

11.0 Town of Southington Annex



11.1 Introduction

The former Central Connecticut Region, which includes Southington, is updating its Natural Hazard Mitigation Plan (the Plan). The goal of the Plan for the Town of Southington is to reduce losses of life and property, and minimize economic consequences of natural hazards. The Town of Southington has developed a series of objectives to meet this goal as discussed in Section 11.3, and specific strategies are identified under appropriate objectives with the goal of enacting these strategies by 2021.

The Plan contains two parts. The first four chapters comprise a regional section that considers risks from various natural hazards, and lays out a series of broad goals and objectives. The final seven chapters is a collection of municipal plans referred to as “annexes”. These municipal annexes serve three functions. The first is to gather, in one place, information from various municipal departments about how the Town currently prepares for, and responds to, natural hazards. The second is to gather the projects and priorities that the community will pursue to improve its natural hazard preparedness and strengthen its disaster response efforts. The final purpose is to make the community eligible for funding from the Federal Emergency Management Agency (FEMA). To be eligible for many of FEMA’s grant and assistance programs, a municipality must have a current FEMA-approved Natural Hazard Mitigation Plan that is adopted by the local governing body by resolution.

Chapter 11 presents the updated municipal annex of the Plan for the Town of Southington. It presents a brief overview of the town, its challenges, its vulnerabilities, and its goals, objectives, and strategies for the next five years.

11.1.1 Background

The Town of Southington is a suburban community located in the south central part of the former CCRPA region. Southington shares borders with Berlin to the east, New Britain to the northeast, Plainville to the north, and Bristol to the northwest. Other neighboring communities include Wolcott to the west, Cheshire to the south, and Meriden to the southeast.

In terms of land area, Southington is the largest town in the former CCRPA region at 35.9 square miles of land area, and the town is home to a variety of natural landscapes. The population of the town was 43,069 as of the 2010 U.S. census with a population density of 1,200 people per square mile. This is above the state average (644 persons per square mile) and consistent with the Hartford County average (1,190 persons per square mile). The median age increased to 43.8, which is older than the county and state medians (40 years old). According to the UCONN State Data Center, Southington is projected to see a 51% increase in its population, age 60 and over, from 2000 to 2025; this cohort is expected to comprise one-third of the town’s population by 2025.

Elevation in Southington ranges from approximately 110 feet to 930 feet. The majority of the Town drains to the Quinnipiac River (a tributary to Long Island Sound), although the eastern edge of town drains to the Mattabesset River in Berlin. Aside from the Quinnipiac River, other major streams in Southington include Cussgutter Brook, Eightmile River, Roaring Brook, Hamlin Brook, and Misery Brook.

The Town of Southington was historically an agricultural community, but over time it has grown to incorporate industrial and commercial districts including a revitalized downtown. In addition,

Southington also has several designated historic districts. Interstate Highways 84 and 691 pass through Southington; the interchange converges at the town's southern border. Other major transportation routes include Routes 10, 120, 177, 229, 322, and 364. Although no longer served by a railroad, the Town is part of the CTFastrak bus rapid transit system providing bus services to Hartford and Waterbury.

Southington's major businesses and industries include retail, accommodation and food services, health care and social assistance, and manufacturing. Recent commercial and industrial development has been a mix of new development and redevelopment and infill, with redevelopment occurring downtown. One major redevelopment project is Greenway Commons which will convert existing land in the floodplain to a privately-owned town park. Residential development also continues in the town. The percentage of single-family homes in Southington has increased to 78%, compared to the 77% in the 2000 census. By 2020, the population is expected to grow by 0.6%, which is higher than county or state growth rates, while the population above age 60 will continue to rise above county and state averages.

In order to account for population growth and changes, the Town of Southington emphasized in the Plan of Conservation & Development (POCD last adopted in 2006) the promotion of efficient development that accommodates a growing population and promotes additional infrastructure improvements to existing development. The Town of Southington aims to achieve these goals through remediation of brownfields and a review of zoning regulations to improve quality development and re-development. Furthermore, Southington recognized the importance of preserving open space that links preservation of resources, landscapes, historic and cultural districts, and recreational opportunities. The POCD is currently being updated and the Town is incorporating information from the hazard mitigation plan into the update. As the population of the community, building square footage, and associated infrastructure increases, so does the risk of damage from natural hazards as discussed in the next section.

11.2 Challenges

The top three natural hazards that present a high risk to Southington include flooding, winter storms, and tropical storms/hurricanes. According to information from the Town and the FEMA Public Assistance Funded Projects Summary (Open Government Initiative), there were eight federally declared disasters or emergencies since 1999 that resulted in reimbursement requests to FEMA. These expenses included debris and snow removal, emergency protective measures, and repairs to damaged buildings and infrastructure experienced by private citizens and businesses. Table 11-1 presents a summary. The types of events in this table are consistent with the top three natural hazards listed above.

Other natural hazards present a moderate or low risk. A general discussion of the Town of Southington's emergency response capabilities and a discussion of the vulnerability of the community to each hazard is discussed in more detail in the sections below.

Event	Name	Declaration Date	Town of Southington Reimbursement	Other Local Agency ¹ Reimbursement	Total Cost ²
EM-3176	Snow (February)	3/11/2003	\$98,672.83	\$884.95	\$132,743.71
EM-3192	Snow (December)	1/15/2004	\$112,255.50	\$1,687.59	\$151,924.12
EM-3200	Snow (January)	2/17/2005	\$125,397.91	\$2,242.67	\$170,187.44
EM-3266	Snow (February)	5/2/2006	\$122,496.40	\$2,593.71	\$166,786.81
DR-1958	Severe Winter Storm	3/3/2011	\$86,570.24	\$8,812.13	\$127,176.49
DR-4023	Tropical Storm Irene	9/2/2011	\$145,446.73	\$0	\$193,928.97
DR-4046	Severe Storm Alfred	11/17/2011	\$785,017.55	\$0	\$1,046,690.07
DR-4106	Severe Winter Storm	3/21/2013	\$215,891.33	\$49,844.56	\$354,314.52

Table 11-1 Recent Disasters Where Southington Applied for Public Assistance.

1. Other Agencies = Fire Districts, Schools, Housing Authorities, Private and Non-Profit Agencies
2. Assuming that federal reimbursement was 75% of damages.

Source: FEMA

11.2.1 All Hazards

The Town of Southington has a variety of emergency operation procedures in place to respond to the effects of natural hazards. In addition to maintaining an Emergency Operations Plan (updated annually) and an Emergency Operations Center, the Town maintains shelters, has identified warming/charging stations, and has identified a variety of resources to assist with response to natural hazard events. The Town maintains a training program for its emergency personnel. The Town notes that it wishes to update its Emergency Operations Plan to include procedures specific to the liquid propane plant at the north end of Town. The Town also participates in DEMHS Region 3 regional emergency planning.

Since the creation of the initial plan, the Town inventoried all shelters, developed a comprehensive shelter plan to guide sheltering response activities, and invests in shelter supplies twice per year. The Town developed a household preparedness pamphlet and posted it on the Town website, and emergency personnel hand the pamphlet out at a variety of events. The Town also provides preparedness training in local schools using the FEMA Student Training in Emergency Preparedness (STEP) program.

The Everbridge emergency notification system was recently initiated town-wide. This emergency notification system provides additional coverage above the statewide CT Alerts system. Town staff report that improvements in local communications still need to occur, such as the purchase of satellite phones for certain departments to ensure emergency communications can be maintained during extensive outages. The Health Department maintains a list of vulnerable populations and assists with evacuations during emergencies.

The Town is currently renovating the Calendar House (Senior Center) to be the Town's primary shelter. The facility's generator needs to be upgraded to support use as a shelter. Once this generator is upgraded, the Town wants to move the existing generator to the Town Hall. The two backup shelters are the JFK Middle School and the Apollo Middle School. Generators will be installed in these facilities soon.

Several additional facilities are equipped with backup power, although additional generators are needed. The Fire Stations and the Police Department all have generators, and one of the Fire Station generators is being replaced in 2015. The Water Department and Water Pollution Control Facility have generators to provide backup power to their infrastructure. One facility needing a generator is the

Municipal Center which houses several Town Departments. Another identified need is to purchase an enclosed trailer to store and move an existing portable generator owned by the Town. The Town continues to be interested in participating in a regional generator sharing program that would be able to provide generators on loan to support local businesses.

While the above assets are necessary to keep the town up and running, emergency planners also pay close attention to their most vulnerable citizens. Populations that may be particularly vulnerable include: people living under the poverty line, people with limited or no English proficiency, minorities, and people who are dependent on transit. These issues are considered regionally in Section 2 of this document.

11.2.2 Flooding

During the past decade, Southington has experienced recurrent flooding throughout the town, with regular, localized flooding at known locations 4-5 times per year. The town is relatively flat throughout, which means that floodwaters tend to recede very slowly. The Plantsville area, along West Main Street, is particularly hard-hit by flooding. The Town has also identified areas of recurrent flooding along other sections of Route 10, Mill Street, and Curtiss Street.

Location

Figure 11-1 below shows the locations of critical facilities in Southington, as well as the relationship between them, flood zones, and the most populated areas of town. As shown in the map, a large portion of Southington is located within the 1% annual flood zone. Most of the most densely populated areas of town are close to a flood zone, but not in one.

Areas that experience flooding are generally unchanged since the initial Plan. These include the Plantsville area along the Quinnipiac River such as near West Main Street, Woodruff Street, Curtis Street, North Main Street, Pratt Street, River Street, and Shweky Lane.

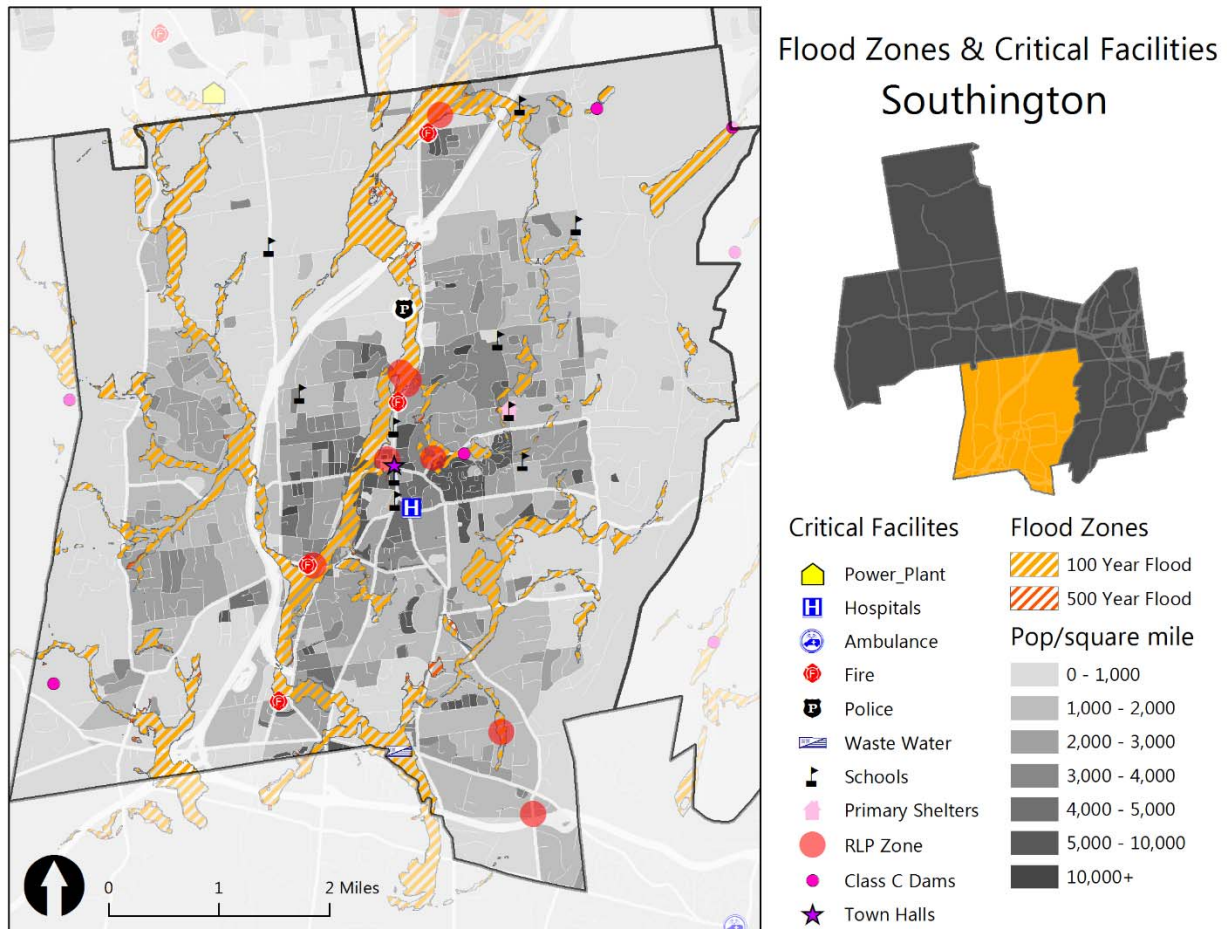


Figure 11-1. Flood Zones, Critical Facilities, and Population Density in Southington

Existing Capabilities

The Town of Southington has in place codes and ordinances to reduce the risks to public health and property posed by flooding. These regulations primarily limit any activities on floodways and floodplains that would increase flood heights and velocities, or reduce or alter naturally occurring floodplains and water catchment areas. The Town’s floodplain ordinance mandates zero increase in storm water runoff in flood plain areas, and town staff places high priority on convincing property owners to provide adequate on-site floodwater storage. The Town defines floodplains, hereafter special flood hazard areas, off of the Federal Flood Insurance Rate Maps identified in FEMA’s Flood Insurance Study. Table 11-2 includes a brief description of how the Town of Southington is addressing flood risk in its most important planning documents.

Planning Documentation	Year Established or Updated	Lead Department(s)	Recommendation for Natural Hazard Mitigation
Municipal Building Codes	2003	Building Department	<ul style="list-style-type: none"> The Town of Southington requires buildings be constructed in accordance with the Connecticut State Building Code; 2003 International Building Code.

Planning Documentation	Year Established or Updated	Lead Department(s)	Recommendation for Natural Hazard Mitigation
Plan of Conservation & Development (POCD)	2006	Planning and Zoning Commission	<ul style="list-style-type: none"> Each town in Connecticut is required to write a Plan of Conservation and Development at least once every 10 years. State statute requires that these plans address “protection of environmental assets critical to public health and safety” (Sec.8-23 CGS). Municipalities that comply with the requirements will become eligible for discretionary state funding. The POCD provides a brief introduction to the flood hazard within Southington. It diagrams the elements of a river corridor, provides a map of all floodplains within the municipality and broadly outlines the risk associated with flooding within the community.
Community Emergency Response Team (CERT)	2015	Emergency Management	<ul style="list-style-type: none"> Southington has a Community Emergency Response Team (CERT). CERT is composed of volunteers who received training in disaster preparedness and response. Using the training, CERT members are able to assist town personnel and support emergency response functions. For example, in Southington CERT members are responsible for staffing the emergency shelter when it is activated. CERT members engage with the community to educate fellow residents about disaster preparedness. They also have a library of resources online that provides information about emergency situations. CERT is an important resource to residents for preparedness.
National Flood Insurance Program (NFIP)	1981	Town Manager	<ul style="list-style-type: none"> Moreover, the Town of Southington is a participating community in FEMA’s National Flood Insurance Program since 1981 and intends to continue participation in the NFIP for the foreseeable future. The National Flood Insurance Program has paid 68 property damage claims in Southington totaling \$770,413.60 to date. The National Flood Insurance Program has paid 30 repetitive loss property damage claims in Southington on 10 properties. These claims total \$541,025.91.
Inland Wetlands and Watercourses Regulations	2013	Inland Wetlands and Conservation Commission	<ul style="list-style-type: none"> The Inlands Waterways and Watercourses Agency of the Town of Southington was established in 1974 to implement the Inland Wetlands and Watercourses Regulations. Under Connecticut General Statutes all municipalities shall regulate activities on those wetlands and watercourses that lie within their borders. The regulations include a list of activities that may be regulated and the environmental justifications for the prohibitions. While these regulations are primarily for the protection of environmental and ecological assets, they do address impacts to safety and public health. As such, the Inland Waterways and Watercourses Commission also has a role to play in mitigating risk in flood hazard areas.

Planning Documentation	Year Established or Updated	Lead Department(s)	Recommendation for Natural Hazard Mitigation
Zoning Regulations	2014	Planning and Zoning Commission	<ul style="list-style-type: none"> • The Town of Southington addresses construction in special flood hazard areas in the Zoning Regulations, adopted in 1957 and amended 2014. • The Town has adopted a Flood Damage Prevention Regulations that addresses floodplain management. The regulations apply to all special flood hazard areas identified by the Federal Emergency Management Agency in its “Flood Insurance Study.” • The regulations acknowledge that there are areas of periodic inundation, “which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.” • The purpose of the regulations is therefore to restrict uses that result in greater vulnerability. This includes the prohibition of certain uses and the restriction of others. It also requires permits for all activities that might alter the river channel or floodplain. The town planner is appointed to administer and implement the regulations. • The regulations require that all new development is engineered to resist flood forces and that the lowest floor is elevated to at least two feet above BFE. For non-residential construction, the lowest floor must be elevated to at least one foot above BFE. If the lowest floor is located below BFE it must be adequately flood proofed to the BFE. Similarly all utilities and electrical appliances must be located above the BFE or be situated to ensure no water is able to enter their workings. • Zoning Regulations require that manufactured homes and recreation vehicles that are parked in a special flood hazard area for longer than 180 days have their lowest floor elevated to two feet or higher above the BFE within the special flood hazard area.
Subdivision Regulations	2005	Planning and Zoning Commission	<ul style="list-style-type: none"> • The Flood Damage Prevention Regulations stipulate that subdivision must minimize the risk of flood damage. This includes locating public utilities and other facilities away from danger. • In particular, the regulation requires that drainage be designed to reduce flood exposure, and that elevations and floodway data be included in all subdivision applications for parcels situated in the special flood hazard area.

Planning Documentation	Year Established or Updated	Lead Department(s)	Recommendation for Natural Hazard Mitigation
Local Emergency Operations Plan	2014-2015	Emergency Management	<ul style="list-style-type: none"> All towns in Connecticut must annually prepare a Local Emergency Operations Plan and submit it to the Department of Emergency Management and Homeland Security (DEMHS) for review. These plans are meant to be applied during an emergency to maximize survival, give direction, integrate departments and expertise, define roles to departments and community leaders, and provide a basis for continued preparation. Specifically the plans identify town personnel and assign responsibilities to each department and its personnel during disasters and emergencies. As part of the plan, instructions are also outlined for activation of the emergency operations center. These plans offer communities an important opportunity to take stock of their level of preparedness and consider any additional steps they can take that may influence their ability to cope and recover.

Table 11-2. Town of Southington Planning Documents.

Town staff believe that existing ordinances do a good job of discouraging development in and near wetlands and in floodplains. Enforcement and outreach regarding floodplain activities is performed by the Planning and Engineering Departments, with outreach typically occurring on a case-by-case basis. In addition, the town’s Open Space and Land Acquisition Committee cites “water quality / resource protection” and “flood control” as two of its rationales for acquisitions and targets wetlands and other properties valuable for pursuing those ends.

The Town assisted FEMA with the MapMod program several years ago, and also assisted with the recent USGS restudy of the Quinnipiac River watershed in 2015 which resulted in revisions to the floodplain for the Quinnipiac River. The Town is currently comparing the old and new floodplain mapping to determine what has changed.

The Town is aware of areas that experience flooding, particularly in Plantsville. When heavy rain is predicted, the Town will put out signs on roads that are at risk of flooding in advance to divert traffic. The Town has an annual inspection and maintenance (if needed) schedule for its bridges and culverts. Drainage and flooding complaints are routed to either the Fire Department or Public Works, depending on if it is an emergency. The Fire Department assists residents and businesses with basement pump outs when flood depths are significant, and now has six pumps to perform this task. Usually Public Works will be involved in resolving any complaint along Town roads.

There have been many new drainage problems occurring due to property owner modifications. Developments were approved with drainage swales and rain gardens, but when the properties are sold to a new owner, the new owner eliminates these mitigation measures which result in flooding. Unfortunately, the Town does not have any jurisdiction over private drainage systems.

Public Works has been undertaking bridge replacement projects throughout the town. All new construction is designed using the most recent NRCC rainfall return periods in accordance with December 2014 CT DOT guidance. The Town has not evaluated other culverts in the community based

on the new rainfall return periods. Ongoing bridge and culvert projects include the West Queen Street bridge, Old Mountain Road (new box culvert), West Center Street Extension bridge, and replacing the stone culvert at the intersection of Flanders Street and Flanders Road (this is a recurring flooding area). A recent subdivision upgraded part of the drainage system on Woodruff Street, and this area now has fewer incidences of flooding due to an undersized drainage system than occurred previously.

The Town recently purchased a very large open space parcel located at 1 Hightower Road upstream of many problem areas in the floodplain. The goal is to use this parcel for flood mitigation related to development that is occurring elsewhere along the Quinnipiac River in Southington. The storage area is separated by natural materials from the channel of the Quinnipiac River. Phase I (2,400 cubic yards of floodplain storage) has been created in relation to a recent project. A small channel allows the river to flow sideways into the storage area in order to attenuate peak flows. Phase II and Phase III (an additional 1,427 cubic yards and 9,738 cubic yards, respectively) are being held by the Town to sell to developers who need space to conduct mitigation activities in relation to their projects. The site also has additional space for future expansion of the storage area.

The Town's capability to mitigate flooding damage is considered to be effective at preventing damage to new development and substantial improvements. In general, the level of capability of the Town of Southington relative to all facets of flood mitigation has slightly increased since the 2011 Plan. The bridge replacement projects have reduced the town's overall vulnerability to flooding, and an upstream flood mitigation area has been created. The Town's participation in the MapMod program several years ago also resulted in digital FIRMs for the community which make it easier to demonstrate floodplain boundaries to property owners.

Impacts and Loss Estimates

Flood losses reported under the NFIP to properties in Southington are listed in Table 11-2. Flooding from the Quinnipiac River is the main challenge for Southington. In particular, Plantsville is always the first or second area flooded in Southington. A two-inch rainfall event can cause flooding on Route 10. The issue is a combination of an undersized drainage system and the fact that drainage outlets are very low to the level of the Quinnipiac River. When the river stage rises, backwater conditions occur at the drainage system outlets preventing drainage from occurring. One of the frequently flooded intersections is Route 10 at West Main Street, which is a high traffic area and important intersection connecting the town to Interstate 84 at Exit 30. This will be a very expensive problem to fix (estimated as being more than \$1 million), and may only provide a benefit for smaller flood events.

Woodruff Street is another area with recurrent flooding. Although the publicly-owned culvert was replaced 15 years ago and is in good condition, the channel that runs across private land is undersized and needs to be widened and deepened for a length of approximately 3,000 feet. As the flooding issue occurs on private land, it is beyond the town's ability to directly remedy. Additional recurring flood areas are along Curtis Street, North Main Street, Pratt Street, River Street, and Shweky Lane. Mill Street can experience flooding up to four feet deep in the vicinity of the Dog Park.

At the Public Information Meeting on June 16, 2015, one resident noted that a significant amount of debris appears to be impeding the flow of the Quinnipiac River, such as large trees growing out of the river bed. In particular, areas of the river from the center of Town and to the north (such as near Curtiss Street) were mentioned. The Town should investigate and clear these areas to prevent debris blockages that could exacerbate nearby flooding conditions. Another area at risk of flooding as reported by residents include the lower section of Eden Avenue due to poor drainage.

CCRPA used FEMA's HAZUS-MH model to analyze potential risks that the Town of Southington might face from a major flooding event. A Level 1 HAZUS-MH Analysis was prepared by CCRPA. Such analyses are known to generally skew high in part based on the limited data entered by the user. Thus, while the numbers below are likely higher than would actually be experienced under a 1% annual chance flood event, they are nonetheless useful for planning purposes. The model estimates that the total economic losses in the town including residential and commercial damage and business interruptions due to a flood having a 1% chance of occurring in any given year (the 100-year flood) would be \$165,580,000. Key impact areas of such a flooding event are summarized in Table 11-3.

Impact of Flooding	Estimated Damage from 1% Annual Chance Flood Event
Households Displaced	1,152
People Needing Shelter	2,574
Buildings at Least Moderately Damaged	173
Total Estimated Economic Losses	\$165,580,000
Total Residential Building & Content Losses	\$45,490,000
Total Commercial, Industrial, & Other Building & Content Losses	\$119,200,000
Total Business Interruption Losses	\$900,000

Table 11-3. HAZUS-MH 1% Annual Chance Flood Losses for Southington.

Source: HAZUS-MH

Based on the public assistance reimbursements in Table 11-1, the Town of Southington has incurred \$193,928.97 since 1999 for impacts due to flooding. Based on the information for the NFIP in Table 11-2, a total of \$770,413.60 has been paid out to NFIP-insured properties since 1981 (33 years). The annualized loss due to flooding based on this information is \$36,274.46. The annualized loss estimate based on the county-wide damages presented in the 2014 *Connecticut Natural Hazards Mitigation Plan Update* (CT NHMP) as described in Section 3.2 is lower at \$25,058. The greater figure is utilized herein as an estimate of annualized loss for the community.

11.2.3 Winter Storms

Southington faces challenges during winter storms as ice and snow make roads impassable and knock down tree limbs which in turn disrupts utility service. The combined effect can leave people stranded in their homes, potentially without heat or power.

Location

All areas of Southington are susceptible to winter storms. Higher elevations may be at a greater risk because the frequency of winter storm events is typically greater in such areas. Areas in floodplains are also at increased risk of winter storm damage due to any flooding that may accompany a winter storm.

Existing Capabilities

The Town has 227 miles of local roads and many additional miles of state roads. Removal of the ice and snow for Southington's town-owned roads is handled by a combination of town workers and contractors; the town also handles debris removal. The plows reportedly do a very good job of keeping the roads clear, although some residents complained during the survey that plowing becomes poor when funds are low. A few areas are prone to drifting snow, such as near large fields. These problems

are mitigated through additional plowing efforts. Similarly, there are areas where ice is a problem on hills which are mitigated through the use of additional treatment before and after a winter storm event.

The majority of roofs on Town-owned buildings are flat, including the schools. The Town has an informal program to review snow accumulation on town-owned roofs each winter, with clearing occurring when depths are sufficiently deep or wet. The Town does not believe that it needs a formal snow load evaluation and removal program at this time.

The Town subdivision regulations do not currently require that utilities in new developments are installed underground. The underground installation of utilities is encouraged for all new development, and nearly all recent development have had underground utilities because developers generally do not want to install power poles. The Town would like to formalize the requirement for underground utilities in the near future. The requirement would not apply for areas where it is not feasible such as the few areas of town with shallow ledge. The Town would like to relocate power lines in Plantsville and downtown Southington underground, but this would be a very expensive undertaking that is unlikely to be completed any time soon.

The Town's capabilities are considered to be effective in regards to response to winter storms, although the Town's capability to mitigate severe winter storm damage is limited to Town facilities. In general, the level of capability of the Town of Southington relative to all facets of winter storm mitigation has slightly increased since the 2011 Plan with the introduction of the informal snow load evaluation procedures and the initiation of the Everbridge emergency notification system.

Impacts and Loss Estimates

The Town faces the same challenges from winter storms as do the other towns in the region: expensive cleanup and management of the storms; residents can be isolated by snowy and icy roads; and downed trees can block roads and cause power outages, depriving residents of electricity, communications, and even heat. As in other towns, the vast majority of residents, accustomed to Connecticut's weather, choose to shelter in place, waiting out the storms from the comfort of their own homes.

Table 11-4 below considers the impact of Severe Winter Storms on the Town of Southington based on Winter Storm Alfred in late October 2011. The biggest impact was the power outage, although debris removal was the biggest financial impact.

Impact of Severe Winter Storm	Estimated Losses from a Severe Winter Storm Comparable to Winter Storm Alfred (October 2011)
Number of Electrical Customers Served (2013)	19,422
Maximum Outages During Severe Winter Storm (2011)	13,457
Maximum Outages Percentage of Customers (2011)	69.29%
Number of Businesses Experiencing Outages	15
Total Lost Wages (Daily)	\$2,331.62
Average Lost Wages (Weekly)	\$39,730.00
Miles of Local Roads Plowed by Town of Southington	226.61
Municipal Cost (Plowing, Road Treatment, debris cleanup)	\$1,046,690.17

Table 11-4. October 2011 Severe Winter Storm Losses for Southington.

Source: Eversource, CCRPA Internal Analysis

Power was lost for nine days to most customers in Southington, with some customers not being restored for two weeks. Businesses in Southington are concentrated in central Southington and the Queen Street area, and both areas had significant power outages. Restaurants were greatly impacted, as most facilities did not have backup power and there was significant spoilage. The larger grocery stores and some gas stations had backup power and were able to provide minimal service. One suggested action is to conduct outreach to businesses about generator safety, and what is needed to pre-wire a building to support a generator. Power restoration was prioritized for first for critical facilities (Police, Fire, and the Hospital), second for water and sewer infrastructure, third for government installations (shelters), fourth industry and businesses (to allow for supplies to be bought and people to get to work), and finally the downtown area and Queen Street.

The January 2013 blizzard produced a lot of snow in Southington. Snow removal was the primary financial impact. Queen Street and the business zones were passable within one day, along with other roads in the downtown area. All other roads were passable within 72 hours, including state roads. Private companies donated seven loaders and crew to help clear the roads which made the effort go much faster. Two commercial roofs were reported collapsed due to this event.

At the Public Information Meeting, one resident noted that there are many winding and narrow roads in Southington that could stand to be widened as these pose risks to egress during storms. Hart Street was mentioned as an example of a street which was recently widened. It was suggested that the Town take a look at streets and roads that could be widened.

Based on the public assistance reimbursements in Table 11-1, the Town of Southington has incurred \$2,149,823.16 since 1999 (15 years) for impacts due to winter storms. The annualized loss due to winter storms based on this information is \$143,321.54. The annualized loss estimate based on the county-wide damages presented in the 2014 CT NHMP as described in Section 3.2 is much lower at \$45,899. The greater figure is utilized herein as an estimate of annualized loss for the community.

11.2.4 Tropical Cyclones and Hurricanes

Southington faces a number of challenges due to tropical storms and hurricanes. The primary problem is dealing with the impact of downed trees which can interrupt power supply for many days and hinder egress through neighborhoods. Secondary impacts are generally caused by heavy rainfall accompanying the storm.

Location

All areas of Southington are susceptible to tropical storms and hurricanes. Higher elevations may be at a greater risk because the speed of the wind may be greater. Areas in floodplains are at increased risk of tropical storm and hurricane damage due to any flooding that may accompany such an event. Mobile home parks may be at increased risk for damage due to high wind.

Existing Capabilities

The Town of Southington uses a variety of preparedness and response procedures to deal with the impacts of tropical storms and hurricanes. Town departments have purchased sufficient supplies over the past few years to be prepared for the next major storm event. Several chainsaws and a wood chipper are now available to assist with cleanup activities. The town has a chipping and trimming contractor on-call when assistance is needed, such as for large jobs.

Tree complaints to the Town Engineer. The Town has a limited budget for tree maintenance which is not sufficient but is not considered enough of a pressing need to increase at this time. This is only for town properties and right-of-ways. The Town will not cut privately-owned trees. Much of the tree trimming in Southington near power lines is conducted by Eversource Energy. A significant amount of trimming occurred in Southington following the 2011 storms, and the Town allowed Eversource to cut any trees they wanted.

At the Public Information Meeting, one resident noted that although the recent Eversource trimming has done a good job of reducing risk, the Town needs to increase trimming along roadways without overhead power lines and along the sides of roads opposite overhead lines. These roads could be blocked by another storm similar to Alfred. Specific areas mentioned that need this attention include Pleasant Street between the High School and Middle School, Woodruff Street to Berlin Avenue, Meriden Avenue (Route 120) to South End Road, and Flanders Road.

The power grid infrastructure in town is aging and considered by the Town to be prone to outages. The Town applied two years ago for a microgrid grant but were denied. As an alternative, the Town has 12 solar power projects proposed for various municipal buildings. Three of the projects are currently approved.

The Town's capabilities are considered to be effective with regard to mitigating hurricane damage. In general, the level of capability of the Town of Southington relative to all facets of tropical storm and hurricane mitigation has slightly increased since the 2011 Plan, with the implementation of the Everbridge system and the recent trimming by Eversource reducing the overall vulnerability of the town.

Impacts and Loss Estimates

Following Tropical Storm Irene in 2011, power was lost for approximately one day in Southington, although some residents lost power for up to five days. A maximum of 3,854 customers were without power. Damages during Tropical Storm Sandy were relatively minimal.

CCRPA used FEMA's HAZUS-MH model to analyze the risks that the Town of Southington might face from a hurricane as powerful as the 1938 Hurricane. The model estimates the economic losses to the town including residential and commercial damage and business interruptions due to such a Category 3 hurricane would be approximately \$144.3 million. The impacts of such a storm are summarized below in Table 11-5.

The annualized loss estimate for tropical storms and hurricanes for Southington based on the county-wide damages presented in the 2014 CT NHMP as estimated by HAZUS-MH is \$2,699,933.

Impact of Simulated 1938 Hurricane Today	Estimated Losses from 1938 Hurricane Event
Households Displaced	160
People Needing Short-Term Shelter	34
Buildings at Least Moderately Damaged	5,096
Building Completely Damaged	59
Total Estimated Economic Losses	\$144,303,410
Total Residential Building Losses	\$115,541,930
Total Commercial, Industrial, & Other Building Losses	\$24,559,920
Total Business Interruption Losses	\$4,201,560
Total Debris Generated (in tons)	522,484
Truckloads (at 25 tons/truck) of building debris	20,899

Table 11-5. HAZUS-MH 1938 Hurricane Simulated Losses for Southington.

Source: HAZUS-MH

11.2.5 Tornadoes and Thunderstorms

Southington faces regular challenges due to tornadoes and thunderstorms, although these events are typically less damaging than tropical storms or hurricanes. The primary problem is dealing with the impact of downed trees which can interrupt power supply and hinder egress through neighborhoods. Secondary impacts are generally caused by heavy rainfall accompanying the storm, and direct wind damage or lightning and hail damage to structures and vehicles.

Location

All areas of Southington are susceptible to tornadoes and thunderstorms. Higher elevations may be at a greater risk because the speed of the wind may be greater. Areas in floodplains are at increased risk of thunderstorm damage due to any flooding that may accompany such an event. Mobile homes are at an increased risk of being damaged by high winds such as those from tornadoes.

Existing Capabilities

The strategies used to mitigate tornado and thunderstorm damage are similar to those used to mitigate damage from tropical storms and hurricanes. The Town has a limited budget for tree maintenance which is known to be insufficient at this time but can only be increased as part of the annual budget. This is only for Town properties and right-of-ways.

The Town’s capability to mitigate thunderstorm damage is similar to that for tropical storms and hurricanes, but the Town’s ability to mitigate tornado damage is relatively limited. In general, the level of capability of the Town of Southington relative to all facets of thunderstorm and tornado mitigation has slightly increased since the 2011 Plan with the introduction of the Everbridge emergency notification system and the recent tree trimming conducted by Eversource.

Impacts and Loss Estimates

According to Town staff, there are no areas of the Town that are specifically prone to wind damage. The annualized loss estimate for thunderstorms based on the county-wide damages presented in the 2014 CT NHMP as described in Section 3.2 is \$5,720. The annualized loss estimate for tornadoes based on the county-wide damages presented in the 2014 CT NHMP as described in Section 3.2 is \$631,903.

11.2.6 Wildfires

Southington experiences small wildfires each year, particularly in the more rural areas of town. Most are accidentally set, although some have been ignited by lightning or undetermined sources.

Location

Less developed areas in Town are at the highest risk for a wildfire. These include the higher elevations on the western and eastern edges rural west end of town where public water service is not available.

Existing Capabilities

The Town maintains mutual aid agreements with all surrounding communities for fire protection. Most of the community has public water service, and tankers are used to shuttle water into outlying areas for firefighting. The Fire Department maintains a variety of all-terrain vehicles to assist with fighting wildfires. Access to some of the outlying areas is fairly good particularly on water company lands and in the vicinity of Crescent Lake. The Town has two local Open Burning Officials certified by the Connecticut DEEP who issue permits for open burning in accordance with Connecticut DEEP regulations.

The Fire Department has one dry hydrant at Crescent Lake. This dry hydrant is undersized (3-inches in diameter) and the pipe sticks through the dam such that upgrading it would be difficult. The Town would like a new dry hydrant installed away from the dam (such as at the dock). Funding for dry hydrants has not been available through the State for several years. Cisterns are not used in the town.

The Town's capabilities are considered to be effective in regards to wildfire response. In general, the level of capability of the Town of Southington relative to all facets of wildfire mitigation is unchanged since the 2011 Plan.

Impacts and Loss Estimates

The greatest areas of concern are the areas of town that do not have public water service along the eastern and western ridgelines. These areas are believed to be long overdue for a fire as the forest floor is littered with debris from previous major storms such as Irene and Alfred. There are many small parcels in these areas where access can be difficult. One suggestion is to consider reviewing areas for potential fire risk by looking at debris accumulation and access issues.

The annualized loss estimate for wildfires based on the county-wide damages presented in the 2014 CT NHMP as described in Section 3.2 and the population density of Southington is \$2,771.

11.2.7 Drought

Only severe droughts would have the potential to cause damages in Southington. The short-duration and moderate droughts that generally occur every few years are not a concern to Town staff.

Location

All areas of Southington are susceptible to drought. Property owners with private wells may have an increased risk of damage due to drought as lower groundwater levels could impact water supply wells.

Existing Capabilities

The Town primarily relies on regional and statewide measures for mitigating the impacts of drought such as the Connecticut Drought Management Plan. The municipal water department maintains an Emergency Contingency Plan that outlines the necessary response procedures when drought is impacting their sources of supply. These procedures include voluntary and mandatory conservation measures for users. The Town Water Department is a member of the Water Utility Coordinating

Committee that will be reconvening in 2016 and will discuss regional water supply issues and needs including ensuring that supply is available during periods of drought.

The Town requires yield tests of new private wells when they are installed in certain areas. There were a few subdivisions that were installed with private wells where a few wells dried up a month after people occupied the home.

The Town does not perform any other mitigation activities for drought and its capability to mitigate drought is relatively limited. In general, the level of capability of the Town of Southington relative to all facets of drought mitigation is unchanged since the 2011 Plan.

Impacts and Loss Estimates

Town staff could not recall any specific damages due to drought. Town staff also did not recall any well deepening permits or new drilling permits being issued recently due to private wells going dry during a drought. Public water is available in most parts of the community, and there have not been any public water supply shutdowns due to drought or implementation of conservation measures in recent memory.

Based on the information above, it is likely that the annualized loss due to drought has been minimal over the past 20 years. An annualized loss figure of \$0 has been used for this Plan update. This is likely lower than the actual annualized loss due to drought, but the number is considered acceptable at this time and can be revised if needed in future updates of this Plan.

11.2.8 Earthquakes

Although low intensity earthquakes regularly occur in Connecticut, these earthquakes are not damaging and are generally imperceptible to residents. Stronger earthquakes have historically occurred in Connecticut which have the potential to cause critical levels of damage.

Location

All areas of Southington are susceptible to earthquakes. Property owners with structures that pre-date current building codes (particularly pre-1990 structures) are considered to be at increased risk of suffering earthquake damages, as well as structures built on sandy soils that could be prone to liquefaction (see Section 3.2.8).

Existing Capabilities

Due to the very infrequent nature of damaging earthquakes, and the fact that earthquakes generally cannot be predicted, local land use policies in Southington do not directly address earthquake damage. In the event that significant earthquake damage occurred, the Town of Southington would activate its Emergency Operations Plan and respond as appropriate.

The Town's capability to mitigate earthquake damage is limited. In general, the level of capability of the Town of Southington relative to all facets of earthquake mitigation is unchanged since the 2011 Plan.

Impacts and Loss Estimates

Town staff could not recall any damages occurring due to earthquakes. The annualized loss estimate for earthquakes based on the county-wide damages presented in the 2014 CT NHMP as described in Section 3.2 is \$2,700. The low figure is consistent with the lack of earthquake damage in the recent historical record.

11.2.9 Dam Failure

More than 20 dams could affect the Town of Southington with their failure, and five Class C (high hazard) dams lie within the Town boundaries.

Location

Only areas of Southington that lie immediately downstream of dams, or near watercourses that are downstream of dams, are susceptible to dam failure. In many cases a breach could flood a similar area to the 1% annual chance or 0.2% annual chance flood; in some cases (particularly for high hazard dams) the impacted area could be much wider. Table 11-6 summarizes the high and significant hazard dams that could affect Southington based on files maintained by the Connecticut DEEP. None of the dams were listed to be in poor condition on the 2013 list.

Dam Name	Hazard Class	Dam Use	Dam Condition	Owner	Downstream Watercourse
New Britain (Wolcott) Reservoir Dam	C	Water Supply	Satisfactory	City of New Britain	Roaring Brook
New Britain (Wolcott) Reservoir Dike	C	Water Supply	Not Rated	City of New Britain	Roaring Brook
Plainville Reservoir Dam	C	Water Supply	Not Rated	Southington Water Department	Tributary to Patton Brook
Southington Reservoir #1 Dam	B	Water Supply	Not Rated	Town of Southington	Humiston & Thompson Brook
Southington Reservoir #3 Dam	C	Water Supply	Fair	Town of Southington	Humiston Brook
Spring Lake Dam	C	Recreation	Not Rated	Private	Quinnipiac River
Wasel Reservoir Dike	C	Water Supply	Satisfactory	City of New Britain	Mattabassett River

Table 11-6. Summary of Dams Whose Failure Could Significantly Impact Southington.

Source: Connecticut DEEP

Existing Capabilities

The Town of Southington owns six dams including one Class C (high hazard) and one Class B (significant hazard) dam. Inspections are performed in accordance with the recently revised inspection schedule mandated by the DEEP, and the dams are in good condition. The Emergency Action Plans for these dams will be revised in accordance with recent DEEP guidance. Several other high hazard dams are owned by the New Britain Water Department, but it is believed that the failure of these dams would have less than significant impact in Southington. The Town has copies of EAPs prepared for other dams whose failure could affect Southington; this information is maintained by the Emergency Management Director.

One privately-owned dam is of concern to Town staff. The Spring Lake Dam is a high hazard (Class C dam) that has a maintenance issue that has been identified by DEEP. DEEP and the dam owner are reportedly working to address the issue. A 100-home subdivision and other development is located close to the dam immediately downstream in the likely inundation area near Woodruff Road and Marcy Drive.

A dam removal is in process on the Quinnipiac River on Route 10. A low hazard, two-foot high run-of-the-river dam is being removed in the vicinity of the bowling alley. This could provide a minimal flood benefit to nearby properties.

The Town’s ability to mitigate dam failure is considered to be good for Town-owned dams but limited for privately owned dams and dams owned by other municipalities (in these cases, preparation for emergency response is the primary goal). In general, the level of capability of the Town of Southington relative to all facets of dam failure mitigation is slightly improved since the 2011 Plan with the recent dam safety law revisions that have occurred statewide.

Impacts and Loss Estimates

Potential losses downstream of Class C (high hazard) dams could be catastrophic, while potential losses downstream of Class B (significant hazard) dams could be significant. An annualized loss estimate for dam failure was developed assuming that failure had a 0.1% annual chance of occurrence in consideration of the estimated value of properties within the 0.2% annual chance floodplain in Southington. The annualized loss in Southington due to dam failure is estimated to be \$1,375. This value is low consistent with the lack of dam failure incidents which have occurred in the town.

11.3 Goals, Objectives, and Strategies

The goal and four objectives from the 2011 Plan were upheld. No additional objectives were identified, although Objective #5 was re-written to “Mitigate impacts to properties in the National Flood Insurance Program” because the Town of Southington intends to continue participation in the NFIP.

11.3.1 Status of Previous Strategies and Actions

Table 11-7 presents the status of the strategies and actions originally developed in the initial 2011 Plan.

Objective	Task	Priority	Responsible Department	Comment	Status
1. Increase Capacity to Shelter Large Numbers of People in the Case of an Emergency	Inventory town shelters	High	Emergency Management	This was performed and is updated twice per year	Completed
	Invest in supplies sufficient to stock at least one shelter in case of a major event	High	Emergency Management	This was completed and is updated twice per year	Completed
	Develop a comprehensive shelter plan	Medium	Emergency Management	This was developed	Completed
2. Improve Capacity to Deal with Hazards by Investing in Necessary Equipment & Training	Invest in emergency generators in order to keep critical facilities online during emergencies	High	Public Works	The Town has acquired several generators but additional needs have been identified	Carry Forward
	Invest in chainsaws and a wood chipper to expedite removal of downed trees	High	Public Works	These have been purchased	Completed
	Invest in sump pumps to more quickly remove floodwaters	High	Public Works	Six sump pumps have been purchased	Completed
	Increase capacity of Plantsville drainage system	Medium	Public Works	Grant funding was not able to be obtained	Carry Forward

Objective	Task	Priority	Responsible Department	Comment	Status
3. Improve Citizen Notification, Awareness, and Response Time	Take advantage of the statewide Reverse 9-1-1 system offered through Everbridge	High	Emergency Management	This has been implemented and is now a capability	Completed
	Develop & distribute household preparedness pamphlet	High	Emergency Management	This was developed and is now a capability	Completed
	Encourage preparedness workshops in schools	High	Emergency Management	This is now done using the local STEPS program	Completed
	Post preparedness pamphlet and town evacuation plans on town website	High	Emergency Management	The pamphlet has been posted, but Town staff no longer want set evacuation plans	Completed
4. Continue Participation in the National Flood Insurance Program	Continue enforcement of floodplain management ordinances by regulating all new and substantially improved construction in flood zones	High	Planning & Zoning	This is regularly performed and is a capability	Delisted
	Work with FEMA to update FIRMs as necessary	High	Planning, Public Works	The MapMod program and Quinnipiac River restudy are finished	Completed
	Continue to distribute information about the NFIP to homeowners	High	Planning	This is regularly performed and is a capability	Delisted
	Continue to assist homeowners with amendments to NFIP maps as necessary	High	Planning	This is regularly performed and is a capability	Delisted

Table 11-7. Status of Previous Strategies and Actions for Southington.

11.3.2 Current Strategies and Actions

This section includes both new strategies and actions as well as updates on objectives and mitigation strategies that were carried forward from the 2011-2016 Plan.

Goal: Reduce losses of life and property, and minimize economic consequences of natural hazards**Objective 1: Increase capacity to shelter large numbers of people in the case of an emergency****Strategies and Actions:****1.1 Complete renovations of the Calendar House for use as the primary shelter**

Action Description: The Town is renovating this facility to be the Town's primary shelter. A generator upgrade is required as part of the renovations. The existing generator at the Calendar House will be moved to the Town Hall.

Lead: Emergency Management

Priority: Medium

Status: In Progress (Carried Forward from Initial Plan, Grant Dependent)

Estimated Cost: Moderate

Potential Funding Source(s): Municipal Capital Budget, STEAP, HMGP

Timeframe: 7/2016 to 6/2018

Objective 2: Improve capacity to deal with hazards by investing in necessary equipment & training**Strategies and Actions:****2.1 Acquire emergency generators for critical facilities**

Action Description: The Town has identified several generator needs in addition to the Calendar House above. The Municipal Center houses many Town functions and needs a generator. Another identified need is to acquire an enclosed trailer to house and move an existing portable generator owned by the Town.

Lead: Emergency Management

Priority: Medium

Status: Not Started (Updated from Initial Plan, Grant Dependent)

Estimated Cost: Moderate

Potential Funding Source(s): Municipal Capital Budget, STEAP, HMGP

Timeframe: 7/2016 to 6/2021

2.2 Increase capacity of the drainage system in Plantsville

Action Description: Grant funding is necessary to perform this work as it will be a multi-million dollar project to replace the drainage systems. In addition, the solution may not work for more severe flood events.

Lead: Public Works

Priority: Medium

Status: Not Started (Carried Forward from Initial Plan, Grant Dependent)

Estimated Cost: High

Potential Funding Source(s): Municipal Capital Budget, STEAP, HMGP, PDM, FMA, CT DOT

Timeframe: 7/2016 to 6/2021

2.3 Update Town Emergency Operations Plan to include procedures specific to the liquid propane plant

Action Description: A liquid propane plant lies on the north end of town. The Town wishes to update its Emergency Operations Plan to include procedures specific to this facility.

Lead: Emergency Management

Priority: High

Status: Not Started

Estimated Cost: Low

Potential Funding Source(s): Municipal Operating Budget

Timeframe: 7/2016 to 6/2018

2.4 Purchase equipment to ensure emergency communications between Town departments

Action Description: The Town wishes to acquire satellite phones to ensure communication can be maintained with the Health Department and other departments during extended power outages

Lead: Emergency Management

Priority: Medium

Status: Not Started

Estimated Cost: Moderate

Potential Funding Source(s): Municipal Operating Budget

Timeframe: 7/2016 to 6/2019

2.5 Participate in a regional generator sharing program.

Action Description: The Town wishes to partner with other communities to participate in a regional generator sharing program. This would provide a pool of generators that could be shared between communities during extended outages to support local businesses.

Lead: Emergency Management

Priority: Low

Status: Not Started (Grant Dependent)

Estimated Cost: High

Potential Funding Source(s): Municipal Capital Budget, STEAP, CT OPM Inter-Town Capital Equipment Purchase Incentive Program

Timeframe: 7/2016 to 6/2021

2.6 Install a new dry hydrant at Crescent Lake

Action Description: The existing dry hydrant is undersized and in a poor location. The Town wishes to install a larger dry hydrant in a more accessible area such as near the dock.

Lead: Emergency Management

Priority: High

Status: Not Started

Estimated Cost: Low

Potential Funding Source(s): Municipal Capital Budget, STEAP

Timeframe: 7/2016 to 6/2019

Objective 3: Improve citizen notification, awareness, and response time**Strategies and Actions:****3.1 Formalize the requirement for underground utilities in new developments**

Action Description: The Town wishes for a formal requirement for underground utilities except in those areas where it is not feasible. Separate requirements may be needed for subdivisions vs. individual properties.

Lead: Planning

Priority: High

Status: Not Started

Estimated Cost: Low

Potential Funding Source(s): Municipal Operating Budget

Timeframe: 7/2016 to 6/2018

3.2 Conduct outreach to businesses regarding generator safety and wiring needs

Action Description: The Town will perform outreach to businesses regarding how generators work and pre-wiring requirements such that generators can be safely used during extended power outages.

Lead: Building Department

Priority: High

Status: Not started

Estimated Cost: Moderate

Potential Funding Source(s): Municipal Operating Budget

Timeframe: 7/2016 to 6/2020

3.3 Widen narrow streets near intersections where bottlenecks could occur

Action Description: The Town will review existing narrow streets to determine where widening could occur and add such areas to the capital project list if possible.

Lead: Public Works

Priority: High

Status: Not started

Estimated Cost: Low

Potential Funding Source(s): Municipal Operating Budget

Timeframe: 7/2016 to 6/2017

3.4 Increase tree maintenance budget to allow for additional trimming along Town roads

Action Description: The Town will work to increase the tree maintenance budget in order to allow trimming along Town-owned roads to occur. Such trimming would only occur opposite power lines or along roads with buried utilities.

Lead: Public Works

Priority: High

Status: Not Started

Estimated Cost: Moderate

Potential Funding Source(s): Municipal Operating Budget

Timeframe: 7/2016 to 6/2021

3.5 Review outlying areas for potential wildfire risk

Action Description: The Town will review outlying parcels for potential fire risk by considering debris accumulation and access issues in these areas. Potential strategies and actions could also be developed to address higher risk areas.

Lead: Emergency Management

Priority: Low

Status: Not Started

Estimated Cost: Moderate

Potential Funding Source(s): Municipal Operating Budget

Timeframe: 7/2016 to 6/2021

3.6 Update Emergency Action Plans for Town-owned dams

Action Description: The Town will update the Emergency Action Plans for its dams to meet the recently revised DEEP guidance.

Lead: Emergency Management

Priority: Medium

Status: Not Started

Estimated Cost: Moderate

Potential Funding Source(s): Municipal Operating Budget

Timeframe: 7/2016 to 6/2018

3.7 Incorporate updated hazard mitigation information into community plan updates

Action Description: Hazard mitigation information will be incorporated into future plan updates of the POCD and other planning documents

Lead: Land Use

Priority: High

Status: Not Started

Estimated Cost: Low

Potential Funding Source(s): Municipal Operating Budget

Timeframe: 7/2016 to 6/2021

3.8 Encourage sign-ups for the Everbridge emergency notification system

Action Description: The Town recently contracted with Everbridge to provide a town-wide emergency notification system. Targeted mailings may be used to encourage signups in particularly vulnerable areas, such as special flood hazard areas and dam failure inundation areas.

Lead: Emergency Management

Priority: High

Status: In Progress

Estimated Cost: Low

Potential Funding Source(s): Municipal Operating Budget

Timeframe: 7/2016 to 6/2018.

3.9 Encourage the owner of Spring Lake Dam and the Connecticut DEEP to complete repairs

Action Description:	The Town will encourage the owner of Spring Lake Dam and the Connecticut DEEP to ensure repairs and maintenance of the dam are being performed properly.
Lead:	Emergency Management, Town Manager
Priority:	Low
Status:	Not Started
Estimated Cost:	Minimal
Potential Funding Source(s):	Municipal Operating Budget
Timeframe:	7/2016 to 6/2021

3.10 Participate in the statewide Water Utility Coordinating Committee process

Action Description:	The Connecticut DPH is preparing a Coordinated Water Supply Plan for the entire state beginning in 2016. The Town Water Department will participate to ensure that drought-related public water supply needs are met throughout the community.
Lead:	Water Department
Priority:	Medium
Status:	Not Started
Estimated Cost:	Low
Potential Funding Source(s):	Municipal Operating Budget
Timeframe:	7/2016 to 6/2018

3.11 Ensure local officials have most updated version of the Connecticut Drought Management Plan

Action Description:	The Connecticut Drought Management Plan is periodically updated. Local officials, land use commissions, health departments, fire departments, and local water utilities should all be made aware of updates to this plan.
Lead:	Planning
Priority:	Medium
Status:	Not Started
Estimated Cost:	Minimal
Potential Funding Source(s):	Municipal Operating Budget
Timeframe:	7/2016 to 6/2021

Objective 4: Mitigate impacts to properties in National Flood Insurance Program**Strategies and Actions:****4.1 Work with private property owners to mitigate channel constrictions that exacerbate flooding**

Action Description:	Streams run across private property in many areas of town and the Town cannot maintain channels in these areas directly. The Town will work with private property owners to remove constrictions and/or widen channels to mitigate exacerbation of flooding conditions.
Lead:	Public Works
Priority:	Low
Status:	Not Started (Property Owner Dependent)
Estimated Cost:	High
Potential Funding Source(s):	Municipal Operating Budget
Timeframe:	7/2016 to 6/2021

4.2 Clear trees and other blockages along the Quinnipiac River

Action Description:	A significant amount of woody debris reportedly clogs the Quinnipiac River, exacerbating flood conditions. The Town will investigate and clear woody debris from the channel bed and river banks to prevent blockages
Lead:	Public Works
Priority:	Low
Status:	Not Started (Dependent on Local Funding)
Estimated Cost:	High
Potential Funding Source(s):	Municipal Operating Budget
Timeframe:	7/2016 to 6/2021

4.3 Evaluate costs and benefits of joining FEMA Community Rating System and enter program if justified

Action Description:	Participation in the CRS can reduce the cost of flood insurance for residents and businesses. The lowest level of participation in the program will reduce the cost of insurance by 5%. This would require municipal staff time or outside help to initially set up.
Lead:	Planning
Priority:	Medium
Status:	Not Started
Estimated Cost:	Moderate
Potential Funding Source(s):	Municipal Operating Budget
Timeframe:	7/2016 to 6/2021

4.4 Update the local floodplain management ordinance to meet current model ordinance requirements

Action Description:	The Town of Southington last updated this ordinance in 2008. Since that time, FEMA and the Connecticut DEEP have revised the model ordinance.
Lead:	Planning
Priority:	High
Status:	Not Started
Estimated Cost:	Moderate
Potential Funding Source(s):	Municipal Operating Budget
Timeframe:	7/2016 to 6/2018

4.5 Work with RLP owners to mitigate RLPs upon property owner request

Action Description:	Repetitive loss properties in Southington are typically only damaged during severe flood events. Ten repetitive loss properties are located in Southington that have experienced 30 flood losses. Mitigation could include acquisition/demolition, elevation, floodproofing, or other techniques.
Lead:	Public Works
Priority:	Medium
Status:	Not Started (Property Owner and Grant Dependent)
Estimated Cost:	High
Potential Funding Source(s):	Municipal Capital Budget, HMGP, PDM, FMA
Timeframe:	7/2015 to 6/2021

11.4 Contributors to Plan Update

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