

Identify Status of the 2018 Mitigation Plan Actions

EPSOM HAZARD MITIGATION 2024

Meeting 3

11/8/2023

TASK: Choose the status of each existing 2018 Action below and identify its description:

Was Action...	Status	If Yes: IDENTIFY:
Will Action be...	COMPLETED	When? Month & Year
Should Action be...	DEFERRED	Why? Choose...
	DELETED	Why? Choose...

What is a Mitigation Activity versus a Preparedness, Response or Recovery Activity?
Mitigation is long-term risk reduction like an ordinance/regulation, construction, upgrade or or rehabilitation of existing facilities.

Action Type	Duration	Definition or Characteristics
Mitigation	Long Term 2024-2029+	Action / project supports sustained risk prevention or reduces long-term risk to people, property, and infrastructure. ↳ Best suited for <i>Town Hazard Mitigation Plan</i>
Preparedness	Short Term Ongoing	Action assists or supports planning, protective activities, public ↳ Best suited for <i>Town Emergency Operations Plan</i>
Response, Recovery, Other Related	Short Term Ongoing	Action supports preventative, response, recovery-related, repeated or deferred maintenance activities. AVOID MOST in HMP ↳ Best suited for <i>Town Emergency Operations Plan</i>

Choose Action Status: COMPLETED, DELETED, or DEFERRED

The Action was **COMPLETED** when?
⇒ Month & Year

This Action was **DEFERRED** from last Plan because *choose 1*
⇒ it needs to be **repeated** to be effective.
⇒ **more time** is required for completion.
⇒ the Town **lacked staff or volunteer capability**.
⇒ the Town **lacked the funding** to complete it.
⇒ it was a **lower priority** than other Town activities.

This Action will be **DELETED** because *choose 1*
⇒ it is **no longer necessary or a priority** to the Town.
⇒ it is **not relevant** to the Town's current situation or objectives.
⇒ its undertaking was **unrealistic**.
⇒ it was **financially infeasible**.
⇒ it was **incorporated into another activity**.
⇒ it **duplicates** existing efforts.
⇒ this is an **Ongoing Action** to be **MOVED TO CAPABILITY ASSESSMENT**



New Action Begins With #93-2024

2018 Actions Status Identification

DETERMINE STATUS OF EACH ACTION

Action Number	Action	Action Timeframe	Who is Responsible	COMPLETED When: Month & Year	DEFERRED Why?	DELETED Why?
---------------	--------	------------------	--------------------	---------------------------------	------------------	-----------------

Local Planning and Regulations

DETERMINE STATUS OF EACH ACTION

#62-2012	Update the Zoning Ordinance to Comply with NFIP Requirements Regulate Building in the Floodplain	Short Term then Ongoing	Planning Board			ONGOING ACTION FOR CAPABILITY ASSESSMENT
#69-2018	Regulate New Underground Utilities in Subdivision and Site Plan Review Regulations to Reduce the Impact of Storms, Wind and Winter Events	Long Term 4-5 Years	Planning Board			

2018 Supporting Action Information to Update Later (2024 Deferred Actions)

Approximate Cost to Town	Action Description or What Approximate Cost Will Pay For	How Funded	Ranking Score Relative Ease of Completion
--------------------------	--	------------	--

\$0	The Zoning Ordinance needs to be updated as new requirements to the National Flood Insurance Program are necessary for retention of NFIP participation. The Floodplain Ordinance protects life and property by regulating distance of structures to flood hazard areas, regulating elevation, clarifying definitions, regulating new structures and encroachments, stating duties of the Code Enforcement Officer, etc. In 2008 and 2010, the Town adopted the recommended updates to the ordinance. The existing ordinance is amended with federal updates on an ongoing basis. Last update in 2012 to allow sheds in the FP with conditions.	N/A	69
\$0	If the main transmission towers were destroyed by any weather event or hazard event, all public safety communications would be jeopardized. People panic when internet and power are out, calling emergency facilities. Infrastructure is protected, but the residents lose service. ATT given broadband contract by governor's office, but it does not cover Epsom well.	N/A	58

Identify Status of the 2018 Mitigation Plan Actions

EPSOM HAZARD MITIGATION 2024

Meeting 3

11/8/2023

#70- 2018	Revise Zoning Ordinance to Require Emergency Generators on All New Telecommunications Towers to Reduce the Impact of Storms, Wind, Fire and Winter Events	<u>Short Term</u> 1-2 Years	Planning Board			
#71- 2018	Continue Efforts to Incorporate 2009 USGS Flood Mapping into Epsom's FIRMs	<u>Long Term</u> 4-5 Years	Board of Selectmen			

\$0	If the main transmission towers were destroyed by any weather event or hazard event, all public safety communications would be jeopardized. People panic when internet and power are out, calling emergency facilities. Infrastructure is protected, but the residents lose service. Fort Mountain is where key Epsom equipment is now located. Catamount (Pittsfield), White Birch, River Road, Brimstone, Nudds Hill (Pittsfield) do not have emergency generators. One tower is vacant on Elkins Lane and would be considered "new" and subject to this regulation. 1-2 of preexisting towers do have propane generators (White Birch Lane and Brimstone Hill).	N/A	56
\$0	With assistance from the NH DES and NH Office of Strategic Initiative, in 2012, efforts were initiated to incorporate the 2009 USGS Suncook River Flood Study into the current FEMA maps. However, due to the number of map panels that were impacted, the effort was placed on hold until FEMA could designate funds towards the project. There is currently a FEMA mapping project for the Merrimack River watershed being led by the USGS. This project, which kicked off in 2015, will include their 2009 study of the Suncook River that will result in new FEMA FIRM mapping.	N/A	61

2018 Actions Status Identification

DETERMINE STATUS OF EACH ACTION

Action Number	Action	Action Timeframe	Who is Responsible	COMPLETED When: Month & Year	DEFERRED Why?	DELETED Why?
---------------	--------	------------------	--------------------	---------------------------------	------------------	-----------------

Structure and Infrastructure Projects

DETERMINE STATUS OF EACH ACTION

#38- 2012	Install a Hydrant East of the Epsom Traffic Circle on the Suncook River to Provide Fire Suppression for the Neighborhood as Part of Water Line Extension (See #72)	<u>Short Term</u> 1-2 Years	Water Precinct			
#41- 2012	Equip Public Buildings with Sprinkler Systems to Provide Fire Suppression	<u>Long Term</u> 4-5 Years	Fire Department			
#46- 2012	Study and Rehabilitate Cass Road Bridge to Reduce Effects of Floods, Ice Jams, Erosion and Scouring	<u>Long Term</u> 4-5 Years	Highway Department			

2018 Supporting Action Information to Update Later (2024 Deferred Actions)

Approximate Cost to Town	Action Description or What Approximate Cost Will Pay For	How Funded	Ranking Score Relative Ease of Completion
\$12,000	Install Dry Hydrant east of the Epsom Traffic Circle on the Suncook River using Emergency Management Performance Grant (EMPG) funds after the grade control structures are installed by NH DES. The dry hydrant also cannot be installed until after the NH DES fluvial erosion hazard (FEH) feasibility study of the Suncook River has been completed.	MTBE Grant from Exxon Class Action Suit, Warrant Article	73
\$30,000 per building, \$250,000 for School	Public buildings should be equipped with sprinklers for fire safety, including future construction. Many historic buildings, like the Meetinghouse (dry system upstairs), Old Town Hall, and Old Library are already designated on the National Register of Historic Places and would need to be retrofitted. The Town Hall should be among the first to have them installed. The Epsom Central School also needs to be sprinklered, built in the 1950s.	Warrant Article for both	58
\$250,000 to \$750,000	The bridge is red-listed and closed. Cass Road Bridge has two side by side decks which are deteriorating and abutment work needs to be done. The Little Suncook River flows under and is scouring away the foundation. Necessary for emergency vehicle access. When Center Hill Road is washed out, this is another way in to the Mountain Road, Echo Valley Farm Road are etc.	Warrant Article or Highway Department Operating Budget (Town) funded OR Town and NH DOT Bridge Aid 80/20 reimbursement	46

Identify Status of the 2018 Mitigation Plan Actions

EPSOM HAZARD MITIGATION 2024

Meeting 3

11/8/2023

#47- 2012	Improve Class VI Fire Roads to Provide a Means of Access for Fire Suppression	Short Term then Ongoing	Fire Department			
#48- 2012	Raise the Village District Well House to Prevent Flooding of the Facility	Long Term 4-5 Years	Epsom Village Water District			
#67- 2015	Continue to Work with NHDES and NH Geological Survey to Combine Hazard Mitigation Projects (FGA) to Reduce Flood and Erosion Impacts	Long Term then Ongoing	Board of Selectmen			
#72- 2018	Retrofit the Epsom Central School with Sprinkler Systems to Provide Fire Suppression	Long Term 4-5 Years	School District			
#73- 2018	Extend the Water Lines from Goboro Road (Route 4) to the End of the Traffic Circle to Reach the Town Office for Fire Suppression (See #38)	Short Term 1-2 Years	Epsom Village Water District			
#74- 2018	Produce an Engineering Study of a Third Well for Epsom Village Water District for Future Fire Suppression Needs	Long Term 4-5 Years	Board of Selectmen			
#75- 2018	Install a Cistern on Gauthier Way for Fire Suppression	Long Term 4-5 Years	Planning Board, with Fire Department assistance			
#84- 2018	Upgrade Sawyer Road Culverts (2) to Protect from Floods and Erosion	Short Term 1-2 Years	Highway Department			
#85- 2018	Upgrade Lords Mill Road Culvert to Protect from Floods and Erosion	Short Term 1-2 Years	Highway Department			
#86- 2018	Upgrade Hoyt Road Culvert to Protect from Floods and Erosion	Short Term 1-2 Years	Highway Department			

\$2,500 annually	Remove debris from storms that have made Class VI fire roads impassable. The FD should complete brush clearing on the fire roads to permit access into rural lands for wildfires and lightning strikes. Mountain Road, Old Mountain Road, Sanborn Hill, Granny Howe Road, Lane Road, Kettle Rock spur are primary Class VI roads Epsom over mountains.	Fire Department Fire Road Maintenance Budget	68
\$50,000	The Well House building regularly is flooded when the Suncook River floods and water service gets suspended to Village District residents. Although the Well House was fenced in and slightly elevated in 2017, the Village Water Precinct still wants to move the entire Well House safely out of the floodplain. No budget is available however for this project.	Epsom Village Water District User Fees, hope to locate grants	36
\$0	Leighton Brook (projected summer 2015 finish) and Route 4 bridge stabilization (streambank stabilization projects downstream of the Route 4 bridge) are continuing with the State of NH. Suncook River is still changing so it is difficult to perform the projects as discussed. Other projects may make themselves known during this work for which funding will be sought.	N/A	42
\$150,000	Estimates are about \$2.00 to \$7.00 per square foot to retrofit existing buildings. The Epsom Central School was built in the 1950s with cinderblock construction and did not include sprinklers. Although the walls and floors would not burn a fire, the contents would.	School District Warrant Article	61
\$0	Fire suppression becomes difficult when some of the historical sites are beyond the water precinct zones. Most of them are up on the hills. Placed a wet hydrant to the old Meetinghouse. Hoping to extend to 10" pipe. Engineering plans developed by Underwood. Contaminated water at Getty Station (MTBE), Exxon Mobil contributed funding to the State that will benefit Epsom. Town Wells 1 & 2 are located on Dover Road (Route 4).	NHDES Grant MtBE (See #38)	73
\$25,000	An engineering study for the third well was voted on at Town Meeting 2018 (\$10,000 warrant article). A third well will provide additional capacity to the existing lines, water for fire suppression. This study is considering long range issues, such as enabling businesses to occupy lots further from the Traffic Circle which helps with traffic movement, a real concern during natural hazard events or disasters, and will provide fire suppression.	Engineering Study of Third Well for Epsom Village Water Capital Reserve Fund	74
\$0	The Town would like to continue the water line to this development, but it is too far. New economic development will occur on Gauthier Way, so a cistern will be necessary. Regulations require cisterns to be installed prior to receiving the occupancy permits.	N/A	58
\$3,500	Two existing Sawyer Road steel, corrugated galvanized 18" culverts are corroded. Both will be upgraded to 24" plastic smooth bore, plenty of room for upgrade in this space.	Highway Maintenance Budget	61
\$15,000	Bottom of Lords Mills Road galvanized, corrugated steel culvert is gone, 14 feet in the ground. The upgrade size will be 48" plastic smooth bore PVC.	Highway Maintenance Budget	61
\$8,000	Bottom of Hoyt Road galvanized, corrugated steel culvert is gone, buried under the road. The upgrade size will be 48" plastic smooth bore PVC.	Highway Maintenance Budget	61

Identify Status of the 2018 Mitigation Plan Actions

EPSOM HAZARD MITIGATION 2024

Meeting 3

11/8/2023

#87- 2018	Upgrade Mountain Road Culvert to Protect from Floods and Erosion	<u>Short Term</u> 1-2 Years	Highway Department			
#88- 2018	Upgrade Colonial Drive Culvert to Protect from Floods and Erosion	<u>Medium Term</u> 3-4 Years	Highway Department			
#89- 2018	Upgrade Lockes Hill Road Culvert to Protect from Floods and Erosion	<u>Medium Term</u> 3-4 Years	Highway Department			
#90- 2018	Upgrade Chestnut Pond Road Culvert to Protect from Floods and Erosion	<u>Long Term</u> 4-5 Years	Highway Department			
#91- 2018	Upgrade Webster Park Culvert to Protect from Floods and Erosion	<u>Long Term</u> 4-5 Years	Highway Department			
#92- 2018	Reconstruct Leighton Brook Road to Protect from Floods and Erosion	<u>Short Term</u>	Highway Department			

\$1,800	Existing Mountain Road culvert is deteriorating corrugated, galvanized 15" metal pipe, will be upgraded to 15" PVC smooth bore pipe that will enable more water to pass through unimpeded. This situation is common all Town. In order to keep costs down, no permitting is needed for materials upgrade of the same size pipe.	Highway Maintenance Budget	61
\$3,500	Existing Colonial Road culvert is deteriorating corrugated, galvanized 15" metal pipe, will be upgraded to 15" PVC smooth bore pipe that will enable more water to pass through unimpeded. This situation is common all Town. In order to keep costs down, no permitting is needed for materials upgrade of the same size pipe.	Highway Maintenance Budget	61
\$2,200	Existing Lockes Hill Road culvert is deteriorating corrugated, galvanized 15" metal pipe, will be upgraded to 15" PVC smooth bore pipe that will enable more water to pass through unimpeded. This situation is common all Town. In order to keep costs down, no permitting is needed for materials upgrade of the same size pipe.	Highway Maintenance Budget	61
\$12,000	Chestnut Pond Road 18" concrete culvert has a crown, so will need to determine reason for it. Plan is to upgrade with new 18" concrete culvert and fix reason for the crown.	Highway Maintenance Budget	61
\$4,800	Existing 2 Webster Park culverts are deteriorating corrugated, galvanized 15" metal pipes, will be upgraded to 15" PVC smooth bore pipes that will enable more water to pass through unimpeded. This situation is common all over Town. In order to keep costs down, no permitting is needed for materials upgrade of the same size pipe.	Highway Maintenance Budget	61
\$70,000	Over time, potholes and deteriorating road conditions have resulted in the need to reconstruct Leighton Brook Road. The road is a Class V Town road, accepted from a development about 40 years ago in the 1970s which was not built to current Town standards.	Highway Department Capital Reserve Fund	75

2018 Actions Status Identification

DETERMINE STATUS OF EACH ACTION

Action Number	Action	Action Timeframe	Who is Responsible	COMPLETED When: Month & Year	DEFERRED Why?	DELETED Why?
---------------	--------	------------------	--------------------	---------------------------------	------------------	-----------------

Natural Systems Protection Actions

DETERMINE STATUS OF EACH ACTION

#36- 2012	Examine Options for Bank Stabilization of Suncook River Banks at the School Athletic Fields	<u>Long Term</u> 4-5 Years	Emergency Management / Board of Selectmen with Epsom School Admin			
#68- 2015	Continue Program to Monitor the Large Woody Material Damming the Suncook River (FGA) to Reduce the Impact of Floods and Erosion	<u>Long Term</u> then Ongoing	Fire Department			

2018 Supporting Action Information to Update Later (2024 Deferred Actions)

Approximate Cost to Town	Action Description or What Approximate Cost Will Pay For	How Funded	Ranking Score Relative Ease of Completion
\$50,000 (study) + \$100,000 (stabilization)	The Suncook River is eroding away the athletic fields, and the building on site will soon be washed away if the bank is not stabilized. Options for bank stabilization should be considered in an engineering study before action is taken.		53
\$0	Town regularly needs to monitor the extensive trees inventoried in the Suncook River during high flows, storm events, and spring rains and snow melt. Calls come in to FD or PD from the public about migrating trees in the river.	N/A	47

Identify Status of the 2018 Mitigation Plan Actions

EPSOM HAZARD MITIGATION 2024

Meeting 3

11/8/2023

#76- 2018	Purchase and Conserve Large Lots on Sanborn Hill and Center Hill as Identified by Bear Paw Regional Greenway to Enable Trails for Fire and Tree Debris Access	<u>Medium Term</u> 3-4 Years	Conservation Commission, approval from Board of Selectmen needed			
#77- 2018	Produce a Study on the Brownfields Sites (Getty Station and Gossville Hotel) to Reduce Environmental Contamination of the Traffic Circle	<u>Medium Term</u> 3-4 Years	Board of Selectmen			
#78- 2018	Continue the Stabilization of the Suncook River Banks to Help Protect Against Erosion and Scour, Floods, Tree Debris, and Storms	<u>Long Term</u> then Ongoing	Highway Department			

\$100,000 to \$300,000	Town services and the School system could not accommodate development of the large lot legacy properties at current Town service levels. Significant upgrades to services, buildings, infrastructure, equipment and staff would need to occur. Some of the lots could be conserved. Bear Paw Regional Greenway recently approached 8 landowners for conservation land, asked town to purchase. Easements for Center Hill and Bear Hill, proposed to Board of Selectmen 2017	Conservation Commission Fund	51
\$0	Contaminated water at Getty Station (MtBE), Exxon Mobil, Gossville Hotel) contributed funding to the State that will benefit Epsom. Economic development is an important theme in the community right now and this is the right time to pursue such a project. NHDES and Economy Devt Committee looking into brownfield sites, formerly Huckins and L Doone, gas stations with unlined tanks.	Brownfields funding, NHDES, US EPA	54
\$10,000,000	Continuing erosion issue is ongoing, will continue to change the floodplains. After the State's river stabilization project to protect the newly rehabilitated Route 4 bridge from scour, the Suncook bank eroded more quickly downstream as a result. Reclamation and stabilization of 15 acres was estimated at \$90,000. Town owns about 3,000 feet on the river and the School District owns 1,000 feet, and the Water Precinct owns another 1,000 feet. The local government has responsibility to ensure banks are safe. This problem may take a generation to solve.	Town share, NHDES grants, possible FEMA, US Army Corps, or EPA federal funding	75

2018 Actions Status Identification

DETERMINE STATUS OF EACH ACTION

Action Number	Action	Action Timeframe	Who is Responsible	COMPLETED When: Month & Year	DEFERRED Why?	DELETED Why?
---------------	--------	------------------	--------------------	---------------------------------	------------------	-----------------

Education and Awareness Programs Actions

DETERMINE STATUS OF EACH ACTION

#54- 2012	Educate the Public on the Effects and Impacts of Dams Which Can Alleviate Flooding Conditions	<u>Short Term</u> then Ongoing	Town Administration, with help from Economic Development Committee			
#40- 2012	Encourage Advance Tree Trimming of Hazardous Trees by Utility Companies to Reduce Storm Damage	<u>Short Term</u> then Ongoing	Highway Department			
#79- 2018	Educate the Adult Public, Town Staff and Volunteers on Instructor-Level ALICE to Reduce Impacts of Human Hazards in Buildings	<u>Short Term</u> 1-2 Years	Police Department			

2018 Supporting Action Information to Update Later (2024 Deferred Actions)

Approximate Cost to Town	Action Description or What Approximate Cost Will Pay For	How Funded	Ranking Score Relative Ease of Completion
--------------------------	--	------------	--

\$0	Developing pamphlets, publicity notices on the cable channel, using "reverse 911" technology with the School, website, and writing articles for newspapers will better help inform the public about the effects and impacts of dams. The Town will partner with the NH DES. The Allenstown/ Pembroke Buck Street Dam was removed by NH DES in 2011. NHDES should be able to provide information for the pamphlet. The targeted audience would be those who are dam owners or directly about dams.	N/A	54
\$0	The Town will notify public utilities of trees and limbs too close to utility wires. The project will ensure maintenance of vital utility services to residents and businesses. Power outages and disruptions will become less common during a disaster event if regular tree trimming within the right-of-way occurs. Unutil every 5 years, Eversource every 6 years, try not to contact them unless necessary.	N/A	69
\$6,000	Town Office, Police Department, Post Office, Library, Epsom Central School, Epsom Manor are targets for human threats (active shooter, bombing, powders, etc). Alert Lockdown Inform Counter Evacuate ALICE "train the instructor" training sponsored by the PD for 2 days on April 24-25 at the Epsom Central School, although it has a high cost (\$600).	Individual Department Budgets for Training	65

Identify Status of the 2018 Mitigation Plan Actions

EPSOM HAZARD MITIGATION 2024

Meeting 3

11/8/2023

#80- 2018	Educate the Public on the See Something Say Something Campaign to Reduce Impacts of Human Hazards	<u>Short Term</u> then Ongoing	Police Department			
#81- 2018	Educate Homeowners About Options on Hazardous Tree Removal to Reduce Storm Damage	<u>Short Term</u> then Ongoing	Highway Department			
#82- 2018	Upgrade the Rail Trail Between the Route 4 to Short Falls Road to Reduce Erosion and Washouts	<u>Medium Term</u> 3-4 Years	Conservation Commission			
#83- 2018	Collect GPS Mapping Data and Develop Maps of Town Trails in the Town Forest and Conservation Areas to Reduce Human Injury Potential from All Hazards	<u>Medium Term</u> 3-4 Years	Conservation Commission			

\$0	Police Department's (PD) See Something Say Something program has posters at the School, call local PD, on PD Facebook and website to report suspicious activities.	N/A		68
\$0	Town receives multiple first responder calls for trees down in seasonal campgrounds, on manufactured homes and town wide during severe wind events and storms. These locations are particularly vulnerable with light structures and heavy trees. During the drought, more trees falling over with roots. Residents are becoming proactive with tree removal. Power companies come in every 5 years. Town can call and request trees removal. HD also removes trees. Homeowners are often reluctant to cut their trees, Town warns when trees are hazardous.	N/A		57
\$5,000	Conservation Commission discussed upgrading the rail trail from approximately the washed out bridge over the Little Suncook on the north end down to Short Falls Rd on the south end. Part of this plan included at least one kiosk as well as some signs, gates and other obstructions to reduce the illegal OHRV traffic. Upgrades to the trail itself would include repair of some culverts and the addition of some stone dust or other hard pack material. The rail trail will be made safer from flooding, erosion, and from human injury with these upgrades.	Conservation Commission Budget Equipment and Supplies, Grants to be sought		57
\$1,000	Accurate maps of the Town Forest & other conservation area maps are needed. Although the Conservation Commission could ask the Town Forester for an updated map, GPSing trails is more flexible and easier to update and use. The public needs the maps to understand the location of trails and how to use the trails responsibly. Very large areas abut private land and there are no indications people are no longer on Town property when hiking through. Emergency response sometimes has difficulty locating and evacuating injured or lost people even in the Town Forest. GPSing the trails will result in updated, versatile trails maps and data available to all.	Conservation Commission Budget, Donated Time		52