Section III

Municipal Mitigation Goals
Andover

Andover is a rural community on the eastern edge of the Capitol Region with a population of about 3,200. The town is approximately 15.7 square miles and has an elevation of about 400 feet above sea level. Andover is located in the Willmantic Watershed. Several small rivers and streams flow through the town including the Hop and Skungamaug Rivers and their tributaries: Burnap and Staddle Brooks. Bear Swamp Brook runs through the Nathan Hale State Forest located in the northeast corner of town. The State owned Bishop’s Conservation Area is located in the southwest corner of town and includes the 53-acre Bishop Swamp Pond. Andover Lake is a 155-acre lake in the southeast corner that provides recreational opportunities to members of the private association that owns it. The Doris Chamberlain Nature preserve with small pond and walking trails is located on Route 316 near School Road. The major transportation routes through Andover include state routes 6, 87, and 316. Principal industries include agriculture and small wood and machine shops.

Challenges

Andover contains significant forested land, which poses some fire risk to residential areas. The Town has only two areas of flooding concern: Parker Bridge Road and the bridge on Long Hill Road over the Hop River. Debris accumulation and erosion of streambanks are the main contributors to flooding problems at those locations.

Goals, Objectives and Strategies

Goal: Minimize loss of life, property damage, and commercial disruption and facilitate recovery from natural hazards.

Objective 1:
Improve warning notification through Reverse-911 and evacuation assistance.

Strategies:

1.1 Monitor implementation of Reverse-911 system, and plan for updates.
   Lead: Emergency Management
   Priority: Medium

1.2 Educate the public on new warning notification system, sheltering facilities and other emergency preparedness measures.
   Lead: Emergency Management
   Priority: Medium

1.3 Coordinate with municipal agent for the elderly on special needs population list maintenance.
   Lead: Emergency Management/Agent for the Elderly
   Priority: Medium

Objective 2:
Ensure adequate natural hazard response and recovery through zoning and public works activities.
Strategies:
2.1 Study and implement improved bank stabilization measures near bridge on Long Hill Road.
   Lead: Public Works
   Priority: Medium

2.2 Study debris and flooding issues on Parker Bridge Road.
   Lead: Public Works
   Priority: Medium

2.3 Educate property owners on property maintenance, especially around natural and artificial drainage systems.
   Lead: Public Works, Emergency Management
   Priority: Medium

2.4 Establish a list of, and agreements with, private tree service companies to ensure prompt debris removal service following storms.
   Lead: Public Works
   Priority: Medium

2.5 Investigate the CRCOG service sharing initiative, especially surrounding tree and other debris removal equipment.
   Lead: Public Works, Selectmen
   Priority: Medium

Objective 3:
Ensure capacity for emergency sheltering of residents.

Strategies:
3.1 Improve shelter facility, especially sanitary facilities, handicapped accessibility and generator.
   Lead: Emergency Management
   Priority: Medium

3.2 Investigate pet sheltering alternatives.
   Lead: Emergency Management
   Priority: Low

Objective 4:
Train first responders and provide proper support, including supplies and equipment.

Strategies:
4.1 Continue to participate in National Incident Management System (NIMS) training.
   Lead: Emergency Management, Public Safety
   Priority: High
4.2 Coordinate with DEP on maintenance of the Andover Lake Dam and of state forest land for structural integrity of dam, wild fire prevention and emergency response.

Lead: Fire and Emergency Management
Priority: Low

Objective 5:
Ensure residents are aware of the Duke Energy gas pipeline that runs through town.

Strategies:
5.1 Coordinate with Duke Energy on public education and outreach regarding line and public safety.

Lead: Emergency Management
Priority: Low
Map 4: Andover Critical Facilities and Population

Critical Facilities & Population Density: 2000 Census Persons per Square Mile by Census Block

- Hazardous Materials
- Hospitals & Medical Facilities
- Emergency Management Centers
- Fire Stations
- Police Stations
- Rivers and Streams
- Freeways
- Major Arterials
- Minor Arterials
- Waterbodies
  - Less than 800
  - 801 - 1600
  - 1601 - 3200
  - More than 3200

Data Sources: Connecticut Department of Environmental Protection, Flood Zones, Dams, Repetitive Loss Data, Town Boundaries, Hydrography and Streams, Connecticut Department of Transportation
Projection: Connecticut State Plane 1983 feet
For Planning and Analysis Use Only
Prepared: Spring 2007
Map 5: Andover Repetitive Flood Loss Claims, Dams, Flood Zones and Open Space

Data Sources: Connecticut Department of Environmental Protection, Flood Zones, Dams, Repetitive Loss Data, Town Boundaries, Hydrography and Streams; Connecticut Department of Transportation
Projection: Connecticut State Plane 1983 feet
For Planning and Analysis Use Only
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Avon

Avon is a suburban town in north-central Connecticut with a population of about 17,300. It has an average elevation of about 350 ft. The Town encompasses 23.5 square miles, lying entirely within the Farmington River watershed. The Farmington River forms the Town’s western border then makes a u-turn in neighboring Farmington, to flow south to north in the eastern section of Avon. Major tributaries that course through Town include Big, Chidsey, Cider, Hawley, Nod, Roaring, Thompson, and Wiggin Brooks. Major state routes that pass through Avon include Routes 10 and 44. Insurance, printing, concrete products, poultry processing, reflective tapes, fiber optics and medical facilities are the major industries in Avon.

Challenges

Flooding and wintery weather can easily disrupt the transportation network in Avon, given the vast floodplain area and the steep terrain on the eastern edge of Town. Town staff also lack some basic resources to target mitigation and/or response measures, e.g. maps of structures in the floodplain and maps of Metropolitan District Commission (MDC) infrastructure that can be shared among public safety, planning, engineering and public works departments.

Goals, Objectives and Strategies

Goal: Reduce the loss of life and property and consequences as a result of natural disasters

Objective 1:
Have a plan for emergency responders to respond to high winds.

Strategies:
1.1 Develop and maintain agreements with local contractors for emergency tree and debris removal, to quickly restore access throughout town, for emergency response.

   Lead: Public Works
   Priority: Medium

Objective 2:
Improve emergency responders’ knowledge of emergency action plans.

Strategies:
2.1 Continue to participate in regional National Incident Management System (NIMS) and other emergency response trainings.

   Lead: Police and Fire
   Priority: High

2.2 Inform municipal staff of revisions to emergency response action plan.

   Lead: Emergency Management
   Priority: High

Objective 3:
Ensure equipment is maintained in proper operative condition.
Strategies:

3.1 Fully implement new fleet management system.
   Lead: Public Works
   Priority: High

3.2 Investigate CRCOG services sharing initiative, and potential for shared equipment, such as a chipper.
   Lead: Public Works, Administration
   Priority: Medium

Goal: Reduce the loss of life and property during adverse weather conditions

Objective 1:
Monitor weather conditions and relocate personnel in key locations to lower response times.

Strategies:

1.1 Continue with current practices of relocating personnel to the East side of the Farmington River as needed.
   Lead: Fire and Police
   Priority: High

1.2 Talk to CT Department of Transportation about using state highway garage as staging area for local personnel.
   Lead: Fire and Police
   Priority: High

1.3 Provide satellite televisions for Public Works and Fire Departments to monitor information when power and cable are out.
   Lead: Fire, Public Works
   Priority: Medium

Objective 2:
Ensure adequate staffing and provide staff with necessary tools to respond to event.

Strategies:

2.1 Upgrade more staff members to wireless communication systems.
   Lead: Emergency Management
   Priority: Medium

2.2 Implement web-based GIS, and provide access to sensitive information for emergency responders.
   Lead: Emergency Management, Planning
   Priority: Low

2.3 Map structures located in floodplains, and develop a targeted Reverse-911 list for those property owners.
   Lead: Emergency Management, Planning
   Priority: Low
2.4 Acquire a portable generator and enable hook-ups at shelters and emergency response facilities.

Lead: Emergency Management
Priority: Low

Objective 3:
Coordinate with all local, state and federal agencies and authorities.

Strategies:
3.1 Map, or obtain mapping of, MDC infrastructure in town.

Lead: Planning
Priority: Low

3.2 Meet with MDC staff to discuss coordinated emergency response planning.

Lead: Emergency Management
Priority: Medium

3.3 Coordinate with other agencies on an as needed basis.

Lead: Emergency Management
Priority: Low

Goal: Reduce the loss of life and property during significant flooding events

Objective 1:
Continue to enforce the towns of Avon's flood plain regulations.

Strategies:
1.1 Continue with current practices.

Lead: Planning, Engineering
Priority: High

1.2 Ensure that an equal amount of compensation for any project that negatively affects flood flows.

Lead: Planning, Engineering
Priority: High

Objective 2:
Educate public in regards to town's emergency plan and emergency shelter.

Strategies:
2.1 Use municipal website and town newsletter to periodically update residents.

Lead: Emergency Management
Priority: Medium
Map 6: Avon Critical Facilities and Population Density

Data Sources: Connecticut Department of Environmental Protection, Flood Zones, Dams, Repetitive Loss Data, Town Boundaries, Hydrography and Streams; Connecticut Department of Transportation

Projection: Connecticut State Plane 1983 feet

For Planning and Analysis Use Only

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Bloomfield

The Town of Bloomfield encompasses 26.4 square miles with an average elevation of about 150 feet. The estimated population is 20,600. Bloomfield is primarily in the Park River Watershed, but northern areas drain to the Farmington River Watershed. The main watercourses in Town include the Tumble, Wash, Filley and Beamans Brooks. Penwood and Talcott Mountain State Parks, and three Metropolitan District Reservoirs are located in Bloomfield. Major transportation routes through Town include east-west state Routes 218 and 178, as well as north-south running routes 185, 187 and 189. Industries include insurance, aerospace products, specialized tools, electronics, gold and diamond products, diversified industries and agriculture.

Challenges

The Town maintains all large flood control structures within its borders; however, if flood control systems back up in neighboring Hartford, Bloomfield is at risk. Small areas of the community are frequently subject to flooding, including along Tunxis Avenue and the Town Center, especially around the library. Ensuring proper maintenance of streambeds, to prevent flooding, is also a challenge, as many run across private property.

Route 185 is a major east-west route over the ridge in western Bloomfield and the Farmington River in neighboring Simsbury. When Route 185 is closed due to debris or ice and snow, significant traffic volumes must be re-routed in Bloomfield.

Goals, Objectives and Strategies

Goal: Reduce loss of life, property and economic consequences as a result of flooding

Objective 1:
Reduce the likelihood of flooding by improving natural and man-made drainage systems.

Strategies:
1.1 Encourage property owners to maintain and clear debris from stream channels.
   Lead: Public Works, Administration
   Priority: Medium

Objective 2:
Where feasible, improve and/or modify existing structures that experience flooding to protect from flood damage.

Strategies:
2.1 Acquire and demolish house on Tunxis Ave. that regularly experiences flooding.
   Lead: Administration
   Priority: Medium

2.2 Further study and pursue protection measures for Town Library.
   Lead: Public Works
   Priority: Medium
Goal: Reduce loss of life, property and economic consequences as a result of severe weather

Objective 1:
Minimize potential debris from severe storms.

Strategies:
1.1 Conduct a tree and vegetation inventory and develop a maintenance program.
   Lead: Public Works
   Priority: Medium

Objective 2:
Improve ability of public works to prepare and respond to severe weather.

Strategies:
2.1 Ensure public works has adequate equipment to respond to downed electric wires.
   Lead: Public Works, Administration
   Priority: Medium

Objective 3:
Implement a resource sharing program with other public works departments.

Strategies:
3.1 Continue to explore service sharing arrangements and engage in CRCOG's service sharing initiative.
   Lead: Public Works
   Priority: Medium

Objective 4:
Improve coordination among, and ability of, all town staff to respond appropriately to severe weather.

Strategies:
4.1 Ensure that all town officials are familiar with emergency preparedness plans.
   Lead: Emergency Management
   Priority: Medium
Map 8: Bloomfield Critical Facilities and Population Density

Critical Facilities & Population Density: 2000 Census Persons per Square Mile by Census Block

- Hazardous Materials
- Hospitals & Medical Facilities
- Emergency Management Centers
- Fire Stations
- Police Stations
- Rivers and Streams
- Freeways
- Major Arterials
- Minor Arterials
- Waterbodies
  - Less than 800
  - 801 - 1600
  - 1601 - 3200
  - More than 3200

Data Sources: Connecticut Department of Environmental Protection, Flood Zones, Dams, Repetitive Loss Data, Town Boundaries, Hydrography and Streams; Connecticut Department of Transportation

Projection: Connecticut State Plane 1983 feet

For Planning and Analysis Use Only

Prepared: Spring 2007
Map 9: Bloomfield Repetitive Flood Loss Claims, Dams, Flood Zones and Open Space

Data Sources: Connecticut Department of Environmental Protection, Flood Zones, Dams, Repetitive Loss Data, Town Boundaries, Hydrography and Streams; Connecticut Department of Transportation

Projection: Connecticut State Plane 1983 feet

For Planning and Analysis Use Only
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Bolton

Bolton is a rural community in Tolland County with a population of about 5,100. 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, Willamantic, 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, state routes 44, 6 and 85.

Challenges

The Town has only a couple of areas of concern with respect to flooding, as a result of an undersized or older culvert. Financing the studies, planning and actual implementation of new culverts is a major concern.

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.

Goals, Objectives and Strategies

*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.

**Strategies:**

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

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

1.3 Study Lyman Road culvert associated with Blackledge River and recommend improvements.
   - Lead: Public Works
   - Priority: Medium

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

1.5 Continue informal arrangements with private contractors for emergency tree/debris removal.
1.6 Monitor and maintain drainage and flood control systems.

Lead: Public Works, Administration
Priority: High

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

**Strategies:**

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

Lead: Public Works, Planning, Administration
Priority: Low

2.2 Maintain good communications with utility companies.

Lead: Public Works, Public Safety
Priority: Medium

2.3 Conduct public outreach on safe operation of generators.

Lead: Emergency Management, Building Official
Priority: Medium

2.4 Pursue opportunities to increase sheltering capacity.

Lead: Emergency Management
Priority: Medium

**Objective 3:**
Ensure emergency services are prepared to respond to natural hazard events.

**Strategies:**

3.1 Implement new town-wide communications system.

Lead: Emergency Management, Administration
Priority: High
Map 10: Bolton Critical Facilities and Population Density

Persons per Square Mile by Census Block

- Hazardous Materials
- Hospitals & Medical Facilities
- Emergency Management Centers
- Fire Stations
- Police Stations
- Rivers and Streams
- Freeways
- Major Arterials
- Minor Arterials
- Waterbodies
  - Less than 800
  - 801 - 1600
  - 1601 - 3200
  - More than 3200

Data Sources: Connecticut Department of Environmental Protection, Flood Zones, Dams, Repetitive Loss Data, Town Boundaries, Hydrography and Streams; Connecticut Department of Transportation
Projection: Connecticut State Plane 1983 feet
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Prepared: Spring 2007
Map 11: Bolton Repetitive Flood Loss Claims, Dams, Flood Zones and Open Space

Data Sources:
- Connecticut Department of Environmental Protection; Flood Zones, Dams, Repetitive Loss Data, Town Boundaries, Hydrography and Streams
- Connecticut Department of Transportation
- Projection: Connecticut State Plane 1983 feet

Ownership:
- Dams w/ At Least Moderate Risk
- Freeways
- Major Arterials
- Minor Arterials
- Rivers and Streams
- 2 - 4 Repetitive Loss Claims
- 5 - 9 Repetitive Loss Claims
- 10 - 17 Repetitive Loss Claims
- 18 - 44 Repetitive Loss Claims
- 100 Year Flood Zone
- 500 Year Flood Zone
- Waterbodies
- Private Ownership Open Space
- Municipal OS & Rec Property

Prepared: Spring 2007