

PUBLIC NOTICE: INVITATION OF COMMENTS

Pursuant to *Section 45-22.2-9(c)(2) of the General Laws of Rhode Island*, the Division of Planning hereby gives public notice of the invitation of comments from regional and state agencies, contiguous communities, and other interested parties regarding the local comprehensive plan amendment listed below.

Town of Hopkinton, RI 2010 Comprehensive Plan 5-Year Update

ID#: HOP-16-01

Posted February 23, 2016

Amendment - to address energy production and consumption and natural hazards within the Public Services & Facilities and Land Use elements of the Comprehensive Plan; in addition, this amendment also adds a recommendation to the Recreation, Conservation, and Open Space Element to adopt the *Langworthy Field Master Plan*.

Materials Attached for Review:

- Strike-through text illustrating the revised language contained within the elements of: Public Services & Facilities; Land Use; Recreation, Conservation, and Open Space; and the Implementation Schedule.
- Natural Hazards Map

The comment period for each comprehensive plan document shall extend for thirty days from its posted date. All comments should reference the **document title and identifier number**, and should be submitted to:

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allowable uses and permitting procedures for development within the established protection zones. The purpose of this ordinance is to protect water quality of existing community system wells and non-transient, non-community system wells. The map depicting the protection zone is updated as new wells are developed.

Solid Waste Management

Hopkinton has an agreement with the Town of Westerly whereby local residents may obtain a waste disposal facility sticker, at no cost, which allows them to dispose of refuse at the Westerly Transfer Station. This includes recycling for paper, plastics, compost, clothing, batteries, motor oil and oil filters, books, e-waste and hazardous wastes. Currently, the amount of refuse and recyclables brought to the Westerly Transfer Station by Hopkinton residents is not tracked. The agreement between the two towns was signed March 30, 2006 and there is no expiration. There are no plans to amend this agreement in the near future.

Energy

STATE GOALS

The Rhode Island State Energy Plan aims to create sustainable and affordable energy infrastructure that is able to meet the State's energy demands and stimulate economic growth. One of the primary strategies to achieve these goals is to increase fuel diversity by developing local renewable energy production facilities rather than relying on out-of-state energy sources. Reduction of energy consumption through community involvement and strategic municipal planning can also make a significant impact in the State's energy demand.

STRATEGIC ENERGY PLANNING

Global energy consumption has increased substantially over the last century due to economic growth and a changing standard of living. Increased land use creates a need for growing transmission infrastructure in order to meet the energy needs of expanding development. Although Hopkinton has remained rural, its energy demand has increased significantly in the past several decades, making energy an essential component of The Town's strategic planning process.

Hopkinton can also benefit from improved efficiency through upgrades to its municipal facilities, and a community-wide effort to reduce energy consumption.

Hopkinton's Energy Plan will coincide with the state's goals as well as The Town's Land Use plan goals discussed in the Land Use Section of this Comprehensive Plan. Statewide Planning's *Land Use 2025*, developed in 2006, promotes a "rural-urban plan" to be used by Rhode Island cities and towns as a guide for future development. This land use strategy encourages planned neighborhoods and mixed-use villages, while conserving and maintaining open space and farmland. By focusing future development in existing villages and strategic locations adjacent to Interstate 95, the Town of Hopkinton will be able to minimize the need for expansive energy

infrastructure associated with sprawl. This type of planning also reduces the average vehicle miles traveled by residents and municipal vehicles, reducing the use of energy consumed by the transportation sector.

By making notable efforts to reduce municipal energy consumption, Hopkinton hopes to promote town-wide private and residential efforts to do the same.

CURRENT ENERGY CONSUMPTION

Energy Sources and Distribution

- National Grid is Rhode Island's electricity transmission network. Electricity consumed in the state is transmitted from plants in New England and the Mid-Atlantic and is generated by natural gas, nuclear, coal, and hydroelectric power.
- Algonquin Gas Transmission Company supplies natural gas throughout Rhode Island and is supplemented by storage sites in the Appalachian Basin, as none currently exist in the state.
- Coal and petroleum derived fuels, such as diesel and gasoline are shipped to the state through the Port of Providence and are distributed locally by trucks and freight train.

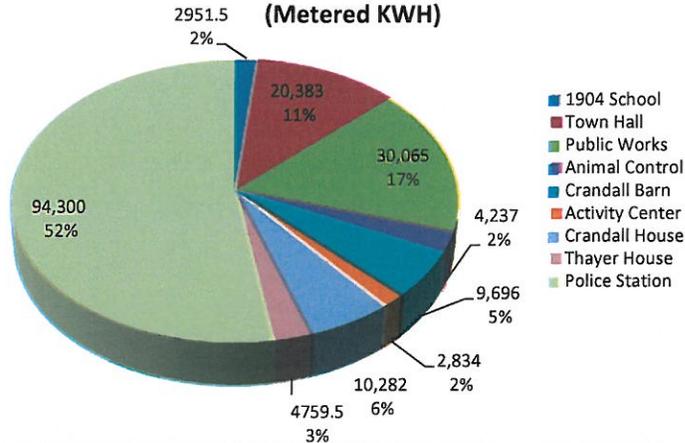
Municipal Consumption

The primary forms of energy used by The Town of Hopkinton are electricity, propane, gasoline, and oil. In 2014, the total cost of The Town's electricity was \$62,374. This includes electricity consumed by street lights, the 1904 School, Town Hall, Department of Public Works facility, Animal Control facility, Crandall House and Barn, Police Station, and the Thayer House (Post Office).

Nearly half of the Town's electricity use is attributed to street lights. This includes street lights on Wellstown Road, Town House Road, and Main Street. Based on analyzed National Grid data from 2013 and 2014, the average annual electricity consumption due to street lights was approximately 169,000 kilowatt-hour (kWh). This costs the Town nearly \$50,000 annually, which accounts for 80% of Hopkinton's municipal electricity costs. **Electricity costs vary across the town's many accounts and within each account over time. The unit cost of electricity in the data period ranges from a lowest observed cost at \$0.05/kWh for the Police Station to a high of \$0.36/kWh for the Wellstown Road streetlights. The Main Street streetlights also had a generally higher unit cost, which ranged from \$0.11/kWh to \$0.17/kWh, than the Town's other accounts.**

Of the Town's municipal buildings, the Police Station consumes the largest percentage of electricity at approximately 94,300 kWh per year. The Department of Public Works facility, Crandall House, and Town Hall ~~all~~ consume between 20,000 and 31,000 kWh annually. Combined, the Crandall House, Activity Center, and Crandall Barn consume almost 23,000 kWh. The 1904 School, which is no longer in use, the Thayer House, and the Animal Control facility each consume less than 5,000 kWh annually.

**Average Annual Electricity Consumption By Facility
(Metered KWH)**

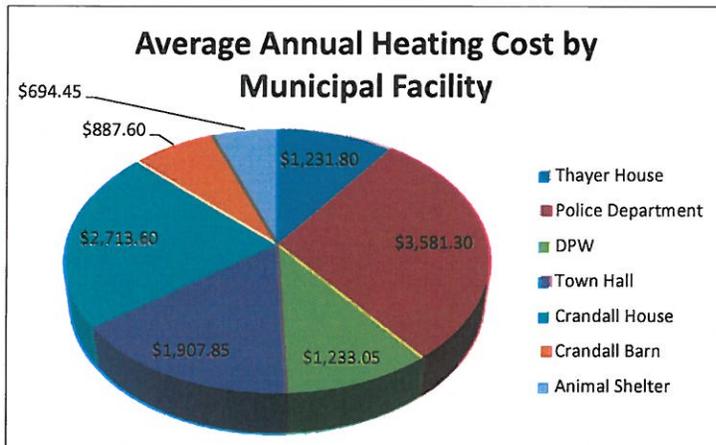


***based on data from 2013 and 2014**

Based on Suburban Propane data from 2013 and 2014, the Town's average yearly propane costs total \$9,930. This includes propane used to heat the first and second floors of Thayer House as well as the Police Station. The police station consumes about 72% of the Town's total propane. Although propane consumption by the Town's municipal facilities declined from 2013 to 2014, the price of propane increased, resulting in higher 2014 costs.

Oil is used to heat the DPW Facility, Town Hall, Crandall House, Crandall Barn, and the Animal Shelter. The total average yearly oil cost for these buildings is \$23,822 according to the 2013 and 2014 data from Gingers Oil.

The combined propane and oil heating cost for the Town is \$33,752 per year. The heating cost for each municipal facility is depicted on the chart below.



The Town's highest energy costs are attributed to gasoline consumption by municipal vehicles used by the police department and the Department of Public Works. The Town's municipal vehicles use at least 27,300 gallons of gas per year, ~~which costs \$71,465.~~

The Police Department has 18 vehicles used by the Town Managers, Chiefs, Captains, Supervisors, Front Line Officers, and Detectives. The Police Department also has a Humvee for emergency use and ~~3-three~~ vehicles used for detail. ~~Based on The fuel data consumption for the month of January 2015, was 1,442 gallons, the estimated yearly gasoline consumption by police vehicles is 17,300 gallons at a cost of , which amounts to \$38,9003,243.~~ The fuel data for the police vehicles is based on the month of January 2015, which was used to estimate yearly fuel consumption and cost. Due to seasonal variability in vehicle use, this yearly estimate is lower than the actual yearly gasoline consumption of 17,300 gallons. This amounts to a yearly cost of \$38,900. Due to seasonal variability in vehicle use, ~~and winter months consuming less fuel,~~ the actual yearly gasoline consumption and cost for police vehicles are ~~much higher than these the~~ ~~pro-rated value produced from the January 2015 data.~~ ~~The Police Department estimate ss~~ ~~the actual cost of fuel consumption to be in the range of \$60,000 per year.~~ The average fuel efficiency of ~~these the police~~ vehicles is approximately 17.8 miles per gallon. Several of the more recently purchased vehicles have ~~efficiencies of approximately 20-22 mpg efficiencies.~~

The Department of Public Works ~~also~~ has 20 vehicles, including pickup trucks, a street sweeper, a bucket truck, and a backhoe. The yearly gasoline consumption is ~~approximately 9,968 gallons, which costs the DPW approximately \$32,550 annually, depending on fuel price fluctuations.~~

Renewable Energy

The majority of the energy consumed nationally is generated from nonrenewable foreign resources. Global competition for fuel sources creates unstable and unpredictable prices, with the potential for local supply shortages. This indicates a need for locally generated renewable energy in order to ensure economic security. Renewable energy technology has evolved to allow rising global energy demands to be met in a more sustainable way, but it is crucial for this to be implemented on a community level.

The Town of Hopkinton can benefit from renewable energy generating technologies as a way to decrease long term energy costs, increase The Town's energy independence, and reduce greenhouse gas emissions. Renewable energy projects also have the potential to create local jobs, particularly in the fields of construction and professional and technical services.

Renewable energy opportunities:

- Opportunity for photovoltaic solar energy systems in commercial and manufacturing districts.
- Private and municipal opportunity for photovoltaic installations at the 52-acre capped landfill site located at AP 13 Lot 27 on Stubtown Road.

Current Renewable Energy Use in Hopkinton

- Bank Street Solar Farm has been approved. It will be located on a 7.5-acre former gravel pit south of Bank Street.

SINCE 2010

- In order to assess the need for municipal facility improvements, Preliminary Energy Audits were conducted by Johnson Controls and Noresco, both in 2011. Each of these audits evaluated the energy use of Town's public buildings and recommended upgrades to the facilities that would help to increase efficiency and reduce overall energy consumption.
- Between 2012 and 2013, The Town made numerous municipal upgrades using its Energy Efficiency and Conservation Block Grant (EECBG). The EECBG program was enacted in 2009 as part of the U.S. Department of Energy's American Recovery and Reinvestment Act, a national investment in community level energy efficiency and renewable energy technologies. Upgrades made using these funds include updated furnaces in the DPW Garage, replaced heating and cooling units in the Town Hall, Energy Star light bulbs, Energy Star appliances installed in Crandall House, and building weatherization measures, such as insulation and door replacements.
- In 2012, the town made an agreement with National Grid to construct an Electric Substation off RT 216 (Ashaway Road) at AP 2 Lot 38, which will replace two existing substations: Oak Street (AP24 Lot 49) and Hope Valley at Dow Field (AP28 Lot 143). This new substation is necessary to meet the increased and ever-growing energy demands of the community. After much consideration, the location of the new substation was chosen because of its minimal visibility from bordering properties, its proximity to

existing transmission lines, and subsequently its minimal impact on the landscape. This substation is an improvement for the town with regard to supply capacity and aesthetics.

- In January, 2014, a zoning amendment was passed allowing photovoltaic solar energy systems to be installed in the commercial and manufacturing districts.
- As part of a state-wide initiative, the Town is working with National Grid, to evaluate the possible purchase of approximately 500 streetlights to be converted to LEDs. This is a multi-year project in the pre-installation phase of evaluating feasibility and cost. With street lighting being Hopkinton's largest electricity expense, this project could significantly reduce the town's energy consumption and cost.

CHALLENGES

- Funding for municipal facility improvements.
- Public awareness and support of climate change, energy efficiency, and renewable energy alternatives.

Review of Town Facilities

During the update process, the Director of Public Works revisited the Town's facilities, including buildings managed by the Town. Overall, providing adequate office space for town departments continues to be an on-going issue at the Town Hall Complex. Developing a long-term Capital Improvement Plan will help in addressing these issues. A full inventory of municipal facilities is provided in Appendix D. Map 7 shows town offices and facilities.

TOWN BUILDINGS: The Town has identified the following Town buildings that need to be addressed:

The Recreation Department is located in the Crandall House Recreation Complex. The Complex will need improvements due to its aging facilities. The existing playground structure is made of pressure-treated wood and aging. The Crandall House itself is the original farmhouse and is need of a modern fire alarm system, updated wiring and reconstruction of the chimney. A comprehensive survey of the structure should be done within the next five years. The Activity Center should also undergo a comprehensive survey. It is anticipated that the structure will have to undergo expansion and/or major renovations to bring it up to current fire and ADA codes. The surrounding play areas will need upgrading in the near future. Due to the high water table at this site, there are continuous maintenance issues for play courts and parking areas.



The Thayer House is currently home to the financial offices and Planning Department of Hopkinton. This building needs a comprehensive survey of its structural integrity. Of concern are sagging floors, doorways and ceilings as well as overcrowding in offices. The departments located here need to be relocated until the issues be adequately addressed. Although there were some renovations done to the Thayer House 10 to 15 years ago, they do not meet the needs of the

GOAL PSF 4 *To maintain and improve the quality of education through traditional and innovative approaches, both public and private*

Policy PSF 5: Involve Richmond and Charlestown in planning for the future of the Chariho Regional School District.

Policy PSF 6: Recognize Hopkinton's library services as a valuable cultural resource.

Recommendation 14:

- ◆ Conduct periodic assessments of needs for capital facilities related to education

Responsibility: Town Council
Time Frame: On-Going.

Recommendation 15:

- ◆ Provide a formal organizational structure for regional education issue resolution.

Responsibility: Town Council
Time Frame: On-Going.

Objective PSF 7: Maintain and improve library services in relation to population growth and service needs.

Recommendation 16:

- ◆ Continue to comply with the Rhode Island Office of Library and Information Service standards.

Responsibility: Town Council / Library Branch Directors
Time Frame: On-Going

GOAL PSF 5 *To Reduce Hopkinton's energy consumption*

Policy PSF 7: Increase the energy efficiency of municipal facilities and vehicles

Recommendation 17:

- ◆ Conduct full audit of all public buildings and implement recommended changes.

Responsibility: Town Council/Town Manager/DPW
Time Frame: 4 years

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Recommendation 18:

- ◆ Evaluate the feasibility and cost of installing photovoltaic and/or wind-powered electricity generating technologies on municipally owned lands and facilities, particularly building rooftops and the capped landfill on Stubtown Road.

Responsibility: Town Manager/Town Planner/DPW

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Time Frame: 4 years

Recommendation 19:

- ◆ Replace the Town's vehicle fleet with fuel efficient vehicles. Encourage the purchase of alternative fuel vehicles when possible.

Responsibility: Police Department/ & DPW

Time Frame: On-going

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Recommendation 20:

- ◆ Incorporate energy efficiency and sustainability in design of Town Hall renovations.

Responsibility: Town Manager

Time Frame: 3 years

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Policy PSF 8: Through public awareness and education, encourage residents to reduce their energy consumption.

Recommendation 21:

- ◆ Create an energy conservation webpage on the Town's website with educational material about energy efficient home improvements, such as weatherization, energy efficient light bulbs, and replacing HVAC systems.

Responsibility: Town Planner/Building Official/IT Director

Time Frame: 3 years

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Policy PSF 9: Endorse future land development that is sustainable, energy efficient, and in accordance with the Town's Future Land Use Map.

Recommendation 22:

- ◆ Consider incentives for businesses to utilize energy efficient techniques in new and re-development building projects.

Responsibility: Planning Board

Time Frame: 5 years

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Recommendation 23:

- ◆ ~~Continue to implement policies and regulations that promote development adjacent to I-95 and limit sprawl~~ in order to mitigate the need for expansive energy infrastructure.

Responsibility: Planning Board

Time Frame: On-going

Policy PSF 10: Encourage renewable energy projects in the private sector.

Recommendation 24:

- ♦ Identify and evaluate regulatory/ zoning deterrents of renewable energy projects. Adopt regulations that encourage small scale renewable energy installations.

Responsibility: Planning Board

Time Frame: 3-4 Years

Recommendation 25:

- ♦ Consider expanding the current zoning regulations to allow photovoltaic installations in residential districts.

Responsibility: Planning Board

Time Frame: 3 years

Recommendation 26:

- ♦ Consider a zoning ordinance to permit wind-energy projects in appropriate zoning districts.

Responsibility: Planning Board

Time Frame: 2 years

Land Use

Introduction

The Land Use Element of the Comprehensive Plan helps guide the town to its desired vision of growth and development. In Hopkinton, residents value its rural character. Protecting open spaces and conserving natural landscapes help to maintain that quality. But future growth is important and should be guided to protect and enhance the natural and built environments of town.

State Guide Plans

Since the 2004 Plan, the state has updated its Land Use Guide Plan. *Land Use 2025* establishes the State’s vision of future development in the state and offers municipalities guidance in reaching these regional goals. *Land Use 2025* focuses on preserving the rural areas of the state by directing development in areas already serviced by infrastructure and utilities. An Urban Services Boundary (USB) was delineated “to denote a significant demarcation in urban pattern – the future boundary of areas that should be more urban in character versus those that should retain a more rural character.” The USB is considered a general boundary of areas where public services support urban development or will through 2025. These services include public water and sewer as well as public transit. Areas within the USB are called Growth Areas, defined as developed areas where maintenance, infill and reuse can accommodate future growth as well as undeveloped areas that are suitable for new development. Growth Centers outside the USB have also been identified as

potential areas for future growth, which have either been proposed by *Land Use 2025* or identified by local communities. The State encourages communities to identify growth centers that meet the overall goals of *Land Use 2025* and objectives of communities.

The 2010 Update supports and meets the goals of *Land Use 2025*. In Hopkinton, the USB is found around the villages of Hope Valley and Wyoming as well as in the southwest portion of town across the Pawcatuck River from Potter Hill in Westerly. These areas are historic mill and industry centers and are at a higher density than the rest of town. The State Guide Plan has deemed the village of Hope Valley to be within the Urban Development category of an USB. Further, the State Guide Plan recommends that undeveloped areas within the Urban Development category of an USB having site and/or resource constraints, or limited services are more appropriately developed at an average density of under one dwelling unit per acre. Most of the village has already been developed under R-1 zoning which originally called for 20,000 square foot minimum lot sizes (2.2 units per acre).

The Town has several concerns with increasing development within Hope Valley and Wyoming due to poor soils, high water table and sewage issues due to failing septic systems (See Public Services and Facilities Element). Public sewers are not presently available and likely will not be available prior to 2025. Additionally, water service to Hope Valley from the Town of Richmond is limited to Spring Street and there are no plans to expand this service. Due to the lack of adequate infrastructure and significant resource constraints, Hope Valley is presently built beyond carrying capacity. Therefore, any future development within these and the other villages of Hopkinton should be within the capacity of environmental constraints associated with soils, floodplain and wastewater management.

The Exit 1 Development Area Study was an effort by the Town to meet the challenges of preserving its rural character while continuing to manage new growth. Findings showed that access from I-95 provided opportunities for new development and existing businesses can become the anchor. As discussed in the Economic Development Element, new manufacturing and office businesses have established in the vicinity of Exit 1 and the town sees ample opportunity to build on them. The Study offers new zoning and development guidelines that will create a mixed-use village center at the exit that includes affordable housing, recreational activities and a variety of mobility options. Moreover, the town of Hopkinton has committed to an Affordable Housing Plan strategy designed to achieve affordable housing units at Exit 1. In furtherance of this objective, the town will develop a Mixed-Use Village ordinance. Proposed zoning encourages density of development in areas where sewer and water service exist or are proposed while protecting open space. In the mixed-use village center, strategies reflect planning practices of New Urbanism and Traditional Neighborhood Development to avoid strip commercial development and large-lot single family subdivisions. There is an emphasis on walkable communities with smaller lots.

As the next step, the Town would like to adopt the study and incorporate its land use plan and development guidelines into local policy for implementation. Furthermore, the Town would like to undertake a similar effort at Exit 2 and assess the potential for this area to accommodate new growth and how to manage it.

After completing the Exit 1 Development Area Study, the Town would like to consider designating the Exit 1 Development Area as a Growth Center. The Development Area is seen as an alternative to areas within the USB. According to the study, lands abutting Exit 1 are able to accommodate development because of better soils, lower water table and anticipated future development opportunities. Working with developers, water and wastewater systems can be planned for future growth. It will be the responsibility of the private developer to develop a water source for potable and fire usage and OWTS on their property to meet the demands of their project.

NATURAL HAZARDS

With climate change causing increased weather event severity and measurable sea level rise, it is important to consider natural hazards in the municipal planning process. Strategic infrastructure and thoughtful land use planning are essential in creating a community that is resistant to natural hazards. Hazard mitigation efforts help to protect The Town's resources, the property and wellbeing of its residents and businesses, and the natural environment and rivers that make Hopkinton a desirable place to live and visit.

Current Strategies

The Town of Hopkinton maintains a Hazard Mitigation Plan, which evaluates the impacts of natural hazards in The Town and the strategies for preventing future damage caused by these hazards. The Hazard Mitigation plan is to be updated every 5 years and approved by the Federal Emergency Management Agency (FEMA) and the Rhode Island Emergency Management Agency (RIEMA).

The strategies of the Hazard Mitigation Plan include:

- Prevention
- Property Protection
- Structural Protection
- Public Information and Involvement

Hopkinton participates in the National Flood Insurance Program (NFIP), which enables property owners to purchase insurance against flood losses and requires State and community floodplain management regulations be followed to reduce flood-related damages in the town. As part of the NFIP, Flood Insurance Rate Maps (FIRM) are used to designate flood hazard zones. These are used by The Town to determine at-risk flood areas and to ensure that development projects abide by the applicable regulations of their respective flood zone designations. The FEMA flood boundaries are depicted on the Natural Hazards Map enclosed within this Comprehensive Plan. The 500 year flood hazard zone is the boundary of the flood that has a 0.2 percent chance of being equaled or exceeded in any given year. Zone A is the 100- year floodplain determined by approximate methods. No base flood elevations are shown within this zone, as detailed hydraulic analyses are not performed in these areas. Zone AE is the 100-year floodplain as determined by detailed methods. Lastly, Zone AO represents areas of 100-year shallow flooding

where average depths are between 1 and 3 feet. This usually refers to areas where stormwater sheet flows across sloping terrain. Alluvial fan flood hazards area also shown in this zone.

Hopkinton's Zoning Bylaws and Subdivision Regulations help to mitigate the impacts of new and redevelopment construction projects on the town's hydrology, and help to protect new development from the impacts of flooding. The Subdivision Regulations currently include standards to prevent erosion and storm water flooding. Site designs are required to avoid impacting ground water and aquifer recharge, and to reduce impervious cover and cut and fill, which alter the natural hydrology of the watershed. In order to prevent future development from contributing to, and from being damaged by flooding, the Flood Plain and Water Course Protection Zone prohibits building below the 50 year flood elevation. Additionally, any development that falls within the High Flood Danger (HFD) zoning district must comply with provisions, such as elevated public utilities, for Areas of Special Flood Hazard.

Recent Improvements

- Flood Control System designed to prevent repetitive flood issue on South Drive
- Replaced Culvert in Egypt Street
- Backup generators being installed at the Town Hall and Crandall House
- Began utilizing GIS to develop a storm drain database and map
- Ongoing tree limb removal

Priority Hazards

The 2012 Hopkinton Hazard Mitigation Plan includes a hazard risk assessment matrix based on frequency of occurrence, area of impact, and potential magnitude of damage. The hazards that were determined to have the highest risk are (in descending order of determined risk): flooding, wildfires, tropical cyclones, dam failure, and coastal storms.

1. **Flooding:** Flooding is caused by overtopping waterways and by stormwater collecting at low elevations in topography during significant precipitation events. In Hopkinton, the waterways of concern with regard to flooding are the Wood River, the Pawcatuck River, Canonchet Brook, Tomaquag Brook, Ashaway River, Brushy Brook, and Parameter Brook.

Flooding poses a risk to homes, businesses, infrastructure, farms, and the natural environment. There have been several major floods affecting Hopkinton since 1927, including



Hopkinton, April 2010



the flood event in March of 2010. The flooding of 2010 caused major damage to Hopkinton's infrastructure, homes, and businesses. The Pawcatuck River and other waterbodies exceeded their capacities due to record-setting monthly rainfall, causing a breach of Blue Pond Dam along Canonchet Brook, many road and bridge washouts, road closures lasting more than two weeks, and long term closure of Woodville Bridge. Hopkinton received over \$955, 000.00 in FEMA Individual Assistance and approximately \$151,000 in Public Assistance due to damage caused by the 2010 flooding.

Although this was the most severe flood Hopkinton has faced in recent history, smaller scale flooding is common in the town. Due to its frequency and potential to cause widespread damage when it occurs, flooding is the Town's largest priority natural hazard.

- 2. Wildfire:** Hopkinton faces a higher risk of wildfire than the majority of Rhode Island, as it is a mainly rural community with a large amount of woodland area. With many homes bordering or surrounded by forested land, the town is particularly at risk for urban-wildland interface fires, which occur where wildlands border residences and other structures.

Wildfire risk in the town is greatest in early spring and late fall due to strong winds, low humidity and dry fuels. The summer months can also have dry fuels during long drought conditions, which can increase the potential for wildfires. Although the frequency of wildfires is relatively low, the potential magnitude is very high, making it a high priority hazard for The Town.

- 3. Tropical Cyclones:** Hurricanes and tropical storms are a priority hazard for Hopkinton due to their frequency and large impact area. Damage from these storms is primarily caused by high winds and heavy precipitation. Recovering from hurricane damage can be costly for both municipalities and property owners. Although unpreventable, damage caused by tropical cyclones can be minimized through preparedness.

- 4. Dam Failure:** Of the State's 528 dams, 41 are within the Town of Hopkinton. Two of those dams are owned by the Town, six are owned by the State, and 33 are privately owned old mill dams, which are not regulated by the municipality. The Wyoming Upper Dam, the Locustville Pond Dam, and Yawgoo Dam in Hopkinton are classified as "high hazard" dams, meaning they would pose a substantial risk to human life and would cause widespread damage to property in the event of failure. Eight of the dams in the Town are "significant hazard" dams, as their failure would potentially pose a risk to human life and would cause considerable property damage. The remainder of the dams are considered "low hazard" dams, which would cause minimal property damage, if any.

Climate Change

The impacts of climate change are being felt globally as the oceans continue to warm, sea levels rise, and extreme weather events increase in frequency and magnitude. Rhode Island has experienced increased atmospheric temperatures, with the average annual temperature increasing one degree every 33 years. Data also shows a significant increase in Rhode Island's precipitation from 1930 to 2013, as well as a rise in Narragansett Bay temperatures, and a significant increase in the annual number of days above 90 degrees. Sea level rise is of particular concern for Rhode Island, as it poses a threat to the State's shoreline, coastal resources, and infrastructure. According to NOAA, the mean sea level trend for Providence is 0.74 feet in 100 years, and for Newport it is 0.90 feet over the same period. Rhode Island is faced with the challenge of preparing for, and adapting to the projected effects of sea level rise and climate change.

For The Town of Hopkinton, climate change may cause expanding flood zones, increased storm severity, and increased drought durations. Overall, this emphasizes the importance of preparing for the growing impacts of the natural hazards that are already of concern for the Town.

Priority Impacts

The potential implications of climate change and natural disasters over the next ten years are numerous in terms of human health and safety, financial costs, damaged infrastructure and the natural environment.

Human Health and Safety

A top priority for the Town in preparing for natural disasters and climate change is the health and safety of its residents and employees. The direct and indirect effects of these hazards on human health are wide ranging and can be difficult to quantify. Flooding, which is Hopkinton's top priority natural hazard, can be life threatening due to the potential for drowning, hypothermia, and physical trauma. Flooding and hurricanes can also cause injuries due to debris from collapsed or damaged structures. An increased risk of car accidents also results from flooded roads, damaged roads and bridges, and low visibility during inclement weather. Mobilized contaminants during floods and storms can impact water quality and can increase the risk of disease and chemical exposure. Power outages during natural hazards can endanger human health and safety in a number of ways, such as inadequate refrigeration of food and hypothermia due to lack of heating.

The people most vulnerable to these safety and health concerns in the event of natural hazards are infants, children, and the elderly. The elderly are at an increased risk due to limited mobility, lower resiliency to disease and injury, and higher rates of dependency on family or professional assistance. Children are similarly vulnerable due to reliance on parents, teachers, and other for assistance, direction, and care. Residents who are ill or disabled are also particularly vulnerable to the impacts of natural disasters.

These most vulnerable populations are a priority for the Town of Hopkinton in assessing the need for strategic climate change and natural disaster planning and preparedness throughout the community. They are also a priority when considering emergency response actions during and in

the aftermath of these hazard events. The pre-schools, daycare facilities, and elementary schools within the Town should be priorities when considering infrastructure improvements. On-going roadway improvements should be made as needed to ensure safe access to and from these locations in the event of flooding and storms. The areas of Hope Valley and Ashaway both contain elementary schools. These villages also contain more medium-high density residential areas than the remainder of the Town, making them areas of importance for infrastructure maintenance and emergency preparedness.

Financial Costs and Infrastructure

The impacts of flooding and storm events can be felt by our local economy. Damaged buildings, agriculture, property, and infrastructure can result in direct repair, replacement, and reconstruction costs, but can also cause indirect losses due to business interruptions. Damaged or disrupted utilities can hinder businesses who rely on power and communication services. Fallen trees, flooding, and damaged roadways can also limit the transport of goods and services to and from businesses, as well as limit access to local businesses by customers. While the impact of extreme weather events on businesses is significant, the majority of the State's disaster-related building repair costs are residential. This stresses the need for strategic development in flood hazard areas, particularly those most densely populated.

Areas of Vulnerability

With flooding, tropical cyclones, and dam failure being three of the highest priority hazards facing the Town of Hopkinton, areas of the town in proximity to at-risk waterways and waterbodies, are considered most vulnerable to natural hazards. Areas with the most potential for consequences resulting from natural hazard-related issues are also considered high-priority. As mentioned above, the rivers and streams of highest concern for flooding are the Wood River, the Pawcatuck River, Canonchet Brook, Tomaquag Brook, Ashaway River, Brushy Brook, and Parameter Brook.

The Wood and Pawcatuck Rivers are the largest waterways in Hopkinton. The Wood River flows from Sterling, Connecticut to the southeast through Exeter, Rhode Island, and south through the Barberville, Hope Valley, and Woodville areas of Hopkinton, and to its junction with the Pawcatuck River. The Wood River forms Hopkinton's eastern border with Richmond, Rhode Island. The Pawcatuck River flows from South Kingstown, Rhode Island to its junction with Wood River and forms the southern boundary of Hopkinton. The Canonchet Brook and Tomaquag Brook flow through the central parts of the town, and have ~~generally rural drainage basins/watersheds that are~~ **generally rural in character with low-intensity development**, making them a relatively low-priority and lower risk for significant flooding impacts.

Ashaway

The Ashaway River and Mile Brook flow through Ashaway, which is a medium-density residential area, making it one of the highest-priority impact areas in the town for issues related to flooding and other natural hazards. Ashaway Elementary School is considered critical infrastructure, as it is a designated shelter for the Town. In the event of its use as a shelter, issues such as street closures in Ashaway due to flooding or downed trees could be detrimental not only to Ashaway residents, but the rest of the town. It is a priority of the Town to keep Hillside Avenue cleared during extreme

weather to allow access to the school. As shown on the 2010 Individual Assistance Applications Map enclosed within the **Comprehensive-Hazard Mitigation Plan**, the largest number of individual assistance applications following the 2010 floods came from Ashaway and Hope Valley. This indicates a need for flood protection improvements in those areas of Hopkinton.

The South Drive area of the Eccleston Plat section of the Village of Ashaway has experienced repeated flooding during heavy rain events. This is a low lying area west of the Ashaway River, near the Connecticut border. Flooding in this residential area impacts many homes, causing property damage and flood losses. Heavy rains have caused the southern, low-lying portion of South Drive to close in past years during all seasons, often for several days, until floodwaters recede or, in winter, ice is removed by heavy equipment and water is pumped away from the road. The town received a Flood Hazard Mitigation Grant from FEMA to remedy some of the flooding in South Drive. The corrective measure of an engineered stormwater management system for South Drive was implemented at the end of 2014 and has successfully addressed the flooding of the roadway at this location.

Church Street experiences similar flooding issues, causing street closure. A flood mitigation project is being designed to resolve this specific flood issue as well. This will also result in roadway improvements and a decreased need for flood-related road repairs on Church Street.

Hope Valley

Hope Valley is another high-priority area of vulnerability, as it is a medium-density residential area, as well as the most developed commercial area of the community. Many critical municipal facilities are located in Hope Valley, including the Fire Station, Post Office and Hope Valley Elementary School, as well as many of the town's vital businesses and several historic sites. Hope Valley is bordered by Wood River, and contains several waterbodies, including Wyoming Pond, and Locustville Pond. Power outages, downed trees, street closings, property damages, school closures, and impacted local businesses, are some of the issues Hope Valley faces during natural hazard events. The proximity of this suburban area to woodlands puts it at risk of urban-wildland interface fires. The Town is attempting to reduce the number of wildfire issues in the community by amending its burn ordinance to match the State Code, conducting a public relations campaign to inform residents of fire safety, and developing a cistern ordinance to dictate the construction of firefighting cisterns.

Canonchet

As shown on the Residential Density Map in this Comprehensive Plan, one of the only high density residential areas in Hopkinton is located in Canonchet. This area includes the three Canonchet Cliffs housing facilities and Wood River Health Services. Canonchet Cliffs is an affordable senior living facility, which includes assisted living apartments. This area is a priority because of its high density of residents, many of whom have decreased mobility and require assistance. Although flooding is not a major concern in this area, other extreme weather-related issues, such as power outages, road closures, dangerous road conditions, and inhibited emergency response, have heightened consequences for this population. Socio-economic factors also decrease residents' potential to recover from damages, displacement, and other issues. Hopkinton is taking several measures to reduce road closures and power outages, improve emergency services, and protect at-risk residents. These projects include tree cutbacks along all roadways, establishing improved GIS

mapping of the town, distributing natural disaster preparedness pamphlets, improving emergency services facilities, and developing a corp-s of emergency response volunteers.

Preserving Rural Character and Villages

Hopkinton is a rural community of forests, farms and fields. As shown in Table 15, approximately three quarters of the land in Hopkinton is forested, followed by residential uses and agricultural, both idle and active. These are important attributes of the town character in need of preserving. Map 9 shows existing residential density.

DRAFT

GOAL LU 5 *To minimize future impacts of natural hazards through mitigation and preparedness.*

Policy LU 9: Improve upon the natural hazard prevention and flood control efforts of the Town.

Commented [CV1]: RM5: "Should we include our work with Wood Pawcatuck Watershed flood resiliency project work in conjunction with this plan? There is info on their website about the project"

Recommendation 18:

- ♦ Continue to maintain an up-to-date Hazard Mitigation Plan, and implement the infrastructure improvement projects outlined therein.

Responsibility: Hazard Mitigation Plan Committee

Time Frame: On-going

Recommendation 19:

- ♦ Pursue hazard mitigation funding sources.

Responsibility: Hazard Mitigation Plan Committee

Time Frame: 1 year

Recommendation 20:

- ♦ Consider installing best management practices at municipal buildings and sites.

Responsibility: DPW

Time Frame: Ongoing

Recommendation 21:

- Develop GIS Storm Drain Database Map and use it to identify and assess causes of flooding and prioritize improvements.

Responsibility: DPW/ Hopkinton GIS/ IT

Time Frame: Ongoing

Recommendation 22:

- Conduct a vulnerability assessment of the town, and create a natural hazards vulnerability map, identifying areas most **as-at** risk of natural hazard-related issues, crucial roadways and infrastructure, and facilities with highest consequence populations. This should be included in the updated Hazard Mitigation Plan.

Responsibility: Hazard Mitigation Plan Committee/ Hopkinton GIS/ IT

Time Frame: 3 years/ Ongoing

Policy LU 10: Mitigate stormwater related impacts from new development in floodplain and bordering lands.

Recommendation 2123:

- ♦ Continue to ensure that development in and around floodplain areas is in accordance with the applicable restrictions.

Responsibility: Planning Board/ Building Inspector

Time Frame: On-Going

Recommendation 2224:

- ◆ Update the Hopkinton Zoning Map to include a floodplain overlay district.

Responsibility: Planning Board

Time Frame: 3 years

Policy LU 11: Utilize the Pawcatuck Watershed Management Plan developed by the Wood-Pawcatuck Watershed Association in order to improve the town's resiliency to impacts of storms and climate change, and to lessen Hopkinton's impacts on the watershed.

Commented [CV2]: Added per RM's suggestion

Recommendation 2325:

- ◆ Develop a strategy to implement the stormwater management projects, dam, culvert, and bridge improvements, sediment removal projects, and green infrastructure opportunities identified by the Pawcatuck Watershed Management Plan.

Responsibility: Town Manager/DPW/Planner

Time Frame: 5+ years

Recommendation 2426:

- ◆ Make land use and regulatory decisions that are in agreement with the Pawcatuck Watershed Management Plan.

Responsibility: Planning Board

Time Frame: On-going

Policy LU 12: Increase public awareness of natural hazard risks and increase involvement in prevention, and safety measures.

Recommendation 2527:

- ◆ Develop and distribute pamphlets to residents, especially those in flood-prone areas, about flood hazards and preparedness.

Responsibility: Hopkinton EMA

Time Frame: 2 Years

Recommendation 2628:

- ◆ Develop/ continue public wildfire prevention campaign.

Responsibility: Hopkinton EMA, Fire Department

Time Frame: 2 years

Recommendation 2729:

- ◆ Improve the town's Emergency Management webpage to include flood prevention and safety information and a comprehensive map of flood-prone areas.

Responsibility: Hopkinton EMA

Time Frame: 2 years

Recommendation 2830:

- ♦ Explore possible tax incentives for property owners to implement qualifying improvements to their property to increase resilience to storm impacts.

Responsibility: Finance

Time Frame: 3 years

Recommendation 2931:

- ♦ Inform property owners of updates to local Flood Insurance Rate Maps.

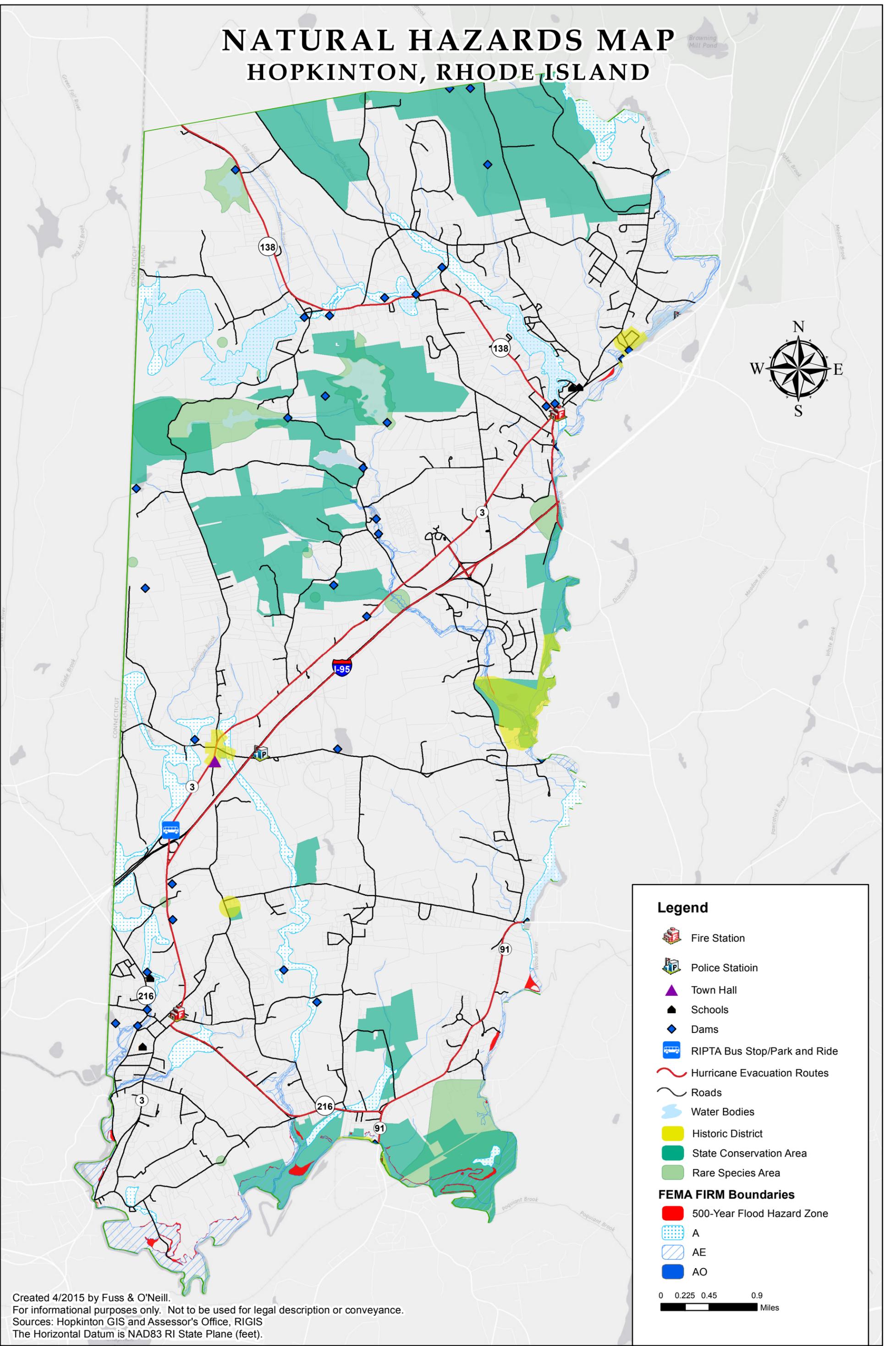
Responsibility: Hazard Mitigation Plan Committee

Time Frame: On-going

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NATURAL HAZARDS MAP

HOPKINTON, RHODE ISLAND



Legend

- Fire Station
 - Police Station
 - Town Hall
 - Schools
 - Dams
 - RIPTA Bus Stop/Park and Ride
 - Hurricane Evacuation Routes
 - Roads
 - Water Bodies
 - Historic District
 - State Conservation Area
 - Rare Species Area
- FEMA FIRM Boundaries**
- 500-Year Flood Hazard Zone
 - A
 - AE
 - AO

0 0.225 0.45 0.9
Miles

Created 4/2015 by Fuss & O'Neill.
 For informational purposes only. Not to be used for legal description or conveyance.
 Sources: Hopkinton GIS and Assessor's Office, RIGIS
 The Horizontal Datum is NAD83 RI State Plane (feet).

Implementation Schedule

The following is a schedule for implementation of the Hopkinton Comprehensive Plan. It identifies the Recommendation Item of each Element, the responsible party in its implementation and the time frame it is estimated that it will be completed, either short-term (1 to 2 years), mid-term (3 to 4 years) or long-term (more than 5 years). Recommendation Items can also be on-going.

Reference	Recommendation Description	Responsibility	Time Frame			
			1-2 Years	3-4 Years	5+ Years	On-Going
Recreation, Conservation and Open Space						
Recommendation 1	Investigate the possible use of land presently owned by the town for future development of ball fields and develop appropriate site.	Town Manager / Recreation Director				
Recommendation 2	Develop a plan and maintenance program for town property on the Wood River and Bridge Street to provide better access to the river for fishermen and canoeists and as a possible picnic site.	Recreation Commission				
Recommendation 3	Identify town properties that are unusable and underutilized and develop a plan for their sale with the proceeds from all sales earmarked for local recreation acquisition and development.	Town Manager				
Recommendation 4	Prepare an annual Capital Improvement Plan based on a site-specific operations and maintenance plan with tasks and schedule for all town-owned recreational facilities.	Recreation Director				
Recommendation 5	Revise the town's subdivision regulations for conventional developments so as to encourage the dedication of public recreation land.	Planning Board				
Recommendation 6	Work to continue and expand on the regional Chariho programs approach for league play and coordinate efforts for large or unusual facilities which would serve several communities (i.e. skating rink, swimming pool, bike path).	Recreation Director				
Recommendation 7	Coordinate regional summer learn-to-swim programs with adjacent towns and RIDEM.	Recreation Director				
Recommendation 8	Develop a plan to establish and maintain a network of biking and hiking trails throughout town and connected with adjacent communities.	Recreation Commission				
Recommendation 9	Assess the proposed planned development of the Ashville Pond site.	Town Manager / Conservation Commission				
Recommendation 10	Through the Recreation Commission, ensure that Hopkinton's special needs populations have sufficient access to recreational facilities and programs.	Recreation Commission				

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Reference	Recommendation Description	Responsibility	Time Frame			
			1-2 Years	3-4 Years	5+ Years	On-Going
Recommendation 25	Identify the roadways in Hopkinton that are scenic in nature and prepare a plan for their preservation.	Conservation Commission				
Recommendation 26	Prepare a maintenance and improvement program of historical cemeteries.	Historic District Commission				
Recommendation 27	Prepare a preservation plan for historical stone walls.	Historic District Commission / Town Council				
Recommendation 28	Develop an education plan to increase local knowledge of historic and cultural resources.	Historic District Commission				
Public Services and Facilities						
Recommendation 1	Evaluate local population trends to ensure that police, fire and municipal employees meet future requirements.	Town Manager				
Recommendation 2	Support creating positive incentives for encouraging volunteers for the Fire and Ambulance Service to meet the personnel requirements for adequate staffing. -	Town Council				
Recommendation 3	Develop additional municipal building space that is sensitive to the existing location and historical setting of the existing Town Hall and the adjacent Thayer House.	Town Manager				
Recommendation 4	Consult with town departments in planning for additional municipal office space to relieve overcrowding and address special requirements.	Town Manager				
Recommendation 5	Develop an annual Public Works Capital Improvement Plan that establishes a systematic program of public building improvements and capital equipment acquisition with the engagement of appropriate personnel to ensure that the Public Works Department is able to meet space and equipment needs.	Public Works Director				
Recommendation 6	Develop a Haz-Mat Plan as part of the town's Emergency Operations Plan to identify the issue of hazardous materials in the workplace and on the roadways.	Emergency Management Director				
Recommendation 7	Establish a senior service advocate or provider that coordinates efforts with the towns of Hopkinton, Charlestown and Richmond	Town Manager / Public Works Director / Public Welfare Director / Committee on Aging				
Recommendation 8	Partner with South County Community Action and other social service organizations for tri-community (Hopkinton, Charlestown and Richmond) efforts in order to formulate and implement the necessary social service programs in the three towns.	Town Manager				

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Reference	Recommendation Description	Responsibility	Time Frame			
			1-2 Years	3-4 Years	5+ Years	On-Going
Recommendation 9	Determine the transportation needs of the senior citizens and youth in order to assist in their participation in the recreational programs.	Recreation Director				
Recommendation 10	Develop a town-wide educational program that informs residents on the proper use and maintenance of On-site Wastewater Treatment Systems.	Wastewater Management District Commission				
Recommendation 11	Assist owners of On-site Wastewater Treatment Systems in maintaining and reconstructing these systems, including implementing innovative technologies where appropriate.	Wastewater Management District Commission				
Recommendation 12	Formulate and implement a town-wide Wastewater Management Facilities Plan, and Non-Point Source Management Plan (stormwater runoff), consistent with the Natural/Cultural Resources Element of this Plan.	Town Planner				
Recommendation 13	Educate the residents of Hopkinton on the importance of recycling solid waste.	Conservation Commission				
Recommendation 14	Conduct periodic assessments of needs for capital facilities related to education.	Town Council				
Recommendation 15	Provide a formal organizational structure for regional education issue resolution.	Town Council				
Recommendation 16	Maintain and improve library services in relation to population growth and service needs.	Town Council				
Recommendation 17	Conduct full audit of all public buildings and implement recommended changes.	<u>Town Council/Town Manager/DPW</u>				
Recommendation 18	Evaluate the feasibility and cost of installing photovoltaic and/or wind-powered electricity generating technologies on municipally owned lands and facilities, particularly building rooftops and the capped landfill on Stubtown Road.	<u>Town Manager/Town Planner/DPW</u>				
Recommendation 19	Replace the Town's vehicle fleet with fuel efficient vehicles. Encourage the purchase of alternative fuel vehicles when possible.	<u>Police Department/DPW</u>				
Recommendation 20	Incorporate energy efficiency and sustainability in design of Town Hall renovations.	<u>Town Manager</u>				
Recommendation 21	Create an energy conservation webpage on the Town website with educational material about energy efficient home improvements, such as weatherization, light bulbs, and replacing HVAC systems.	<u>Town Planner/Building Official/IT Director</u>				
Recommendation 22	Consider incentives for businesses to utilize energy efficient techniques in new and re-development building projects.	<u>Planning Board</u>				

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Reference	Recommendation Description	Responsibility	Time Frame			
			1-2 Years	3-4 Years	5+ Years	On-Going
Recommendation 23	Continue to implement policies and regulations that promote concentrated village development adjacent to I-95 and limit sprawl in order to mitigate the need for expansive energy infrastructure.	Planning Board				
Recommendation 24	Identify and evaluate regulatory/zoning deterrents of renewable energy projects. Adopt regulations that encourage small scale renewable energy installations.	Planning Board				
Recommendation 25	Consider expanding the current zoning regulations to allow photovoltaic installations in residential districts.	Planning Board				
Recommendation 26	Consider a zoning ordinance to permit wind-energy projects in appropriate zoning districts.	Planning Board				
Circulation						
Recommendation 1	Work with the RI Department of Transportation (RIDOT) in improving the transportation system in Hopkinton, particularly along state roads and bridges, to ensure that improvements occur in a manner that increases traffic flow and minimizes community disruption.	Public Works Director				
Recommendation 2	Modify subdivision regulations to require connections of adjacent subdivisions wherever possible.	Planning Board				
Recommendation 3	Modify subdivision regulations and Zoning Ordinance to require off-site transportation improvements where new development places additional burden on the existing circulation system.	Planning Board / Town Council				
Recommendation 4	Continue to update program developed for the identification, prioritization and scheduling of preventative road maintenance.	Public Works Director				
Recommendation 5	Develop a system of pedestrian and bicycle trails linking major areas in conjunction with RIDEM and neighboring communities to provide recreational opportunities and a major north/south alternative transportation corridor (See Goals and Policies of Recreation, Conservation and Open Space Element).	Recreation Commission				
Recommendation 6	Identify and designate certain roads as scenic and adopt appropriate design standards for their protection (See Policies of Natural and Cultural Resources Element).	Conservation Commission				
			<u>Time Frame</u>			
<u>Reference</u>	<u>Recommendation Description</u>	<u>Responsibility</u>	<u>1-2 Years</u>	<u>3-4 Years</u>	<u>5+ Years</u>	<u>On-Going</u>

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Reference	Recommendation Description	Responsibility	Time Frame			
			1-2 Years	3-4 Years	5+ Years	On-Going
Recommendation 17	<u>Create zoning and policy incentives that will increase the supply of housing for rental occupancy, especially low and moderate income rental units.</u>	<u>Town Planner / Planning Board / Zoning Board / Town Council / Affordable Housing Partnership</u>				
Recommendation 18	<u>Develop a Linkage Ordinance that ties commercial development to affordable housing development and recognizes the impacts of large-scale projects on the community.</u>	<u>Town Planner / Planning Board / Zoning Board / Town Council / Affordable Housing Partnership</u>				
Recommendation 19	<u>Consider Historic Restoration Strategy for village infill and supporting multi-family housing projects that could utilize existing mill buildings that are or may become vacant.</u>	<u>Town Planner / Planning Board / Zoning Board / Town Council / Affordable Housing Partnership</u>				
Recommendation 20	<u>Analyze new uses for town surplus buildings, including as affordable housing uses and develop template Request for Proposal documents that enable quick response by developers for buildings that may have low or moderate income potential, depending on the need, as they become available.</u>	<u>Town Planner / Planning Board / Zoning Board / Town Council / Affordable Housing Partnership / Public Works</u>				
Recommendation 21	<u>Participate in regional strategies that support the development and retention of affordable housing.</u>	<u>Town Planner / Planning Board / Zoning Board / Town Council / Affordable Housing Partnership</u>				
Land Use						
Recommendation 1	<u>Prepare a set of project review criteria applying to development zones for submission to the Town Council.</u>	<u>Planning Board</u>				
Recommendation 2	<u>Encourage the utilization of criteria planning techniques such as Cluster Residential Developments and PUDs.</u>	<u>Planning Board</u>				
Recommendation 3	<u>Consider residential zoning districts that reflect the actual predominant lot size and physical character of the substantially built-out areas of town.</u>	<u>Planning Board</u>				
Recommendation 4	<u>Research zoning revisions and policy strategies to meet the goals and objectives of the comprehensive plan pertaining to the conservation of natural resources and preservation of rural character, including revisions to the Cluster Subdivision Ordinance, development of a TDR program, and other similar strategies.</u>	<u>Planning Board / Land Trust / Town Council</u>				
Recommendation 5	<u>Adopt a stormwater management ordinance that includes Low Impact Development (LID) strategies.</u>	<u>Town Council</u>				
Recommendation 6	<u>Partner with the Wood-Pawcatuck River Association and other groups in public educational efforts, prioritizing areas for river use and developing joint proposals/grant applications for the preservation and utilization of river corridors.</u>	<u>Conservation Commission</u>				

Reference	Recommendation Description	Responsibility	Time Frame			
			1-2 Years	3-4 Years	5+ Years	On-Going
Recommendation 7	Coordinate future land use decisions with the neighboring State of Connecticut, Voluntown, North Stonington, and adjacent Rhode Island towns.	Town Planner				
Recommendation 8	Form an informal regional panel to review the implementation of the adopted comprehensive plans.	Town Planner				
Recommendation 9	Work through the Washington County Regional Planning Council and with other towns directly toward sharing common service facilities.	Town Manager / Town Council				
Recommendation 10	Encourage the implementation of the existing Waste Water Management District and its possible expansion into other areas of town and examine the feasibility of a central collection and treatment sewage disposal system for the village areas in order to minimize adverse impact on ground and surface water.	Town Council				
Recommendation 11	Explore the development of private water systems and companies to provide quality drinking water to the village areas in order to avoid conflict with the operation of private On-site Wastewater Treatment Systems.	Wastewater Management District Commission				
Recommendation 12	Develop a Business / Professional overlay zone for the village areas.	Town Planner				
Recommendation 13	Support the expansion of the Historic District Ordinance.	Historic District Commission / Town Council				
Recommendation 14	Utilize alternative development practices that require dedication of open space to the town.	Planning Board				
Recommendation 15	Partner with outside organizations that specialize in open space acquisition, such as The Nature Conservancy and the Audubon Society, to pool and maximize our limited resources for preservation efforts.	Hopkinton Land Trust				
Recommendation 16	Consider adoption of Agricultural Zoning and a Land Clearing/Earth Excavation Ordinance.	Town Council / Planning Board / Conservation Commission				
Recommendation 17	Use creative Planning and Zoning Techniques such as the purchase or transfer of development rights associated with working farms (See Natural and Cultural Resources Element).	Town Council / Planning Board				
Recommendation 18	Continue to maintain an up-to-date Hazard Mitigation Plan, and implement the infrastructure improvement projects outlined therein.	Hazard Mitigation Plan Committee				
Recommendation 19	Pursue hazard mitigation funding sources.	Hazard Mitigation Plan Committee				
Recommendation 20	Consider installing best management practices at municipal buildings and sites.	DPW				

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Reference	Recommendation Description	Responsibility	Time Frame			
			1-2 Years	3-4 Years	5+ Years	On-Going
Recommendation 21	Develop GIS Storm Drain Database Map and use it to identify and assess causes of flooding and prioritize improvements. Continue to ensure that development in and around floodplain areas is in accordance with the applicable restrictions. LU 6 Recommendation 21: Develop GIS Storm Drain Database Map and use it to identify and assess causes of flooding and prioritize improvements. Policy LU 10: Recommendation 21: Continue to ensure that development in and around floodplain areas is in accordance with the applicable restrictions.	Planning Board/Building Inspector LU6-DPW/Hopkinton GIS/IT LU10-Planning Board/Building Inspector				
Recommendation 22	Conduct a vulnerability assessment of the town, and create a natural hazards vulnerability map, identifying areas most at risk of natural hazard-related issues, crucial roadways and infrastructure, and facilities with highest consequence populations. This should be included in the updated Hazard Mitigation Plan. Update the Hopkinton Zoning Map to include a floodplain overlay district. LU 6 Recommendation 22: Conduct a vulnerability assessment of the town, and create a natural hazards vulnerability map, identifying areas most at risk of natural hazard-related issues, crucial roadways and infrastructure, and facilities with highest consequence populations. This should be included in the updated Hazard Mitigation Plan. LU10 Recommendation 22: Update the Hopkinton Zoning Map to include a floodplain overlay district.	Planning Board LU6: Hazard Mitigation Plan Committee/ Hopkinton GIS/IT LU10: Planning Board				
Recommendation 23	Continue to ensure that development in and around floodplain areas is in accordance with the applicable restrictions. Develop and distribute pamphlets to residents especially those in flood-prone areas about flood hazards and prepare them. Develop a strategy to implement the stormwater management projects, dam, culvert, and bridge improvements, sediment removal projects, and green infrastructure opportunities identified by the Pawcatuck Watershed Management Plan.	Town Manager/DPW/Planner Planning Board/Building Inspector Hopkinton EMA				
Recommendation 24	Update the Hopkinton Zoning Map to include a floodplain overlay district. Develop/continue public wildfire prevention campaign. Make land use and regulatory decisions that are in agreement with the Pawcatuck Watershed Management Plan.	Planning Board Hopkinton EMA Fire Department				

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Reference	Recommendation Description	Responsibility	Time Frame			
			1-2 Years	3-4 Years	5+ Years	On-Going
Recommendation 25	Develop a strategy to implement the stormwater management projects, dam, culvert, and bridge improvements, sediment removal projects, and green infrastructure opportunities identified by the Pawcatuck Watershed Management Plan. Improve the Town Emergency Management webpage to include flood prevention and safety information and a comprehensive map of flood-prone areas. Develop and distribute pamphlets to residents, especially those in flood-prone areas, about flood hazards and preparedness.	Town Manager/DPW/Planner/Hopkinton EMA				
Recommendation 26	Make land use and regulatory decisions that are in agreement with the Pawcatuck Watershed Management Plan. Explore possible tax incentives for property owners to implement qualifying improvements to their property to increase resilience to storm impacts. Develop/continue public wildfire prevention campaign.	Planning Board/Hopkinton EMA, Fire Department/Finance				
Recommendation 27	Inform property owners of updates to local Flood Insurance Rate Maps. Improve the town's Emergency Management webpage to include flood prevention and safety information and a comprehensive map of flood-prone areas. Develop and distribute pamphlets to residents, especially those in flood-prone areas, about flood hazards and preparedness.	Hopkinton EMA/Hopkinton EMA				
Recommendation 28	Develop/continue public wildfire prevention campaign.	Hopkinton EMA/Fire Department				
Recommendation 29	Improve the town's Emergency Management webpage to include flood prevention and safety information and a comprehensive map of flood-prone areas.	Hopkinton EMA				
Recommendation 30	Explore possible tax incentives for property owners to implement qualifying improvements to their property to increase resilience to storm impacts.	Finance Department				
Recommendation 31	Inform property owners of updates to local Flood Insurance Rate Maps.	Hazard Mitigation Plan Committee				
Recommendation 28	Examine sea level rise projections and create a map of affected areas.	Planning Board/GIS				
Recommendation 29	Incorporate sea level rise projection areas into regulations and ordinances.	Planning Board				

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Amendment to Recreation, Conservation, and Open Space element

Recommendation 1-A:

- ♦ Implement the Master Plan for Langworthy Field that was developed by the Recreation Commission in conjunction with consultant Fuss & O'Neill and that was approved by the Hopkinton Town Council on May 4, 2015.
 - *Secure funding for this project from various Federal, State, and Private Sources.*

Responsibility: Recreation Director/Town Planner/Town Manager

Time Frame: Short-term (3-4 Years)

Amendment to Implementation Schedule

Reference	Recommendation Description	Responsibility	Time Frame						
			1-2 Years	3-4 Years	5+ Years	On- Going			
Recreation, Conservation and Open Space									
Recommendation 1-A	Implement the Master Plan for Langworthy Field that was developed by the Recreation Commission in conjunction with consultant Fuss & O'Neill and that was approved by the Hopkinton Town Council on May 4, 2015.	Town Manager / Recreation Director / Town Planner							