Windham Regional Commission to monitor, evaluate, and update the plan throughout the next 5 year cycle. The next major update will occur five years after this plan is adopted and approved by FEMA (in 2019). The 2019 plan update will follow a similar process as described in the Planning Process Section of this plan and begin with adequate time to ensure there is not a lapse of time between approved plans being in place. The stakeholder group will review each portion of the Plan to assess whether new data and/or circumstances warrant updates to those sections. The review will give particular attention to the risk assessment section, identifying critical structures, mitigation goals, progress made to implement the proposed mitigation actions and progress made to the Plan’s risk assessment and analysis into other town planning and regulatory programs.

In mid April each year, the Town will dedicate a specific meeting time to review and update the Plan as necessary. The reviewers will be the emergency stakeholder group that includes: a member of the Selectboard, Planning Commission, Road Foreman, Fire Department and EMD. The person who will ensure this task is accomplished each will be the EMD.

A review of the plan will also take place each year by the emergency planner at the Windham Regional Commission along with the Town’s emergency planning committee to update the plan after any FEMA disaster declaration as well as any funding received from FEMA, to record any hazard related events, or to determine if the town is interested in applying for grant funding. Normal review of the plan will take active involvement on the part of the Jamaica’s Selectboard in
consultation with Jamaica’s Road Foreman, Fire Chief, and Emergency Management Director working with Windham Regional Commission staff to identify and plan for ongoing hazard mitigation work and coordination among stakeholders to identify structures and engineering projects that can help mitigate future hazardous events; e.g. bridge and culvert replacements, road replacements and grading, as well as any repetitive loss structures that may be in the Special Flood Hazard Area as identified on FEMA Flood Maps (e.g. FHBM and FIRM maps). Public input would also be included. All plan review meetings will be publicized and open to the public. The Plan and any proposed revisions will be on the jurisdiction’s website with information on how the public can direct questions/comments to the Planning Team.

Incorporating into Existing Planning Mechanisms

The following policies, programs and activities related to hazard mitigation are currently in place and/or being implemented in the town of Jamaica. The Committee analyzed these programs for their effectiveness and noted improvements needed. Jamaica uses all of the plans listed below to help plan for current and future activities with the town. For example: the Local Emergency Operation Plan has a contact list that is used for response purposes in the case of a hazard event. The Town Plan directs visions and goals that include Natural Resources and Land-Use. Road Standards are followed by the town and they do an annual culvert and bridge inventory that is mapped by the WRC. The town is compliant with the NFIP.

The Town of Jamaica feels that the Hazard Mitigation Plan is one of several plans that informs and influences reasonable land use decisions. In the absence of zoning regulations, other than floodplain regulations, Jamaica is also engaged in planning mechanisms to spur economic development, create traffic calming in the Village, and capitalizing on their natural resources to plan for the future. As shown in the Table on page 31, Jamaica is aware and current on integration of hazard mitigation elements into most existing plans and relevant Town documents. Where gaps have been identified, such as in the School Emergency Response Protocol, someone has already been identified and is working to fill that gap. The mitigation planning process is continual and as new issues arise Jamaica is committed to incorporating new information into Town documents as deemed necessary.
<table>
<thead>
<tr>
<th>Type of Existing Protection</th>
<th>Description</th>
<th>Effectiveness/Enforcement/Hazard that is addressed</th>
<th>Gaps in Existing Protection/Improvements Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town Plan</td>
<td>Plan for coordinated town-wide planning for land use, municipal facilities, etc.</td>
<td>Flooding, Ball Mtn Dam, and Emergency management resources are all addressed in the Town Plan.</td>
<td>Town Plan was updated and adopted in 2012.</td>
</tr>
<tr>
<td>Town Local Emergency Operation Plan</td>
<td>Municipal procedures for emergency response</td>
<td>Incident Command; Hazard Annexes included</td>
<td>Local Emergency Operation Plan was completed in 2010 and adopted by Town Select board; It is updated every year.</td>
</tr>
<tr>
<td>School Emergency Response Protocol</td>
<td>School procedures for emergency response</td>
<td>School Crisis Plan</td>
<td>School Crisis Planning Team Facilitator currently meeting with schools and First Responders to assess gaps and offer solutions</td>
</tr>
<tr>
<td>LEPC 6 Hazardous Materials Plan</td>
<td>Procedures for hazmat emergency response at regional level</td>
<td>LEPC 6 has the plan</td>
<td>Continued involvement with the LEPC 6.</td>
</tr>
<tr>
<td>Mutual Aid – Emergency Services</td>
<td>Agreement for regional coordinated emergency services</td>
<td>Keene (NH) Mutual Aid – written agreement/contract for Fire/Ambulance and HazMat</td>
<td>None identified</td>
</tr>
<tr>
<td>Mutual Aid – Public Works</td>
<td>Agreement for regional coordinated emergency highway maintenance services</td>
<td>Public Works MAA signed 06/27/05</td>
<td>None identified</td>
</tr>
<tr>
<td>Road Standards</td>
<td>Design and construction standards for roads and drainage systems</td>
<td>Adopted VT State codes and standards.</td>
<td>Town would like to see some written standards, which are updated on a regular basis.</td>
</tr>
<tr>
<td>Subdivision Regulations</td>
<td>Regulates the division of land, standards for site access and utilities</td>
<td>NA</td>
<td>No Town Subdivision Regulations</td>
</tr>
<tr>
<td>Sewage Regulations</td>
<td>Regulates on-site sewage systems</td>
<td>State Regulations apply</td>
<td>None Identified</td>
</tr>
<tr>
<td>Flood Hazard Area Regulations</td>
<td>Regulates development in FEMA flood hazard areas</td>
<td>Stand Alone Town Bylaw</td>
<td>Revised in 2007 to include new FEMA DFIRM’s.</td>
</tr>
<tr>
<td>Site Plan Review (SPR)</td>
<td>Site development standards</td>
<td>NA</td>
<td>No Town Zoning Regulations</td>
</tr>
<tr>
<td>National Flood Insurance Program (NFIP)</td>
<td>Provides ability for residents to acquire flood insurance</td>
<td>NFIP member updated September 2007</td>
<td>None Identified</td>
</tr>
<tr>
<td>Maintenance Programs</td>
<td>Bridge &amp; Culvert Inventory</td>
<td>Updated in 2009 Completed Annually</td>
<td>None Identified</td>
</tr>
<tr>
<td>Building Code</td>
<td>Regulates building construction standards</td>
<td>Through Labor and Industry</td>
<td>NA</td>
</tr>
<tr>
<td>Wetland protection – VT Wetland Rules</td>
<td>Protected by 1990 Vermont Wetland Rules</td>
<td>Protection of environment, water resources, wildlife, biota</td>
<td>None Identified</td>
</tr>
</tbody>
</table>
APPENDICES

A. Sign-in Sheet for Emergency Planning Committee Meeting
B. Public Participation Documentation
C. Planning with Adjacent Towns
**Appendix A - Sign-in Sheet (s) for Town of Jamaica Hazard Mitigation Plan meeting.**

<table>
<thead>
<tr>
<th>Name</th>
<th>Town where you live</th>
<th>Affiliations - Please list all</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ken Johnson</td>
<td>Jamaica</td>
<td>Jamaica Fire &amp; Rescue</td>
<td>874-7234</td>
<td><a href="mailto:kmjose2007@gmail.com">kmjose2007@gmail.com</a></td>
</tr>
<tr>
<td>Paul Foster</td>
<td>Jamaica</td>
<td>County - 1st Select Board</td>
<td>874-4475</td>
<td></td>
</tr>
<tr>
<td>Bob Rockwith</td>
<td>Jamaica</td>
<td>Jamaica Fire &amp; Rescue</td>
<td>874-4537</td>
<td></td>
</tr>
<tr>
<td>Stewart Barker</td>
<td>Jamaica</td>
<td>County - 1st Select Board</td>
<td>874-4537</td>
<td></td>
</tr>
<tr>
<td>Edward Flaherty</td>
<td>Jamaica</td>
<td>County - 1st Select Board</td>
<td>874-4537</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Affiliations – Please list all</td>
<td>Town where you live</td>
<td>Phone</td>
<td>email</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------</td>
<td>---------------------</td>
<td>----------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Valarie Panizano</td>
<td>Flood Zone Administrator, Lister GIS Specialist</td>
<td>Jamaica</td>
<td>874-4908</td>
<td></td>
</tr>
<tr>
<td>Charlie Pck</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jim Todd</td>
<td>Zoning Commission, ZBA Flood Zone</td>
<td>Jamaica</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dale West</td>
<td>Jamaica Fire &amp; Rescue Chief</td>
<td>Jamaica</td>
<td></td>
<td>dalewest@sk getId</td>
</tr>
<tr>
<td>Pam S West</td>
<td>EP Coordinator, Grace College Hospital, Jamaica Fire &amp; Rescue</td>
<td>Jamaica, VT</td>
<td>874-7236</td>
<td><a href="mailto:west6ganoco@mac.com">west6ganoco@mac.com</a></td>
</tr>
<tr>
<td>LEXA CLARK</td>
<td>Select Board, Jamaica Fire &amp; Rescue</td>
<td>Jamaica</td>
<td>874-4772</td>
<td><a href="mailto:lexasteve@gmail.com">lexasteve@gmail.com</a></td>
</tr>
<tr>
<td>Name</td>
<td>Affiliations – Please list all</td>
<td>Town where you live</td>
<td>Phone</td>
<td>email</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
</tbody>
</table>
| DAVID DEZENDRE | TOWNSEND EMER. MGMT. DIRECTOR  
TOWNSEND SCHOOL BOARD CHAIR  
WUSU VIC-CHAIR    | TOWNSEND, VT        | 802-683-9191 (cell)  
802-365-4425 (home) | daviddez@sover.net |
| DINA H. REED    | ASSISTANT PLANNER,  
WINDHAM REGIONAL  
COMM.              | BURLINGTON         | (802) 857-4547  | dreed@sover.net |
<p>| | | | | |
|                 |                                                                                               |                     |                 |                 |</p>
<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliations – Please list all</th>
<th>Town where you live</th>
</tr>
</thead>
<tbody>
<tr>
<td>VALERIE PANTORNO</td>
<td>Flood Zone Administrator and Listor</td>
<td>JAMAICA</td>
</tr>
<tr>
<td>GREG JOLLY</td>
<td>Jamaica Library Trustee</td>
<td>JAMAICA</td>
</tr>
<tr>
<td>PAUL FRENCH</td>
<td>Select board Jamaic EM0</td>
<td>JAMAICA</td>
</tr>
<tr>
<td>KEITH HAND</td>
<td>Road Commissioner</td>
<td>JAMAICA</td>
</tr>
<tr>
<td>PAT MARLOWY</td>
<td>Town Clerk</td>
<td>JAMAICA</td>
</tr>
<tr>
<td>ROBERT H. STINTS</td>
<td>Jamaica Vol. Fire &amp; Rescue Inc</td>
<td>JAMAICA</td>
</tr>
</tbody>
</table>
Appendix B - Advertisement making plan available to public for comment.

Are you ready to weather the next ice storm? Flood event? Extended power outage?

The Town of Jamaica is developing a Hazard Mitigation Plan to address potential future hazards in our community.

As the Town is taking action to be prepared for whatever hazard event strikes, won’t you join us in preparations? Your input is important! We would like to know your feedback regarding this important document. Let us know if you have suggestions or comments about the plan. Your local knowledge is critical to making the plan effective for Jamaica.

Hazard Mitigation Goals
- Reduce the loss of life and injury resulting from all hazards.
- Reduce the impact of hazards on the town’s water bodies, natural resources, and historic resources.
- Reduce the economic impacts from hazard events.
  - Minimize disruption to the road network and maintain access,
  - Mitigate financial losses incurred by municipal, residential, industrial, agricultural and commercial establishments due to disasters,
  - Ensure that community infrastructure is not significantly damaged by a hazard event.
- Ensure that members of the general public continue to be part of the hazard mitigation planning process.

The Plan is available for review at the following locations:
- Town Office & Library – Hard Copy available

Please review sections of the plan that interest you and return comments to:
- Patricia Muelemars, Jamaica Town Clerk – jamaicatownclerk@svcable.net
- Or Dinah Reed at the Windham Regional Commission – dreed@windhamregional.org
Appendix C: Documentation from Jan. 15th Planning with Adjacent Towns Meeting

MONTHLY MEETING

LEPC VI

Tuesday, January 15, 2013 -- 5:30 pm
Location: Marlboro Graduate Center, Vernon Street, Brattleboro
Room – Second Floor East (2E) (parking available in lot south of the bldg.)

AGENDA
1. Introductions – Sign-in
2. Minutes of Previous Meeting
3. No Business meeting except for any important timely reports/announcements

Jan 15th Program:
Resiliency through Communication and Planning

Discussion Topics/Activities:
1) Viewing of Maps, place sticky notes at problem spots
2) Small groups - Roundtable Discussions between Towns
3) Establish notetaker - make notes on large white sheets of paper
4) Reorganize tables – sit with towns you have not yet sat with
5) Take photos
6) Final – Re-cap as large group – reflect on map areas – what did you learn from this?

Things to think about when discussing potential issues with neighboring towns:

1. Rivers/streams that flow through more than one town? How does what one town does upstream affect your town downstream?

2. Major roads in common? What if there is a detour/bridge out – how do you plan together to mitigate traffic impacts?
### Volunteer Form to Document In-Kind Services - Match Information

**Local Emergency Planning Committee 6**
January 15, 2013
Marlboro Graduate Center
Local Hazard Mitigation Planning with Neighboring Towns
5:30 PM

#### Volunteer Attendees - Claimed

<table>
<thead>
<tr>
<th>No.</th>
<th>NAME</th>
<th>SIGNATURE</th>
<th>AFFILIATION</th>
<th>MILEAGE ROUND TRIP</th>
<th>MEETING HOURS</th>
<th>TOTAL MILEAGE</th>
<th>TOTAL TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gail Gallo</td>
<td>[Signature]</td>
<td>Town Hall (EJ)</td>
<td>40</td>
<td></td>
<td>0.685</td>
<td>20.00</td>
</tr>
<tr>
<td>2</td>
<td>Michelle Burt</td>
<td>[Signature]</td>
<td>MRC</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Dan Baker</td>
<td>[Signature]</td>
<td>WCFT</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Sam Barlow</td>
<td>[Signature]</td>
<td>Bridgman</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Herb Michielsen</td>
<td>[Signature]</td>
<td>Grafton ERM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Lou Labrecque</td>
<td>[Signature]</td>
<td>Grafton ERM</td>
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</tr>
<tr>
<td>7</td>
<td>Paul Farnan</td>
<td>[Signature]</td>
<td>VSP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>David Deaver</td>
<td>[Signature]</td>
<td>Town Road End</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Bob Kirk</td>
<td>[Signature]</td>
<td>Town Road End</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>David More</td>
<td>[Signature]</td>
<td>Newfane ERM</td>
<td></td>
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</tr>
<tr>
<td>11</td>
<td>Pam Collier</td>
<td>[Signature]</td>
<td>VC</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>12</td>
<td>Karen Green</td>
<td>[Signature]</td>
<td>Windham ERM</td>
<td></td>
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<tr>
<td>14</td>
<td>Glen Herr</td>
<td>[Signature]</td>
<td>Modified</td>
<td></td>
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</tr>
<tr>
<td>15</td>
<td>Eric Stevens</td>
<td>[Signature]</td>
<td>Grafton</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>16</td>
<td>Kevin Bertie</td>
<td>[Signature]</td>
<td>Londonderry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sub Total:**
0.00  | 0.00  | 0.00  | 0.00  |  

#### Non Volunteer Attendees - Can Not Claim

<table>
<thead>
<tr>
<th>No.</th>
<th>NAME</th>
<th>AFFILIATION</th>
<th>MILEAGE ROUND TRIP</th>
<th>MEETING HOURS</th>
<th>TOTAL MILEAGE</th>
<th>TOTAL TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>John F. Anstis</td>
<td>[Signature]</td>
<td>Windham</td>
<td>6.375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Keith Cusick</td>
<td>[Signature]</td>
<td>WCSD</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sub Total:**
0.00  | 0.00  | 0.00  | 0.00  |  

**Total Match:**
0.00

**Total Non-Volunteer Match:**
0.00

**Total Volunteer Match:**
0.00
Photo Documentation from Jan. 15th Planning with Adjacent Towns Meeting

Paul Fraser, EMD for Jamaica, in picture above, placing a post it on the map.