

SECTION 5. MITIGATION STRATEGIES

Mitigation Strategy	
<p>Requirement: §201.6(c)(3): (The plan must include) a mitigation strategy that provides the jurisdiction’s blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools. This section shall include:</p> <ul style="list-style-type: none"> (i) A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards. (ii) A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction’s participation in the NFIP, and continued compliance with NFIP requirements, as appropriate. (iii) An action plan describing how the actions identified in paragraph (c)(3)(ii) of this section will be prioritized, implemented and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs. (iv) For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan. 	
Element	C1: Does the plan document each jurisdiction’s existing authorities, policies, programs and resources, and its ability to expand on and improve these existing policies and programs?
	C2: Does the Plan address each jurisdiction’s participation in the NFIP and continued compliance with NFIP requirements, as appropriate?
	C3: Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards?
	C4: Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure?
	C5: Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction?
	D2: Was the plan revised to reflect progress in local mitigation efforts? See Maintenance Section
	D3: Was the plan revised to reflect changes in priorities? See Maintenance Section

Mitigation Strategy
Requirement §201.6(c)(3): The plan shall include a mitigation strategy that provides the jurisdiction’s blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.

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The following pages contain goals, objectives and strategic actions for each of the hazards identified earlier in this report, followed by a town by town summary of prioritized projects.

The list of local projects was developed separately by each municipality. Local officials did not use formal, written criteria for the identification of local projects. Local officials relied on common sense, local knowledge of the frequency and extent of local damages, local knowledge of which projects were of the highest priority, based on frequency and severity of damages, local knowledge of the weather, the geography and topography of the community, and the technical and financial abilities of their respective communities to address hazards and mitigate the impacts of hazards.

13. Local Hazard Mitigation Goals	
Requirement §201.6(c)(3)(i): (The hazard mitigation strategy shall include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.	
Element	A. Does the new or updated plan include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards?

A. Mitigation Goals

See Goal/Mission Statements for flooding (page 5-3), severe winter and severe summer storms (page 5-5) and wildfires (page 5-8).

14. Identification and Analysis of Mitigation Actions	
Requirement §201.6(c)(3)(ii): (The mitigation strategy shall include a section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.	
Elements	A. Does the new or updated plan identify and analyze a comprehensive range of specific mitigation actions and projects for each hazard?
	B. Do the identified actions and projects address reducing the effects of hazards on new buildings and infrastructure?
	C. Do the identified actions and projects address reducing the effects of hazards on existing buildings and infrastructure?

C1. Existing Authorities, Policies, Programs and Resources

Below is a summary of existing authorities, policies, programs and resources available to accomplish hazard mitigation. See also the table that follows this summary.

- **Town Manager, Administrator, Administrative Assistant to the Selectmen:** Some towns in Somerset County have a town manager, others have an administrator whose duties may vary from those of a town manager, and still others have an administrative assistant to the selectmen who may serve as staff to the selectmen but may not have the powers of a town manager to hire staff. In the table below, “TM” indicates town manager; “A” indicates administrator, and “AA” indicates administrative assistant.
- **Board of Selectmen or Board of Assessors:** If a town has no Town Manager, that role is filled by a Board of Selectmen, or in the case of a plantation, by a Board of Assessors.

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Depending on the community's needs and financial resources, the Board might also serve as Road Commissioner.

- **Staff Resources:** Staff resources, where available, usually consist of a planner or community development director. There are no towns in Somerset County with staff resources devoted exclusively to hazard mitigation.
- **Public Works or Road Commissioner:** Some of the larger towns have a public works director, but most have a road commissioner. The road commissioner might also be the town manager or board of selectmen.
- **Flood Hazard Ordinance:** All the towns that are in the Flood Insurance Program have a flood hazard ordinance in effect. In the following table, the designation "LUPC" indicates that the plantation's flood plains are under the regulatory jurisdiction of the State's Land Use Planning Commission (LUPC).
- **All the towns in Somerset County** are required to have a shoreland zoning ordinance, whether adopted by the municipality or imposed by the Maine Department of Environmental Protection. The designation LUPC indicates that the plantation's shorelands are under the regulatory jurisdiction of the State's Land Use Planning Commission.
- **Form of Government:** In the following table, the letters "ST" indicate the selectmen/town meeting form of government; a "Council" indicates a council form of government and the designation LUPC indicates that the plantation is governed by the State's Land Use Planning Commission.
- **Resources:** In addition to staffing or other expertise, funding resources are from local taxes and/or grants that are funded by taxes or private donations.

All jurisdictions in Somerset County could expand and improve their existing capabilities if additional funds, beyond their existing tax bases, became available to address hazard mitigation projects listed on the following pages.

Key to table on next page

"X" - Yes

"MGR" – Town Manager

"AA" – Administrative Assistant

"LUPC" – Maine Land Use Planning Commission

"S/TM" – Selectmen/Town Meeting form of government

"S/TM/MGR"- Selectmen, Town Meeting, Manager form of Government

"S/TM/AA" - Selectmen, Town Meeting, Administrative Assistant form of Government

"Council/TM/MGR" – Council/Town Meeting/Manager form of government

"Council/Mayor/MGR" – Council/Mayor/Manager form of government

"Assessors" – Assessors/Annual Meeting form of Government

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Authorities, Policies, Programs and Resources Available to Accomplish Hazard Mitigation							
Towns (27)	Town/City Manager	Staff involved in Local Planning	Public Works or Road Commissioner	EMA Director	Flood Hazard Ordinance	Shoreland Zoning Ordinance	Form of Government
Anson	AA		X	X	X	X	S/TM
Athens			X	X		X	S/TM
Bingham			X	X	X	X	S/TM
Cambridge	AA		X	X	X	X	S/TM/AA
Canaan			X	X	X	X	S/TM
Caratunk			X	X	X	X	S/TM
Cornville			X	X	X	X	S/TM
Detroit			X	X	X	X	S/TM
Embden			X	X	X	X	S/TM
Fairfield	MGR		X	X	X	X	Council/TM/MGR
Harmony			X	X	X	X	S/TM
Hartland	MGR		X	X	X	X	S/TM
Jackman			X	X	X	X	S/TM/MGR
Madison	MGR	X	X	X	X	X	S/TM/MGR
Mercer			X	X	X	X	S/TM
Moose River			X	X		X	S/TM
Moscow			X	X	X	X	S/TM
New Portland	MGR		X	X	X	X	S/TM/MGR
Norridgewock	MGR		X	X	X	X	S/TM/MGR
Palmyra	AA		X	X	X	X	S/TM/AA
Pittsfield	MGR		X	X	X	X	Council/Mayor/MGR
Ripley	AA		X	X	X	X	S/TM/AA
St. Albans	MGR		X	X	X	X	S/TM/MGR
Skowhegan	MGR	X	X	X	X	X	S/TM/MGR
Smithfield	AA		X	X	X	X	S/TM/AA
Solon			X	X	X	X	S/TM
Starks			X	X	X	X	S/TM

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Authorities, Policies, Programs and Resources Available to Accomplish Hazard Mitigation							
Towns (27)	Town/City Manager	Staff involved in Local Planning	Public Works or Road Commissioner	EMA Director	Flood Hazard Ordinance	Shoreland Zoning Ordinance	Form of Government
Plantations (6)							
Brighton Plt.			X	X	LUPC	LUPC	Assessors
Dennistown Plt			X	X	LUPC	LUPC	Assessors
Highland Plt			X	X	LUPC	LUPC	Assessors
Pleasant Ridge Plt.			X	X	LUPC	LUPC	Assessors
The Forks Plt.			X	X	LUPC	LUPC	Assessors
West Forks Plt.			X	X	LUPC	LUPC	Assessors

While Somerset County EMA does not have any direct authority to implement hazard mitigation projects in the municipalities, it does:

- Oversee the preparation of the County Hazard Mitigation Plan and its updates
- Support hazard mitigation planning / training / exercising
- Coordinate activities of local EMA directors and
- Participate in grant application development

C2. Participation in the National Flood Insurance Program (NFIP)

As shown in the table below, all but two of the towns in Somerset County are in the Flood Insurance Program, and as a condition of participation in the program, have enacted floodplain management ordinances that limit new development in floodplain areas.

All six of the plantations in Somerset County and the County's portion of the Unorganized Territory are under the jurisdiction of Maine's Land Use Planning Commission (LUPC). LUPC has agreed to administer and enforce the NFIP for all communities and unorganized areas that are under its control and has modified its requirement to include floodplain management regulations. As shown in the table below, the six plantations are in the NFIP by virtue of being under LUPC jurisdiction.

The table below summarizes the participation of Somerset County municipalities in the NFIP.

Abbreviations

- M: No elevation determined – All Zone A, C and X
- L: Original FIRM by letter - All Zone A, C and X
- NSFHA: No Special Flood Hazard Area – All Zone C

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Somerset County Towns Participating in the NFIP					
Towns	Init FHBM¹	Init FIRM¹	Curr Effective Map Date¹	Reg-Emer Date¹	Adoption and Enforcement²
Anson	7-23-76	7-15-88	7-3-95	7-15-88	X
Athens	-	-	-	-	-
Bingham	7-19-74	9-27-85	9-27-85(M)	9-27-85	X
Cambridge	1-17-75	9-27-85	9-27-85(M)	9-27-85	X
Canaan	4-1-77	9-27-85	9-27-85(M)	9-27-85	X
Caratunk	-	11-1-85	11-1-85(M)	11-1-85	X
Cornville	1-17-75	9-27-85	9-27-85(M)	9-27-85	X
Detroit	2-21-75	8-19-85	8-19-85(M)	8-19-85	X
Embden	2-21-75	9-4-85	9-4-85(M)	9-4-85	X
Fairfield	11-1-74	2-17-88	2-17-88	2-17-88	X
Harmony	4-18-75	9-27-85	9-27-85(M)	9-27-85	X
Hartland	2-21-75	1-1-91	1-1-91(L)	1-1-91	X
Jackman	1-24-75	9-4-85	9-4-85(M)	9-4-85	X
Madison	6-28-74	8-4-88	7-3-95	8-4-88	X
Mercer	1-31-75	8-19-85	5-2-94	8-19-85	X
Moose River	-	-	-	-	
Moscow	12-6-74	11-1-85	11-1-85(M)	11-1-85	X
New Portland	1-27-74	8-19-85	8-19-85(M)	8-19-85	X
Norridgewock	12-6-74	6-3-88	5-6-96	6-3-88	X
Palmyra	11-29-74	8-19-85	8-19-85(M)	8-19-85	X
Pittsfield	9-6-74	8-19-85	1-19-96	8-19-85	X
Ripley	1-3-75	9-27-85	9-27-85(M)	9-27-85	X
St. Albans	4-11-75	9-27-85	9-27-85(M)	9-27-85	X
Skowhegan	10-18-74	1-5-89	9-20-95	1-15-89	X
Smithfield	1-12-75	9-4-85	9-4-85(M)	9-4-85	X
Solon	4-18-75	8-19-85	8-19-85(M)	8-19-85	X
Starks	4-18-75	3-18-87	4-2-00	3-18-87	X
Plantations (6)					
Brighton Plt.			?	?	X
Dennistown Plt.			NSFHA	4-30-84	X
Highland Plt.			NSFHA	4-30-84	X
Pleasant Ridge Plt.	2-14-75	11-1-85	11-1-85(M)	11-1-85	X
The Forks Plt.			NSFHA	4-30-84	X
West Forks Plt			NSFHA	4-30-84	X

¹ Source: FEMA Community Status Book Report as of December, 2016.

² Based on all available information, this community has adopted and continues to enforce a floodplain management ordinance, including regulating new construction in Special Flood Hazard Areas. Somerset EMA is not aware of any new construction in Special Flood Hazard Areas.

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C3. Goals

The Hazard Mitigation Planning Team reviewed the goals contained in the 2012 Hazard Mitigation Plan and determined that these goals should continue to guide this Hazard Mitigation Plan - 2017 Update. The goals relate to the hazards profiled in this plan and include the following:

Flooding: Reduce damage, injury and possible loss of life in Somerset County caused by flooding.

Severe Winter Storms: Reduce damage, injury and possible loss of life in Somerset County caused by severe winter storms erosion.

Wildfires: Reduce damage, injury and possible loss of life in Somerset County caused by wildfires.

Severe Summer Storms: Reduce damage, injury and possible loss of life in Somerset County caused by severe summer storms.

~~A. Comprehensive Range of Mitigation Actions and Projects~~

~~Pages 5-3 to 5-8 contain goals, objectives and strategic actions for each of the hazards identified earlier in this report, followed by a town by town summary of prioritized projects beginning on page 5-12.~~

~~The goals, objectives and mitigation actions were modified from the goals, objectives and mitigation actions contained in the 2005 plan. The Hazard Mitigation Planning Team relied heavily on MEMA staff input as well as Somerset County EMA's contacts with individual municipalities for the development of the prioritized mitigation projects.~~

~~B. Actions and Projects that Reduce Hazards on New Buildings and Structures~~

~~Flooding: See 1A, 1C and 2B~~

~~Severe winter and severe summer storms:~~

~~Note: there are no actions related to new structures because storm-related hazards such as roof collapses are adequately covered by the State's new building code which became effective on December 15, 2010~~

~~Wildfires: See 1B and 2A~~

~~C. Actions and Projects that Reduce Hazards on Existing Buildings and Structures~~

~~Flooding: See 1A, 1B, 2A, 2C, 3A and 3B~~

~~Severe winter and severe summer storms: See 3A and 3B~~

~~Wildfires: See 2A and 2B~~

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**Table 1
GOALS, OBJECTIVES AND STRATEGIC MEASURES (ACTIONS)**

FLOODING

In Somerset County, flooding is most often associated with the effects of severe summer storms, ice and snow build-up in the mountains and rivers, ice dams, and spring run-off. The County contains eight major rivers and many streams and lakes, and is in the foothills and mountains. It also has 74 dams, including 6 high hazard dams and 7 significant hazard dams which could cause significant flooding if there is a dam failure. The most likely damages resulting from flooding are the destruction of roads caused by washouts and undercutting. Most communities that have flooding issues have joined the National Flood Insurance Program and are controlling future development through the enforcement of a local flood hazard ordinance.

Goal/Mission Statement: Reduce loss of life, injury and property damage in Somerset County caused by flooding.

Objectives	Strategic Measures (Actions)	Responsibility	Timeframe	Status
1. Lessen loss of life and injuries resulting from flooding.	A. Wyman Dam. Work with government agencies to get the dam owner to upgrade the emergency notification system for Wyman Dam.	MEMA, County EMA, Local Communities		Deleted; not a County responsibility
	A. River Flow Advisory Commission. Work with the River Flow Advisory Commission to monitor ice conditions and river flows prior to and during flood events.	County EMA Director Local EMA directors	2017-2022 as the need arises	Somerset EMA continues to work with Advisory Commission
	B. 406 Funding. Encourage communities to maximize the use of 406 funds through the Public Assistance (PA) Program. Analysis: This is an important program. Because it is written into the PA scope of work and budget, the work can be completed more quickly than by going through the 404 grant program. Because the State pays 15% of the local share, the community only pays 10%, lessening the financial burden after a disaster for infrastructure protection and improvement.	County EMA Director	2017-2022 as 406 funds become available	New
		County EMA Director,		Continue as needed

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Objectives	Strategic Measures (Actions)	Responsibility	Timeframe	Status
	<p>C. Emergency Action Plans (EAP) Dam Safety drills. Continue to participate with FERC and State officials in EAP drills. in dam safety exercises.</p> <p>Analysis: Because High hazard potential dams can cause loss of life and property damage in the event of a failure, these exercises promote greater awareness of the risk and the need to keep the emergency plans current.</p>	Dam owners, Local EMA directors	2017-2022 as exercises are scheduled	
	<p>D. FEMA maps. Encourage FEMA to update flood boundary maps and flood insurance rate maps.</p>	County EMA Director, Municipalities		Deferred: limited FEMA funding for update Deleted; not a County responsibility
	<p>E. Special needs population. Maintain a list of special needs people who would be vulnerable during a power outage. Encourage the public to check on the safety of elderly or infirm neighbors and relatives who may be adversely affected by power outages.</p>	Municipal fire departments* Social service agencies Local EMA directors		Continue to maintain list; update as necessary Deleted; not a County responsibility
<p>2. Lessen property damages caused by flooding.</p>	<p>D. NFIP participation. Encourage participation in the flood insurance program where there are flooding problems, as well as actions needed to ensure municipal compliance with flood insurance requirements. including adoption of upgraded ordinances. Promote continued</p>	County EMA Director, MEMA, State Officials	2017-2022 as workshops are scheduled	Continue to contact municipal officials as needed Somerset EMA continues to provide NFIP information on its website and at workshops
	<p>B. Ordinance enforcement. Enforce local floodplain management ordinances so as to minimize future flood losses caused by new construction.</p>	Code Enforcement Officers Planning Boards		Continue to enforce as needed Deleted; not a County responsibility
		Somerset EMA, Local EMA		New Deleted; not a County responsibility

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Objectives	Strategic Measures (Actions)	Responsibility	Timeframe	Status
	C. Repetitive loss properties. Encourage municipalities to apply for funds to address repetitive loss properties, as long as it is cost beneficial.	directors, SPO, MEMA		
3. Ensure critical transportation links by making roads safe from flooding	E. Problem documentation. Encourage municipalities to document the costs of repairing recurring flood damages to ditches, culverts, roadway drainage systems and roads, using tools such as the Road Tracker.	MEMA, Somerset EMA, Local EMA's County EMA Director	2017-2022 as opportunities arise	New Currently included in workshops and training
	B. Grant applications. Where recurring problems can be documented, Apply for grants to upgrade roads, culverts, ditches and drainage systems and in accordance with plans for making roads safe from flooding.	MDOT Municipal Public Works Somerset County		Deferred. Lack of problem documentation has been an obstacle. More towns are beginning to use the Road Tracker to keep track of local expenditures Deleted; not a County responsibility
	F. Grant and Training Opportunities. Inform local officials of training exercises, technical assistance and potential funding opportunities aimed at infrastructure protection. Analysis: Since there is constant turnover of public officials, and funding resources constantly ebb and flow, keeping officials up to date with current information is critical to implementing these strategies.	EMA Director	2017-2022 as opportunities arise	New

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SEVERE WINTER AND SUMMER STORMS

In Somerset County, there have been six federally-declared winter storm disasters since 1998. The worst storm in the past decade **twenty years** was the ice storm of January, 1998, which caused \$1.3 million in damage throughout the entire County. Most winter storms in the County are blizzards that overwhelm highway snow removal operations and cause localized power outages. Winter storms can cause injuries or loss of life due to delayed responses from emergency services, the improper use of back-up heat sources, debris falling on an individual, or from storm-related vehicle accidents resulting from icy conditions, road wash-outs or erosion. Major winter storms can shut down businesses, resulting in major losses of income to local businesses and individuals. During the “January thaw,” and in the transition from winter to spring, frost heaves also cause damage to local roads.

In Somerset County, the most likely damages caused by a severe summer storm or hurricane are the loss of electrical power from downed power transmission lines, the blockage of roads from tree debris, wash-outs caused by water runoff that overwhelms local drainage systems, and erosion resulting from river flow. There could be injuries or loss of life caused by delayed responses from emergency services, debris falling on an individual, or from storm-related vehicle accidents resulting from downed tree limbs, road wash-outs. Other types of general damage to personal and real property may be caused by high winds. If power is lost for extended periods of time, major summer storms can shut down businesses, resulting in major losses of income to local businesses and individuals.

Goal/Mission Statement: Reduce loss of life, injury and property damage in Somerset County caused by winter storms, water runoff and erosion as well as severe summer storms and hurricanes.

Objectives	Strategic Measures (Actions)	Responsibility	Timeframe	Status
	<p>A. Generators. Assist municipalities in applying for fire or mitigation grant funds for generators at critical facilities that are not in flood hazard areas.</p> <p>Analysis: As of a FEMA policy change in 2012, generators are eligible for mitigation funding. Generators can ensure the proper functioning of critical facilities during emergencies, thus making the whole community more resilient.</p>	County EMA Director	2017-2022	New
	<p>B. 406 Funding. Maximize the use of 406 funds through the Public Assistance (PA) Program.</p> <p>Analysis: This is an important aspect of the PA program for several reasons. Because it is written into the PA scope of work and budget, the work can be completed more quickly</p>	County EMA Director	2017-2022 As 406 funds become available	New

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Objectives	Strategic Measures (Actions)	Responsibility	Timeframe	Status
	<p>than by going through the 404 grant program. Because the State pays a portion of the local share (15%), the community only pays 10%, lessening the financial burden after a disaster for infrastructure protection and improvement.</p>			
<p>1. Lessen loss of life and injuries resulting from severe winter storms, severe summer storms and hurricanes, including the resulting water runoff or erosion.</p>	<p>A. Public education. Develop an online brochure to educate the public about the dangers of severe storms. Include a link to the MEMA website. Emphasize:</p> <ul style="list-style-type: none"> • The importance of being self-supporting for up to 72 hours following a storm by having necessary emergency supplies on hand; ▪ How to keep warm; ▪ Where emergency shelters can be found; and ▪ The dangers of severe winter storms including heart stress when working in winter conditions, winter driving dangers, carbon monoxide poisoning from alternate heating sources, and the dangers of hypothermia. 	<p>County EMA Director</p>		<p>Deferred; as previously worded, this action was not specific about how to educate the public</p> <p>Deleted; not a County responsibility</p>
	<p>C. Website/Media Outreach. Include hazard mitigation information on the EMA website, social media and/or work with the media on public service announcements.</p>	<p>County EMA Director</p>	<p>2016-2021 as needed</p>	<p>New</p>
	<p>B. Shelter signs. Work with the Maine Emergency Management Agency to develop uniform emergency shelter signs to inform the public about these shelters.</p>	<p>Local EMA Directors Municipal governments</p>		<p>Deferred: Lack of funding Deleted; not a County responsibility</p>
	<p>C. Special needs population. Maintain a list of special needs people who would be vulnerable during a power outage. Encourage the public to check on the safety of elderly or infirm neighbors and relatives who may be adversely affected by power outages.</p>	<p>Municipal fire departments* Social service agencies Local EMA directors</p>		<p>Continue as needed Deleted; not a County responsibility</p>

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Objectives	Strategic Measures (Actions)	Responsibility	Timeframe	Status
2. Lessen property damages caused by severe winter storms, severe summer storms and hurricanes, and the resulting water runoff or erosion.	A. Public education. Develop an online brochure to educate the public about the dangers of severe storms. Include a link to the MEMA website. Emphasize ways to reduce real and personal property damage caused by severe storms including cutting large trees from around homes and driveways, freeze-proofing water pipes, cleaning rain gutters to prevent ice jams, keeping sidewalks and driveways cleared of snow, and removing snow loads from roofs. Continue to utilize County Fan-Out letters to notify school, nursing homes, and other critical facilities of severe storms.	County EMA Director Municipalities		Deferred; as previously worded, this action was not specific about how to educate the public Deleted; not a County responsibility
3. Ensure critical transportation links by prompt restoration of damaged roads.	A. Problem documentation. Encourage municipalities to document the costs of repairing recurring flood damages to ditches, culverts, roadway drainage systems and roads, using tools such as the Road Tracker.	MEMA, Somerset EMA, Local EMA's		New Deleted; see item D, below
	D. Grant and Training Opportunities. Inform local officials about training exercises, technical assistance and potential funding opportunities aimed at infrastructure protection. Analysis: Since there is constant turnover of public officials, and funding resources constantly ebb and flow, keeping officials up to date with current information is critical to implementing these strategies.	County EMA Director	2017-2022 as opportunities arise	New
	B. Grant applications. Where recurring problems can be documented, apply for grants to upgrade roads, culverts, ditches and drainage systems and in accordance with plans for making roads safe from winter storms, summer storms and hurricanes and water runoff.	MDOT Municipal Public Works Somerset County		Deferred. Lack of problem documentation has been an obstacle. More towns are beginning to use the Road Tracker to keep track of local expenditures

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Objectives	Strategic Measures (Actions)	Responsibility	Timeframe	Status
				Deleted; replaced by "D". above
	C. Training. Encourage attendance at Roads Scholar training offered by the Maine Department of Transportation	Municipal officials, public works		Some towns have participated in this program. Additional participation is anticipated during the next five years Deleted; replaced by "D". above
4. Ensure that all emergency facilities have back-up power.	A. Generators. Raise funds or apply for grants for installation of generators at critical facilities such as municipal offices, fire stations, designated shelters and schools (for example, Homeland Security Grants).	Municipal fire departments, town meetings, city councils, County EMA, Local EMA		Deferred due to poor economic conditions Deleted; replaced by "A" above

* Or other municipal officials if there is no municipal fire department.

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WILDFIRES

Somerset County is subject to wild land fires. ~~There have been at least 261 wild land fires in the County from 2005 to 2010.~~ The most likely damages caused by a wildfire are the loss of life, loss of prime timberland, and the destruction of personal and real property, especially homes. The loss of electricity is also possible, since many high voltage transmission lines pass through heavily wooded areas. Major wildfires may close commerce, resulting in major losses of income to local businesses and individuals.

Goal/Mission Statement: Reduce loss of life, injury and property damage in Somerset County caused by wildfires.

Objectives	Strategic Measures (Actions)	Responsibility	Timeframe	Status
1. Lessen loss of life and injuries resulting from wildfires.	A. Regional Approach to Fire Protection. Explore a regionalized approach to fire protection to better serve all Somerset County communities	County EMA, Municipal Fire Departments		New Deleted; replaced by "A", below
	A. Mutual Aid. Evaluate the status of mutual aid agreements. Provide assistance to municipalities for updating as necessary. Analysis: 90 percent of all fire fighters in Maine are volunteers. These volunteers must first leave their regular jobs to access the fire trucks and equipment <u>before</u> going to fight fires. Because few communities can support fully staffed fire departments, mutual aid is both a life-saver, and cost effective. There is wholehearted support for mutual aid and therefore a great deal of cooperation and support among municipal fire departments. This has bolstered the fire-fighting capabilities of all communities. Somerset EMA is actively involved with municipal emergency response capabilities.	County EMA Director	2017-2022 as needed with EMA Directors and fire departments	New
	B. Public Education. Educate the public through links on the County EMA website to the Maine Forest Service website about the dangers of forest fires to new and existing	County EMA		New Deleted; replaced by "B", below

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Objectives	Strategic Measures (Actions)	Responsibility	Timeframe	Status
	structures, particularly during dry conditions or a drought, and through outreach to the schools.			
	<p>B. Public Education. Notify local officials of fire prevention workshops offered by the Maine Forest Service (MFS). Include fire prevention information on the EMA website and social media. Include “fire-wise” information on the EMA website and social media.</p> <p>Analysis: The MFS has a wide variety of resources that can be accessed by the communities and businesses. These range from website information, social media, to individual consultations on methods for reducing potential damages from wildfires.</p>	County EMA Director	2017-2022 as needed	New
	<p>C. Grant applications. Apply for grants to improve local fire fighting facilities (for example: Homeland Security grants, FEMA grants, Department of Conservation grants).</p>	Municipal fire departments*		Apply as needed. Some local fire departments have applied for grants. Deleted; not a County responsibility
	<p>D. Special needs population. Maintain a list of special needs people who would be vulnerable during a power outage. Encourage the public to check on the safety of elderly or infirm neighbors and relatives who may be adversely affected by power outages.</p>	Municipal fire departments* Social service agencies Local EMA directors		Continue as needed Deleted; not a County responsibility
<p>2. — Lessen property damages caused by wildfires.</p>	<p>A. Fire ponds for subdivisions. Require that developers construct fire ponds or install dry hydrants in new subdivisions located in remote wooded areas, or other high risk areas.</p>	Planning boards, town meetings/city councils, Land Use Regulation Commission		Deferred: No development activity Deleted; not a County responsibility

* Or other municipal officials if there is no municipal fire department.

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Rating of Actions and Establishment of Priorities

The Somerset County Hazard Mitigation Planning Team established priorities by hazard for the general mitigation actions set forth on the previous pages. The Team used the following criteria to rank each of the actions:

1. Life safety
2. Population benefited
3. Probability of community acceptance
4. Probability of funding
5. Feasibility of implementation

Each strategy was rated high (3 points), medium (2 points) or low (1 point) for each of the criteria, with the result that priorities were established by total score (the higher the points, the higher the priority).

Rating of Flood Mitigation Actions						
	Life Safety	Population Benefited	Probability Community Acceptance	Probability Funding	Feasibility of Implementation	Total Score
1A Wyman Dam	3	3	3	2	3	14
A. River Flow Advisory Comm	1	1	3	3	3	11
B. 406 Funding	1	3	3	2	3	12
1C EAP Drills	3	3	3	3	3	15
C. Dam Safety Drills	3	1	2	3	3	12
1D FEMA maps	3	2	3	4	4	10
1E Special needs population	3	4	3	3	3	13
D. NFIP participation	2	2	3	3	3	13
2B Ordinance enforcement	2	4	3	3	3	12
2C Repetitive loss properties	3	4	3	4	4	9
2D Grant applications	3	4	3	4	4	9
E. Problem documentation	2	3	3	2	2	12
F. Grant and Training Opportunities. applications	1	3	2	1	1	8

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Rating of Severe Winter and Summer Storm Mitigation Actions						
	Life Safety	Population Benefited	Probability Community Acceptance	Probability Funding	Feasibility of Implementation	Total Score
A. Generators	2	3	3	2	3	13
B. 406 Funding	2	3	3	1	2	11
1A Public Education	3	3	3	3	3	15
C. Website Media Outreach	3	3	3	3	3	15
1B Shelter signs	3	4	3	3	3	13
1C Special needs population	2	4	3	3	3	12
2A Public Education	3	3	2	2	3	13
3A Problem documentation	2	3	3	4	2	11
D. Grant applications and Training Opportunities	2	3	3	1	1	10
3C training	3	3	3	2	3	14
4A Generators	4	2	4	4	3	8

Rating of Wildfire Mitigation Actions						
	Life Safety	Population Benefited	Probability Community Acceptance	Probability Funding	Feasibility of Implementation	Total Score
1A Regionalized approach to fire protection	3	3	2	4	2	11
A. Mutual Aid						
B. Public education	1	2	3	3	3	12
1C Grant applications	3	4	3	4	3	11
1D Special needs population	4	4	3	3	3	11
2A Fire ponds for subdivisions	4	4	2	3	3	10

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PRIORITIZED MITIGATION – LOCAL PROJECTS

~~Projects listed in priority order.~~ All municipalities in Somerset County identified one or more ~~action items~~ projects consistent with the County-wide goals, objectives and mitigation actions, to mitigate hazards at the local level. The jurisdictions, as well as the specific ~~actions~~ projects they will pursue, are listed in priority order in the following table. The time frames shown are based upon the ~~permitting requirements~~ and availability of materials and funding.

Criteria for prioritization. The list of local projects was developed separately by each municipality ~~in consultation with the County~~. Local officials did not use formal, written criteria for the identification of local projects. ~~Local officials utilized the following criteria to develop and informally prioritize the list of projects.~~

- ~~Local officials relied on common sense,~~
- local knowledge of the frequency and extent of local damages,
- local knowledge of ~~which projects were of the highest priority,~~ project priorities, based on frequency and severity of damages,
- local knowledge of the weather, the geography and topography of the community, and
- the technical and financial abilities of their respective communities to address hazards and mitigate the impacts of hazards.

How the actions will be implemented. ~~Table 2~~ The table below identifies a timeframe for each project, and identifies one or more parties who will be responsible for implementation. If the towns apply for grant funds, the FEMA benefit/cost analysis will be undertaken.

Use of a cost-benefit analysis. Many of the jurisdictions included in this Plan are small towns run by volunteers. These towns have tight budget constraints. They do not have staff, resources or funding to prepare cost-benefit analyses for the projects included in this plan. However, in virtually all cases involving expenditure of local funds for implementation, there will be a very rigorous, line-by-line analysis of cost effectiveness during the budget review process and subsequent public discussion. This review is at least equal to a formal cost-benefit calculation because each expenditure item will be scrutinized rather than simply being plugged into a formula. For purposes of grant applications and potential grant funding however, MEMA and the County EMA will work with local officials to prepare a formal FEMA cost-benefit analysis (BCA).

Timeframe. Some of the projects have been completed, as indicated in the table of projects. Some are newly listed. However, the clear majority of projects are carry-overs from the last plan update, so an approximate time frame has been assigned to each project, subject to the availability of funds which, in most cases, have not been secured as of this writing.

NOTE: It is understood that the time frames start when funding becomes available and permitting is obtained.

- Short Term: 1-2 years
- Medium Term: 3-4 years
- Long Term: 5 years

Municipal inaction to date does not mean lack of interest. Most municipalities do not have the funds to implement the projects, in part because scarce municipal resources are dedicated to winter and summer road maintenance, school costs and county budgets, to name a few, and municipal finances are also

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being squeezed by state funding cutbacks in revenue sharing, education, county jails and other areas of government.

The time frames set forth in this plan are subject to change if circumstances improve and funding sources become available.

~~Status of completed, deleted or deferred projects. Table 2 contains the prioritized list of town projects, including a status column.~~

Status. The projects were initially included in the Plan based on an expectation that there would be sufficient federal funds to help pay for many of the projects, but this has not been the case. Many municipalities simply do not have the resources to construct these projects using only local funds, and this has been indicated by the phrase “deferred, lack of funds.”

Potential Funding Sources.

Potential funding sources for local projects include, but are not limited to:

- Local tax money
- MaineDOT local road assistance funds
- FEMA Hazard Mitigation Assistance (HMA) grant funds
- Maine Department of Environmental Protection (DEP) culvert grants
- Community Development Block Grant (CDBG) funds
- Other (e.g. private benefactors, emerging grant programs)

D2. Progress in Local Mitigation Efforts

The table below reflects progress in local mitigation efforts. See status column.

D3. Revisions to Reflect Changes in Priorities

The table below reflects progress in local mitigation efforts. See discussion on how projects were prioritized, page 5-19

Note: References to culverts on the following pages refer to upsizing or lengthening culverts, unless otherwise stated. Over the years, FEMA has established project useful life standards for typical mitigation project types. FEMA’s project useful life standard for culverts ranges from 25-50 years, depending on type of materials used. Other examples are: generators - 19 years, elevations – 30 years, and acquisition/demolitions - 100+ years.

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**Table 2
Prioritized Mitigation Projects in Somerset County**

Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
Anson	1. Spear Hill Rd; upgraded with replacement bridge at Getchell Brook, 16' x 21.'	\$65,000	Completed	Road Commissioner	Completed
	2. Madison St; elevate 1,000' x 21' x 6'; repave.	\$125,000	Long Term	Road Commissioner	Deferred. Lack of funding
	3. Hollin Waite Rd; excavated 75' x 21' x 3'; installed geo textile fabric and refilled.	\$13,000	Completed	Road Commissioner	Completed
	4. Elevate roads subject to flooding including Hollin Waite Hill Road (Dane Corner); Madison Street on the end, Mayhew Road (also add culverts), Greenleaf Road	Unknown	Long Term	Road Commissioner	New
	5. Improve ditching, upsize culverts as needed.	Unknown	Long Term	Road Commissioner	New
Athens	1. Lords Hill Circle; ditch 12,000', install 15" x 40' culvert.	\$25,000	Short Term	Road Commissioner	75% Completed; ditching continuing
	2. Gilman Rd; ditched 1,000'.	\$2,200	Completed	Road Commissioner	Completed
	3. Hall Farm Rd; install (3) 18" x 40' culverts.	\$3,500	Short Term	Road Commissioner	Partially Completed
	4. Taylor Rd; upsize 18" x 40' & 36" x 40' culverts.	\$5,500	Short Term	Road Commissioner	Partially Completed
	5. South Merrill Rd; ditch 3,500'.	\$7,000	Short Term	Road Commissioner	Partially Completed
	6. Stickney Hill Rd; ditched 4,000'.	\$8,000	Completed	Road Commissioner	Completed

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Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
(Athens)	7. Ward Hill Rd; ditched 500'.	\$1,000	Completed	Road Commissioner	Completed
	8. Fox Hill Rd; ditch 1,000'.	\$2,000	Short Term	Road Commissioner	Partially Completed
	9. Leavitt Rd; ditch 4,500'.	\$9,000	Short Term	Road Commissioner	Partially Completed
	10. Floyd French Rd; upsize 15" x 32' culvert.	\$12,000	Short Term	Road Commissioner	Deferred. Lack of funding
Bingham	1. Geo engineer Kennebec River to return to original channel.	\$75,000	Long Term	Selectmen	Deferred. Lack of funding
	2. Geo engineer Austin Stream to return to original channel.	\$35,000	Long Term	Selectmen	Deferred. Lack of funding
	3. Installed additional alarm system for Wyman Dam.	\$15,000	Completed	Selectmen/Dam Owner	Completed
	4. Emergency generator for ambulance, communications center and high school.	\$18,000	Medium Term	Fire Department	Partially Completed, high school only
	5. Mahoney Hill Rd; elevated 400' x 4' x 20'; upsized (2) 36" x 40' culverts.	\$25,000	Completed	Road Commissioner	Completed
	6. Brighton Rd; upsize (3) 36" x 40' culverts.	\$12,000	Medium Term	Road Commissioner	Partially Completed
	7. Improve ditching, upsize culverts as needed.	Unknown	Long Term	Road Commissioner	New
Brighton Plantation	1. Lords Hill Circle; ditch 12,000', install 15" x 40' culvert.	\$25,000	Short Term	Road Commissioner	75% Completed; ditching continuing
Cambridge	1. Burden Hill Rd; ditch 1,000' & upsize 24" x 32' culvert.	\$3,500	Short Term	Road Commissioner	Deferred. Lack of funding

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Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
	2. Ham Hill Rd; ditch 2,500'.	\$5,000	Short Term	Road Commissioner	Deferred. Lack of funding
Canaan	1. Strickland Rd; elevated 2,000' x 20' x 2'; ditched 4,000' with check dams & upsized 18" x 30' culvert.	\$82,000	Completed	Road Commissioner	Completed
	2. Moores Mill Bridge: Upgrade with replacement bridge	\$250,000	Long Term	Road Commissioner	New
	3. Improve ditching, upsize culverts as needed	\$50,000	Long Term	Road Commissioner	Deferred. Lack of funding
Caratunk	1. Pleasant Pond Rd; upsized 3' x 4' x 40' box culvert; rip rap intake and outflow.	\$25,000	Completed	Road Commissioner	Completed
	2. Main St; upsized 36" x 40' culvert and rip rap.	\$5,500	Completed	Road Commissioner	Completed
	3. Improve ditching, upsize culverts as needed	Unknown	Long Term	Road Commissioner	New
Cornville	1. James Rd; improved bridge abutments; added wing walls 5' x 5'; added 3' x 40' overflow culvert.	\$35,000	Completed	Road Commissioner	Completed
	2. Babcock Rd; ditched 200'; upsized 18" x 40' culvert.	\$2,000	Completed	Road Commissioner	Completed
	3. Improve ditching, upsize culverts as needed	\$50,000	Long Term	Road Commissioner	Deferred. Lack of funding
Dennistown	1) Improve ditching, upsize culverts as needed	\$50,000	Long Term	Town has only ½ mile of local roads and a population of 30.	Deferred. Lack of funding

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Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
Detroit	1. Bassford Rd; ditched 10,000'.	\$20,000	Completed	Road Commissioner	Completed
	2. Horseback Rd; improve bridge abutments.	\$17,000	Long Term	Road Commissioner	Deferred. Lack of funding
	3. Improve ditching, upsize culverts as needed.	Unknown	Long Term	Road Commissioner	New
Embden	1. Lords Hill Circle; ditch 12,000', install 15" x 40' culvert.	\$25,000	Short Term	Road Commissioner	75% Completed; ditching continuing
	2. Take steps to make the Embden School an Emergency Shelter.	\$20,000	Short Term	Selectmen	Deferred. Lack of funding
	3. Dunbar Hill Road; upgrade road due to ledge coming out of the ground.	\$100,000	Medium Term	Road Commissioner	Deferred. Lack of funding
Fairfield	1. Old Center Rd; lengthened 72" culvert by 30' & rip rap intake & outflow.	\$11,000	Completed	Road Commissioner	Completed
	2. Improve ditching, upsize culverts as needed	\$50,000	Long Term	Road Commissioner	Deferred. Lack of funding
Harmony	1. North Rd; ditched 500'; installed check dams.	\$2,000	Completed	Road Commissioner	Completed
	2. Traffton Rd; ditched 200'; upsized 24" x 38' culvert & rip rap.	\$3,500	Completed	Road Commissioner	Completed
	3. Brown Rd; upsized 30" x 50' culvert & rip rap.	\$3,500	Completed	Road Commissioner	Completed
	4. Improve ditching, upsize culverts as needed	\$50,000	Short Term	Road Commissioner	Deferred. Lack of funding
Hartland	1. Munn's Flat Rd; upsized to 6' x 6' x 35' box culvert.	\$58,000	Completed	Road Commissioner	Completed

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Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
	2. Improve ditching, upsize culverts as needed	\$50,000	Short Term	Road Commissioner	Deferred. Lack of funding
Highland Plantation	1. Sandy Stream Rd; ditched 10,000' and re-shaped road.	\$22,000	Completed	Road Commissioner	Completed
(Highland Plantation)	2. County Rd; ditched 100'; added 10" gravel surface and shape.	\$2,000	Completed	Road Commissioner	Completed
	3. Howard Hill Rd; ditch 3,500'; added 10" gravel surface and shape.	\$35,000	Completed	Road Commissioner	Completed
	4. Improve ditching, upsize culverts as needed	\$50,000	Long Term	Road Commissioner	Deferred. Lack of funding
Jackman	1. Installed backflow preventers in 60 basements.	\$15,000	Completed	Public Works	Completed
	2. Install generators	\$2,500	Short Term	Selectmen	Deferred. Lack of funding
	3. Improve ditching, upsize culverts as needed	\$50,000	Long Term	Road Commissioner	Deferred. Lack of funding
Madison	1. Installed generator for the shelter and communications center	\$12,000 \$40,000	Completed	Fire Department	Completed
	2. Lake Wesserunsett; upgrade sluiceway with mechanized system.	\$28,000	Long Term	Public Works	Deferred. Lack of funding
	3. Kincaid Rd; upsized 36" x 28' culvert.	\$2,500	Completed	Road Commissioner	Completed

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Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
	4. Lower Mill Road Dam: Remove dam.	Unknown	Long Term	Road Commissioner	New
	5. Shusta Road: Upgrade culvert.	Unknown	Medium Term	Road Commissioner	New
Mercer	1. East Sandy River Road; upgrade 8' x 40' culvert.	Unknown	Short Term	Road Commissioner	Deferred. Lack of funding
	2. Ladd Rd; ditched 5,000'; installed check dams; add 36" x 40' culvert'.	\$19,000	Completed	Road Commissioner	Completed
	3. Elm St; ditched 15,000'; added 24" x 40' culvert.	\$32,000	Completed	Road Commissioner	Completed
	4. Rome Road; upgrade box culvert to 8' x 50'.	Unknown	Medium Term	Road Commissioner	Deferred. Lack of funding
	5. Northshore Drive; Upgrade culverts at town line, working with Smithfield	\$50,000	Medium Term	Road Commissioner	Partially Completed
	6. Improve ditching, upsize culverts as needed.	Unknown	Long Term	Road Commissioner	New
Moose River	1. Lords Hill Circle; ditch 12,000', install 15" x 40' culvert.	\$25,000	Short Term	Road Commissioner	75% Completed; ditching to continue
	2. Improve ditching, upsize culverts as needed	\$50,000	Long Term	Road Commissioner	Deferred. Lack of funding
Moscow	1. Geo engineered Austin Stream to return to original channel.	\$35,000	Completed	Selectmen	Completed
	2. Stream Rd @ Mink Brook; installed overflow culvert 36" x 60' and repaved.	\$6,000	Completed	Road Commissioner	Completed

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Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
	3. Improve ditching, upsize culverts as needed	\$50,000	Long Term	Road Commissioner	Deferred. Lack of funding
New Portland	1. Cole Grove Rd; upgraded bridge abutments; add (2) 16' x 4' culverts.	\$20,000	Completed	Road Commissioner	Completed
	2. Gillman Pond Rd; elevate 1,500' x 1' and stabilize slope.	\$16,000	Long Term	Road Commissioner	Deferred. Lack of funding
	3. Stafford Rd; upsize 36" x 40' overflow culvert.	\$3,500	Short Term	Road Commissioner	Deferred. Lack of funding
	4. Improve ditching, upsize culverts as needed	Unknown	Long Term	Road Commissioner	New
Norridgewock	1. Public library; stabilize river bank along Kennebec River 400' x 16' x 3'.	\$105,000	Short Term	Road Commissioner	Deferred. Lack of funding
	2. Father Rasle Rd; upsized 96" x 40' culvert.	\$8,000	Completed	Road Commissioner	Completed
	3. Sandy River Rd; elevate 400' x 4'; add 48" x 40' cross culvert.	\$25,000	Short Term	Road Commissioner	Deferred. Lack of funding
	4. Improve ditching, upsize culverts as needed	Unknown	Long Term	Road Commissioner	New
Palmyra	1. Bagerboro Rd; ditched 5,000'; blasted ditch line 2,000'.	\$75,000	Completed	Road Commissioner	Completed
	2. Square Rd; ditched 400'; installed check dams in ditch line.	\$2,000	Completed	Board of Selectmen	Completed
	3. Shy Rd (a); placed geo textile on 1,200' x 26' of road; replaced 12' gravel and installed 24" x 30' culvert.	\$32,000	Completed	Road Commissioner	Completed

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Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
	4. Shy Rd (b): Add 18" x 40' culvert 2,500 feet in from Route 152. Remove 1,500' of road, replace with good material, approximately 35 yards of gravel. Ditch 1,000'; add 100 yards surface gravel.	\$45,000	Short Term	Road Commissioner	New
	5. Smith Rd: Clear 1,000' ditch on Route 100 end. Upgrade culvert to 24" x 40'. Elevate ½ mile of road about 1 1/5 feet.	\$40,000	Short Term	Road Commissioner	New
	6. Improve ditching, upsize culverts as needed	\$50,000	Short Term	Road Commissioner	Deferred. Lack of funding
Pittsfield	1. Paltoma Ave; elevated 7,000' x 2' x 26'; added (7) 24" x 40' cross culverts and repave.	\$360,000	Completed	Road Commissioner	Completed
	2. Improve ditching, upsize culverts as needed	\$50,000	Short Term	Road Commissioner	Deferred. Lack of funding
Pleasant Ridge Plt.	1. Carry Pond Rd; rip rap; installed 50' x 6' x 3' culvert.	\$16,000	Completed	Road Commissioner	Completed
	2. Improve ditching, upsize culverts as needed	\$50,000	Short Term	Road Commissioner	Deferred. Lack of funding
Ripley	1. North Rd; upsize 60" x 30' culvert & rip rap.	\$7,000	Short Term	Road Commissioner	Deferred. Lack of funding
	2. Curtis Rd; upsize 60" x 30' culvert & rip rap.	\$7,000	Short Term	Road Commissioner	Deferred. Lack of funding
	3. Improve ditching, upsize culverts as needed	Unknown	Short Term	Road Commissioner	New

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Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
St. Albans	1. Devils Head Rd; ditch 15,000'; install check dams in ditch.	\$34,000	Short Term	Road Commissioner	Deferred. Lack of funding
	2. Springer Rd; upsize to 15' x 50' box culvert with head walls to be engineered.	\$45,000	Short Term	Road Commissioner	Deferred. Lack of funding
	3. Ripley Rd; upsize to 72" x 40' squash pipe; rip rap intake and outflow.	\$10,000	Short Term	Road Commissioner	Deferred. Lack of funding
	4. Denbow Road; Upsize culvert	\$30,000	Short Term	Road Commissioner	Deferred. Lack of funding
Skowhegan	1. 1097 River Rd; buy out & remove 600 sq' home & restore land.	\$75,000		Selectmen	Deferred. Lack of funding-see new #1 below
	2. 1115 River Rd; buy out & remove 1,900 sq' house & restore land.	\$110,000		Selectmen	Deferred. Lack of funding-see new #1 below
	1. Acquire and demolish, or relocate frequently flooded homes, depending on cost beneficial aspects of project and voluntary participation.	Unknown	Long Term	Selectmen	New
	2. Relocate fire station out of floodplain.	\$4.5 million	Long Term	Selectmen, Fire Department	Deferred. Lack of funding
	3. 39 Back Rd; bought out & removed 720 sq' mobile home & restored land.	\$65,000	Completed	Selectmen	Completed
	4. Half Moon Bridge; mitigated damages per engineering report.	\$152,000	Completed	Road Commissioner	Completed
	5. Bigelow Hill Rd; upsized 15" x 50' squash pipe & rip rap intake and outflow.	\$45,000	Completed	Road Commissioner	Completed
	6. Red Bridge Rd; upgrade with replacement bridge 24' x 70'.	\$100,000	Short Term	Road Commissioner	Deferred. Lack of funding

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Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
	7. Steward Hill Rd; upsize 15" x 40' squash pipe & rip rap intake and outflow.	\$40,000	Short Term	Road Commissioner	Deferred. Lack of funding
	8. East Ridge Rd; elevated 1,250' x 18"; added 36" x 40' culvert and repave.	\$100,000	Completed	Road Commissioner	Completed
	9. Generator; purchase and install generator for the Recreation Center	\$5,000	Short Term	Selectmen	Deferred. Lack of funding
	10. Improve ditching, upsize culverts as needed	Unknown	Short Term	Road Commissioner	New
Smithfield	1. North Shore Rd; ditched 300'; upsized 84" x 40' culvert & repave.	\$9,000	Completed	Road Commissioner	Completed
	2. Sands Hill Rd; ditched 400'; upsized (3) 24" x 40' culverts.	\$7,000	Completed	Road Commissioner	Completed
	3. Oaks Hill Rd; ditched 500'; upsized 24" x 40' culvert.	\$2,000	Completed	Road Commissioner	Completed
	4. Bickford Rd; ditched 1,400', upsized 30" x 40' plastic culvert.	\$4,500	Completed	Road Commissioner	Completed
	5. Miller Lane; ditch 1,600', upsize 30" x 40' plastic culvert.	\$5,000	Medium Term	Road Commissioner	Deferred. Lack of funding
	6. Quaker Lane; ditched 450'; upsized 24" x 40' plastic culvert; rip rap and repaved.	\$4,000	Completed	Road Commissioner	Completed
	7. Improve ditching, upsize culverts as needed	Unknown	Short Term	Road Commissioner	New
Solon	1. Parkman Hill Rd; Raised road and lengthened culvert 10' x 50' and rip rap.	\$13,000	Completed	Selectmen	Completed 2007 HMPG DR-1591-05

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Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
(Solon)	2. Purchased generators for fire station and municipal building,	\$12,000	Completed	Selectmen, Fire Department	Completed
	3. Improve ditching, upsize culverts as needed	\$50,000	Long Term	Road Commissioner	Deferred. Lack of funding
Starks	1. Sawyer Mill Rd; upgraded bridge abutments, 19' x 10'.	\$25,000	Completed	Road Commissioner	Completed
	2. Locke Cemetery Rd; ditched 5,000' and added gravel.	\$23,000	Completed	Road Commissioner	Completed
	3. Improve ditching, upsize culverts as needed	\$50,000	Long Term	Road Commissioner	Deferred. Lack of funding
The Forks Plantation	1. Moxie Lake Rd; ditched 600' and seeded and ditched.	\$1,500	Completed	Road Commissioner	Completed
	2. Improve ditching, upsize culverts as needed	\$50,000	Long Term	Road Commissioner	Deferred. Lack of funding
West Forks Plantation	1. Dead River Rd; Lengthened culvert 48" x 32'.	\$4,500	Completed	Road Commissioner	Completed
	2. Improve ditching, upsize culverts as needed	\$50,000	Long Term	Road Commissioner	Deferred. Lack of funding
Unorganized Territory (UT)	1. Lexington, Back Rd; lower portion of road 1,200' x 20' x 4'; add (2) 48" x 60' culverts & pave & toe in 400' low water crossing.	\$36,000	Long Term	Road Commissioner	Deferred. Lack of funding

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Town	Project (in Priority Order)	Cost	Time Frame	Responsible Agency	Status
(UT)	2. Lexington, Round Up Rd; add 25' x 10' each end to existing culvert and rip rap intake and outflow.	\$15,000	Short Term	Road Commissioner	Deferred. Lack of funding
	3. Concord, Cool Rd; lower portion of road, 400' x 24' x 2' & paved & toed in 400' x 24' low water crossing.	\$26,000	Completed	Road Commissioner	Completed

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15. Identification and Analysis of Mitigation Actions: National Flood Insurance Program (NFIP) Compliance	
Requirement §201.6(c)(3)(ii): (The mitigation strategy) must also address the jurisdiction's participation in the National Flood Insurance Program (NFIP), and continued compliance with NFIP requirements, as appropriate.	
Elements	A. Does the new or updated plan describe the jurisdiction's participation in the NFIP?
	B. Does the mitigation strategy identify, analyze and prioritize actions related to continued compliance with the NFIP?

A. Participation in the NFIP. All but two towns and one plantation in Somerset County are in the Flood Insurance Program, as shown in the Table below. The Effective Date is based on the Federal Emergency Management Agency's Community Status Book Report. Please note that Somerset County's portion of the Unorganized Territory is also in the National Flood Insurance Program.

Somerset County Communities Participating in the National Flood Insurance Program			
Town	Effective Date	Town	Effective Date
Anson	7-15-85	New Portland	8-19-85
Athens	Not in program	Norridgewock	6-3-88
Bingham	9-27-85	Palmyra	8-19-85
Cambridge	9-27-85	Pittsfield	8-19-85
Canaan	9-27-85	Ripley	9-27-85
Caratunk	11-1-88	St. Albans	9-27-85
Cornville	9-27-85	Skowhegan	1-5-89
Detroit	8-19-85	Smithfield	9-4-85
Embdon	8-4-85	Solon	8-19-85
Fairfield	2-17-88	Starks	3-18-87
Harmony	9-27-85	Brighton Plantation	Not in program
Hartland	1-1-91	Dennistown Plt	4-30-84
Jackman	9-4-85	Highland Plantation	4-30-84
Madison	8-4-88	Pleasant Ridge Plt	11-185
Mercer	8-19-85	The Forks Plt	4-30-84
Moose River	Not in program	West Forks Plt	4-30-84
Moscow	11-1-85		

Source: FEMA Community Status Book

B. Actions related to continued compliance with the NFIP. Actions related to continued compliance with the NFIP are on pages 5-3 and 5-4, specifically:

2.A. NFIP Participation — this is the top ranked priority related to the flood insurance program because all but three communities participate in the program and it is likely that this high rate of participation will continue. However, it's important that the three non-participating communities be encouraged to participate (non-participation is due to the fact that serious flooding is not perceived to be an issue and populations are small: Brighton Plantation- 70; Moose River- 218; Athens- 1,019).

2.B. Ordinance Enforcement — this is the second-ranked priority related to the NFIP. It is ranked second because effective enforcement of the floodplain management ordinance is critical to continued compliance with the requirements of the NFIP.

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~~2.C. Repetitive Loss Properties~~— this is the third-ranked priority related to the NFIP. It is ranked third because the prospects for project application and funding are not assured.

~~1.D. Improved Maps~~— this is the fourth-ranked priority related to the NFIP because many maps are obsolete and while there is new LIDAR data for much of the coast, it still needs to be incorporated by FEMA.

The Maine State Planning Office administers the State’s Flood Insurance Program and encourages non-participating municipalities to join. Municipal failure to join is often based on a resistance to adopting ordinances and/or a perceived lack of need (lack of significant flood plain areas and/or lack of structures in identified flood plain areas).

16. Implementation of Mitigation Actions	
Requirement §201.6(c)(3)(iii): (The mitigation strategy section shall include) an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented and administered at the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.	
Elements	A. Does the new or updated mitigation strategy include (a discussion about) how the actions are prioritized? (For example, is there a discussion of the process and the criteria used?)
	B. Does the new or updated mitigation strategy address how the actions will be implemented and administered, including the responsible department, existing and potential resources and the timeframe to complete each action?
	C. Does the new or updated prioritization process include an emphasis on the use of a cost benefit review to maximize benefits?
	D. Does the updated plan identify the completed, deleted or deferred mitigations as a benchmark for progress, and if actions are unchanged (i.e., deferred) does the updated plan describe why no changes occurred?

A. How the actions are prioritized.

- ~~**County-wide actions.**~~ Long-range mitigation actions are important in developing a coherent strategy for mitigating hazards. The county-wide mitigation actions included on pages 5-3 through 5-8 are prioritized on pages 5-9 to 5-10 according to criteria described on page 5-9.
- ~~**Town-specific projects.**~~ Projects shown on pages 5-12 through 5-16, are subject to FEMA requirement #16. However, in a multi-jurisdiction plan involving many municipalities, it is not possible to compare projects across municipal boundaries because very few if any officials will have a detailed understanding of each project and how they compare to those in other communities. The preparation of cost benefit analyses is part of the project funding application process and will be undertaken at the time municipalities decide to apply for grants. Instead of a formal process for prioritizing projects, each municipality is asked to prioritize its own projects. See introductory statements to Prioritized Mitigation Projects on page 5-11 for a discussion about how these projects were prioritized.

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~~**B. How the actions and projects will be implemented and administered.** See county-wide goals, objectives and mitigation actions on pages 5-3 to 5-8 for a summary of who will be responsible for implementation as well as the current status of each action. See Prioritized Mitigation Projects beginning on page 5-12 for a project-by-project summary of costs, timeframe and responsible party.~~

~~**C. Use of a cost-benefit analysis.** MEMA will utilize the FEMA cost-benefit analyses tool when communities apply for mitigation funding.~~

Many of the jurisdictions included in this Plan are small towns run by volunteers. They do not have staff, resources or funding to prepare cost-benefit analyses for the projects included in this Plan. However, in virtually all cases involving expenditure of local funds for implementation, there will be a very rigorous, line-by-line analysis of cost effectiveness during the local budget review process and subsequent public discussion. This review is at least equal to a formal benefit-cost calculation because each expenditure item will be carefully scrutinized rather than simply being plugged into a formula. Nevertheless, MEMA and the County EMA have made it clear to local officials that a cost-benefit analysis will have to be prepared in the event they apply to MEMA for mitigation funding.

D. Benchmarks for progress

See the “Status/Rationale if no Action” column in General Goals, Objectives and Mitigation Actions beginning on page 5-3 of this Plan.

See the “Status” column in Summary of Hazard Mitigation Projects by Municipality beginning on page 5-12 of this Plan.

17. Multi-Jurisdictional Mitigation Actions	
Requirement §201.6(c)(3)(iv): For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.	
Elements	A. Does the new or updated plan include identifiable action items for each jurisdiction requesting FEMA approval of the plan?
	B. Does the updated plan identify the completed, deleted or deferred mitigation actions as a benchmark for progress, and if activities are unchanged (i.e., deferred), does the updated plan describe why no changes occurred?

A. Identifiable action items specific to jurisdictions

(See pages 5-12 to 5-18)

B. Status of mitigation actions

(See Status “Status” column on pages 5-12 to 5-18)