Bolton

Bolton is a rural community in Tolland County with a population of about 5,000. The town is approximately 14.4 square miles and has an elevation of about 700 feet above sea level. Bolton’s elevation makes it the high point of the three watersheds it is divided among: the Hockanum, Willimantic, and Salmon. Principal watercourses in Bolton include Railroad Brook, Hop River, Porter Brook, Blackledge River and Baker Brook. The main industries in Bolton include agriculture, manufacturing of printed circuits, commercial cleaning solvents, candy manufacturing, and small machine shop. Major transportation routes through Bolton include the terminus of Interstate 384 and state routes 44, 6 and 85.

Challenges

The Town has a couple of specific areas of concern with respect to flooding, as a result of an undersized or older culvert. Flooding is typically localized, generally affecting roads rather than facilities and buildings. Financing the studies, planning and actual implementation of new culverts is a major concern. Beaver dams at Notch Pond are also a concern for localized flooding. Bolton has not had any changes in permitting or regulations that would increase its vulnerability to natural hazards since the adoption of the 2008 Plan.

The National Flood Insurance Program has paid two property damage claims in Bolton totaling $3,989.54 to-date. Bolton has no Repetitive Loss Property claims to-date. Although flooding is not as large a concern in Bolton as in some other communities, a significant flood event could result in much damage particularly to residential properties. CRCOG used FEMA’s Hazus-MH model to analyze the risks that the Town of Bolton might face from flooding. The model estimates that economic losses to the town including residential and commercial damage and business interruptions due to a flood having a 1% chance of occurring any given year (the 100-year flood) would be nearly $2 million. The impacts of such a flood are summarized below:

<table>
<thead>
<tr>
<th>Estimated Damages from a 1% (100-Year) Flood</th>
<th>Households Displaced</th>
<th>People Needing Shelter</th>
<th>Buildings at Least Moderately Damaged</th>
<th>Total Estimated Economic Losses</th>
<th>Total Residential Building &amp; Content Losses</th>
<th>Total Commercial, Industrial &amp; Other Building &amp; Content Losses</th>
<th>Total Business Interruption Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34</td>
<td>14</td>
<td>0.00</td>
<td>$1,970,000</td>
<td>$1,540,000</td>
<td>$440,000</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

CRCOG also used FEMA’s Hazus-MH model to analyze the risks that the Town of Bolton might face from a hurricane as powerful as the 1938 hurricane. The model estimates that economic losses to the town including residential and commercial damage and business interruptions due to such a Category 3 hurricane would be significant and could be over $25 million. The impacts of such a storm are summarized below:

<table>
<thead>
<tr>
<th>Estimated Damages from</th>
<th>Buildings at Least Moderately Damaged</th>
<th>Buildings Completely Damaged</th>
<th>Total Estimated Economic Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>227</td>
<td>15</td>
<td>$25,315,000</td>
</tr>
</tbody>
</table>
According to information from the Connecticut Department of Emergency Management and Homeland Security, the three federally declared natural disasters of 2011 resulted in total expenses to the municipality and other public and private nonprofit agencies of over $175,000. These expenses include debris and snow removal, emergency protective measures and repairs to damaged infrastructure and buildings but do not include damages experienced by private citizens and businesses.

| 2011 Disasters Damage Amounts Eligible for 75% Reimbursement Under FEMA Public Assistance Program |
|-----------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Applicant: Municipality | 100% of Amount Eligible for 75% Reimbursement | Total Damages Eligible for Public Assistance Due to 2011 Disasters |
| DR-1958-CT 2011 Snow | $27,738.45 | $20,197.39 | $127,070.54 | $175,006.38 |
| DR-4023-CT Irene August 2011 | | | | |
| DR-4046-CT Severe Weather Oct 2011 (Alfred) | | | | |

In addition, some areas of Bolton are served by older electrical infrastructure and are especially vulnerable to power outages. As a result, many residents own their own generators; however, the safe operation of generators in houses is a concern to public safety officials. During power outages generators are needed for the operation of grinder pumps serving some residences.

Goals, Objectives and Strategies

The Town of Bolton reviewed the Goals, Objectives and Strategies proposed in the 2008 Plan and determined that the previous goal, its associated objectives and the established mitigation actions should remain. In addition, the Town proposed to initiate several additional strategic actions for the upcoming five years. Several mitigation actions proposed in the 2008 Plan have been completed. These are:

1.1 Study School Road culvert associated with Baker Brook and recommend improvements.
   - Lead: Public Works
   - Priority: Medium
   - Status: Completed

1.2 Implement improvements recommended in above study.
   - Lead: Public Works, Administration
   - Priority: Medium
   - Status: Completed

2.4 Pursue opportunities to increase sheltering capacity.
   - Lead: Emergency Management
   - Priority: Medium
   - Status: Completed
The following is the Town of Bolton’s Mitigation Strategy for the 2014-2019 Plan Update:

**GOAL: REDUCE THE LOSS OF LIFE AND PROPERTY, AND ECONOMIC CONSEQUENCES OF NATURAL HAZARDS**

**Objective 1:**
Ensure safe access throughout town during storm events and floods.

**Strategic Actions:**

1.1 Study Lyman Road culvert associated with Blackledge River and recommend improvements.
   - **Lead:** Public Works
   - **Priority:** Medium
   - **Status:** Initial efforts are underway, however study is not complete.
   - **Potential Funding Sources:** Town Operating Budget/Grants
   - **Timeframe:** 2015-2019.

1.2 Implement improvements recommended in above study.
   Because this is expected to be a long term, multi-year project, for the 2014-2019 Plan period, the action to be taken is to develop a scope of work for implementing the recommended improvements.
   - **Lead:** Public Works, Administration
   - **Priority:** Medium
   - **Status:** Deferred: Study needs to be completed first.
   - **Potential Funding Sources:** Town Operating Budget/Grants
   - **Timeframe:** 2018-2019

1.3 Continue informal arrangements with private contractors for emergency tree/debris removal.
   - **Lead:** Public Works
   - **Priority:** High
   - **Status:** This is an established practice.
   - **Potential Funding Sources:** Town Operating Budget
   - **Timeframe:** Annually throughout the 2014-2019 plan period

1.4 Monitor and maintain drainage and flood control systems.
   - **Lead:** Public Works, Administration
   - **Priority:** High
   - **Status:** This is an established practice.
   - **Potential Funding Sources:** Operating Budget
   - **Timeframe:** Annually throughout the 2014-2019 plan period

1.5 Study Johnson Road culvert/dam and recommend improvements.
   - **Lead:** Public Works
   - **Priority:** Medium
   - **Status:** This is a new initiative
   - **Potential Funding Sources:** Town Operating Budget/Grants
   - **Timeframe:** 2015-2019
1.6 Implement improvements recommended in above study. Because this is expected to be a long term, multi-year project, for the 2014-2019 Plan period, the action to be taken is to develop a scope of work for implementing the recommended improvements.

Lead: Public Works, Administration
Priority: Medium
Status: This is a new initiative
Potential Funding Sources: Town Operating Budget/Grants
Timeframe: 2018-2019

1.7 Monitor and manage Notch Pond Dam beaver population.

Lead: DEEP with Public Works
Priority: High
Status: This is a new initiative
Potential Funding Sources: Town Operating Budget
Timeframe: 2014 – 2019

**Objective 2:**
Reduce power outages resulting from natural hazards and their consequences.

**Strategic Actions:**

2.1 Pursue opportunities to update and/or underground transmission lines.

Lead: Public Works, Planning, Administration
Priority: Low
Status: This is an established practice. Efforts will continue dependent on funding
Potential Funding Sources: Town Operating Budget/Grants
Timeframe: 2014 – 2019

2.2 Maintain good communications with utility companies.

Lead: Public Works, Public Safety, EMD
Priority: Medium
Status: This is an established practice.
Potential Funding Sources: Town Operating Budget
Timeframe: Annually throughout the 2014-2019 plan period

2.3 Conduct public outreach on safe operation of generators.

Lead: Emergency Management, Building Official
Priority: Medium
Status: This is an established practice.
Potential Funding Sources: Town Operating Budget
Timeframe: Annually throughout the 2014-2019 plan period
Objective 3:
Ensure emergency services are prepared to respond to natural hazard events.

Strategic Actions:

3.1 Implement new town-wide communications system.
   Lead: Emergency Management, Administration
   Priority: High
   Status: In Progress
   Potential Funding Sources: Town Operating Budget
   Timeframe: Project is expected to be completed in 2014

3.2 Develop and implement plan to power residential grinder pumps during prolonged power outages.
   Lead: Emergency Management, Administration with the Bolton Lakes Regional Water Pollution Control Authority (BLRWPCA)
   Priority: High
   Status: This is a new initiative
   Potential Funding Sources: Grants
Map 17: Bolton Flood Plains, Repetitive Loss Areas, Dams and Important Facilities