

# State and Local Capabilities

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## Section 4 – State Capabilities

Stafford Act 44 CFR §201.4(c)(3)(i)-(ii),(iv)-(v)<sup>1</sup>

### 4.1 State Mitigation Authorities [S8.a.]

The State of Maine has established several capabilities that directly or indirectly support natural hazard mitigation efforts, several of which have been introduced since the 2018 State Hazard Mitigation Plan (SHMP) update. This section describes State land use laws, building codes, NFIP administration, and mitigation funding. The State Mitigation Funding Capability Assessment Matrix (Table 4.1) and State Mitigation Non-Funding Capability Assessment Matrix (Table 4.2) offer a more detailed inventory of funding, programs, plans, policies, regulations, or practices to support mitigation. These tables include the funding source agency, an evaluation of their effect on mitigation efforts, and the specific hazard addressed.

#### 4.1.1 Land Use Laws and Policies [S8.a.1.]

Maine has several policies related to land use and development in hazard prone areas, described here.

##### [Executive Order Dated March 4, 1968](#)

Evaluation of Flood Hazard in Locating State Owned, State Insured, and State Approved Public Improvements and Other Facilities<sup>2</sup> – This executive order precludes future development of state assets within known flood hazard areas to lessen risks of flood losses in connection with State-owned lands and installations and State insured or State-approved or supported improvements.

##### [Mandatory Shoreland Zoning Act](#)

The Mandatory Shoreland Zoning Act<sup>3</sup> requires municipalities to adopt, administer, and enforce local ordinances that regulate land use activities in the shoreland zone. The shoreland zone is comprised of all land areas within 250 feet, horizontal distance, of the normal high-water line of any great pond or river; upland edge of a coastal wetland, including all areas affected by tidal action; upland edge of defined freshwater wetlands; and all land areas within 75 feet, horizontal distance, of the normal high-water line of certain streams. The purposes are as follows:

- to prevent and control water pollution;
- to protect fish spawning grounds, bird and wildlife habitat;
- to protect buildings and lands from flooding and accelerated erosion;
- to protect archeological and historic resources;
- to protect commercial fishing and maritime industries;
- to protect freshwater and coastal wetlands;
- to control building sites, placement of structures and land uses;
- to conserve shore cover, and visual as well as actual points of access to inland and coastal waters;
- to conserve natural beauty and open space; and
- to anticipate and respond to the impacts of development in shoreland areas.

<sup>1</sup> Stafford Act 44 CFR §201.4: <https://www.law.cornell.edu/cfr/text/44/201.4>

<sup>2</sup> Executive Order Dated March 4, 1968: [http://lldc.mainelegislature.org/Open/Exec/ExecutiveOrders/66\\_Curtis/1968/eo\\_1968no01.pdf](http://lldc.mainelegislature.org/Open/Exec/ExecutiveOrders/66_Curtis/1968/eo_1968no01.pdf)

<sup>3</sup> Mandatory Shoreland Zoning Act: <https://www.maine.gov/dep/land/slz/>

Since shoreland zoning regulations are administered and enforced by each municipality through municipal specific ordinances, the local code enforcement officer is typically the first point of contact for shoreland zoning questions. Shoreland Zoning Staff at the Department of Environmental Protection assist municipalities with shoreland zoning related questions and issues, as well as provide technical assistance and training on the shoreland zoning rules.

The Department of Environmental Protection also regulates Stormwater Management<sup>4</sup> and Dam Licensing<sup>5</sup> statutes, regulations and programs. These programs and regulations deal with the man-made causes of stormwater reduction capability and water body retention. The Stormwater Management Law does not apply to small projects, including the construction of single-family dwellings. The Shoreland Zoning Program now requires that significant coastal landslide hazard areas be included in a Resource Protection District in which development is prohibited. This effectively prohibits development in these hazard areas.

### [Municipal Planning Assistance Program](#)

The Municipal Planning Assistance Program provides land use planning expertise for Maine citizens, municipalities, regional planning organizations, state agencies and the Legislature, and promotes growth management principles in state and local policies, programs, regulations and investments by:

- Providing financial and technical assistance
- Coordinating with State agencies
- Implementing Maine's Growth management Act

Upon request from a town's comprehensive planning committee, the Municipal Planning Assistance Program will collect and share certain state agency data<sup>6</sup> that are appropriate and useful to towns undertaking a local comprehensive planning effort including State and Local hazard Mitigation Plans. The partnership between the Municipal Planning Assistance Program and MEMA is important to ensure that products from Local Hazard Mitigation Plans are presented to municipalities and integrated into comprehensive plans.

Related to this program is Maine Subdivision Law<sup>7</sup>, which enforces a process and requirements for the division of a parcel of land for residential use. However, natural hazard mitigation is currently not incorporated into subdivision law.

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<sup>4</sup> Maine DEP Stormwater: <https://www.maine.gov/dep/land/stormwater/index.html>

<sup>5</sup> Maine DEP hydropower state process: <https://www.maine.gov/dep/land/dams-hydro/index.html#state>

<sup>6</sup> MPAP planning data: [https://www.maine.gov/dacf/municipalplanning/comp\\_plans/planning\\_data.shtml](https://www.maine.gov/dacf/municipalplanning/comp_plans/planning_data.shtml)

<sup>7</sup> Maine Subdivision Law: [https://www.maine.gov/dacf/municipalplanning/docs/2011\\_subdivision\\_law\\_presentation.pdf](https://www.maine.gov/dacf/municipalplanning/docs/2011_subdivision_law_presentation.pdf)

### Growth Management Act

Enacted in 1988, The Growth Management Act establishes a set of State goals providing overall direction and consistency to the planning and regulatory actions of all state and municipal agencies affecting natural resource management, land use, and development. The Legislature declares that, in order to promote and protect the health, safety and welfare of the citizens of the State, it is in the best interests of the State to achieve the following goals:

- To encourage orderly growth and development in appropriate areas of each community and region while protecting the State's rural character, making efficient use of public services and preventing development sprawl;
- To plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development;
- To promote an economic climate which increases job opportunities and overall economic well-being;
- To promote and work to ensure choice, economic diversity and affordability in housing for low-income and moderate-income households and use housing policy to help address disparities in access to educational, occupational and other opportunities;
- To protect the quality and manage the quantity of the State's water resources, including lakes, aquifers, great ponds, estuaries, rivers and coastal areas;
- To protect the State's other critical natural resources including, without limitation, wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic vistas, and unique natural areas;
- To protect the State's marine resources industry, ports and harbors from incompatible development and to promote access to the shore for commercial fishermen and the public;
- To safeguard the State's agricultural and forest resources from development which threatens those resources;
- To preserve the state's historic and archeological resources;
- To promote and protect the availability of outdoor recreation opportunities for all Maine citizens, including access to surface waters
- To encourage municipalities to develop policies that accommodate older adults with aging in place and that encourage the creation of age-friendly communities; and
- To plan for the effects of the rise in sea level on buildings, transportation infrastructure, sewage treatment facilities and other relevant state, regional, municipal or privately held infrastructure, property or resources.

### United States Coastal Zone Management Act

As required by the United States Coastal Zone Management Act<sup>8</sup> of 1972, PL 92-583, the Legislature directs state and local agencies and federal agencies, with responsibility for regulating, planning, developing, or managing coastal resources, to conduct their activities affecting the coastal area consistent with nine policies. The program is administered by NOAA and there are basic requirements for state partners<sup>9</sup>, but it also allows the flexibility needed to design programs that best address local challenges identified individually by each coastal state. Maine's Coastal Program Outlook report indicates coastal hazards as a high priority<sup>10</sup>. Maine's State Coastal Policies are as follows:

- Port and harbor development. Promote the maintenance, development and revitalization of the State's ports and harbors for fishing, transportation and recreation;
- Marine resource management. Manage the marine environment and its related resources to preserve and improve the ecological integrity and diversity of marine communities and habitats, to expand our understanding of the productivity of the Gulf of Maine and coastal waters and to enhance the economic value of the State's renewable marine resources;
- Shoreline management and access. Support shoreline management that gives preference to water-dependent uses over other uses, that promotes public access to the shoreline and that considers the cumulative effects of development on coastal resources;
- Hazard area development. Discourage growth and new development in coastal areas where, because of coastal storms, flooding, landslides or sea-level rise, it is hazardous to human health and safety;
- State and local cooperative management. Encourage and support cooperative state and municipal management of coastal resources;
- Scenic and natural areas protection. Protect and manage critical habitat and natural areas of state and national significance and maintain the scenic beauty and character of the coast even in areas where development occurs;
- Recreation and tourism. Expand the opportunities for outdoor recreation and encourage appropriate coastal tourist activities and development;
- Water quality. Restore and maintain the quality of our fresh, marine and estuarine waters to allow for the broadest possible diversity of public and private uses; and
- Air quality. Restore and maintain coastal air quality to protect the health of citizens and visitors and to protect enjoyment of the natural beauty and maritime characteristics of the Maine coast.

The Growth Management Law, including state Coastal Zone management Act programs, requires an evaluation every four years (MRS 30-A § 4331) of the state, regional and local efforts to achieve the purposes and goals of the law<sup>11</sup>.

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<sup>8</sup> Coastal Zone Management Act: <https://coast.noaa.gov/czm/act/>

<sup>9</sup> Maine Coastal Program Federal Consistency Review: [https://www.maine.gov/dmr/sites/maine.gov/dmr/files/inline-files/Final\\_Maine\\_Guide\\_to\\_Federal\\_Consistency\\_Review\\_5thed\\_update5\\_rev1\\_0.pdf](https://www.maine.gov/dmr/sites/maine.gov/dmr/files/inline-files/Final_Maine_Guide_to_Federal_Consistency_Review_5thed_update5_rev1_0.pdf)

<sup>10</sup> Maine Coastal Program Outlook: [https://www.maine.gov/dmr/sites/maine.gov/dmr/files/inline-files/MCP%20Strategic%20Outlook%202021\\_2025\\_CZMA%20309%20Assessment\\_PUBLIC%20VERSION\\_NOAA\\_Approved\\_3.29.23\\_0.pdf](https://www.maine.gov/dmr/sites/maine.gov/dmr/files/inline-files/MCP%20Strategic%20Outlook%202021_2025_CZMA%20309%20Assessment_PUBLIC%20VERSION_NOAA_Approved_3.29.23_0.pdf)

<sup>11</sup> Growth Management Evaluation 2023: <https://www.maine.gov/dacf/municipalplanning/docs/growthmanagementevaluation2023.pdf>

### Land Use Planning Commission

The Maine Land Use Planning Commission<sup>12</sup> serves as the planning and zoning authority for the unorganized and deorganized areas of the State, including townships and plantations. These areas either have no local government or have chosen not to administer land use controls at the local level. Along with carrying out its planning and zoning responsibilities, the LUPC issues permits for smaller development projects, such as home constructions and camp renovations. For larger development projects requiring Department of Environmental Protection review under the Site Location of Development Law, the LUPC certifies that proposed land uses are allowed and that proposed development activities comply with applicable LUPC land use standards.

The responsibility of serving the unorganized and deorganized areas of Maine and helping guide land use in these areas represents a unique challenge. These areas covers over half the State, encompassing more than 10.4 million acres and include the largest contiguous undeveloped area in the northeast. The unorganized and deorganized areas include several coastal islands and portions of downeast Maine, and stretch across the western mountains and up to the Canadian border. The Legislature created the Commission to extend principles of sound planning, zoning and development to the unorganized and deorganized areas of the State to:

- Preserve public health, safety and general welfare;
- Support and encourage Maine's natural resource-based economy and strong environmental protections;
- Encourage appropriate residential, recreational, commercial and industrial land uses;
- Honor the rights and participation of residents and property owners in the unorganized and deorganized areas while recognizing the unique value of these lands and waters to the State;
- Prevent residential, recreational, commercial and industrial uses detrimental to the long-term health, use and value of these areas and to Maine's natural resource-based economy;
- Discourage the intermixing of incompatible industrial, commercial, residential and recreational activities;
- Prevent the development in these areas of substandard structures or structures located unduly proximate to waters or roads;
- Prevent the despoliation, pollution and detrimental uses of the water in these areas; and
- Conserve ecological and natural values.

The Land Use Planning Commission is responsible for regulating floodplain development in adherence with the National Flood Insurance Program<sup>13</sup>.

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<sup>12</sup> LUPC: <https://www.maine.gov/dacf/lupc/index.shtml>

<sup>13</sup> LUPC Land Use Districts and Standards: [https://www.maine.gov/dacf/lupc/laws\\_rules/ch10.html](https://www.maine.gov/dacf/lupc/laws_rules/ch10.html)

### [Natural Resources Protection Act](#)

The intent of Maine's Natural Resources Protection Act<sup>14</sup> is to protect natural resources by requiring permitting for any activity that would be in a natural resource area or adjacent to any body of water. Natural hazards such as flooding or erosion may be more likely to occur in these areas and so the natural Resources Protection Act is relevant to hazard mitigation goals. For example, Coastal Sand Dune Rules<sup>15</sup> require that new coastal development will not increase erosion or flood hazards to sand dune systems.

### [National Historic Preservation Act](#)

The Maine Historic Preservation Commission (MHPC)<sup>16</sup> implements Section 106 of the National Historic Preservation Act (as amended), which aims to protect historic and cultural properties from unintentional federal action. A federal action can be through a permit, license, or funding. It is the Commission's goal, through the project review process, to protect historic properties in the State of Maine while striking a balance between the public interest in historic preservation and governmental, commercial, and private interests in various initiatives.

When a project uses federal funds or requires a federal or state permit or federal license, the State Historic Preservation Office has the opportunity to comment on the project's effect on historic resources. Section 106 requires federal agencies to consult with the State Historic Preservation Office to:

- Identify historic properties in the project area and determine their eligibility for the National Register of Historic Places
- Consider the effect of their projects on historic properties
- Seek ways to avoid or reduce adverse effects to historic properties

Since the creation of the Maine Historic Resources Inventory in the early 1970s MHPC staff, consultants, federal and state agencies, municipalities, and volunteers have surveyed and recorded over 60,000 above ground resources and identified over 10,000 archaeological sites. This in turn enables us to identify those properties which merit nomination to the National Register of Historic Places and to thereby extend protection to those resources.

### [Coastal and Estuarine Land Conservation Program](#)

The Coastal and Estuarine Land Conservation Program<sup>17</sup> is authorized as part of the Coastal Zone Management Act to protect coastal lands that are ecologically important or possess other coastal conservation values relevant for hazard mitigation.

From 2002 to 2019, the Coastal and Estuarine Land Conservation Program protected more than 110,000 acres through funds to state and local governments to purchase threatened coastal and estuarine lands or obtain conservation easements, including over 16,000 acres protected as in-kind matching contributions.

### [Coastal Zone Enhancement Program](#)

Improvements to state and territory coastal management programs are encouraged through the Coastal Zone Enhancement Program<sup>18</sup>. The focus is on nine enhancement areas: wetlands, coastal hazards, public access, marine debris, cumulative and secondary impacts, special area management plans, ocean and Great Lakes resources, energy and government facility siting, and aquaculture. The program was established in 1990 under Section 309 of the Coastal Zone Management Act.

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<sup>14</sup> Natural Resources Protection Act: <https://www.maine.gov/dep/land/nrpa/>

<sup>15</sup> Sand Dune Rules: <https://www.maine.gov/dacf/mgs/pubs/online/dunes/dunes-exp.htm>

<sup>16</sup> MHPC Project Review: <https://www.maine.gov/mhpc/programs/project-review>

<sup>17</sup> Coastal and Estuarine Land Conservation program: <https://coast.noaa.gov/czm/landconservation/>

<sup>18</sup> Coastal Zone Enhancement program: <https://coast.noaa.gov/czm/enhancement/>

### Road Repair and Local Technical Assistance

The Maine Department of Transportation is responsible for the repair, maintenance, and upgrade work to state-owned highways. When funds are available, the Maine DOT upgrades and/or elevates road surfaces to reduce the possibility of flood damage to roads. The Maine DOT also maintains the Maine Local Roads Center which provides technical assistance to municipalities for completing the same actions. There is seldom sufficient funding, either at the state or municipal level, to complete all the roadwork that is necessary.

Maine, however, has made significant progress in recent years by helping communities mitigate flood damages to roads, bridges, ditches, and culverts. The Maine Emergency Management Agency has partnered with the Local Roads Center to sponsor a series of ongoing workshops throughout the state on the use of geo-synthetics to mitigate flood damages to local transportation systems through the stabilization of banks, fill, rip-rap, improvements to road surfaces and other structures. On a continuous, annual basis, the Local Roads Center workshops help local officials understand how they can plan for and implement infrastructure improvements that are likely to withstand the impacts of various hazards including flooding. On the downside, not all communities have been represented at the workshops. There continues to be a constant turnover of elected local officials, including road commissioners, therefore training is not always consistent.

### Forest Practices Act

The Forest Practices Act<sup>19</sup> was designed to promote sustainable forestry in order to protect forest management, forest industries and rural communities in Maine. The Forest Practices Act has had many benefits for mitigating wildfire, erosion, flooding, wind damage, mass wasting, and other related hazards. Primarily, it reduces the threat of liquidation harvesting, where forest harvesting is held to three standards: 1) Standards for Regeneration after clearcuts; 2) Performance Standards for Clearcuts; and 3) Separation Zones. This law also requires notification prior to harvest. Related rules and acts include Liquidation Harvesting<sup>20</sup>, Statewide Standards for Timber Harvesting<sup>21</sup>, Maine Natural Resources Protection Act<sup>22</sup>, U.S. Endangered Species Act<sup>23</sup> and Maine Endangered Species Act<sup>24</sup>, Maine Boundary Line Law<sup>25</sup>, and Tree Growth Tax Law<sup>26</sup>.

### Maine GeoLibrary Board Statute

The mission of the GeoLibrary was set by legislature in state statutes; Title 5, Part 4, Chapter 163 2001 through 2006<sup>27</sup>. The Board seeks to expand and promote the value of geographic spatial data through widespread distribution and innovative use for the benefit of Maine's citizens. Though it is not a regulatory entity, Maine GeoLibrary offers an invaluable capacity for spatial planning through the distribution of relevant public geospatial data. For example, the geospatial datasets used in the risk assessment of this plan and all LHMPs for communities in Maine are disseminated and provided by GeoLibrary.

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<sup>19</sup> Forest Practices Act: <https://www.sappi.com/maine-forest-regulations>

<sup>20</sup> Liquidation Harvesting: [http://www.maine.gov/dacf/mfs/publications/rules\\_and\\_regs/chap\\_23\\_rules.pdf](http://www.maine.gov/dacf/mfs/publications/rules_and_regs/chap_23_rules.pdf)

<sup>21</sup> Statewide Standards for Timber Harvesting: [http://www.maine.gov/dacf/mfs/policy\\_management/water\\_resources/sws/sws.html](http://www.maine.gov/dacf/mfs/policy_management/water_resources/sws/sws.html)

<sup>22</sup> Maine Natural Resources Protection Act: <http://www.maine.gov/dep/land/nrpa/>

<sup>23</sup> U.S. Endangered Species Act: <http://www.fws.gov/endangered/laws-policies/>

<sup>24</sup> Maine Endangered Species Act: <https://www.maine.gov/ifw/fish-wildlife/wildlife/endangered-threatened-species/legislation.html>

<sup>25</sup> Maine Boundary Line Law: [http://www.shelterwoodmaine.com/pdf/BOUNDARY\\_LINES.pdf](http://www.shelterwoodmaine.com/pdf/BOUNDARY_LINES.pdf)

<sup>26</sup> Tree Growth Tax Law: <http://www.maine.gov/tools/whatsnew/attach.php?id=392600&an=1>

<sup>27</sup> Maine GeoLibrary: <https://www.maine.gov/geolib/index.html>



### [Community Wildfire Protection Plans and Firewise Communities](#)

Community Wildfire Protection Plans (CWPPs)<sup>28</sup> are collaborative, community-driven frameworks that outline local priorities for wildfire risk mitigation. Since the passage of the Healthy Forest Restoration Act in 2003, thousands of plans have been developed across the United States. The considerable flexibility given to communities as they develop their CWPPs has led to plans that are tailored to their individual needs. There is considerable variation in the scope, scale, and goals of the CWPPs in place across the country.

Maine has approximately 70 CWPPs for communities and home or lake associations. With the newly mandated expiration period of ten years for CWPP's, all but ten CWPP's are out of date. The communities include Thompson Lake in Oxford, Taylor Pond in Auburn, Brightwater-Windburg in Phippsburg, Raymond Neck, Southwest Harbor, Harford's Point near Greenville, Portage lake, Stoneham, Stow, and Albany/Mason Townships.

Many other communities have also become involved in the state Firewise program. These communities are Indian Point in Georgetown (2009), Cushing Island in Portland (2011), Sprucewold in Boothbay Harbor (2011), Pequawket Lake Preservation Association in Limington (2012), Little Diamond Island in Portland (2012), Great Diamond Island in Portland (2013), Bustins Island (2014), Wynburg-Brightwater-Wynburg East in Phippsburg (2017), and Harfords Point near Greenville (2021). Many Firewise and CWPP communities are located in remote areas where wildfire suppression resources are very limited, such as coastal islands and small communities surrounded by forest, suggesting the importance of wildfire mitigation.

The goals of Firewise are to:

- Reduce loss of lives, property, and resources to wildland fire
- Maintain communities in a way that is compatible with our natural surroundings
- The Firewise USA Sites approach emphasizes community responsibility and involvement

The Maine Forest Service's "Wildfire Risk Reduction" program can assist communities in getting federal grants to create new or update obsolete CWPP's. The USDA Forest Service recently created the Community Wildfire Defense Grant (CWDG) program, which uses CWPP's as the "gateway" to obtain federal funding for mitigation projects. The CWDG grant has thousands of dollars available to help with writing CWPP's, forest fuel reduction and improving water supplies for wildland fire suppression. MEMA intends to support these efforts to mitigate local wildfire risks, please refer to Section 6 – Mitigation Strategy.

### [Dam Safety Program](#)

As noted in Section 3 – Risk Assessment, Maine's Dam Safety Program keeps digital and hard copy records of Emergency Action Plans (EAPs) for high hazard dams. These EAPs include dam breach or failure inundation areas and are kept as digital and hard copy files and are available upon request but are not available through the MEMA website to protect personally identifiable information; Contact Maine's Dam Safety Program Administrator ([tara.ayotte@maine.gov](mailto:tara.ayotte@maine.gov)) for more information.

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<sup>28</sup> CWPP guidelines: [https://www.usfa.fema.gov/downloads/pdf/publications/creating\\_a\\_cwpp.pdf](https://www.usfa.fema.gov/downloads/pdf/publications/creating_a_cwpp.pdf)

### 4.1.2 Building Codes [S8.a.2.]

The Bureau of Building Codes and Standards (BBCS) was created in 2010 under Maine Statute to provide administrative and technical support to the Technical Building Codes and Standards Board. The BBCS also provides non-binding technical interpretation of the codes for professionals and the public.

Codes are published by the International Code Council to incorporate natural environmental considerations into structure stability and safety. All codes target hazard resistant provisions and address natural environmental issues such as flooding, wind, heavy snow, frost depth, and all other hazards profiled in this plan.

#### MUBEC

Maine Uniform Building and Energy Code (MUBEC) applies to all towns within the State of Maine. Application of MUBEC is based on population for communities above 4,000 residents based on the most recent decennial U.S. Census. Communities with fewer than 4,000 residents have the option to enforce MUBEC by local action. Smaller communities generally do not have the capacity to enforce MUBEC and so often choose an alternative approach with the use of Third-Party Inspectors.

The Office of the State Fire Marshal is responsible for updating MUBEC and providing training and certification to municipal code enforcement officers but has no regulatory authority or capacity to verify that MUBEC is being enforced for new development. All permitting authority is managed by local code enforcement officers. Management of code enforcement at a local level makes it challenging to confirm the degree to which MUBEC is being enforced with no state-level oversight of permitting and development.

MUBEC is made up of the following codes and standards. Maine has adopted the national model codes and standards with amendments<sup>29</sup>. Currently MUBEC implements codes from 2015. Current codes were adopted after 2015 and before the last SHMP update in 2018. In 2024 the state will adopt the ICC family of codes for 2021. ICC codes are updated every three years.

- 2015 International Residential Code (IRC)
- 2015 International Building Code (IBC)
- 2015 International Existing Building Code (IEBC)
- 2015 International Energy Conservation Code (IECC)
- 2015 International Mechanical Code (IMC)

The following standards are also adopted as part of the MUBEC and are mandatory. The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standards:

- 62.1 - 2016 (Ventilation for Acceptable Indoor Air Quality)
- 62.2 - 2016 (Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings)
- 90.1 - 2016 (Energy Standard for Buildings except Low-Rise Residential Buildings) editions without addenda.
- E-1465-2008, Standard Practice for Radon Control Options for the Design and Construction of New Low-Rise Residential Buildings.

In 2021 the Office of the State Fire Marshal also delivered a public service announcement for code officers and fire inspectors to inspect abandoned buildings in their communities due to recent fatalities from fire within an abandoned structure<sup>30</sup>.

<sup>29</sup> MUBEC rules and laws: <https://www.maine.gov/dps/fmo/building-codes/mubec-rules>

<sup>30</sup> Abandoned Buildings Public Service Announcement: <https://www.maine.gov/dps/fmo/sites/maine.gov.dps.fmo/files/inline-files/AbandonedBuildingsNotice12172021.pdf>

### MUBEC Update

The Office of the State Fire Marshal is currently in the process of updating MUBEC as staff to the Technical Building Codes and Standards Board to incorporate 2021 editions of the International Codes which include the IRC, IBC, IEBC, IMC, and IECC. Code updates are published on a three-year cycle. By statute the state is no longer allowed to be more than one full cycle from the most recent published edition of the codes, meaning that Maine's implementation of 2015 codes is currently behind schedule. The update for MUBEC to enforce 2021 codes is anticipated to go into effect by the fall of 2023. This code cycle requirement also pertains to many FEMA and DOE grant programs. Federal agencies are encouraging adoption and enforcement of modern building codes as part of the National Initiative to Advance Building Codes<sup>31</sup>.

There has been a proposal in recent legislation to suggest a "study" of the program that is charged with implementing and training to the updated codes<sup>32</sup>. The study will be in a position to consider staffing needs that would best support the State effort to make MUBEC and the codes included as successful as possible. The code family is in place to provide safe and resilient structures for all types of construction in Maine. The hope is that the office would have the resources to complete this task and assist the municipalities in Maine through the Code Enforcement program.

### Third-Party Inspector Program

The third-party Inspector Program (TPI Program) can be a valuable asset for smaller communities with part-time code officers. TPIs are certified to review building plans, conduct inspections, and provide reports to the developer and municipality just as a municipal code officer does, but they are able to work within multiple local jurisdictions and "float" between towns as a contracted service that would otherwise have very limited capacity for building inspection and MUBEC enforcement. Currently the TPI program is underutilized, and the Office of the State Fire Marshal is taking steps to encourage greater participation and understanding of the benefits.

### History of MUBEC

In 1988, the Legislature was concerned that many small towns did not have code officers and many more did not have the training and knowledge to effectively administer state and local codes and land use regulations. The Legislature decided that, if state goals were to be achieved, there was a need to not only train, but to test and certify code officers for specific competencies. It established, as part of the Growth Management Act, a state-administered program to train and certify code officers. Today, the purpose of the program remains to build and strengthen local capabilities to administer and enforce land use and building ordinances<sup>33</sup>.

The Technical Building Codes and Standards Board was created in 2010 under M.R.S. 10 §9722. Duties of the board are to adopt and amend the Maine Uniform Building and Energy Code, identify, and resolve conflicts of the building code and life safety codes. Board meetings are scheduled for the third Thursday of every month.

Technical Advisory Groups (TAGs) are groups of experts that provide the MUBEC Technical Codes and Standards Board with detailed information and recommendations on amendments to the MUBEC. The current TAGs are:

- Fire/Life Safety Codes
- International Building Code
- International Residential Code
- International Energy Code
- International Existing Building Code
- Mechanical/Ventilation
- Sprinklers
- Training and Certification

<sup>31</sup> NABC: [https://www.fema.gov/sites/default/files/documents/fema\\_niabc-progress-report\\_122022.pdf](https://www.fema.gov/sites/default/files/documents/fema_niabc-progress-report_122022.pdf)

<sup>32</sup> Building Code Study Resolve: <http://www.mainelegislature.org/legis/bills/getPDF.asp?paper=HP0128&item=2&snum=131>

<sup>33</sup> Maine Code Officer Certification Standards: <https://www.maine.gov/sos/cec/rules/16/219/219c052.docx>

Reporting building code compliance is largely in the hands of municipal code compliance officers and therefore Maine is lacking a standard approach to publicly documenting code compliance across all municipalities. However, some resources provide at least partial documentation for some municipalities<sup>34</sup>.

#### 4.1.3 Administration of State NFIP [S8.a.3.]

Maine Department of Agriculture, Conservation and Forestry's Floodplain Management Program (FMP) provides technical assistance, model floodplain ordinances to municipalities, training for local officials and professional groups (e.g., professional land surveyors, insurance agents and realtors), and manages the National Flood Insurance Program (NFIP) within the state. The effort to enact floodplain ordinances in every Maine community has had the greatest effect of loss reduction on real property in the state. Participation in the NFIP is voluntary. Maine has the largest number of communities in New England (490 organized towns and 400+ unorganized townships). 97% of Maine communities participate in NFIP, including the unorganized territories.

The state Land Use Planning Commission is the permitting and enforcement authority in the unorganized areas of the state, but the FMP is the entity that administrates NFIP for Maine. Also, the Municipal Planning Assistance Program works with the Floodplain Management Program to ensure that municipal comprehensive plans (and other planning initiatives) incorporate NFIP compliance in all aspects of local government management. Each of these entities have been housed within the Department of Agriculture, Conservation, and Forestry since the dissolution of the State Planning Office in 2012, which encourages stronger coordination on NFIP administration. As a result, most jurisdictions in Maine (97%) are NFIP compliant.

The US Army Corps of Engineers coordinates with FMP in order to process permitting of any project that is located within the floodplain or potentially impacts flow in streams and rivers. FMP may also coordinate with the Department of Environmental Protection in cases where infrastructure projects are being developed in the shoreland zone, and consequentially in the floodplain. This department also controls permitting for post-disaster debris removal and processing.

The Maine Emergency Management Agency works closely with FMP to document NFIP compliant communities for purposes of local and state hazard mitigation planning as well as mitigation grant applications. MEMA and FMP also collaborate and co-host the annual Flood Safety Awareness Week, in which pre- and post-disaster recovery and mitigation opportunities are promoted. MEMA also collaborates with FMP for the Hazard Mitigation Grant Review Council involving pre- and post-disaster mitigation opportunities, distribution of NFIP information and map updates to county and local emergency managers, facilitating Local Hazard Mitigation Plan updates, and updates to the Interagency Disaster Recovery Plan. MEMA and FMP also participate in Silver Jackets, where multiple organizations can cooperate with efforts to improve NFIP compliance.

The State NFIP Coordinator also coordinates with FEMA Headquarters, FEMA Region I, and FEMA's Hazard Mitigation Assistance programs on joint partnerships and workshops to support NFIP administration in Maine.

The Maine Bureau of Insurance collaborates with FMP to promote local flood insurance policies and incorporate post-disaster data on repetitive loss structures, severe repetitive loss structures. FMP also works with partners to review and provide general technical assistance to state agencies and programs. For example, FMA conduct reviews for Executive Order 11988 for floodplain management to assure that federal agencies also comply with NFIP. Maine Department of Environmental Protection works with FMP to determine whether regulated sites are located in the floodplain and are compliant with NFIP. The Office of the State Fire Marshal also coordinates with FMP to ensure proper land use regulations and NFIP are part of code enforcement officer training. Many additional state and federal agencies cooperate with FMP to encourage municipal NFIP compliance.

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<sup>34</sup> CostructConnect building codes list: <https://ref.constructconnect.com/building-codes/?search=Maine>

Banks and other financial institutions have been instrumental in the success of local floodplain management efforts because they will not issue mortgages for structures in identified flood hazard areas unless the applicant purchases flood insurance.

Maine is also pro-active in promoting the NFIP Community Rating System (CRS), which recognizes communities with good performance in floodplain management. Based on a point system for activities that enhance flood mitigation and floodplain management beyond the minimum NFIP regulations, communities may improve their standing in the NFIP which results in lower flood insurance premiums. Maine has seen a decline in the CRS participation over the last 5 years. Currently, 15 communities are enrolled in the CRS Program. One community is working on entering CRS. This is down from a high of 17 participating communities. CRS communities represent 26% of the state's flood insurance policy base.

The 2010 State Hazard Mitigation Plan recognized that Maine's flood hazard mitigation efforts were somewhat limited by the aging Flood Insurance Rate Maps. Within the last 10 years or so, significant progress has been made.

NFIP recently changed its pricing methodology to a new format named Risk Rating 2.0 that better reflects a property's flood risk. In addition to the new pricing approach, NFIP now allows policy holders easier option to pay insurance online using an app and there are income-based insurance coverage increments for low income households.

Hurricane Surge Inundation Maps have been completed by the Army Corps of Engineers, and MEMA has distributed copies to all affected municipalities. Maine Geological Survey hosts the Sea Lake and Overland Surges from Hurricanes (SLOSH) maps for Maine<sup>35</sup> and the Maine Emergency Management Agency hosts the Hurricane Evacuation Zone maps<sup>36</sup> that were delineated based on storm surge analysis in the 2020 Maine Hurricane Evacuation Study.

#### **4.1.4 Participation in Risk MAP [S8.a.4.]**

FEMA's Risk Map Program has produced a number of new, digital floodplain maps that are much more detailed and easier to use than the earlier FIRMS. Updated maps for Waldo, Lincoln, and Sagadahoc Counties became effective in July of 2015 and updated maps for Fort Kent (Aroostook), Hancock, and Knox became effective in July of 2016. Washington County had updated maps go effective in July of 2017. Cumberland and York Counties have had updated preliminary maps issued and anticipate a mid 2024 effective date.

#### **Flood Insurance Rate Maps**

Many counties in Maine have recently had their FIRMS updated or are in the process of doing so. For more information on the map status, please see the Flooding profile of the Risk Assessment. New mapping is complete in the Lower Penobscot River Watershed affecting 24 communities. New maps will be released July 19, 2023.

Discovery, which is the first step in the process of producing new maps, has begun in the Dead River Watershed, the Lower Kennebec River Watershed, the Piscataquis River Watershed, the Saco River Watershed, the Upper Androscoggin River Watershed, and the Aroostook and Northern Penobscot River watersheds. Re-delineation of floodplains to 2' contours through the use of LiDAR is taking place in Hancock and Oxford Counties.

The State has also continued to make significant progress updating flood risk maps to support mitigation efforts since the 2013 State Hazard Mitigation Plan. Specific projects include:

<sup>35</sup> Maine SLOSH maps: <https://www.maine.gov/dacf/mgs/hazards/slosh/index.shtml>

<sup>36</sup> Maine Hurricane Dashboard: <https://storymaps.arcgis.com/stories/4fb502bf0ea6467693ff4191a1859e92>

Sea, Lake, and Overland Surges from Hurricanes (SLOSH) Maps with support from U.S. Army Corps of Engineers, FEMA, MEMA, and the Maine Geologic Survey potential hurricane inundation from storm surge for Category 1 and 2 hurricanes was modeled in 2013. The U.S. Army Corps of Engineers has since modeled potential storm surge inundation from Category 3 and 4 hurricanes using the same methodology. All 138 jurisdictions that are vulnerable to hurricane storm surge have storm surge inundation maps for Category 1-4 hurricanes.

### [Sharing Flood Risk Data](#)

Special Flood Hazard Areas are included in municipal planning resource maps, but one problem is that many areas of the State are not covered by digital flood data, or are covered by inaccurate Q3 data, so the information provided to the community may not be available or accurate until FEMA provides new digital FIRMs. This confirms the importance of the Risk MAP program improving flood hazard map data. The Maine Flood Hazard Map Application is provided by FMP to the public for use in mitigation, community planning, and mitigation action development<sup>37</sup>. The FMP also directs the public to the FEMA Map Service Center<sup>38</sup>. The Maine Risk Map, hosted by MEMA for public use, also includes the most recent effective and preliminary FIRMs<sup>39</sup>, and all of these resources are used to update Local, Tribal, and State Hazard Mitigation Plans. MEMA's Natural Hazards Planner provides related GIS technical assistance and data analytics for local planning purposes. These resources are promoted through Maine's Flood Safety Awareness Week and at other community emergency management functions. Recent flood map discovery reports, Community Summary of Map Action toolkits, and other resources are available at the FMP website<sup>40</sup>. All requests for NFIP and FIRM information are directed to the State NFIP Coordinator.

### [LIDAR Mapping](#)

The Maine Office of Geographic Information Systems continues to acquire LIDAR coverage across Maine. The Maine GeoLibrary 2022 South Central LiDAR Project has been collecting new LiDAR for the southwest areas of the State as well as a portion in central Maine. This will be used as FEMA updates maps. LIDAR data has been generated by a consortium of agencies including NOAA and the Army Corps of Engineers for the entire coast and for some inland counties. The state is close to having LIDAR coverage all over the state.

### [Substantial Damage Administration](#)

Substantial Damage is when a structure has been damaged by 50% of its market value. Coincident is Substantial Improvement, when a structure is improved by 50% of its market value. When this threshold is met, the structure must be brought into compliance with floodplain standards. Communities have the option of instituting a higher standard such as lowering the threshold so that a structure must be brought into compliance at a lower percentage of damage/improvement, or a cumulative threshold such as a limited number of years or the lifetime of the structure.

As the community permits development, the cost of all building materials and labor are recorded. When these improvement costs reach the market value, the code enforcement officer must require the structure to be brought up to floodplain management standards.

The market value can be determined by the community. This value can be the tax assessed or independently assessed value, the resale value, the replacement value, or the cash value, as long as the process is used consistently for all structures in the community.

FEMA requests that the community keep a record of the value of structures located in the floodplain. If there is a large flooding event that affects many structures, this information will make the recovery much easier.

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<sup>37</sup> Maine Flood Hazard Map Application: <https://maine.maps.arcgis.com/apps/webappviewer/index.html?id=3c09351397764bd2aa9ba385d2e9efe7>

<sup>38</sup> FEMA Map Service Center: <https://msc.fema.gov/portal/home>

<sup>39</sup> Maine Risk Map: <https://experience.arcgis.com/experience/202cb7e1444c4881b44b7586136ef9e7/>

<sup>40</sup> FMP website: <https://www.maine.gov/dacf/flood/mapping.shtml>

A Substantial Damage Plan is recommended at the community, county, or state level. The plan can be used to make recovery after a disaster easier. FEMA offers a Substantial Improvement/Substantial Damage Desk Reference, this book provides guidance on the minimum requirements of the NFIP regulations. Refer to Appendix – NFIP Substantial Damage Plan.

## 4.2 State Mitigation Funding [S8.b.; S11]

### 4.2.1 State Funding Resources [S8.b.1.]

Since the publication of the 2019 State Hazard Mitigation Plan, there has been improvement in state funding for hazard mitigation both through the Community Resilience Partnership program and increased state allotment of FEMA Hazard Mitigation Assistance Grants. There is also a growing understanding of natural hazard mitigation and the many risks associated with climate change thanks to the plans, programs, and funding opportunities described below.

#### Community Resilience Partnership

The Governor's Office of Policy Innovation and the Future (GOPIF) launched the Community Resilience Partnership<sup>41</sup> on December 1, 2021. Through grants and direct support to municipal and Tribal governments, the Community Resilience Partnership assists communities to reduce carbon emissions, transition to clean energy and become more resilient to climate change effects such as extreme weather, flooding, rising sea levels, public health impacts, and more.

Communities in Maine can join the Partnership individually, or through a regional group, after completing three simple steps including (1) adopting a resolution of commitment, (2) completing a pair of self-assessments, and (3) holding a community workshop to prioritize initial climate resilience and clean energy actions. Participation in the Partnership is open to all municipalities and federally recognized Tribes in Maine.

Communities with a record of climate action may join the Partnership by reviewing past activities, completing the self-assessments, providing proof of a qualifying community workshop, and passing or amending a resolution. Communities yet to begin climate action can choose to complete the steps on their own but may find greater benefit in working with a service provider and neighboring communities to join the Partnership as a group.

Community Action Grants can support two categories of climate action by communities: (1) actions from the List of Community Actions, an approved list of climate mitigation and adaptation activities that align with the strategies of *Maine Won't Wait*, and (2) other projects proposed by a community that support capacity building, planning, and implementation projects.

These options offer guidance for communities starting on climate plans and incentivize a baseline level of climate action across the state. They also provide flexibility by allowing communities to choose actions from the List that are most relevant and feasible, while also providing support for community climate and energy priorities that may not appear on the List of Community Actions.

The Community Resilience Partnership offers two types of grants:

1. Community Action Grants: Municipal and tribal governments and unorganized territories in Maine who have joined the Partnership may apply directly for funds to support projects that reduce energy use and costs and/or make their community more resilient to climate change effects, such as flooding, extreme weather, drought, and public health impacts.
2. Service Provider Grants: Regional service provider organizations may apply for funds to recruit groups of two to five communities to complete the enrollment activities, join the Partnership, and apply for Community Action Grants.

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<sup>41</sup> Community Resilience Partnership: <https://www.maine.gov/future/climate/community-resilience-partnership>



### Coastal Community Grant Program

The coastal community competitive grant program<sup>42</sup> provides funds to towns and regional organizations for projects in the areas of public access, water quality improvement, storm hazard resiliency, and marine-related economic development. Eligible applicants include counties, municipalities, unorganized territories, tribal governments, and Regional Planning Organizations in Maine's coastal zone. Groups of two or more coastal municipalities are eligible to submit a multi-municipal application.

Coastal Community grants include projects in Maine's coastal zone with a focus on the following priority coastal issues, as identified by the Maine Coastal Program<sup>43</sup> and the Maine Climate Council's Maine Won't Wait: A Four-Year Plan for Climate Action<sup>44</sup>:

- Building Community Resiliency to Adapt to a Changing Climate
- Planning for Green Infrastructure
- Preparing for Flooding, Sea Level Rise, Coastal Storms and Storm Surge, and Shoreline Erosion
- Land Use Activity Impacts to Water Quality

The National Oceanic and Atmospheric Administration provides funding for these grants in cooperation with the Maine Department of Marine Resources Maine Coastal Program.

### Municipal Stream Crossing Upgrade Grant Program

Since 2015, Maine voters have approved a total of four bonds that fund the upgrade and replacement of stream crossings throughout Maine. These monies support the DEP's competitive grant program that matches local funding for the upgrade of municipal culverts at stream crossings to cost-effectively improve fish and wildlife habitats, reduce flooding, and increase community safety.

#### **4.2.2 FEMA Hazard Mitigation Assistance Pre- and Post-Disaster Programs [S8.b.2.; S11.b.; S11.c.]**

While ultimately funded by FEMA, the Hazard Mitigation Assistance (HMA) programs are all administered by the Maine Emergency Management Agency (MEMA) to sub-applicants upon award. MEMA is responsible for the maintenance of the State Emergency Operations Plan (EOP) and State Hazard Mitigation Plan (HMP) which helps state agencies to mitigate against, prepare for, and respond to natural disaster events. The following is a description of FEMA Hazard Mitigation Assistance programs and how they are utilized in Maine.

Since the 2019 SHMP update, growing interest in the HMA program has led to an unprecedented number of applications by municipal, county, and state entities. MEMA has been able to meet this new need for technical assistance and administration of grant programs, taking full advantage of state allotted mitigation funds. These programs are separated as either pre-disaster or disaster grants. Pre-disaster grants are

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<sup>42</sup> Coastal Community Grant Program: [https://www.maine.gov/dacf/municipalplanning/financial\\_assistance.shtml](https://www.maine.gov/dacf/municipalplanning/financial_assistance.shtml)

<sup>43</sup> Maine Coastal Program: <https://www.maine.gov/dmr/programs/maine-coastal-program>

<sup>44</sup> Maine Won't Wait: <https://www.maine.gov/climateplan/>

**Building Resilient Infrastructure and Communities (BRIC) [Pre-Disaster]**

The BRIC program makes Federal funding allocations available annually for State and National Competition, and Tribal set aside. The BRIC program seeks to fund effective and innovative activities that address future risks to natural disasters, including ones involving wildfires, drought, hurricanes, earthquakes, extreme heat, and flooding (Figure 3.1). Addressing these risks helps communities become more resilient. Funding can be used for 1) Capacity-and Capacity-Building (C&CB) activities including hazard mitigation planning; building code adoption & enforcement activities; project scoping to identify mitigation action; and 2) Mitigation Projects including culvert upsizing/drainage improvements, acquisition/demolition, critical infrastructure retrofits/upgrades, and road/bank stabilization. Maine state agencies, local governments, and municipalities have applied for BRIC grants to assist with updating local hazard mitigation plans, project scoping, building code training, and management costs. Funding is only available to those with current FEMA-approved LHMPs.

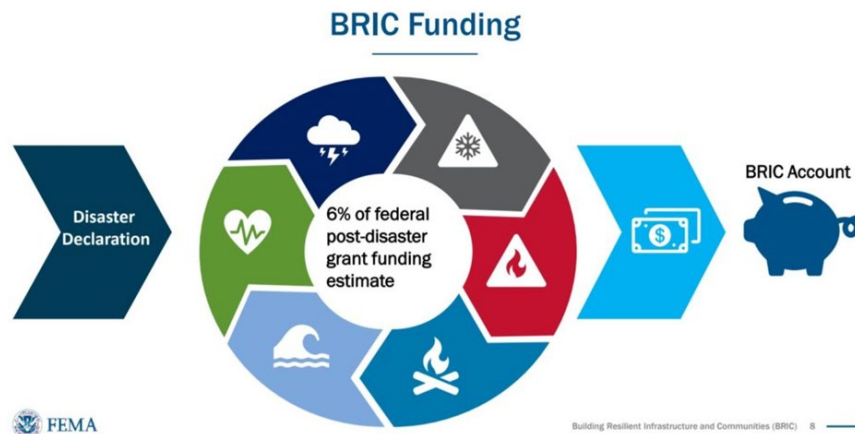


Figure 3.1: BRIC Funding is based on estimates of multi-hazard post-disaster funding.

**Building Resilient Infrastructure and Communities (BRIC) Direct Technical Assistance (DTA) [Pre-Disaster]**

The Building Resilient Infrastructure and Communities (BRIC) Direct Technical Assistance (DTA) is a no-cost opportunity that gives full support to counties, federally recognized tribes, and municipal partners that may not have the resources to begin climate resilience planning and project solution design on their own. FEMA provides communities climate risk assessments, community engagement, partnership building, mitigation and climate adaptation planning, and BRIC program requests throughout the grant lifecycle. Support for BRIC DTA communities will be given from pre-application activities to grant closeout.



### [Flood Mitigation Assistance \(FMA\) \[Pre-Disaster\]](#)

FMA is a nationally competitive grant that provides funding annually to states, local communities, federally recognized tribes and territories (Figure 3.2). Funds can be used for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program. FEMA requires state, local, tribal and territorial governments to develop and adopt hazard mitigation plans as a condition for receiving certain types of non-emergency disaster assistance, including funding for hazard mitigation assistance projects. Example projects include but are not limited to; property acquisition, structure demolition/relocation, structure elevation, dry floodproofing of historical residential structures or non-residential structures, non-structural retrofitting of existing buildings and facilities, mitigation reconstruction, and structural retrofitting of existing buildings. Funding is only available for NFIP-insured buildings in communities that participate in NFIP<sup>45</sup> and have current FEMA-approved Local Hazard Mitigation Plans (LHMP).

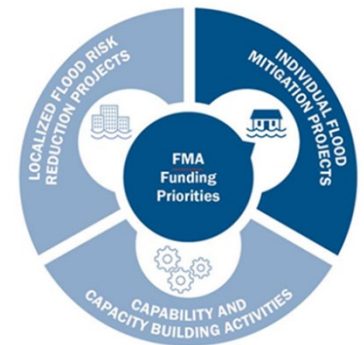


Figure 3.2: FMA funding priorities.

### [Hazard Mitigation Grant Program \(HMGP\) \[Disaster\]](#)

HMGP provides funding to state agencies, local governments, private non-profit organizations, and federally recognized tribes so they can rebuild in a way that reduces, or mitigates, future natural disaster losses in their communities. The program is authorized by Section 404 of the Stafford Act.

HMGP funding is authorized with a Presidential Major Disaster Declaration. A governor or tribal chief executive may request HMGP funding throughout the state, tribe or territory when submitting a disaster declaration. The amount of funding made available to the applicant is based on the estimated total Federal assistance. The formula generally gives 15% of the total federal assistance amount provided for recovery from the presidentially declared disaster and is determined by the FEMA-approved Hazard Mitigation Plan.

Through HMGP, FEMA allows states to access up to 10% and local governments up to 5% of their HMGP award for management and administration costs, there is a lot of opportunity to access funding for mitigation planning and management. Management costs are any indirect costs and administrative expenses that are reasonably incurred by a Grantee or subgrantee in administering a grant or subgrant award.

Maine currently has several HMGP projects including updating local hazard mitigation plans, advance assistance (similar to project scoping), permanent generators, beach erosion and public infrastructure replacements, wastewater treatment facility improvements, culvert replacements, and more. Funding is only available to those with current FEMA-approved Local Hazard Mitigation Plans (LHMP).

<sup>45</sup> FEMA Disaster Assistance for non-participating communities: [https://www.fema.gov/sites/default/files/documents/fema\\_non-participating-communities-fact-sheet.pdf](https://www.fema.gov/sites/default/files/documents/fema_non-participating-communities-fact-sheet.pdf)

### [Public Assistance \(PA\) Program \[Disaster\]](#)

FEMA's Public Assistance Program provides supplemental grants to state, tribal, territorial, and local governments, and certain types of private non-profits so communities can quickly respond to and recover from major disasters or emergencies. Section 406 of the Stafford Act is the portion of Public Assistance providing financial support for mitigation efforts. Unlike HMGP, the 406 funding provides discretionary authority to fund mitigation measures in conjunction with the repair of the disaster-damaged facilities, so is limited to declared counties and eligible damaged facilities.

Section 406 is applied on the parts of the facility that were damaged by the disaster and the mitigation measure is intended to directly reduce the potential of future, similar disaster damages to the eligible facility.

Authorization of Section 404 and Section 406 has occurred six times between May 2018 and July 2023 under the following Presidential Disaster Declarations for Maine:

- June 29, 2023 incident: Maine Severe Storm and Flooding (DR-4736-ME)<sup>46</sup>
- Apr 30-May 1, 2023 incident: Maine Severe Storm and Flooding (DR-4719-ME)<sup>47</sup>
- December 23-24, 2022 incident: Maine Severe Storm and Flooding (DR-4696-ME)<sup>48</sup>
- October 30-31, 2021 incident: Maine Severe Storm and Flooding (DR-4647-ME)<sup>49</sup>
- January 20, 2020 to May 11, 2023 incident: Maine Covid-19 Pandemic (DR-4522-ME)<sup>50</sup>
- March 2-8, 2018 incident: Maine Severe Storm and Flooding (DR-4367-ME)<sup>51</sup>

### [HMGP Post Fire \[Disaster\]](#)

The Hazard Mitigation Grant Program Post Fire (HMGP Post Fire) program provides funding to help communities implement hazard mitigation measures focused on reducing the risk of harm from wildfire. HMGP Post Fire funding is authorized under Sections 404 and 420 of the Stafford Act, and provides hazard mitigation grant funding to state agencies, local governments, tribes, private non-profit organizations, and municipalities in areas receiving a Fire Management Assistance Grant (FMAG) declaration. Funding under HMGP Post Fire is not limited to wildfire mitigation only and can be used for other hazard mitigation projects.

A Presidential Disaster Declaration is not required to activate funding. The funding amounts are determined by FEMA and are based on a national aggregate calculation of the historical expenditures for FMAG declarations from the past 10 years. This amount is recalculated at the beginning of each fiscal year (October 1-September 30). HMGP Post Fire awards are provided for each FMAG declaration but are aggregated under one award for each Recipient for the fiscal year to lessen the administrative burden and provide all available funding for that fiscal year under one award.

Maine does not currently have an FMAG declaration and therefore does not have any HMGP Post Fire funding available. If FMAG disaster is declared, a NOFO will be released by FEMA. Funding is only available to those with current FEMA-approved Local Hazard Mitigation Plans (LHMP).

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<sup>46</sup> DR-4736-ME: <https://www.fema.gov/disaster/4736>

<sup>47</sup> DR-4719-ME: <https://www.fema.gov/disaster/4719>

<sup>48</sup> DR-4696-ME: <https://www.fema.gov/disaster/4696>

<sup>49</sup> DR-4647-ME: <https://www.fema.gov/disaster/4647>

<sup>50</sup> DR-4522-ME: <https://www.fema.gov/disaster/4522>

<sup>51</sup> DR-4367-ME: <https://www.fema.gov/disaster/4367>

### [Rehabilitation of High Hazard Potential Dams \(HHPD\) \[Pre-Disaster\]](#)

HHPD awards technical, planning, design and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams. A state or territory with an enacted dam safety program, the State Administrative Agency or an equivalent state agency is eligible for the grant. In Maine, 25 dams are eligible for HHPD, however the program has never been used in the state.

Note that, though HHPD covers projects that directly cover dam mitigation, other programs may cover hazard dam breach and dam-related flood mitigation for communities below a high hazard or other dam. These programs may include BRIC, HMGP, Community Resilience Partnership, or the Coastal Community Grant Program, among others.

### [Safeguarding Tomorrow Revolving Loan Fund Program/Safeguarding Tomorrow through Ongoing Risk Mitigation \(STORM\) \[Pre-Disaster\]](#)

Safeguarding Tomorrow RLF Program/Safeguarding Tomorrow through Ongoing Risk Mitigation (STORM) Act is a revolving loan fund for projects and activities that mitigate the impacts of drought, intense heat, severe storms (including hurricanes, tornadoes, windstorms, cyclones, and severe winter storms), wildfires, floods, earthquakes, and other natural hazards.

Funding is only available to those with current FEMA-approved Local Hazard Mitigation Plans (LHMP). The STORM loan funding is a new program and currently Maine is not participating, however, plans are in place to implement this program.

### [Legislative Pre-Disaster Mitigation \(LPDM\) \[Pre-Disaster\]](#)

The Legislative Pre-Disaster Mitigation Program was established through the Consolidated Appropriations Act of 2023, which authorizes funding for 100 projects for states, federally recognized tribes, and local communities. These funds allow governments to plan for and implement sustainable cost-effective measures designed to reduce the risk to individuals and property from future natural hazards, while also reducing reliance on federal funding from future disasters. Funding is offered in addition to funds provided through other FEMA grant programs for projects that will support growing mitigation needs.

This funding is only available to state agencies, federally recognized tribes, local governments, and municipalities who have connected with a Maine Senator about Congressionally Directed Spending (CDS), or House Representative about Community Project Funding (CPF), and applied through their office. Funding is only available to those with current FEMA-approved Local Hazard Mitigation Plans (LHMP). CDS/CPF applications are moved through the House of Representatives and Senate Appropriations for final approval. Funding that is approved for Legislative Pre-Disaster Mitigation is earmarked to the Department of Homeland Security (DHS) and passed through to FEMA. Those CDS/CPF projects that were earmarked are required to complete the FEMA LPDM application for FEMA when the annual Notice of Funding Opportunity (NOFO) is released.

### 4.2.3 Other Resources [S8.b.3.]

Refer to Table 4.1 for a list of funding sources supporting Hazard Mitigation Capabilities in Maine, and Table 4.2 for a list of non-funding resources.

There are several effective mitigation programs in place to deal with the impacts of flooding and wildland fires. Additionally, hurricane pre-disaster mitigation and coastal landslide hazard mitigation are handled directly by the Floodplain Management Program via floodplain management ordinance development standards for coastal construction and the adoption of the *FEMA Coastal Construction Manual*<sup>52</sup>. There has been and continues to be a concerted effort to deal with these hazard events. Conversely, there is little mitigation effort in terms of dealing with the impacts of severe winter weather, erosion, severe summer weather, drought and earthquakes. These are dealt with in the all-hazard mitigation programs and efforts shown in the State Mitigation Capability Assessment Matrix.

Through the development of the State Hazard Mitigation Plan, the State of Maine seeks to review and assess the state's financial, legal and programmatic ability to initiate and complete the mitigation efforts which will reduce the impacts of its identified natural disaster hazard events. This assessment of state capabilities is defined by the natural disaster hazard events expected to have the greatest impact on the State of Maine.

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<sup>52</sup> FEMA Coastal Construction Manual: [https://www.fema.gov/sites/default/files/2020-08/fema55\\_voli\\_combined.pdf](https://www.fema.gov/sites/default/files/2020-08/fema55_voli_combined.pdf)

## 4.3 State Mitigation Challenges and Proposed Solutions [S8.c.1]

Despite recent advances in state and local understanding of climate change risks, natural hazard mitigation, and potential funding opportunities, challenges still remain to accomplish mitigation goals. Due to insufficient agency staffing, more technical assistance is needed by county and municipal governments in order for local officials to have a better awareness and understanding of hazard mitigation policies, plans and programs.

The completion and regular update of 16 county hazard mitigation plans and one University of Maine System plan have made it clear that hazard mitigation needs far exceed available resources. These plans have collectively identified over \$205,800,000 in hazard mitigation needs, and the majority of projects have been deferred until funding becomes available. Most of these projects will ultimately be paid for through municipal capital improvement budgets. A proposed solution to this funding issue is to further promote FEMA Hazard Mitigation Assistance grants at the municipal level and to ensure that high priority projects are included in the Mitigation Strategy of Local Hazard Mitigation Plans to take better advantage of Section 404 and 406 funding. There is also further potential for MEMA to work collaboratively with other state agencies to promote the benefits of and encourage more state funding for hazard mitigation actions. There have been recent improvements in resilience funding as noted above, but municipalities still require a large amount of communication, training, and technical assistance to take advantage of them.

### 4.3.1 Natural hazard-specific challenges and proposed solutions

**Flooding** – In Maine, the greatest amount of damage from flooding events occurs to the roadway system, both state and municipal roads, bridges, culverts and ditches. This is followed in severity and probability with damage to homes and businesses located in inland and coastal floodplains. Many of the capabilities listed in this Plan relate directly or indirectly to mitigating flood hazards.

**Severe Summer Weather** – The types of severe summer weather in Maine include extreme heat, thunderstorms, and tornadoes. There are no mitigation programs in the State of Maine dedicated solely to lessening the impacts of severe summer weather, excluding that of all-hazards emergency management planning and emergency response agencies.

**Tropical Cyclones** – Historically, hurricanes either reach Maine as a Category 1 or are downgraded to a Tropical Storm prior to landfall. The damaging effects of hurricane storm surge and flooding have caused major damage in the past. As such, state programs that work to mitigate the effects of flooding have already been described in a preceding section. New building codes make structures more resilient to wind damages. There are no mitigation programs in the State of Maine dedicated solely to lessening the impacts of hurricanes.

**Severe Fall/Winter Weather** – The second greatest amount of damage caused by a natural disaster hazard event is severe winter weather. Winter storm damages typically involve downed overhead utility lines, flooding from ice jams and melt runoff, and debris in the roads. Currently there is one major state program that works to mitigate the effects of severe winter storms. The Maine DOT is responsible for snow and debris removal on all state highways. Maine DOT garages are well placed around the state to complete this task in a timely manner. Maine DOT also provides technical assistance to municipalities for road debris clearance with the Maine Local Roads Center. At times, the Maine DOT will even assist with the actual debris clearance on select local roads. However, in many cases, a bad winter storm can overwhelm the financial and equipment capabilities of many municipalities.

**Wildfire** – Although Wildfires normally do not cause a great deal of destruction in Maine, they have a terrible potential, as evidenced in the forest fires of 1947. Land use planning, regulation and building codes in Maine do not deal at all with the wildland-urban interface issues. Mitigation efforts in the state are limited to the Maine Forest Service which performs forest health and monitoring, oversees forest firefighting efforts, and provides

financial and equipment grants to local fire departments. Within the past eight years or so, the Maine Forest Service has initiated a community assessment program aimed at helping communities and rural homeowners at the wildland/urban interface better protect their properties from the threat of wildfire. The assessment is a voluntary program that relies on public education to reach its intended audience.

**Drought** – In response to drought conditions, the River Flow Advisory Commission<sup>53</sup> transitions into the Drought Task Force<sup>54</sup> and convenes to assess drought impacts and report on drought conditions. Due to Maine’s nature as a home rule state, and because a large percentage of the population relies on private wells for water supply, the State has limited capability to mitigate drought. A proposed solution is to communicate the benefits of mitigation assistance to local governments and public water suppliers. The Maine Public Utilities Commission oversees that each water supplier has an Emergency Action Plan for times of water shortages, and Maine State Housing Authority can provide emergency assistance in times of drought.

**Erosion** – Some inland areas and about half of the Maine coast, including many of its beaches, are slowly eroding. Unfortunately, erosion generally goes unnoticed until a home or other structure is threatened or destroyed. Eroding bluffs can be “armored” by the use of sea walls, rocks, riprap or other engineered solutions, but there is no state program to support such efforts. Many individuals cannot afford to pay for the protection needed to save their properties. Unfortunately, federal rules governing Mitigation Assistance are such that municipal applications aimed at helping individuals protect their properties are very competitive. Erosion is increasingly recognized as a major issue by local governments, and there are several capabilities listed in this Plan to plan for mitigation erosion hazards. Municipalities hold permitting requirements regarding the stabilization of eroded areas and protecting structures from erosion. Projects need to be assessed as permitting will depend on the details and circumstances of the situation.

**Mass Wasting** – Coastal landslides can occur in areas of chronic bluff erosion in areas with mud banks that exceed 20 feet in height. The only mitigation program in the state that deals with landslides is the Shoreland Zoning Program which prohibits development near areas where the landslide hazard is great. There are no mitigation programs for homeowners already located in a landslide hazard area.

**Earthquake** – The 2006 magnitude 4.3 earthquake in Bar Harbor demonstrates that earthquakes of this size can cause damage. Although the statistical estimate for return time of a magnitude 6.0 earthquake in Maine is approximately 363 years, little monitoring and research have been done to substantiate this estimate. Continued instrumental earthquake monitoring in New England is funded entirely by the federal government, with some in-kind contribution by state agencies. There are no mitigation programs in the State of Maine dedicated solely to lessening the impacts of earthquakes, excluding that of all-hazards emergency management planning and emergency response agencies.

**Tier 2 Hazards** – These hazards are identified as a growing challenge in Maine that will require further expansion of capabilities. However, programs are in place to monitor each hazard and mitigate or prevent expansion of risk. For example, Maine has emergency orders banning import of out of state firewood and restrictions for transporting firewood within the state to reduce the spread of invasive forest pests<sup>55</sup>. Maine Department of Environmental Protection and Department of Marine Resources<sup>56</sup> monitor freshwater and marine water, respectively, for potential onset of harmful algal blooms (HABs), and there are water quality regulations set in place to mitigate against human-caused sources of HABs<sup>57</sup>. Air quality measures mitigate against hazards associated with poor air quality in Maine<sup>58</sup>.

<sup>53</sup> Maine River Flow Advisory Commission: <https://www.maine.gov/mema/hazards/river-flow-advisory-commission>

<sup>54</sup> Maine Drought Task Force: <https://www.maine.gov/mema/hazards/drought-task-force>

<sup>55</sup> Maine Firewood Restrictions: [https://www.maine.gov/dacf/mfs/forest\\_health/invasive\\_threats/firewood.shtml](https://www.maine.gov/dacf/mfs/forest_health/invasive_threats/firewood.shtml)

<sup>56</sup> Marine Biotxin monitoring in Maine: <https://www.maine.gov/dmr/fisheries/shellfish/bureau-of-public-health-programs/biotoxins-in-maine>

<sup>57</sup> Maine DEP Lakes program: <https://www.maine.gov/dep/water/lakes/index.html>

<sup>58</sup> Maine air quality: <https://www.maine.gov/dep/air/>



### 4.3.2 Hazard Management Capabilities of the State that have Changed [S8.c.2]

The following depict improvements from the last plan to the State's hazard management capabilities. Other updates are documented throughout the Capabilities Section.

- Staff with GIS mapping, data analytics, and research capabilities brought onto staff;
- Streamlined Public Assistance and Mitigation through combined briefings;
- Revised and streamlined the state HMGP application to make it easier for towns to apply and for the State and FEMA to review;
- Revised and streamlined grant workshops for applicants;
- Utilized, and continue to utilize, the FEMA 406 Program to a far greater extent than it did just a few years ago to implement hazard mitigation projects at less cost to the towns; and
- Partnered with the Local Roads Center to sponsor a series of ongoing workshops throughout the state on the use of geo-synthetics to mitigate flood damages to local transportation systems by stabilizing banks, fill, rip-rap, road surfaces and other structures.
- Other changes that were not related to specific disaster events included:
- Governor's Office of Policy Innovation and the Future has established Community Resilience Partnership with associated mitigation capabilities listed in this section
- State agency hazard mitigation partnerships have been strengthened through the update process for this Plan
- Maine Hurricane Evacuation Study published in 2020 and distributed to coastal counties
- Maine Risk Map<sup>59</sup> developed by MEMA to assist local planning needs
- Shoreland Zoning regulations were strengthened to protect against mass wasting hazards
- Many more resources are now available to support hazard mitigation planning, as shown in the Risk Assessment
- Office of the State Fire Marshal is anticipating adoption of new International Building, Residential, and Energy Conservation Codes. All state code officers are required to be retrained and recertified before they can inspect using the new standards
- New LIDAR data has been gathered along the coast of Maine and for portions of Androscoggin, Oxford and Kennebec Counties
- Coastal bluff erosion and landslide maps were completed for virtually the entire Maine coast as well as some inland areas
- The Maine Geological Survey has studied the potential impacts on Maine from coastal beach/bluff erosion, inland landslides, and tsunamis
- 15 county hazard mitigation plans have been updated and one university system plan has been approved
- More county directors continue to be heavily involved in hazard mitigation work

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<sup>59</sup> Maine Risk Map: <https://experience.arcgis.com/experience/202cb7e1444c4881b44b7586136ef9e7/>

Table 4.1. State Mitigation Funding Capabilities Matrix in Alphabetical Order by Source Agency

Funding Program Name	Source Agency	Description	Hazard/Use
<a href="#">Underserved and Indigenous Microgrids (UIM)</a>	Department of Energy	This funding will support multi-year research, development and demonstration (RD&D) of tools and technologies to enhance the reliability and resilience of the nation’s energy infrastructure.	All hazards impacting energy grid
<a href="#">Maintaining and Enhancing Hydroelectricity Incentives</a>	Energy Programs	To make incentive payments to the owners or operators of qualified hydroelectric facilities for capital improvements.	Flood, erosion
<a href="#">Brownfields Projects</a>	Environmental Protection Agency	The Environmental Protection Agency provides technical and financial assistance for brownfields activities that protect human health and the environment, encourage sustainable reuse, promote partnerships, strengthen local economies, and create jobs.	Brownfield sites in hazard areas
<a href="#">Brownfields State &amp; Tribal Response Programs</a>	Environmental Protection Agency	The primary goal of this funding is to ensure that State and Tribal response programs include, or are taking reasonable steps to include, certain elements of an environmental response program and that the program establishes and maintains a public record of sites addressed.	Brownfield sites in hazard areas
<a href="#">Clean Water State Revolving Fund</a>	Environmental Protection Agency	Under the Bipartisan Infrastructure Law, 49 percent of Clean Water State Revolving Fund funds shall be eligible to be grants or 100 percent principal forgiveness loans. The Clean Water State Revolving Fund program provides capitalization grants to States, which will provide a long-term source of State financing for construction of wastewater treatment facilities and implementation of other water quality management activities.	Flood, erosion, HABs/water quality
<a href="#">Clean Water State Revolving Fund- Emerging Contaminants</a>	Environmental Protection Agency	Clean Water State Revolving Fund funding as described in the Clean Water State Revolving Fund program, with eligible projects limited to those that address emerging contaminants, such as PFAS.	Flood, erosion, HABs/water quality
<a href="#">Drinking Water State Revolving Fund</a>	Environmental Protection Agency	States are required to give priority for the use of Drinking Water State Revolving Fund project funds to: Address the most serious risks to human health, ensure compliance with the requirements of the Safe Drinking Water Act, and assist systems most in need on a per household basis according to State affordability criteria. Under the Bipartisan Infrastructure Law, 49 percent of funds shall be eligible to be grants or 100 percent principal forgiveness loans.	Flood, erosion, HABs/water quality
<a href="#">Drinking Water State Revolving Fund Emerging Contaminants (incl. PFAS)</a>	Environmental Protection Agency	Drinking Water State Revolving Fund funding as described in the Drinking Water State Revolving Fund program, with eligible projects limited to those that address emerging contaminants, such as PFAS.	Flood, erosion, HABs/water quality
<a href="#">Drinking Water State Revolving Fund Lead Service Lines Replacement</a>	Environmental Protection Agency	Drinking Water State Revolving Fund funding as described in the Drinking Water State Revolving Fund program, below, with eligible projects limited to lead service line replacement and associated activities related to identification, planning, design, and removal. Under the Bipartisan Infrastructure Law, 49 percent of funds shall be eligible to be grants or 100 percent principal forgiveness loans.	Hazardous materials in natural hazard areas
<a href="#">National Estuary Program Grants</a>	Environmental Protection Agency	Estuary specific needs.	Coastal hazards
<a href="#">Reduce, Reuse, Recycling Education and Outreach Grants</a>	Environmental Protection Agency	Communities across the country are burdened by pollution impacts from inefficient waste management systems. This historic investment will transform public education and outreach regarding how to reduce, reuse, and recycle right.	Flood, erosion, HAB Water quality issues

Funding Program Name	Source Agency	Description	Hazard/Use
<a href="#">Solid Waste Infrastructure for Recycling Infrastructure Grants</a>	Environmental Protection Agency	Communities across the country are burdened by pollution impacts from inefficient waste management systems. This historic investment will transform recycling and solid waste management across the country while creating jobs.	Flood, erosion, HABS/water quality
<a href="#">Superfund</a>	Environmental Protection Agency	Contract, Cooperative Agreement, Interagency. To protect public health and the environment the Superfund program focuses on making a visible and lasting difference in communities, ensuring that people can live and work in healthy, vibrant places.	Superfund sites in hazard areas
<a href="#">Water Infrastructure Improvements for the Nation, Small and Underserved Communities Emerging Contaminants Grant Program</a>	Environmental Protection Agency	This grant program provides grants to public water systems in small and underserved/disadvantaged communities that are unable to finance activities needed to comply with drinking water regulations. Bipartisan Infrastructure Law prioritizes the funding to focus on small and disadvantaged communities in addressing emerging contaminants, including PFAS.	Flood, erosion, HABS/water quality
<a href="#">Fire Management Assistance Grants</a>	Federal Emergency Management Agency	Fire Management Assistance Grant (FMAG) Program is available to states, local and tribal governments, for the mitigation, management, and control of fires on publicly or privately owned forests or grasslands, which threaten such destruction as would constitute a major disaster.	Wildfire
<a href="#">Hazard Mitigation Grant Program Post Fire (Disaster Funding)</a>	Federal Emergency Management Agency	The Hazard Mitigation Grant Program (HMGP) Post Fire assistance is available to help communities implement hazard mitigation measures after wildfire disasters in any area that receives a Fire Management Assistance Grant (FMAG) declaration. Funding is only available to state agencies, federally recognized tribes, counties, private non-profits, and municipal partners with a current FEMA-approved Local Hazard Mitigation Plans (LHMP).	All hazards
<a href="#">Hazard Mitigation Grant Program, 404 Program (Disaster Funding)</a>	Federal Emergency Management Agency	The Hazard Mitigation Grant Program (HMGP), 404 Program, is dependent on a Presidentially declared major disaster. HMGP seeks to plan for and implement mitigation measures that reduce the risk of loss of life and property from future natural disasters during the reconstruction process following a disaster. Funding is only available to state agencies, federally recognized tribes, counties, private non-profits, and municipal partners with a current FEMA-approved Local Hazard Mitigation Plans (LHMP)	All hazards, dam breach hazards
<a href="#">Individuals and Households Program</a>	Federal Emergency Management Agency	FEMA's Individuals and Households Program (IHP) may provide those who qualify with Housing Assistance. This may include direct or financial assistance to help with disaster-caused housing needs. Needs that are not covered by insurance or other sources.	All hazards
<a href="#">Legislative Pre-Disaster Mitigation Grant Program (Robert T Stafford Act Section 203) (Non-Disaster Funding)</a>	Federal Emergency Management Agency	Legislative Pre-Disaster Mitigation (LPDM) Program was established through the Consolidated Appropriations Act of 2023, which authorizes funding for 100 national projects for States, Federally Recognized Tribes, and Local Communities. These funds allow governments to plan for and implement sustainable cost-effective measures designed to reduce the risk to individuals and property from future natural hazards, while also reducing reliance on federal funding from future disasters.	All hazards, dam breach flood
<a href="#">Public Assistance Program</a>	Federal Emergency Management Agency	FEMA's Public Assistance Program provides supplemental grants to state, tribal, territorial, and local governments, and certain types of private non-profits so communities can quickly respond to and recover from major disasters or emergencies. FEMA also encourages protecting these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process (Section 406 Funding).	All hazards

Funding Program Name	Source Agency	Description	Hazard/Use
<a href="#">Safeguarding Tomorrow RLF Program/Safeguarding Tomorrow through Ongoing Risk Mitigation (STORM) Act (Robert T Stafford Act, Sec 205)</a>	Federal Emergency Management Agency	Safeguarding Tomorrow RLF Program/Safeguarding Tomorrow through Ongoing Risk Mitigation (STORM) Act is a revolving loan fund for projects and activities that mitigate the impacts of drought, intense heat, severe storms (including hurricanes, tornadoes, windstorms, cyclones, and severe winter storms), wildfires, floods, earthquakes, and other natural hazards. Funding is only available to those with current FEMA-approved Local Hazard Mitigation Plans (LHMP). Must establish a dedicated source for repayment within their Intended Use Plan. Currently the State of Maine is not participating in this opportunity, only the State of New York and Rhode Island.	All hazards affected by climate change
<a href="#">BRIC Direct Technical Assistance</a>	Federal Emergency Management Agency	The Building Resilient Infrastructure and Communities (BRIC) Direct Technical Assistance (DTA) is a no-cost opportunity that gives full support to counties, federally recognized tribes, and municipal partners that may not have the resources to begin climate resilience planning and project solution design on their own. FEMA provides communities climate risk assessments, community engagement, partnership building, mitigation and climate adaptation planning, and BRIC program requests throughout the grant lifecycle. Support for BRIC DTA communities will be given from pre-application activities to grant closeout.	All hazards, Dams
<a href="#">Building Resilient Infrastructure and Communities (Robert T Stafford Act Section 203(i)) (Non-Disaster Funding)</a>	Federal Emergency Management Agency	FEMA provides federal funds for the Building Resilient Infrastructure and Communities (BRIC) grant program to state agencies, federally recognized tribes, counties, and municipal partners for hazard mitigation activities, including capacity and capability activity types and hazard mitigation projects. BRIC is funded by a 6% set-aside from federal post-disaster grant funding each year. Funding is set aside for States and Tribal communities, while the remainder is left for national competition. Funding is only available to those with current FEMA-approved Local Hazard Mitigation Plans (LHMP)	All hazards, dam breach hazards
<a href="#">Emergency Management Performance Grant Program</a>	Federal Emergency Management Agency	The Emergency Management Performance Grant (EMPG) provides state, local, tribal, and territorial emergency management agencies with the resources required for implementation of the National Preparedness System and works toward the National Preparedness Goal of a secure and resilient nation. The EMPG's allowable costs support efforts to build and sustain core capabilities across the prevention, protection, mitigation, response and recovery mission areas.	All hazards affected by climate change
<a href="#">Flood Mitigation Assistance Grants (National Flood Insurance Act Sec 1366) (Non-Disaster Funding)</a>	Federal Emergency Management Agency	Flood Mitigation Assistance (FMA) is a nationally competitive grant program that provides funding to state agencies, federally recognized tribes, counties, and municipal partners. Funds can be used for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program (NFIP). Funding is only available to those with current FEMA-approved Local Hazard Mitigation Plans (LHMP)	Flood, Dam breach flood
<a href="#">Homeland Security Grant Program</a>	Federal Emergency Management Agency	Though not typically used for hazard mitigation specifically, The Homeland Security Grant Program (HSGP) plays an important role in the implementation of the National Preparedness System (NPS) by supporting the building, sustainment, and delivery of core capabilities essential to achieving the National Preparedness Goal (NPG) of a secure and resilient Nation. The HSGP's allowable costs support efforts to build and sustain core capabilities across the Prevention, Protection, Mitigation, Response, and Recovery mission areas.	All hazards affected by climate change
<a href="#">National Dam Safety Program</a>	Federal Emergency Management Agency	The National Dam Safety Program (NDSP) is a partnership of states, federal agencies, and other stakeholders to encourage and promote the establishment and maintenance of effective federal and state dam safety programs to reduce the risk to human life, property, and the environment from dam related hazards. NDSP provides partial funding to staff the State Dam Safety Engineer and assistant position in Maine.	All hazards affected by climate change

Funding Program Name	Source Agency	Description	Hazard/Use
<a href="#">Rehabilitation Of High Hazard Potential Dam Grant Program</a>	Federal Emergency Management Agency	Rehabilitation of High Hazard Potential Dams provides technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams.	Dams
<a href="#">Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) - Discretionary</a>	Federal Highway Administration	PROTECT Grants will support planning, resilience improvements, community resilience and evacuation routes, and at-risk coastal infrastructure.	All hazards affecting transportation
<a href="#">Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) - Formula</a>	Federal Highway Administration	The PROTECT Formula Program will support planning, resilience improvements, community resilience and evacuation routes, and at-risk coastal infrastructure.	All hazards affecting transportation
<a href="#">Wildlife Crossings Pilot Program</a>	Federal Highway Administration	The Wildlife Crossings Pilot program will support projects that seek to reduce the number of wildlife-vehicle collisions, and in carrying out that purpose, improve habitat connectivity	All hazards affecting transportation
<a href="#">Grid Resilience Program</a>	Governor's Energy Office	Section 40101(d) of the Bipartisan Infrastructure Law (BIL) established the Grid Resilience Formula Grant Program, which will provide a total of \$459 million each year for five years to States and Indian Tribes. The funds available under this program are intended to improve the resilience of the electric grid against disruptive events, such as reducing shut offs due to extreme weather or natural disaster. The Governor's Energy Office (GEO) has submitted an application for the State of Maine's combined 2022 and 2023 funding allocations, for a total allocation of \$4,364,534. It is currently anticipated that approximately \$2.2 million will be allocated to the State of Maine in each of the remaining three program years. Maine tribes will also separately be allocated their own funding amount.	all hazards impacting energy grid
<a href="#">Community Resilience Partnership: Community Action Grants</a>	Governor's Office of Policy Innovation and the Future	Municipal and tribal governments and unorganized territories in Maine who have joined the Partnership may apply directly for funds to support projects that reduce energy use and costs and/or make their community more resilient to climate change effects, such as flooding, extreme weather, drought, and public health impacts.	Coastal hazards
<a href="#">Community Resilience Partnership: Service Provider Grants</a>	Governor's Office of Policy Innovation and the Future	Regional service provider organizations may apply for funds to recruit groups of two to five communities to complete the enrollment activities, join the Partnership, and apply for Community Action Grants.	Natural hazards impacting grid
<a href="#">Community Block Development Grant Disaster Recovery</a>	Housing and Urban Development	In response to Presidentially declared disasters, Congress may appropriate funding for the CDBG Program as Disaster Recovery (CDBG-DR) grants to support cities, counties, U.S. states, and U.S. territories in rebuilding and recovering from disasters. CDBG-DR grants provide housing, infrastructure, and economic revitalization assistance to impacted areas.	All Hazards
<a href="#">Community Block Development Grant - Mitigation</a>	Housing and Urban Development	The CDBG-Mitigation (CDBG-MIT) program is available through the Community Development Block Grant Disaster Recovery Program when a disaster has been Presidentially declared. CDBG-MIT provides additional funding to increase resilience to disasters by lessening the impact of future disasters.	All Hazards
<a href="#">Coastal Community Grant program</a>	Maine Coastal Program	The Coastal Community Grant program is a competitive grant program that provides federal funds for projects in Maine's coastal zone with a focus on priority coastal issues, as identified by the Maine Coastal Program and the Maine Climate Council's Maine Won't Wait: A Four-Year Plan for Climate Action.	Coastal hazards

Funding Program Name	Source Agency	Description	Hazard/Use
<a href="#">Coastal Community Planning Grant</a>	Maine Coastal Program (Marine Resources)	Provides technical assistance to municipalities, advises the legislature, coordinates with other state agencies, and advocates for sound land use planning in Maine coastal areas.  The Grant Program (awarded through MPAP) supports implementation of projects that will restore commercial fisheries habitat, mitigate pollution from stormwater run-off, provide data to plan cost-effective storm drainage infrastructure improvements, and vulnerability and adaptation options for historic coastal downtowns subject to flooding from storm surge and sea level rise.	Flooding
<a href="#">Farmer Drought Relief Program</a>	Maine Department of Agriculture, Conservation & Forestry	In August of 2022, Governor Mills signed legislation establishing the Maine Farmer Drought Relief Grant Program to support Maine farmers in identifying and accessing new water sources to overcome the adverse effects of drought conditions. The program is currently not funded. DACF will develop the rules governing this grant in 2023 to be prepared to launch the program when funding is made available.	Drought
<a href="#">Municipal Stream Crossing Upgrade Grant Program</a>	Maine Department of Environmental Protection	Since 2015, Maine voters have approved a total of four bonds that fund the upgrade and replacement of stream crossings throughout Maine. These monies support the DEP's competitive grant program that matches local funding for the upgrade of municipal culverts at stream crossings to cost-effectively improve fish and wildlife habitats, reduce flooding, and increase community safety.	Flood, erosion
<a href="#">Boating Infrastructure Grant</a>	Maine Department of Transportation	This program is administered in Maine by the MaineDOT and funded through the US Fish and Wildlife Service. The BIG program provides grant funds to construct, renovate, and maintain tie-up facilities with features for transient boaters in vessels 26 feet or more in length. The MaineDOT may partner with local governments, private marinas, and others to fund eligible projects.	Sea level rise
<a href="#">Maine Highway Fund</a>	Maine Department of Transportation	Provides funding for highway road maintenance and capital improvements	Flood, erosion
<a href="#">MaineDOT Bicycle and Pedestrian Program Funding</a>	Maine Department of Transportation	This program assists with funding sidewalks, pedestrian crossing improvements, off-road transportation-related trails, downtown transportation improvements, etc. The goal of this program is to improve transportation and safety and promote economic development.	Flood, erosion
<a href="#">Municipal Partnership Initiative</a>	Maine Department of Transportation	This program is intended to help develop, fund, and build projects of municipal interest on the state infrastructure system with MaineDOT as a partner. This program will respond to municipal interests, leverage economic opportunities, and improve safety whenever possible while ensuring the public gets good value for their tax dollars.	All hazards
<a href="#">Small Harbor Improvement Program</a>	Maine Department of Transportation	This program promotes economic development, public access, improved commercial fishing opportunities and works to preserve, and create infrastructure at facilities in tidewater and coastal municipalities. The SHIP program assists municipalities in improving or creating facilities, such as public wharves, piers, landings, and boat ramps. Proposed projects must be on current or proposed public access facilities.	Sea level rise
<a href="#">Maine Infrastructure Adaptation Fund</a>	Maine Jobs and Recovery Plan; ARPA	Climate change poses a serious risk to Maine infrastructure, with damage estimates in the billions of dollars unless action is taken. The Maine Infrastructure Adaptation Fund, administered through the Maine Department of Transportation, will provide grants to municipalities, tribal governments, and others to improve stormwater, drinking water, and wastewater infrastructure from flooding, rising sea levels, and extreme weather. These grants will help protect vital infrastructure most at risk from the effects of climate change, support natural resources, and benefit public safety and emergency management efforts.	All hazards

Funding Program Name	Source Agency	Description	Hazard/Use
<a href="#">Disaster Assistance and Home Repair Loan Programs (HRLP)</a>	MaineHousing	MaineHousing offers low-interest home-repair loans and home-replacement mortgages to homeowners whose homes have been damaged or destroyed in a declared natural disaster. Home repair loans: Eligible homeowners may borrow funds for disaster-related home repairs. Loans are typically offered at low interest rates no payments due and no interest accrual for the first 12 months. Home replacement mortgages: For home replacements, interest rates and terms are typically the same as MaineHousing's First Home program, except of course that you do not need to be a first-time homebuyer.	All-hazards
<a href="#">Land Use Impact Fees</a>	Municipalities	Impact fees are charges assessed against new development that attempt to cover the cost of providing capital facilities needed to serve the development. Their use has been promoted as a way for growth to "pay its own way" by charging at the beginning for infrastructure needed by new development. Impact fees provide one way to help ensure that existing residents will not bear the cost of new facilities necessitated by the new development.	All hazards
Municipal tax dollars	Municipalities	Tax money raised by municipalities to support capital improvement plans	All hazards
<a href="#">Coastal Habitat Restoration and Resilience Grants for Underserved Communities, Under the IJA</a>	National Oceanic and Atmospheric Administration	Specific set aside from program above for underserved communities	Coastal hazards
<a href="#">Coastal Zone Management (Habitat Restoration and Resiliency)</a>	National Oceanic and Atmospheric Administration	This funding will enable approved coastal programs to protect and restore ecologically significant habitats, including conserving lands that play a critical role in helping communities become more resilient to natural hazards such as storms, flooding, inundation, erosion, tsunamis, sea level rise, and lake level changes.	Coastal hazards
<a href="#">Community-Based Habitat Restoration</a>	National Oceanic and Atmospheric Administration	NOAA's Community-based Restoration Program provides technical and financial assistance to develop high-quality habitat restoration projects that support our nation's fisheries, including dam removals and floodplain restoration.	Dams, flood, erosion
<a href="#">National Estuarine Research Reserve System</a>	National Oceanic and Atmospheric Administration	Coastal habitat restoration; coastal habitat restoration planning, engineering and design; land conservation	Coastal hazards
<a href="#">National Oceans and Coastal Security Fund (National Coastal Resilience Fund)</a>	National Oceanic and Atmospheric Administration	National Coastal Resilience Fund invests in conservation projects that restore or expand natural features such as coastal marshes and wetlands, dune and beach systems, oyster and coral reefs, forests, coastal rivers and floodplains, and barrier islands that minimize the impacts of storms and other naturally occurring events on nearby communities. Administered through NFWF.	Coastal hazards
<a href="#">Restoring Fish Passage through Barrier Removal Grants</a>	National Oceanic and Atmospheric Administration	Restoring fish passage by removing in-stream barriers and providing technical assistance pursuant to section 117 of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (16 U.S.C. 1891a).	Dams, flood, erosion
<a href="#">Transformational Habitat Restoration and Community Resilience</a>	National Oceanic and Atmospheric Administration	habitat restoration funds through a competitive grants process with the purpose of restoring marine, estuarine, coastal, and Great Lakes ecosystem habitat as well as constructing or protecting ecological features that protect coastal communities from flooding or coastal storms.	Dams, flood, erosion

Funding Program Name	Source Agency	Description	Hazard/Use
<a href="#">Restoring Tribal Priority Fish Passage through Barrier Removal</a>	National Oceanic and Atmospheric Administration	Federal financial and technical assistance to Indian tribes and organizations that represent Indian tribes through formal legal agreements to remove barriers to fish passage for native migratory or sea-run fish. Funding will be used for fish passage that rebuilds productive and sustainable fisheries, contributes to recovery and conservation of threatened and endangered species, enhance watershed health, promotes resilient ecosystems and communities, and increases tribal commercial, recreational, subsistence and cultural practice opportunities.	Dams, flood
<a href="#">National Historic Preservation Fund</a>	National Park Service	The Historic Preservation Fund (HPF) was established in 1977 to provide financial assistance to carry out activities related to preservation. Awards from the HPF are made to States, Tribes, Territories, local governments, and non-profits. The National Park Service's State, Tribal, Local, Plans & Grants Division manages the programs and grant awards funded by the HPF. Today, the fund is the primary Federal funding source for matching grants to State and Tribal historic preservation offices and other eligible recipients to pay for such things as surveys and repair of historic resources, training, nominations to the National Register of Historic Places, and grants to local jurisdictions for their preservation priorities.	All hazards
<a href="#">Save America's Treasures Grants</a>	National Park Service	The Save America's Treasures grant program was established in 1998 to celebrate America's premier cultural resources in the new millennium. The National Park Service administers Save America's Treasures grants in partnership with the National Endowment for the Arts, the National Endowment for the Humanities, and the Institute of Museum and Library Services.	All hazards
<a href="#">Watershed And Flood Prevention Operations</a>	Natural Resources Conservation Services	Provides planning, design and construction of measures that address resource concerns in a watershed.	Flood, erosion
<a href="#">Northern Border Regional Commission</a>	Northern Border Regional Commission	The Northern Border Regional Commission catalyzes regional, collaborative, and transformative community economic development approaches that alleviate economic distress and position the region for economic growth.	Flood, erosion
<a href="#">National Culvert Removal, Replacement, &amp; Restoration Grant (Culvert Aquatic Organism Passage (AOP) Program)</a>	Office of the Secretary (FHWA)	National Culvert Removal, Replacement and Restoration program provides supplemental funding for grants to a State, local government, or an Tribe on a competitive basis for projects that replace, remove, and/or repair culverts or weirs. From MaineDOT: FHWA culvert aquatic organism passage program (sea-run fish), MaineDOT has been working with Maine Department of Marine Resources to identify priority culverts (municipal and state)– The expected award size for projects is \$100,000 to \$2M per project and a batch of projects could be awarded up to \$20 M.	Flood, erosion
<a href="#">Disaster Loans Program</a>	Small Business Administration	The SBA offers disaster assistance in the form of low interest loans to businesses, nonprofit organizations, homeowners, and renters located in regions affected by declared disasters. SBA also provides eligible small businesses and nonprofit organizations with working capital to help overcome the economic injury of a declared disaster.	All hazards
<a href="#">Water Resources Research Act Program 104b state institute grant</a>	State Water Resources Research Institute (University of Maine); USGS	With funding from the U.S. Geological Survey's 104b program, the Maine Water Resources Research Institute (WRRRI) in the Mitchell Center for Sustainability Solutions supports research and outreach to enhance the capacity for the sustainable management of water resources across the state. We request proposals for solutions-driven projects in which interdisciplinary research teams collaborate closely with stakeholders and provide support for student training.	Flood, drought, water quality- and quantity-related hazards



Funding Program Name	Source Agency	Description	Hazard/Use
<a href="#">Flood Plain Management Services</a>	U.S. Army Corps of Engineers	Under the authority provided by Section 206 of the 1960 Flood Control Act (PL 86-645), as amended, the U.S. Army Corps of Engineers can provide the full range of technical services and planning guidance that is needed to support effective flood plain management. General technical assistance efforts under this program includes determining site-specific data on obstructions to flood flows, flood formation, and timing; flood depths, stages, or floodwater velocities; the extent, duration, and frequency of flooding; information on natural and cultural flood plain resources; and flood loss potentials before and after the use of flood plain management measures. Types of studies have been conducted under the FPMS program include flood plain delineation/hazard, dam failure analyses, hurricane evacuation, flood warning, floodway, flood damage reduction, storm water management, flood proofing, and inventories of flood prone structures.	Flood
<a href="#">Interagency Nonstructural Flood Risk Management</a>	U.S. Army Corps of Engineers	Under the Floodplain Management Services (FPMS) Program, the Corps provides a wide range of technical services and planning guidance to support effective management of the floodplains associated with the rivers of the United States. Interagency nonstructural efforts that focus on flood risk reduction activities are services that can be provided through FPMS and support non-federal governments while promoting a collaborative approach.	Flood
<a href="#">Corps Water Infrastructure Financing Program</a>	U.S. Army Corps of Engineers	The Corps Water Infrastructure Financing Program (CWIFP) enables local investment in infrastructure projects that enhance community resilience to flooding, promote economic prosperity, and improve environmental quality. Through CWIFP, the U.S. Army Corps of Engineers (USACE) will accelerate non-federal investments in water resources infrastructure by providing long-term, low-cost loans to creditworthy borrowers.	Dams
<a href="#">Community Wildfire Defense Grant Program For At-Risk Communities</a>	U.S. Forest Service	legislative Pre-Disaster Mitigation (LPDM) Program was established through the Consolidated Appropriations Act of 2023, which authorizes funding for 100 national projects for States, Federally Recognized Tribes, and Local Communities. These funds allow go	Wildfire
<a href="#">Firewood Banks</a>	U.S. Forest Service	Financial assistance delivered through Alliance for Green Heat for existing firewood banks.	Severe fall/winter weather
<a href="#">State Fire Assistance</a>	U.S. Forest Service	Through the State Fire Assistance program, the Forest Service supports and assists State Foresters and local communities in building capacity for wildfire prevention, mitigation, control, and suppression on non-Federal lands.	Wildfire
<a href="#">State Forest Action Plans</a>	U.S. Forest Service	To implement State Forest Action Plans. State plans were revised in 2020 for all 59 States and territories—they offer practical and comprehensive roadmaps for investing Federal, State, local, and private resources where they can be most effective in achieving national conservation goals.	Wildfire, forest pests
<a href="#">Volunteer Fire Assistance Program</a>	U.S. Forest Service	The Volunteer Fire Assistance program focuses on increasing the capacity of local fire departments to provide initial attack on wildfires by providing additional firefighter training and assistance to departments with purchasing equipment. Recipients match grants dollar-for-dollar.	Wildfire
<a href="#">Community Development Block Grant</a>	U.S. Maine Department of Environmental Protection Department of Housing and Urban Development	Each year the State of Maine receives a formula allocation of funding from the Department of Housing and Urban Development to be distributed to eligible Maine communities under the Community Development Block Grant Program. In 1982 the State of Maine began administering the CDBG Program to assist units of local government in various community projects in areas ranging from infrastructure, housing, downtown revitalization to public facilities and economic development.	Flood, drought, water quality- and quantity-related hazards

Funding Program Name	Source Agency	Description	Hazard/Use
<a href="#">National Fish Passage Program</a>	United States Fish and Wildlife Service	For the removal of barriers and for technical assistance under the National Fish Passage Program.	Dams, flood, erosion
<a href="#">Earth Mapping Resources Initiative</a>	United States Geological Survey	To accelerate the U.S. Geological Survey topographic, geologic, geochemical, and geophysical mapping; accelerating the integration and consolidation of geospatial and resource data; and providing an interpretation of both critical mineral resources still in the ground and critical mineral resources that may be reprocessed from mine wastes.	General risk mapping
<a href="#">National Geological And Geophysical Data Preservation Program</a>	United States Geological Survey	Implementation provides competitive grants to State Geological Surveys and funds projects executed by U.S. Geological Survey and other Department of the Interior bureaus to preserve, modernize, and make publicly available geological and geophysical data and assets.	General risk assessment
<a href="#">National Resources Conservation Service Watershed Rehabilitation Program</a>	United States Maine Department of Environmental Protection Department of Agriculture	This program authorizes the USDA to assist watershed project sponsors (local governments and soil conservation districts) with technical and financial assistance to plan, design, and rehabilitate aging watershed dams originally built by NRCS.	Dams
<a href="#">Farm Service Agency</a>	US Department of Agriculture	USDA’s Farm Service Agency (FSA) offers disaster assistance and low-interest loan programs to assist farmers experiencing drought. Available programs and loans include the Non-Insured Crop Disaster Assistance Program, Livestock Forage Disaster Program, Tree Assistance Program, Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program, Emergency Loan Program, and the Emergency Conservation Program.	Drought
<a href="#">Rural Development Agency</a>	US Department of Agriculture	USDA Rural Development supports rural prosperity in Maine by investing in modern infrastructure such as high-speed internet and water and waste treatment systems. We help eligible rural Mainers buy or rent affordable housing, and we can partner to build or improve essential community facilities such as hospitals, libraries, and schools.	All hazards
<a href="#">Conservation Innovation Grants</a>	US Department of Agriculture National Resources Conservation Service	Conservation Innovation Grants (CIG) is a competitive program that supports the development of new tools, approaches, practices, and technologies to further natural resource conservation on private lands.	All hazards

Table 4.2. State Mitigation Non-Funding Capabilities Matrix in Alphabetical Order

Capability Name	Type	Responsible agency	Evaluation of Effect on Mitigation Initiatives	Hazard
<a href="#">Application Guide for the 2022 Sea Level Rise Technical Report</a>	Plan	National Oceanic and Atmospheric Administration	Provides guidance for planning efforts in response to NOAA's 2022 SLR tech report	Sea level rise
<a href="#">Aquatic Resources Umbrella Mitigation Banking Instrument</a>	Program	Maine Department of Transportation; Bureau of Maintenance and Operations	Directs and coordinates compensatory mitigation for impacts to wetland resources caused by state transportation projects.  This mitigates the loss of wetlands but is not mitigation of a hazardous area.	N/A
<a href="#">Bureau of Public Health Programs</a>	Program	Maine Department of Marine Resources	DMR reduces risk from HABs and other marine water quality/sanitation hazards through administration of public health programs, including marine biotoxin monitoring, shellfish dealer certification, shellfish growing area classification, the Nearshore Marine Resources Program, water quality volunteer monitoring, and environmental permit review.	HABs
<a href="#">Capital Improvement Projects (MaineDOT work plan)</a>	Program	Maine Department of Transportation; Bureau of Maintenance and Operations	Potential to incorporate mitigation principles based on scope of capital improvement project and funds available to project.	All-hazards
<a href="#">Clean Air Act, air quality programs</a>	Program	US EPA, Maine Department of Environmental Protection	The Maine Department of Environmental Protection implements air quality programs under the Clean Air Act and state law. The Department monitors air quality across the state, licenses emissions from larger facilities, and conducts compliance assistance and inspection visits. The Department collaborates with local, state, and federal agencies to plan and implement strategies to protect Maine’s air quality.	Air Quality
<a href="#">CoastWise</a>	Program	Maine Department of Marine Resources, Maine Coastal Program	CoastWise provides a voluntary set of best practices, decision-making tools, and path for designing safe, cost-effective, ecologically supportive, and climate-resilient tidal crossings.	Coastal
<a href="#">Community Resilience Partnership</a>	Program	Governor’s Office of Policy Innovation and the Future	Through grants and direct support to municipal and tribal governments and unorganized territories, the Community Resilience Partnership assists communities to reduce carbon emissions, transition to clean energy, and become more resilient to climate change effects such as to extreme weather, flooding, rising sea levels, public health impacts, and more.	All hazards influenced by climate change
<a href="#">Dam Safety Program (Law 37-B, Chapter 24)</a>	Program	Maine Emergency Management Agency (Department of Defense, Veterans, and Emergency Management)	Inspects existing dams and reservoirs to rate their hazard potential based on downstream vulnerabilities.  Assists dam owners develop EAPs to minimize the impacts of dam failure.	Flooding

Capability Name	Type	Responsible agency	Evaluation of Effect on Mitigation Initiatives	Hazard
<a href="#">Defensible Space Chipping Program</a>	Program	Maine Forest Service	The Maine Forest Service is offering a FREE “Hazardous Fuels Reduction Chipping Program” to communities who have initiated wildfire risk assessments and are working towards completing a Community Wildfire Protection Plan. For more information, please contact their local Forest Ranger or call 2874989.	Wildfire
<a href="#">DEP Performance Partnership Agreement and Priorities and Commitments</a>	Program	Maine Department of Environmental Protection	This agreement is the detailed three-year plan that the Department and the US Environmental Protection Agency (EPA) negotiate to accomplish mutual long-term goals for environmental protection. Annual progress reports are submitted by the Department to EPA, and when necessary the work plan is adjusted to address emerging issues.	All-hazards
<a href="#">Digital Coast</a>	Map/Tool	National Oceanic and Atmospheric Administration	Provides data, tools, and training recommended for communities to address coastal issues.	Sea level rise
<a href="#">Disaster Management Program</a>	Program	American Red Cross	Provides emergency relief immediately following disasters. Not directly applicable to mitigation.	All-hazards
<a href="#">Disaster Preparedness Information &amp; Education</a>	Practice	Maine Emergency Management Agency (Department of Defense, Veterans, and Emergency Management)	Provides educational materials to support the four phases of emergency management: mitigation, preparedness, response, and recovery.  Coordinates the protection of Maine citizens from All-Hazards emergencies; coordinates disaster mitigation, preparedness, response, and recovery actions; and assists county and local governments in protecting life and property. MEMA has been effective in building hazard mitigation partnerships with other agencies, counties, and towns.	All-hazards
<a href="#">Drought Task Force</a>	Program	Maine Emergency Management Agency (Department of Defense, Veterans, and Emergency Management)	Convenes when drought conditions emerge to assess water conditions and their impacts statewide. Focus points are on drought impact monitoring, promoting assistance programs, and encouraging drought mitigation grants.  Co-chaired by MEMA and USGS, the DTF is composed of representatives from state and federal agencies and the University of Maine.	Drought
<a href="#">Enhanced 911</a>	Program	Emergency Services Communication Bureau (Public Utilities Commission)	Allows for the location identification of mobile users resulting in a more efficient and effective response effort. The enhanced system directly relates to reducing negative impact associated with natural hazards to people.	All-hazards
<a href="#">Erosion &amp; Sediment Control</a>	Policy	Land and Water Programs (Environmental Protection)	Requires anyone filling, displacing, or exposing soil or other earthen materials to take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource.	Erosion

Capability Name	Type	Responsible agency	Evaluation of Effect on Mitigation Initiatives	Hazard
<a href="#">Executive Order dated March 4, 1968</a>	Policy	Governor's Office (Executive Branch)	Executive Order dated March 4, 1968, precluding the uneconomic, hazardous, or unnecessary use of flood plains in connection with state facilities. Prohibits new state facilities from being located in flood plains.	Flooding
<a href="#">Federal Excess Property Program</a>	Program	Maine Forest Service (Agriculture, Conservation, and Forestry)	Allows MFS to acquire federal surplus property and loan or transfer it to Maine fire departments, thereby encouraging state-supported land use/development practices.	Wildfire
<a href="#">FireWise USA</a>	Program	Maine Forest Service	Goals of FireWise UAS: Reduce loss of lives, property, and resources to wildland fire, maintain communities in a way that is compatible with our natural surroundings, emphasize community responsibility and involvement.	Wildfire
<a href="#">Forest health and Monitoring</a>	Program	Maine Forest Service	The Division of Forest Health & Monitoring was established in 1921 to protect the forest, shade and ornamental tree resources of the state from significant insect and disease damage and to provide pest management and damage prevention for homeowners, municipalities, and forest landowners and managers, thereby preserving the overall health of Maine's forest resources.	Forest Pests
<a href="#">Forest Protection Division</a>	Program	Maine Forest Service (Agriculture, Conservation, and Forestry)	Manages Maine's forests to protect homes and forest resources from wildfire and to respond to disasters and emergencies. Oversees the pre-suppression, suppression, and investigation of Maine forest fires. Provides trained and equipped Forest Rangers. MFS has been very effective in its wildfire prevention efforts as noted in the Wildfire hazard profile.	Wildfire
<a href="#">GeoLibrary Data Catalog</a>	Program	Maine Office of GIS and Maine Geolibrary Board	Provides public access to numerous GIS resources useful for hazard mitigation planning	All-hazards
<a href="#">Guidelines on Flood Adaptation for Rehabilitation Historic Buildings</a>	Guidance	National Park Service	These Guidelines are designed to provide information on adapting historic buildings to be more resilient to flooding in a manner that will preserve their historic character and meet The Secretary of the Interior's Standards for Rehabilitation.	Flood
<a href="#">Hazard Mitigation Planning</a>	Program	County and local Emergency Management Agencies	In Maine, emergency management is coordinated regionally by Emergency Management Agencies (EMAs) in each of our 16 Counties. County Directors are appointed by their respective County Commissioners, and funded in part by County, and in part by federal funds provided through MEMA. County EMAs provide an invaluable link between the almost 500 cities and towns in Maine, and the State. They provide support and leadership in preparedness, response, recovery, and mitigation to their local, business and volunteer partners.	All-hazards

Capability Name	Type	Responsible agency	Evaluation of Effect on Mitigation Initiatives	Hazard
<a href="#">High Hazard Potential Dams</a>		Maine Emergency Management Agency (Department of Defense, Veterans, and Emergency Management)	The Rehabilitation of High Hazard Potential Dams Grant (HHPD) awards provide technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams. A state or territory with an enacted dam safety program, the State Administrative Agency, or an equivalent state agency, is eligible for the grant. Maine has not yet taken advantage of this program.	Dam-related hazards
<a href="#">Historic Properties and Climate Change Planning in Maine</a>	Plan	Maine Historic Preservation Commission	The future of historic properties is often overlooked in the complex process of planning for the effects of climate change, yet they are also subject to the effects of erosion, high water, intense storms, high winds, and wildfire. Much like parks or schools or town buildings, a community’s historic properties help create a unique sense of place. Community members, municipal officials, planners, preservationists, scientists, and visionaries all need to be part of the discussion of how - and which – historic properties can be protected. Local values, demographics, culture, and economics underlay the available and feasible options.	All-hazards
<a href="#">Historic Properties Toolkit</a>	Map/Tool	Maine Historic Preservation Commission	<p>This GIS map depicts the locations of properties in Maine listed in the National Register of Historic Places, National Historic Landmarks, or museums/archives along with layers depicting potential threats to these properties including flood, fire, sea-level rise, storm surge. The map also shows current NOAA hazards and watches.</p> <p>The MHPC has developed this web application so that as communities, regions, officials, and citizens create plans to deal with changing climate, storms, erosion, or other physical threats, historic properties, museums, or archives within the subject areas can be identified, evaluated, and their futures contemplated. As irreplaceable, authentic touchstones to our past, these properties merit specialized consideration in the planning processes in order to protect the historic characteristics and associations that give them meaning.</p>	Flood
Home Fire Risk Assessment	Program	US Forest Service and Maine Forest Service	Residential Fire Risk Assessment offered by Maine Forest Rangers	Wildfire
<a href="#">Hydropower &amp; Dams</a>	Policy	Maine Department of Environmental Protection, Land and Water Programs	Federal and State processes may permit construction, reconstruction, or structural alteration of new or existing hydropower projects to ensure water quality standards are met.	Flooding

Capability Name	Type	Responsible agency	Evaluation of Effect on Mitigation Initiatives	Hazard
<a href="#">Land Use Planning Commission (LUPC)</a>	Program	Maine Department of Agriculture, Conservation & Forestry, Bureau of Resource Information and Land Use Planning	<p>Planning and zoning authority for the 10.4 million acres of unorganized territory in Maine.</p> <p>By regulating development in the Unorganized Territory (UT), the LUPC ensures that development is either directed away from hazard areas or that proposed activities in hazard areas meet applicable development standards.</p> <p>LUPC continues to enforce strong standards for development in the UT, including inappropriate floodplain development. However, the agency’s work is hamstrung by the lack of detailed flood data throughout the UT.</p>	Flooding
<a href="#">Maine Climate Council (MCC)</a>	Program	Governor’s Office of Policy Innovation and the Future; Department of Environmental Protection Co-Chairs	<p>On June 26, 2019, the Governor and Legislature created the Maine Climate Council, an assembly of scientists, industry leaders, bipartisan local and state officials, and engaged citizens. The goal of MCC is to reduce carbon emissions, build climate-resilient communities, enhance economic opportunity, and advance equity in Maine. The guiding principles relate directly to goals within the State Hazard Mitigation Plan.</p>	All hazards influenced by climate change
<a href="#">Maine Climate Hub and Maine Adaptation Toolkit</a>	Program	Maine Department of Environmental Protection, Sustainability Programs	<p>A centralized climate directory providing decision makers and assistance providers with the resources needed to become more resilient in the face of a changing climate.</p>	All hazards influenced by climate change
<a href="#">Maine Coastal Mapping Initiative (MCMi)</a>	Program	Maine Department of Marine Resources, Maine Coastal Program	<p>Acquires data about the sea floor and oceanic environment to increase Maine’s ability to model hazards and environmental changes relevant to mitigation planning among other initiatives not related to hazard mitigation.</p>	Coastal
<a href="#">Maine Coastal Program</a>	Program	Maine Department of Marine Resources, Maine Coastal Program	<p>Partnership among local, regional, and state agencies for the purpose of managing Maine's coastal resources for the public benefit.</p>	Coastal
<a href="#">Maine Community Resilience Workbook</a>	Guidance	Maine Climate Council	<p>The workbook is intended for municipalities and service providers contracted by municipalities/communities for climate change and climate change-related projects. This workbook assists in the efficacy of people, communities, and networks in Maine that are taking climate actions and supports timely information sharing across those actors.</p>	Climate change hazards
<a href="#">Maine Cooperative Snow Survey</a>	Program	Maine Department of Agriculture, Conservation & Forestry, Bureau of Resource Information and Land Use Planning	<p>The Snow Survey collects, interprets, and distributes information on the depth and water content of Maine’s snowpack in the late winter and early spring to assess the extent/location of annual spring flood risk. MGS prepares maps showing the water content and snowpack across the state; USGS and MGS analyze the data collected by private organizations as well as state and federal partners.</p>	Flooding

Capability Name	Type	Responsible agency	Evaluation of Effect on Mitigation Initiatives	Hazard
<a href="#">Maine Floodplain Management Program (includes Risk MAP Program)</a>	Program	Maine Department of Agriculture, Conservation & Forestry, Bureau of Resource Information and Land Use Planning	<p>Works with individuals, communities, and professionals to reduce the risk of flooding.</p> <p>Administers the NFIP in Maine.</p> <p>Provides technical information including flood risk maps and model ordinances, and inventories vulnerable structures statewide.</p> <p>Provides training on reading and using flood maps, ordinance interpretation, and floodplain management. Provides interagency reviews of proposals in the floodplain for state and federal agencies. Reviews local ordinances for compliance with the NFIP standards.</p> <p>This program has been effective, as evidenced by the high rate of municipal participation and the relatively low number of repetitive loss properties.</p>	Flooding
<a href="#">Maine Forest Action Plan</a>	Plan	Maine Forest Service	A comprehensive analysis of forest-related conditions, trends, threats, opportunities, and strategies to achieve Maine’s forest policy goals	All-hazards
<a href="#">Maine Geological Survey maps and planning assistance</a>	Program	Maine Department of Agriculture, Conservation & Forestry, Bureau of Resource Information and Land Use Planning	The Maine Geological Survey collects data and produces reports about groundwater, mineral resources, surface deposits and bedrock materials, stability of coastal properties, and geologic hazards such as storm surge, sea level rise, floods, landslides, erosion, earthquakes, and tsunamis. By researching past geologic events and mapping Maine’s geology, MGS’s efforts support risk assessments for the purposes of this Plan as well as for local jurisdictions and the private sector which are the basis for recurrence interval estimates. The MGS website has been effective in providing accessible relevant information regarding geologic hazards. MGS’s hazard maps effectively help communities and stakeholders understand their vulnerability to the hazards, including storm surge, sea level rise, erosion, earthquakes, and erosion.	Geologic Hazards
<a href="#">Maine Housing Characteristics</a>	Practice	MaineHousing	Housing Characteristics is an interactive tool that provides the reader with Census data on the financial and structural characteristics of residential housing in Maine, counties and towns. Affordability indexes provide a statewide, county, and local breakdown of home buying and rental affordability. The affordability calculation is based on the ratio of area median home prices and median two-bedroom rent costs to area median household and rental household incomes. These data can provide the reader with some basic understanding of housing equity in the selected community: its availability, affordability, and need.	All-hazards: equity
<a href="#">Maine Interagency Climate Adaptation (MICA) Work Group</a>	Program	Sustainability Programs (Environmental Protection)	<p>No longer active, but hosts reports from its active period. Established an interagency effort to coordinate state climate change adaptation activities.</p> <p>Coordinated by DEP with representatives from eight state agencies, whose efforts led to establishment of the Maine Climate Council.</p> <p>Members consolidated resources for adaptation, resilience, and mitigation, and collaborate on opportunities for cross-agency projects.</p>	All hazards



Capability Name	Type	Responsible agency	Evaluation of Effect on Mitigation Initiatives	Hazard
<a href="#">Maine Local Roads Center</a>	Program	Maine Department of Transportation, Bureau of Maintenance and Operations	Provides training, technical assistance, and information to municipalities for constructing, maintaining, and managing local roads & bridges.  Training brings to local officials the most up-to-date information on managing local infrastructure.	All-hazards
<a href="#">Maine Municipal Infrastructure Planning Toolbox</a>	Plan	Maine Department of Transportation, Environmental Office	This tool brings together resources to inform local road stream crossing decisions using information gathered by state and federal agencies, conservation organizations, and educational institutions. It is available to anyone considering a culvert, bridge, or road project.	Flood; erosion
<a href="#">Maine Natural Areas Program</a>	Program	Maine Department of Agriculture, Conservation & Forestry, Bureau of Resource Information and Land Use Planning	While the Natural Areas Program’s priority is not hazard mitigation, their efforts to preserve wetlands and prevent floodplain development lessens susceptibility to sea level rise and flooding and mitigates the impacts of those events.  Inventories lands that support rare and endangered plants and rare natural communities and ecosystems.  Inventories and maps Maine’s tidal marshes. Models’ marsh migration and susceptibility to sea level rise and storm surge to support coastal resilience.	Flooding
<a href="#">Maine Risk Map</a>	Practice	Maine Emergency Management Agency (Department of Defense, Veterans, and Emergency Management)	This map provides information on natural hazard locations and overlays with identified basic critical infrastructure/community asset data for the State of Maine. These GIS resources provide the basis for the Risk Assessment for this Hazard Mitigation Plan.  The map was developed by the Maine Emergency Management Agency for use in updating the 2023 State Hazard Mitigation Plan. Follow the link to access source data used in this Risk Assessment.	All-hazards
<a href="#">Maine Won't Wait: a Four-Year Plan for Climate Action</a>	Plan	Governor’s Office of Policy Innovation and the Future; Department of Environmental Protection Co-Chairs	In June 2019, Governor Janet Mills signed LD 1679 into law, with strong support from the Maine Legislature, to create the Maine Climate Council. The Council — an assembly of scientists, industry leaders, bipartisan local and state officials, and engaged citizens — was charged with developing this four-year Climate Action Plan to put Maine on a trajectory to decrease greenhouse gas emissions by 45% by 2030 and 80% by 2050 and achieve carbon neutrality by 2045. The Plan also addresses actions to mitigate against climate change hazards.	Climate change hazards
<a href="#">MaineDOT Family of Plans</a>	Program	Maine Department of Transportation	MaineDOT’s Family of Plans is a set of multimodal and modal transportation planning documents that lay out the department’s vision for Maine’s transportation system, present recommendations for how to achieve the vision, and lay out the path to implementing them.	All-hazards

Capability Name	Type	Responsible agency	Evaluation of Effect on Mitigation Initiatives	Hazard
<a href="#">MaineDOT's Climate Initiative</a>	Program	Maine Department of Transportation, Environmental Office	To lower the risk of future damage to infrastructure, MaineDOT has taken a number of steps to reduce vulnerability to climate change for transportation assets and other infrastructure. These include design guidance for bridges and culverts, adaptation projects, design based on sea level rise models, and an ongoing vulnerability assessment.	All-hazards
<a href="#">Maine's Climate Future - 2020 Update</a>	Report	University of Maine Climate Change Institute	Maine's Climate Future 2020 builds on the Maine's Climate Future 2009 and Maine's Climate Future 2015 reports and the Coastal Maine Climate Futures report. This update demonstrates the progression of accelerating change in the climate in Maine and its effects, reflecting dramatic evidence for accelerating climate change around the globe with the often dire consequences of those changes. This report looks at examples of evidence of effects in Maine drawn from the scientific literature and news media accounts of Maine people and their experiences.	Climate change hazards
<a href="#">Manufactured Housing Board</a>	Program	Maine Office of Professional & Financial Regulation	Manufactured Housing Act: To provide and enforce, with respect to its licensees and political subdivisions, uniform performance standards for construction and installation of manufactured housing that ensure durability and safety of manufactured housing	All-hazards
<a href="#">Model Coastal Resilience Ordinance Language</a>	Guidance	Southern Maine Planning and Development Commission	The overall objective of the project is to develop a model coastal resilience ordinance that offers Maine's coastal municipalities and their residents increased protection from threats posed by climate change such as sea level rise, flooding, coastal erosion, and storm surge. The ordinance will focus not only on built infrastructure, but also natural resources and the environment in order to increase the overall resiliency of coastal municipalities.	Coastal hazards
<a href="#">Model Ordinance Language for Stormwater Management: Erosion and Sedimentation Control Standards</a>	Guidance	Southern Maine Planning and Development Commission	The purpose of the project is to develop a regional checklist and standards document for Sediment and Erosion Control Plans for development sites to comply with requirements of the new, forthcoming municipal MS4 (Municipal Separate Storm Sewer Systems) permit and inform municipal ordinance revisions to ensure sound stormwater management, minimize soil pollution, and protect the region's water quality. Project goals include standardizing ordinances in different communities to ensure MS4-required sediment and erosion control plans in the region are consistently protective of water quality; integration of climate change and coastal resilience considerations in standards; and conducting of training workshops on standards for municipal planners in MS4 communities.	Flood, erosion
<a href="#">Model Ordinance Language for Stormwater Management: Low Impact Development</a>	Guidance	Southern Maine Planning and Development Commission	SMPDC partnered with Cumberland County Soil and Water Conservation District and Integrated Environmental Engineering, Inc. to develop a model ordinance for low impact development (LID) to assist communities protect water quality, integrate climate resilience into stormwater management, and comply with the new 2022 MS4 permit.	Flood

Capability Name	Type	Responsible agency	Evaluation of Effect on Mitigation Initiatives	Hazard
<a href="#">Municipal Code Enforcement Training and Certification Program (State Fire Marshal)</a>	Program	Maine Department of Economic and Community Development, Office of Community Development	<p>Trained, testing, and certifying in all land use codes, including building, shoreland zoning, and floodplain management.</p> <p>This is not directly a mitigation activity, but it has resulted in better trained and better-informed code enforcement officers who contribute to safer development and code practices supporting hazard mitigation.</p>	All-hazards
<a href="#">Municipal Planning Assistance Program (MPAP)</a>	Program	Maine Department of Agriculture, Conservation & Forestry, Bureau of Resource Information and Land Use Planning	<p>Provides land use planning expertise by way of technical and financial assistance to municipalities, citizens, regional planning organizations, and the Legislature to support development of comprehensive plans and zoning ordinances. Under the Growth Management Act, MPAP grants jurisdictions the authority to enact local land use ordinance on the condition they have a comprehensive plan.</p> <p>Advocates for sound holistic planning, covering the topic areas of community development, transportation planning, hazard mitigation planning, growth management, and smart growth / low impact development.</p> <p>While not directly hazard mitigation, the program has effectively helped many municipalities prepare comprehensive plans. Sound planning has helped communities enact ordinances to better guide growth.</p>	All-hazards
<a href="#">National Building code adoption tracking portal</a>	Practice	FEMA BCAT	Jurisdictional building code adoption status organized by hazard and presented in GIS format	All-hazards: code compliance
<a href="#">Natural and Beneficial Functions of Floodplains Report</a>	Guidance	Task Force on the Natural and Beneficial Functions of the Floodplain	The task force concluded that protecting and restoring the natural and beneficial functions of floodplains will not only reduce flood damages, but also contribute to a community's social and economic well-being. Preservation and restoration of the natural and beneficial functions and values of floodplains depends on preventative floodplain management policies, programs, and initiatives outlined in this report.	Flood, erosion
<a href="#">Natural Resources Protection Act</a>	Policy	Land and Water Programs (Environmental Protection)	<p>Requires a permit for any activity located in a protected natural resource or is adjacent to a wetland, great pond, river or brook, sand dune systems, or significant wildlife habitat.</p> <p>Residents must contact their municipality regarding permitting requirements in or adjacent to protected areas.</p>	All-hazards
<a href="#">Nonprofit organizations involved in regional planning efforts</a>	Program	Regional Planning Organizations (Commissions, Councils of Governments)	RPOs offer planning assistance to local governments and regional organizations, several of which support Local Hazard Mitigation Plan updates in Maine. Typical funding for RPOs to support mitigation planning is sought by local government sub-applicants through FEMA mitigation assistance grants.	All-hazards

Capability Name	Type	Responsible agency	Evaluation of Effect on Mitigation Initiatives	Hazard
<a href="#">Planning, Design, &amp; Construction</a>	Program	Maine Department of Administrative and Financial Services, Bureau of General Services	Responsible for the planning, design and construction administration of all State public improvements and public-school projects.	All-hazards
<a href="#">Property Management</a>	Program	Maine Department of Administrative and Financial Services, Bureau of General Services	Provides operation, maintenance and building control services to 73 state-owned structures located on 5 campuses.	All-hazards
<a href="#">Risk Management</a>	Program	Maine Department of Administrative and Financial Services, Bureau of General Services	Insures state assets.	All-hazards
<a href="#">River Flow Advisory Commission (RFAC) (Law 37-B, Chapter 24)</a>	Program	Maine Emergency Management Agency (Department of Defense, Veterans, and Emergency Management)	Facilitates coordination of hydrological information between dam operators, river basin managers, state agencies, USGS, and NWS to communicate flood risk.  Co-chaired by MEMA and USGS, the RFAC is composed of representatives from eight major river basin management operations, seven state agencies, two federal agencies, and the University of Maine.  Statute requires Commission to convene each March following the largest statewide snow survey; Commission may convene throughout the spring during seasons of high flood risk.	Flooding
<a href="#">Shoreland Zoning</a>	Policy	Maine Department of Environmental Protection, Land and Water Programs	Requires municipalities to adopt, administer, and enforce local ordinances that regulate land use activities in the shoreland zone (land area within 250 feet of river, pond, wetland, or outer limits of the intertidal zone).  Residents must contact their municipality regarding permitting requirements in the shoreland zone.	Flooding, erosion
<a href="#">Single Family Housing Repair Loans</a>	Loan Program	U.S. Department of Agriculture	Also known as the Section 504 Home Repair program, this provides loans to very-low-income homeowners to repair, improve or modernize their homes or grants to elderly very-low-income homeowners to remove health and safety hazards. Projects such as well drilling due to drought-related issues are eligible as reported by Drought Task Force.	Drought; all-hazards
<a href="#">State of the Air</a>	Program	American Lung Association	For 24 years, the American Lung Association has analyzed data from official air quality monitors to compile the State of the Air report. The more you learn about the air you breathe, the more you can protect your health and take steps to make the air cleaner and healthier.	Air Quality

Capability Name	Type	Responsible agency	Evaluation of Effect on Mitigation Initiatives	Hazard
<a href="#">Stormwater Management</a>	Program	Maine Department of Environmental Protection, Land and Water Programs	Works to protect and restore surface and groundwater impacted by stormwater flows and reduce impacts from floodwaters and erosion.	Flooding
<a href="#">Stream Smart Program</a>	Program	Maine Audubon	Stream Smart works with contractors, landowners, and other professionals responsible for road-stream crossings to construct culverts that maintain fish and wildlife habitat while protecting roads and public safety.	Flood, erosion
<a href="#">The Nature Conservancy land conservation and environmental resilience projects in Maine</a>	Program	The Nature Conservancy	With a mission to protect the lands and waters on which all life depends, The Nature Conservancy in Maine is taking action to protect land and water, work toward a healthy and sustainable ocean, address and mitigate the effects of climate change, and connect people and nature, in Maine and around the world.	All-hazards
<a href="#">TNC Maine Mapping Portal: Culvert Flood Risk Explorer and Coastal Risk Explorer</a>	Map/Tool	The Nature Conservancy	<p>The Culvert Flood Risk Explorer shows the risk level of a flood event in the next 30 years at crossings across the state. This analysis was performed on public and select private crossings; however, it is not exhaustive and only addresses the flood risk of culverts caused by potential flow restriction.</p> <p>Use the Coastal Risk Explorer to explore how rising sea levels will affect roads in coastal cities and towns, see where road networks will be inaccessible to emergency responders, and how that relates to the overall social vulnerability of the community.</p>	Flood, erosion
<a href="#">Transportation Risk Assessment for Planning and Project Delivery (TRAPPD)</a>	Program	Maine Department of Transportation, Environmental Office	Tool to predict when transportation infrastructure project schedules and budgets would be at risk due to the presence of Atlantic salmon.	N/A
<a href="#">Watershed Management</a>	Program	Maine Department of Environmental Protection	Provides education grants to local schools for educating students about watershed protection. This is not a direct mitigation activity, but well-informed students may become more responsible adults.	Flooding

## Section 5 – Local Capabilities

Stafford Act 44 CFR §201.4(c)(3)(ii)<sup>60</sup>

### 5.1 Local Mitigation Authorities and their Effectiveness [S13]

Maine has been considered a strong “home rule” state since November 1969, when an amendment to the state constitution delegated broad “home rule” ordinance powers to cities and towns. Cities and towns have the right to enact laws that are municipal in nature and that do not frustrate or run counter to a state law or a law which the state has not prohibited it from passing.

The concept of home rule is very important to local government because without this authority, cities and towns would depend on specific acts of the State Legislature for their governing authority. Home rule therefore allows local governments to be more effective in responding to local needs for regulations that fit their specific community, rather than relying on the generally slower and more generalized process state legislation.

In practice, home rule authority can be challenging for staff- resource-deficient communities who, for example, may not have the capacity to draft new ordinances in response to growing risks associated with unchecked development and climate change. Regional Planning Organizations can support local governments in these situations so long as the need for assistance is communicated. At least from the perspective of hazard mitigation, home rule authority requires very strong communication ties among local, county, and state government to be effective and responsive to changes in natural hazard risks. However, because of home rule, Maine is capable of developing and implementing custom tailored mitigation actions that serve the needs of individual communities.

#### 5.1.1 Current Capabilities [S13.a]

##### Municipal Ordinances

Maine’s Home Rule statute affords municipalities with the authority to establish and enforce ordinances that regulate land use and land development practices relevant to hazard mitigation. The University of Maine School of Law Garbrecht Law Library compiles links for each municipality that hosts ordinances online<sup>61</sup>, as does the Maine Municipal Association<sup>62</sup>. Multiple types of ordinances exist, but the ones most relevant to hazard mitigation involve management of floodplains, coastal zones, and zoning/development practices. These local ordinances, combined with state and federal capabilities identified above (such as the Community Resilience Partnership), provide a strong basis for expanding hazard mitigation capabilities in Maine.

Municipal floodplain ordinances are a very effective approach for implementing community flood risk reduction. Virtually all municipal floodplain ordinances in Maine are based on FEMA flood insurance rate maps, and as noted above, 97% of Maine communities participate in NFIP, including the unorganized territories. Local regulation by floodplain ordinances has led to substantial reductions in flood risk for communities by directly avoiding development in flood-prone areas. Development audits by the Maine Emergency Management Agency (see SECTION 3 – RISK ASSESSMENT) confirm that land use/development changes have been minimal within the lifespan of the last State Hazard Mitigation Plan.

Subdivision ordinances vary by municipality, though they are relevant in hazard mitigation due to their influence over private development practices including structures and roads. The unorganized territory has a uniform ordinance with little variation in requirements. Generally, a local planning board will review a proposed

<sup>60</sup> Stafford Act 44 CFR §201.4: <https://www.law.cornell.edu/cfr/text/44/201.4>

<sup>61</sup> Maine Town Ordinances: <https://mainelaw.maine.edu/library/collections/maine-town-ordinances>

<sup>62</sup> MMA Ordinances and Home Rule: <https://www.memun.org/Training-Resources/Local-Government/Ordinances-Home-Rule>

subdivision to see if it conforms with the ordinance, followed by public notice. Subdivision ordinances may impact the location and density of residential areas relative to hazardous areas, therefore findings from a local risk assessment should be incorporated into the subdivision review process. This has been acknowledged by regional planning organizations who provide model ordinance guidance<sup>63</sup>.

Municipalities with 4,000 residents or more are required to adopt MUBEC building and energy codes. Smaller municipalities may adopt MUBEC or different components of the state code, or they may choose to have no code. Refer above to the state building code law.

Many municipalities do not have the capacity to directly undertake much in the way of hazard mitigation planning. Fortunately, County Emergency Management Agencies and Regional Planning Organizations can provide the planning and coordination services necessary to address local hazard mitigation.

### [Code Enforcement Officers](#)

A Code Enforcement Officer (CEO) is defined under 30-A M.R.S. § 4451<sup>64</sup> as a person employed by a municipality to enforce all enabling state laws and local ordinances in the following areas: shoreland zoning, land use regulation, internal plumbing, subsurface waste water disposal, and building standards. CEOs must be certified in each area for which they have responsibility within 12 months of their initial appointment date or of the date they assume responsibility for a given area. The Maine Code Enforcement Training and Certification Program provides the basic courses needed for certification. The statute also requires code officers to maintain their certification and be recertified every six years.

In 1988, the Legislature was concerned that many small towns did not have code officers and many more did not have the training and knowledge to effectively administer state and local codes and land use regulations. The Legislature decided that, if state goals were to be achieved, there was a need to not only train, but to test and certify code officers for specific competencies. It established, as part of the Growth Management Act, a state-administered program to train and certify code officers. Today, the purpose of the program remains to build and strengthen local capabilities to administer and enforce land use and building ordinances<sup>65</sup>.

Code enforcement officers have proven to be effective at mitigating risks by avoiding development in hazard prone areas and implementing modern building codes.

### [Hazard Insurance](#)

Several options for hazard insurance are available for Maine residents and business owners, the most popular of which is flood insurance since homeowners and commercial property insurance policies exclude coverage for flood. This section provides as summary of these opportunities. According to the national Association of Insurance Commissioners, Maine had the 11<sup>th</sup> lowest average homeowners premiums in 2020 and is traditionally lower than other New England states, making it one of the most affordable states in the nation<sup>66</sup>.

The type of policy determines which perils are covered by the insurance<sup>67</sup>. Each covers your belongings and your personal liability, and provides medical payments and loss of use coverage. Basic fire insurance may only cover fire and lightning damage, while for an additional premium extended perils can be added (such as windstorms, hail, frozen pipes, explosions, smoke, and volcanic eruption). Special form insurance is a common policy that

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<sup>63</sup> Model Subdivision Regulations:

[https://www.maine.gov/dacf/municipalplanning/docs/SMRPC%20\(SMPDC\)%20Model%20Subdivision%20Regulations%202006.pdf](https://www.maine.gov/dacf/municipalplanning/docs/SMRPC%20(SMPDC)%20Model%20Subdivision%20Regulations%202006.pdf)

<sup>64</sup> Training and certification for code enforcement officers: <https://www.mainelegislature.org/legis/statutes/30-a/title30-Asec4451.html>

<sup>65</sup> Office of the State Fire Marshall Code Enforcement: <https://www.maine.gov/dps/fmo/building-codes/code-enforcement>

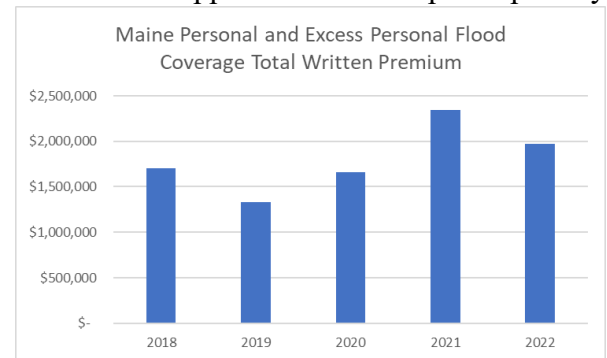
<sup>66</sup> Maine Bureau of Insurance report: [https://www.maine.gov/pfr/sites/maine.gov.pfr/files/inline-files/2023\\_pc\\_availability\\_report.pdf](https://www.maine.gov/pfr/sites/maine.gov.pfr/files/inline-files/2023_pc_availability_report.pdf)

<sup>67</sup> Bureau of Insurance covered perils: <https://www.maine.gov/pfr/insurance/consumers/homeowners-or-renters-insurance/covered-perils>

covers all perils except those that the policy excludes. Flood and earthquake hazards are typically excluded. An endorsement can be purchased to cover earthquake perils.

**Flood Insurance:** Most Maine communities (94.5 percent) participate in the National Flood Insurance Program and have received technical assistance and guidance from the Department of Agriculture, Conservation and Forestry’s Floodplain Management Program, have floodplain ordinances and are members of the National Flood Insurance Program (NFIP). In addition, there are 17 communities in the CRS Program. This represents a higher level of floodplain management than the federal minimums. This program has probably had the greatest effect on loss reduction on real property in the state. FEMA’s Risk Map Program will allow more municipalities to better manage their floodplains, especially where local flood insurance rate maps are based on LIDAR topographic mapping. Many Maine communities did not receive an updated map within the time frame originally envisioned by Congress (2009). Moreover, there are still a number of smaller communities in Maine that have not ever received a Flood Insurance Rate Map. Most of LUPC’s jurisdiction is not mapped but citizens participate by virtue of LUPC’s permit review process.

The Maine Bureau of Insurance has provided data on private insurance trends for flood insurance. Personal flood is first dollar coverage for flood while excess flood is a layer of coverage over personal flood or NFIP coverage. This premium remains steady in recent years. There is a slight uptick in 2021 and 2022. We haven’t had rate increases filed so we can assume this is an increase in consumers purchasing this coverage.



**Dam breach insurance [HHPD5.a]:** According to FEMA grants specialists, there is no insurance specific to dam breach or failure, however the private surplus lines market may provide insurance to cover flooding caused by a dam breach. The NFIP policy would cover a dam failure by key definition of the Standard Flood Insurance Policy and because it is not an exclusion.

The Maine Bureau of Insurance reports that Dam Breach Risk insurance from flooding has not shown up in the admitted market. This coverage may be available in surplus lines but those aren’t required to be filed here at the Bureau. “Admitted market” refers to insurance carriers authorized to do business in Maine. Carriers file rates and forms for approval with the Bureau of Insurance. Surplus lines companies consist of non-admitted specialized insurers covering risks not available within the admitted market and they do not file these coverages at the Bureau of Insurance.

**Mass wasting and erosion insurance:** losses from mudflows, land subsidence, and erosion resulting from flooding may be covered by NFIP, but other forms unrelated to flooding are not covered.

Hurricane and wildfire coverage are covered under property insurance.

Drought coverage is not a separate line and is most applicable to crop insurance.

**Coastal hazards insurance:** Due to the increased frequency and severity of storms, the affordability of property insurance for coastal and island property remains problematic. Windstorm damage is a major concern for such properties, and new coastal property applicants have some difficulty finding coverage in the admitted market. In 2014, the Bureau held public hearings and developed a Rule pursuant to 24-A M.R.S. section 3061 to establish standards for the use of a Hurricane Deductible. This regulation, which took effect April 1, 2015, addresses this issue by allowing a higher deductible to apply for hurricanes, yet it also protects policyholders by limiting its applicability to the time period during which the location is actively under a hurricane warning from the National



Weather Service and ending 24 hours after the last warning for that forecast area expires. The rule also requires notification to the policyholder when the policy is issued that a hurricane deductible applies to the coverage.

Earthquake insurance: the Maine Bureau of Insurance has identified a slight uptick in the earthquake coverage total written premium. There are no rate increases filed so this can be interpreted as an increase in consumers purchasing coverage.

The Maine Bureau of Insurance also notes that it can be difficult to obtain insurance coverage for high-risk homes, such as mobile homes or manufactured homes, homes with a history of prior claims, or homes that are vacant, unoccupied, or poorly maintained.

### County Emergency Management Agencies

Since 2003, the Maine Emergency Management Agency has worked with county emergency management agencies<sup>68</sup> on the development of county multi-jurisdictional Hazard Mitigation Plans. These multi-jurisdictional plans involve participation by municipal officials and the public to identify local vulnerabilities, capabilities, and strategies to reduce their risk from a natural disaster. Based on the knowledge and experience gained throughout the course of this effort, this section describes and analyzes the effectiveness of existing local mitigation capabilities and the expected effectiveness of the general trend of future local mitigation activities.

Strong ties between state, county, and local emergency managers makes for effective development of local and multi-jurisdictional hazard mitigation plans. Thanks to county leadership, many more communities have the capacity to participate in hazard mitigation planning and take advantage of their eligibility to apply for mitigation assistance funds. County-led planning provides a detailed list of mitigation actions to be implemented by local governments. However, the ability of local governments to implement these actions depends on their ability to raise funds through capital improvement or apply for assistance through other capabilities shared in this section.

### Regional Planning Organizations

Regional Planning Organizations (Commissions and Councils of Governments) receive funds from the Maine Legislature and Maine Coastal Program to provide general planning assistance to municipalities within their respective regions. This assistance is available upon request to the extent that the funding allows. At a minimum, this assistance will include answering general questions, advising on committee formation, explaining the Growth Management Act and the Comprehensive Plan Review Criteria Rule, and providing presentations on interlocal resource planning. Most but not all communities are within jurisdiction of Regional Planning Organizations<sup>69</sup>.

Regional planning organizations have a very strong potential to assist local communities with hazard mitigation planning needs. Currently, only a minority of local hazard mitigation plans call upon these organizations to assist them with local planning. To be more effective in this role, MEMA will need to provide more information and training on mitigation assistance, as well as facilitate more meetings between planning organizations, county agencies, and local governments. Relationships between regional planning organizations and county emergency management agencies differ across the state.

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<sup>68</sup> County EMAs: <http://www.maine.gov/mema/ema-community/county-local/county-emergency-management-agencies>

<sup>69</sup> Regional Planning Organizations: [https://www.maine.gov/dacf/municipalplanning/technical/regional\\_council.shtml](https://www.maine.gov/dacf/municipalplanning/technical/regional_council.shtml)

### Capital Improvement Plans

A capital improvement plan<sup>70</sup> is a community planning and fiscal management tool used to coordinate the location, timing and financing of capital improvements over a period of time similar to the 5-year lifespan of a hazard mitigation plan update. In Maine, capital improvement budgets are the most common approach to fund mitigation actions raised by local governments. Unfortunately, there are often many competing initiatives funded by capital improvement and budgets are often very limited. Capital improvement plans have been somewhat effective at implementing mitigation actions on a local level where they clearly align with other community needs/priorities, but other assistance programs will be necessary to increase the effectiveness of Maine's hazard mitigation program.

### Maine Municipal Association

The Maine Municipal Association<sup>71</sup> (MMA) is a voluntary membership organization offering an array of professional services to municipalities and other local governmental entities in Maine. MMA is a non-profit, non-partisan organization governed by an Executive Committee elected from its member municipalities. Founded in 1936, MMA is one of 49 state municipal leagues that, together with the National League of Cities, are recognized at all governmental levels for providing valuable services and advocating for collective municipal interests.

The Maine Municipal Association has a core belief that local government is a fundamental component of a democratic system of government. MMA is dedicated to assisting local governments, and the people who serve in local government, in meeting the needs of their citizens and serving as responsible partners in the intergovernmental system.

MMA's services include advocacy, education and information, professional legal and personnel advisory services, and group insurance self-funded programs. These services will make MMA a strong partner in hazard mitigation planning with further training in hazard mitigation planning and assistance programs.

### Community Action Partnership

Maine Community Action Partnership is a statewide organization dedicated to improving the quality of life of Maine people by advocating for, promoting and supporting the work of local community action agencies. These local agencies provide many services<sup>72</sup> in a way that encourages greater equity and engagement of a diversity of community members in Maine. Though MEMA has strong connections to community action agencies for response and recovery needs, stronger collaborative ties are needed to advance the effectiveness of Maine's mitigation program.

#### **5.1.2 Effectiveness of Local Capabilities [S13.b]**

The effectiveness of local government mitigation capabilities is best determined by studying each hazard. Table 4.3 provides a general summary of local capabilities and their relevance to different natural hazards and common damages as profiled in the Risk Assessment. In summary, local mitigation capabilities have improved since the last plan update, but challenges continue to exist at the municipal scale due to frequent turnover and a lack of understanding or interest in hazard mitigation. The most effective local mitigation capabilities stem from state or federal programs that municipal officials enforce, such as land use/development laws, NFIP managed through floodplain ordinance, Mandatory Shoreland Zoning, and State standards for building codes.

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<sup>70</sup> GPCOG Developing a Capital Improvement Program: [https://www.maine.gov/dacf/municipalplanning/docs/DevelopingCIP\\_GPCOG.pdf](https://www.maine.gov/dacf/municipalplanning/docs/DevelopingCIP_GPCOG.pdf)

<sup>71</sup> MMA: <https://www.memun.org/About-Us>

<sup>72</sup> MaineCAP local services: <https://mccap.org/member-agency-services/>

### Wildfire

Forest fires have the potential for causing a huge loss of residential structures in Maine communities, due to the very high percentage of Maine homes located in the wildland-urban interface. A major wildfire that destroys trees and ground cover in a previously forested river basin could result in increased runoff from storms, thereby increasing downstream flooding potential. Land use planning and regulation and building codes in Maine seldom deal with the wildland-urban interface issues. Mitigation efforts at the local level are limited to the forest firefighting efforts of local volunteer or municipal fire departments.

The Maine Forest Service has initiated a community assessment program for communities with a history of wildfire. The program, which is voluntary, is aimed at educating local officials and homeowners about inexpensive steps (such as the removal of overhanging tree limbs) they can take to protect their structures. Local officials in a number of communities have formally agreed to take the steps recommended in their community assessments.

### Flooding

Some Maine communities have taken advantage of the Maine Department of Transportation's Maine DOT Maine Local Roads Center and have acquired technical assistance and training on maintenance and upgrades to local roads, especially in terms of storm water management. MEMA has partnered with the Local Roads Center to sponsor a series of workshops for local officials on the use of geo-synthetics to mitigate damages from future flooding/storm events. MEMA expects that in the future, more communities will use geo-synthetics to reduce repetitive losses to local roads, bridges, culverts and ditches. After education, road maintenance and upgrades are usually the second largest municipal budget item.

Flood insurance is a primary source of flood hazard mitigation for policyholders in NFIP-compliant communities. Please refer to the Hazard Insurance section above for more information.

Some municipalities have received hazard mitigation grants for structural mitigation projects, usually road upgrades. Over time, those communities that have participated have eliminated their road washout problems. One such community is the town of Searsmont, which has received several mitigation grants and has effectively protected all of its local roads from flooding damage. In Franklin County, many of the projects identified in their 2005 plan have been implemented, primarily with the help of FEMA PA funds. Unfortunately, the mitigation needs documented in the 16 County plans, and one University of Maine System Plan, far outweigh available funding. Just the approved county mitigation plans include 2,058 mitigation projects. Assuming an average of about \$100,000 per project (some are less, but some are a lot more), the total need is \$205,800,000. Over the past three years, Maine received about \$300,000 annually in HMGP funding. Even if no new projects were added to the list, it would take over 100 years to address all of the previously identified needs!

Every municipality in the State of Maine is required to have a state-certified Code Enforcement Officer (CEO). Most municipalities also have a local comprehensive plan and a set of land use ordinances. The CEO enforces not only the local ordinances but provides advice and a second set of eyes for state environmental permit programs in stormwater management and shoreland zoning. However, state law does not make local comprehensive plans and ordinances mandatory, and many smaller towns do not have these mitigation tools.

### Severe Summer Weather

A number of communities, including larger cities such as Portland and Lewiston, have enacted local stormwater regulations that mirror those of the Department of Environmental Protection. Tornadoes are too rare and lightning affects too few people (an occasional home fire somewhere in the state). Thunderstorms can cause localized power outages and leave storm debris in the roads, but these will only take a few hours to repair and clean up. Occasionally a severe summer storm will result in a road washout which may take several weeks to repair.

### Severe Winter Weather

The biggest impact to many municipal budgets from severe winter weather is the expense of unplanned debris removal and extra snow and ice removal costs. In many cases, a bad winter storm can overwhelm the financial and equipment capabilities of many smaller municipalities. Many communities will spread calcium chloride on roads prior to a storm to help reduce the amount of icing, and some communities will cut back trees within the municipal road easement. However, a majority of communities do not have the extra budget or resources to accomplish these pre-disaster mitigation activities.

### Tropical Cyclones

Coastal Maine communities are typically the only ones to experience most hurricane damages and much of this is from storm surge flooding. Based on a review of the Storm Surge Inundation Maps, there are more areas subject to flooding than what are shown on the FIRM maps. Unfortunately, Maine communities have used the FIRM maps for their floodplain ordinances, but a full-blown Category 1 hurricane could exceed the 1 percent return frequency and consequently cause flooding beyond the National Flood Insurance Program's 1 percent or regulatory "100-year" flood event.

While higher category storms are more frequent in other parts of the country, one of the natural mitigating factors for hurricanes in Maine is the fact that Maine's coastal waters are colder and cannot support higher category hurricanes. As the flooding history in Maine continues to expand and as the ocean's temperatures continue to rise there may be an increase in more severe hurricanes. Major structures have been built on the coast recently that were outside the FIRM Special Flood Hazard Areas, that could possibly be endangered by the storm surge flooding from even a Category 1 Hurricane. MEMA has sent a digital copy of the hurricane surge inundation maps to every affected community along Maine's coast.

### Drought

Maine communities are impacted by drought by the increase in possibility of forest fires, dry wells and poor crops. Forest fires and poor crops were discussed in other paragraphs of this section. Individuals and public water suppliers typically deal with dry wells through their own investment in new wells. There are no mitigation programs at the local level in Maine dedicated solely to lessening the impacts of drought, though the recent passing of LD 1998 will provide competitive funding support for agricultural irrigation improvements in the near future.

### Earthquake

The recent magnitude 4.3 earthquake in Bar Harbor demonstrates that earthquakes of this size can cause damage. Although the statistical estimate for return time of a magnitude 6.0 earthquake in Maine is approximately 363 years, little monitoring and research have been done to substantiate this estimate. Although earthquake probability in Maine is relatively low compared to other areas of the country, the risk to property is moderate to high because of inadequately designed and aging structures. Continued instrumental earthquake monitoring in New England is funded entirely by the federal government, with some in-kind contribution by state agencies. There are no mitigation programs at the local level in Maine dedicated solely to lessening the impacts of earthquakes, excluding that of all-hazards emergency management planning and emergency response agencies.

### Erosion

The Maine Geological Survey (MGS) has completed coastal bluff erosion maps for Maine's coast. The covered area extends from York County in Southern Maine to Washington County (Maine's eastern-most county). The information provided on these maps is available on the MGS web site, and copies of the maps have been provided to the affected municipalities. Many communities are beginning to use this information to mitigate the impacts of erosion and sedimentation. The Maine Department of Environmental Protection has incorporated MGS Coastal Bluffs Maps into its Shoreland Zoning rules. There is now a requirement that municipal shoreland zoning ordinances include greater setbacks for development near unstable bluff areas.

### [Mass Wasting](#)

MGS has prepared a parallel set of Landslide Hazard Maps that details historical and potential landslide areas along the coast. MGS is also mapping landslides in non-coastal areas. A pilot project in 2006 developed the method of identifying historical landslide areas, and also established methods of terrain analysis for landslide susceptibility. About one third of the state has geological sediments that make the land potentially vulnerable to landslides. In addition to earth materials, slopes, regional geomorphology and ground and surface water affect landslide hazards.

### [Tier 2 Hazards](#)

These hazards are a growing concern in Maine, though they generally have not had the level of impact felt from many Tier 1 hazards. Currently most mitigation capabilities for Tier 2 hazards involve monitoring conditions at a state or federal agency level rather than a local level. However, there are educational programs presented by state agencies that improve awareness of risk mitigation at local levels.

Local governments have the power to help ensure that city and county operations are zero-emission and that residents can choose zero-emission forms of transportation and electricity. These actions must benefit the communities most impacted by unhealthy air. For example, a municipality may adopt a climate action plan to reduce city- and county-wide emissions by supporting walking, biking and transit and zero-emission-vehicle infrastructure and ensuring that building and parking policies support these goals. Towns can include measures to address the impacts of climate change on residents, including health impacts. Under the Inflation Reduction Act, municipalities can opt in to get planning grant funding to reduce climate pollution. Municipalities may purchase zero-emission fleet vehicles and commit to purchasing zero-emission garbage and recycling trucks, transit buses, school buses and other vehicles. Establish purchasing goals for renewable, non-combustion electricity. Power city and county operations with truly clean sources of electricity like wind, solar, geothermal, or tidal.

State, Territorial and Tribal Governments may set a clean or renewable electricity standard or clean peak standard that phases out the use of coal, oil, methane gas (often called natural gas) and other combustion energy sources and replace with wind, solar, geothermal, and tidal and other non-combustion forms of electricity. Do not allow for the increased use of biomass or municipal solid waste for electricity because of their contributions to particle pollution. States may also leverage Inflation Reduction Act funding available to state, territorial and Tribal governments to reduce emissions, including reducing air pollution at ports, investing in zero-emission heavy-duty vehicles and infrastructure, and improving air quality monitoring. Ensure that environmental justice communities that have long borne the brunt of pollution impacts are prioritized. States may also use the Clean Air Act authority to adopt the California zero-emissions standards for cars and trucks. These include California's Low-Emission Vehicle criteria pollutant and greenhouse gas regulations; Zero-Emission Vehicle regulations; and Advanced Clean Trucks regulations.

### [High Hazard Potential Dams \[S13.c; HHPD6\]](#)

Few local mitigation capabilities exist at the local scale for reducing dam failure risks. However, there are some regulations that exist to help clarify dam ownership, and this may relate to the effectiveness of local hazard mitigation by enforcing some level of accountability of safety risks. State policymakers and local landowners have long been concerned with how these dams have been maintained and operated. Various laws have been passed over the years to regulate dams in one way or another. These laws have dealt with issues of registration, abandonment, water level and flow control, dam safety, and permitting of construction and repair activities<sup>73</sup>.

Currently, dams can no longer be legally abandoned, and they will continue to be the responsibility of owners. Effective July 4, 1996, a dam owner may petition DEP for release from dam ownership or water level maintenance. The owner must then consult with shorefront property owners, town and Indian officials, and others to see if anyone wants to take ownership of the dam. If no new owner is found, ownership may be assumed by one of several state agencies based on an assessment of the public value of the dam. Otherwise, the DEP is required to order the dam owner to release the water from the dam. State law concludes that if no one is willing to own a dam, then the dam should no longer be operated to hold back water.

There is no law requiring that a dam be maintained in good condition. If a water level order or permit has been issued, it will be necessary to maintain the dam to comply with the permit or order. MEMA can require that a dam be maintained or operated in a certain way if necessary to protect public safety. Otherwise, a dam can fall into disuse and disrepair until it either breached or is rebuilt by the owner. A private owner may be liable for property damage or loss of life due to dam failure.

Municipal capabilities to mitigate hazards associated with high hazard potential dams are limited. Many High Hazard dams in Maine are privately owned, the majority of which are part of FERC-licensed hydropower projects. For privately owned high hazard dams not regulated by FERC, a strong collaborative relationship needs to be established between the owner and the municipality to ensure that risks are identified and mitigated. The authority to designate a dam as a high hazard is a state responsibility held by the Dam Safety Engineer.

Of the 25 high hazard dams eligible for the HHPD program, 14 of these are owned either by the host municipality or municipal water district. By home rule authority, these municipalities may have direct authority over their dams but are required to maintain certain safety, water height, and environmental flow conditions based on state/federal regulations and agreements with local conservation and shorefront homeowner organizations. Application of the HHPD program, much like other effective mitigation assistance programs, would have local governments apply for and serve as sub-applicants for grants.

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<sup>73</sup> Maine dam regulation: <https://www.maine.gov/dep/land/dams-hydro/documents/ip-dams.html>

TABLE 4.3: General Summary: local mitigation capabilities by hazard matrix

HAZARD	TYPICAL DAMAGES or LOSSES	ACTIVITY TASKED	PROGRAMS	PRE- OR POST-DISASTER
Flooding	All Structures	Code Enforcement Officer or Municipal Planning Board	Floodplain Ordinance	Pre-disaster
	Local Roads	Road Commissioner or Public Works Director	Maine Local Roads Center Municipal Capital Improvement Projects	Pre-disaster
	Environment	Code Enforcement Officer	Municipal land use ordinances Erosion & sedimentation control Natural Resources Protection Act Shoreland Zoning & Stormwater Program Wildland Firefighting Program	Pre-disaster
Severe Winter Weather	Roads	Road Commissioner or Public Works Director	Winter Road Maintenance program.	Post-disaster
Severe Summer Weather/ Hurricanes	Environment	Code Enforcement Officer	Shoreland Zoning & Stormwater Program	Pre-disaster
Wildfires	Residential Structures	Municipal/Volunteer Fire Department	Wildland Firefighting program	Post-disaster
Drought	Agricultural, Residential	MEMA/USGS	Drought Task Force/River flow Commission	Pre-disaster
Erosion/ Landslides	All structures	Maine Geological Survey	Costal bluffs/coastal landslide hazard maps Inland landslide hazard mapping	Pre-disaster
All-Hazards	All Types	Municipal Emergency Management Director	Public education & information	Pre-disaster
	All types	Municipal Elected Officials	Hazard Mitigation Program Grants	Post-disaster

## 5.2 Support of Local Hazard Mitigation Plans [S14]

As noted above, county emergency management agencies led the development of Local Hazard Mitigation Plans LHMPs starting in 2003, and currently many still take on the responsibility of updating the local plans. The one exception is the University of Maine System Hazard mitigation Plan that was developed and is updated by the University of Maine Facilities Management Office. Currently, all LHMPs are multi-jurisdictional.

MEMA provides training and technical assistance for LHMPs. The Natural Hazards Planner for MEMA also conducts the state review of LHMPs prior to submission for review by FEMA. MEMA also facilitates communication between planners and various subject matter experts to ensure that the best available information is incorporated into all elements of the plan. Refer to the Planning Process section of the State Hazard Mitigation Plan for a list of planning participants who are also contacted for input in LHMPs.

### 5.2.1 Training [S14.a.1]

MEMA promotes and advertises LHMP, and mitigation assistance training opportunities hosted by FEMA Region 1 to local governments and the five tribal nations located in Maine. These training opportunities are reviewed by all Region 1 states prior to the event, and states are permitted to contribute to presentations. FEMA Region 1 LHMP trainings and mitigation assistance trainings are typically held once per year, but there are additional trainings, smaller in scale, that present on certain useful details of LHMPs. Region 1 trainings are virtual, while MEMA trainings are often hybrid or in-person. Other entities such as regional planning organizations have hosted mitigation assistance trainings, in coordination with MEMA and FEMA Region 1, for their local governments.

MEMA's Mitigation, Planning, and Recovery Division hosts one-on-one trainings between state and county emergency managers (or regional planning organizations) as well as trainings with municipal emergency managers, to identify the significance of the mitigation program and the process for applying for mitigation assistance. In 2021-2023, MEMA began to kick off several county mitigation assistance trainings across the state in concordance with LHMP update schedules.

MEMA is also responsible for communicating to local officials about LHMP expiration dates, the consequences of not having a FEMA-approved LHMP, and the availability of funding to support plan updates.

### 5.2.2 Technical Assistance [S14.a.2, S16]

MEMA's Natural Hazards Planner is responsible for providing technical assistance to LHMP planners and coordinating additional assistance where needed (Figure 3.3). The State Hazard mitigation Officer provides technical assistance when applying for Plan Update grants provided through FEMA's Hazard Mitigation Assistance program. Planners may include county employees, regional planners, consultants, local governments, interested citizens, or others.



### Process and Schedule for Approvable LHMPs

Technical assistance is provided in coordination with training because there are several plan elements and guidelines that must be described and understood before they are successfully addressed. MEMA provides expert guidance on how best to address Stafford Act Guidelines and FEMA's LHMP Planning Policy Guide under the context and capacity of the planning area. Guidance includes scheduling, detailed descriptions of planning requirements, examples and best practices from other planning entities, GIS and data support, research support for risk assessment and capabilities, facilitation of planning partners such as subject matter experts, and guidance on best practices for engaging local governments and community members in the update of LHMPs.

State review of LHMPs is an iterative process involving multiple meetings between MEMA, the planning team, and participating communities. The review is completed to ensure that Stafford Act/FEMA guidelines are met and that the plan is consistent with the SHMP. The state reviewer takes note of new findings in the LHMP and incorporates the new information into the SHMP update. Conversely, the state reviewer also encourages the planning team to review the SHMP and incorporate new information into their plan. In this way information about risk, capabilities, and mitigation strategies are integrated across all levels of the mitigation program. MEMA prefers to review plan sections as they become available to better address potential discrepancies early in the update process, and MEMA will facilitate discussions with FEMA Community Planners when requested. The timeframe of MEMA mitigation assistance covers all facets of planning, from applying for a MEMA/HMGP Plan Update grant to confirmation of the last adoption letter for multi-jurisdictional LHMPs. Given the schedule of assistance programs and the number of tasks required to complete an update, assistance to any individual planning group may cover 36 or more months, as noted in Figure 3.3.

All public resources used to update the Maine State Hazard Mitigation Plan are presented to LHMP planners for use in their own update, and in this way the state plan is offered as the standard for mitigation planning at the local level. As noted previously, the responsibilities of monitoring, evaluating, and updating LHMPs is often taken on by the county, but municipalities are responsible for participating in the planning process, implementing mitigation actions, and providing the county with new information regarding risk assessment, capabilities, and the mitigation strategy.

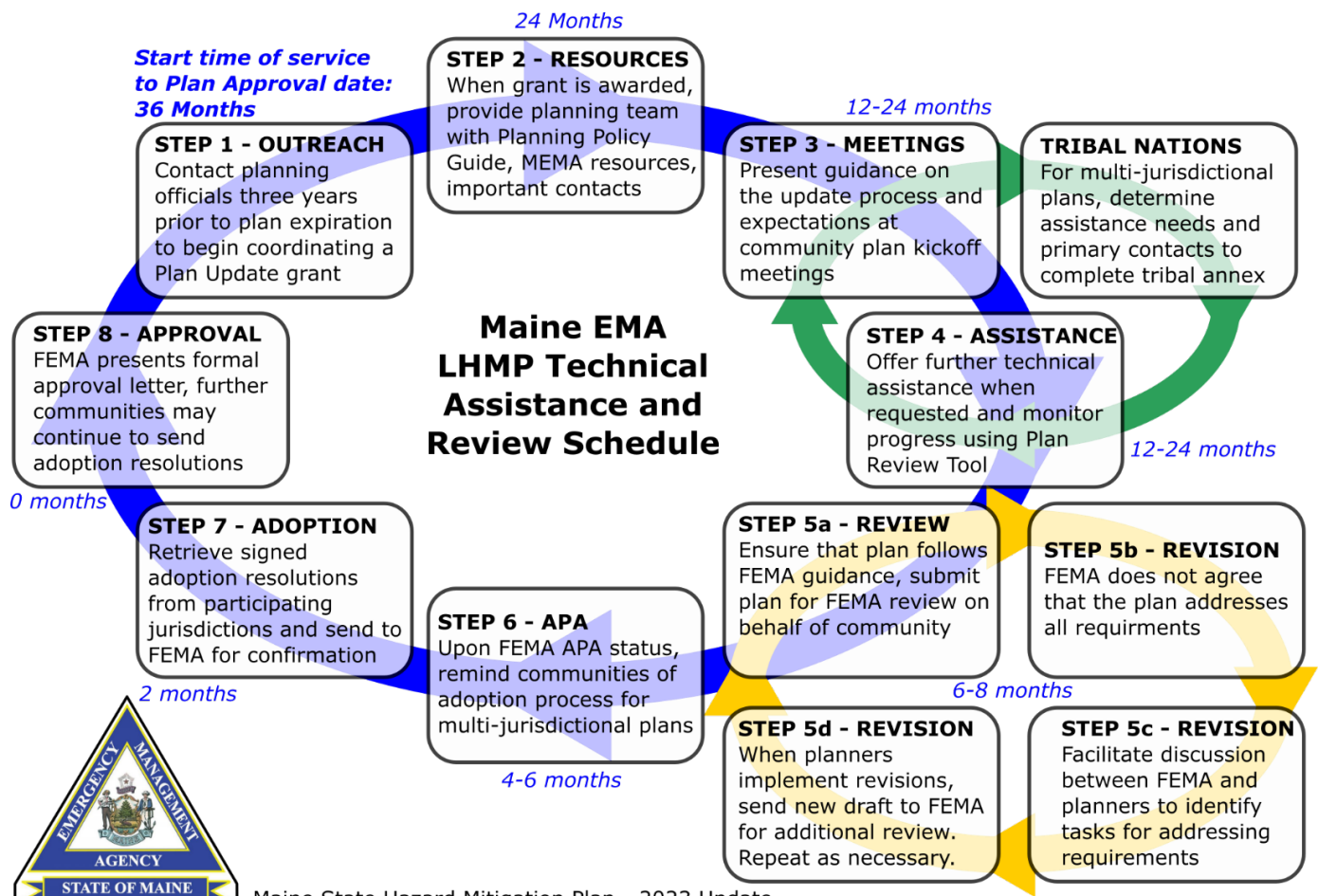
### Assistance for Tribal Nations

The five tribal nations in Maine may choose to receive MEMA and county planning assistance or work directly with FEMA on their own LHMP update. In past updates, some tribal nations have chosen to work collaboratively with county planners, participate in a county LHMP update, and provide an additional tribal annex to fulfill the additional tribal nation guidelines provided by FEMA. If this tribal-county approach is used, the schedule for assisting, reviewing, and approving the plan is the same as MEMA's typical LHMP schedule.

Process for LHMP-SHMP integration [S16.b., S10.d.]

MEMA plays a direct role in the update and review of LHMPs and the SHMP, providing a straightforward process for plan integration. MEMA assures that the best available data are incorporated into local risk assessments and are combined with local observations of specific damages and examples of community and infrastructure vulnerabilities from past events. At the state level this information is combined and presented in the SHMP. Further, the process used in the SHMP is reflected by County EMAs as they update their local plans, ensuring that the best available information is used and shared at multiple levels, particularly important when new information becomes available.

Municipal mitigation actions give a source of direction for state-level actions. The state actions are designed to help facilitate the completion of local mitigation actions to further advance resilience in Maine. This being said, local mitigation actions are too location-specific to be included in the list of State mitigation actions. A recent addition to the list of state mitigation actions is to document local projects and determine their eligibility for the many new funding programs described in the Capabilities section. Please refer to the Mitigation Strategy section for more details and examples of local and state planning integration. Refer to Appendix – Local Mitigation Actions for a complete list of local actions provided by participating jurisdictions.



Maine State Hazard Mitigation Plan - 2023 Update

Figure 3.3: MEMA LHMP technical assistance service plan.

### Local Hazard Mitigation Plan Coverage

In August 2023, a total of 14 multijurisdictional LHMP updates and two Tribal Hazard mitigation Plans are formally approved by FEMA. Another two multijurisdictional LHMP updates are under initial review by FEMA and one more is Approvable Pending Adoption (APA). Of the approved and APA plans, a total of 296 jurisdictions have formally signed resolutions to adopt their LHMP, 69 jurisdictions are in the process of adopting an approved or APA plan, and 42 jurisdictions within the planning regions have chosen to not participate in the planning process (no plan). A total of 80 jurisdictions have expired plans with updates in review by FEMA and will adopt their updated LHMP once they meet APA status. Finally, a total of 13 jurisdictions within one county have an expired plan and at this time have not proceeded with an update process.

Of the five federally recognized tribal nations in Maine, one has adopted a Tribal Annex and one has adopted a full Tribal Plan. One more tribal nation is in the process of updating and adopting a new tribal annex.

For the communities that currently have an expired plan and have not begun an update process, there is interest in working with a Regional Planning Organization to complete an update of an older Multijurisdictional Hazard Mitigation Plan.

There are a total of 500 jurisdictions in Maine, including municipalities, tribal nations, sections of unorganized territories under management by nine of the sixteen counties, and university campuses. Currently 59% of jurisdictions have adopted approved plans and a further 14% can adopt an approved or APA plan. The total proportion of jurisdictions waiting on FEMA review is 16%, 3% of jurisdictions are expired with no plan update in progress, and 8% have not participated.

Approximately 89% of Maine's population resides in jurisdictions with approved or APA plans, a further 8% with updates that are currently under review with FEMA, and a final 3% either with an expired plan with no update or with no intent to participate.

During the last SHMP update, Maine had no expired plans, indicating a downtrend in plan approvals from 2018 to 2023. The COVID-19 pandemic has been noted as a major hurdle to mitigation planning efforts. However, more focused grant and planning technical assistance have provided overall more effective plans and more opportunities to fund and implement mitigation actions. In the future, MEMA intends to encourage all county EMAs to apply for Plan Update funds well in advance of plan expiration to ensure greater resources are used to support these important plans and to encourage greater overall plan adoption rates.

### 5.2.3 State Funding Prioritization [S15, S14.a.3]

#### Hazard Mitigation Assistance

The State of Maine Hazard Mitigation Program has developed review ranking criteria for state allotments of FEMA HMA program funds. In addition to eligibility requirements, the criteria are implemented in cases where total requested funds exceed the state allotment. The state review panel ensures that applicants propose an eligible use of funds for natural hazard mitigation. The criteria closely reflects FEMA HMA grant criteria and guidance.

The sub-applicant must fulfill these eligibility criteria pre-application:

- Be a State Agency, Federally Recognized Tribe, County, Municipal Partner, or Private Non-Profit (HMGP 404 Program Only).
- Have participated in and received formal approval of their LHMP
- Have a BCA of 1.0 or higher (shovel ready project only)
- Cost Match Commitment Letter (not eligibility criteria however must be provided)
- Must have an active Unique Entity Identifier (UEI) (not eligibility criteria however must be provided)
- Must have National Flood Insurance Policy (NFIP) (FMA Only)

The additional scoring criteria are used to rank applications when total requests exceed the state allotment:

- Does the sub-application have a well-defined and clear scope of work that ties cleanly to natural hazard risk reduction?
- Does the sub-application improve community lifelines?
- Does the sub-application mitigate for future natural hazards events?
- Does the sub-application positively contribute to climate change?
- Does the sub-application promote long term resiliency benefits?
- Does the sub-application provide supporting documentation of reoccurring natural hazard events?
- Is this an impoverished community (as per Sec. 203. Pre-disaster Hazard Mitigation (42 U.S.C. 5133) Stafford Act)?
- Does this sub-applicant meet the criteria for EO14008, the Justice40 Initiative?
- Does the sub-applicant have a score of .6 or greater per the social vulnerability index (SVI)?
- Does the sub-application promote partnerships and outreach?
- Additional points based on number of presidentially declared disasters in last 10 years

Refer to Appendix – State Review Ranking Criteria for a copy of the scoring rubric.

#### Community Resilience Partnership

Participation in the Community Resilience Partnership is open to all municipalities and federally recognized tribes and unorganized territories in Maine<sup>74</sup>. To join, a community must meet three criteria: adopting a resolution of commitment, completing a pair of self-assessments, and holding a community workshop to prioritize initial climate resilience and clean energy actions.

Communities with a record of climate action may join the Partnership by reviewing past activities, completing self-assessments, providing proof of a qualifying community workshop, and passing or amending a resolution. Communities yet to begin climate action can choose to complete these steps on their own but may find greater benefit in working with a service provider and neighboring communities to join the Partnership as a group. The program funds projects that implement the 72 resiliency actions<sup>75</sup>.

<sup>74</sup> Community Resilience Partnership eligibility criteria: <https://www.maine.gov/future/climate/community-resilience-partnership/join>

<sup>75</sup> Resiliency actions: [https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/List%20of%20Community%20Actions\\_2021-12-01\\_4.xlsx](https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/List%20of%20Community%20Actions_2021-12-01_4.xlsx)

### [Municipal Stream Crossing Upgrade Grant Program](#)

Proposed projects must be located on municipal roads and involve upgrades of culverts at stream crossings to improve public safety and minimize flooding, improve habitat for fish and wildlife, and represent a cost effective and efficient investment. Eligible project applicants include local governments, municipal conservation commissions, soil and water conservation districts, and private nonprofit organizations<sup>76</sup>.

### [HHPD Program \[S15.b., HHPD5, HHPD6, HHPD7\]](#)

HHPD grants have never been awarded in Maine as of this plan update. There is currently no process for project prioritization other than the general state rubric for all other mitigation projects shared above. As a result, it is necessary to establish criteria for HHPD prioritization should the program ever be utilized by Maine jurisdictions. Greater capacity in the Dam Safety Program will first need to be built in order to advance the criteria. This need takes the form of a new mitigation action. Refer to the Mitigation Strategy section for more information.

The Dam Safety Program prioritizes technical assistance for high hazard dams requiring new EAP information based on their update schedule. The dam safety inspector designates dam hazard levels based on the criteria presented in Section 3- Risk Assessment.

Outside of the HHPD program, there are some grant programs listed in this plan that fund dam removal<sup>77</sup>. Dam removal projects are typically coordinated at a local level and so these funds can improve local capabilities for reducing dam failure risks. The criteria for these resources typically prioritize environmental/fish passage benefits with less consideration of safety concerns, and as a result they often target smaller, low hazard dams. For example, US Fish and Wildlife Service's National Fish Passage Program and NOAA's Community-Based Restoration Program. However, these programs are only very marginally related to dam safety. One exception is the US Department of Agriculture's Watershed Rehabilitation Program that provides assistance to plan, design, and rehabilitate aging dams built by the National Resources Conservation Service. The Nature Conservancy has also raised funds to support dam removals in Maine primarily for environmental benefits and secondarily for safety benefits.

Many flood mitigation funding programs also consider mitigation in dam breach inundation zones as eligible projects. This opens a number of opportunities to reduce risks related to dam failure or breach, though in many cases, such as for HMA funding programs, there must be evidence that dam breach flooding has been a historically recurring issue. The Congressional Research Service reports "Dam Safety Overview and the Federal Role"<sup>78</sup> and "Flood Resilience and Risk Reduction: Federal Assistance and Programs"<sup>79</sup> provide a list of viable resources that could be used to manage downstream dam inundation risks. These are also included in Table 4.1.

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<sup>76</sup> Stream Crossing Applicability: <https://www.maine.gov/dep/land/grants/stream-crossing-upgrade.html>

<sup>77</sup> Funding sources for dam removal: <https://www.rff.org/publications/issue-briefs/federal-funding-dam-removal-united-states/>

<sup>78</sup> CRS report: <https://crsreports.congress.gov/product/pdf/R/R45981>

<sup>79</sup> CRS report: <https://crsreports.congress.gov/product/pdf/R/R45017>

## 5.2.4 Challenges and Solutions for Local Planning [S14.b, S16.a]

Communication is a frequent challenge for LHMP development and updates. Though communication between MEMA and county emergency management agencies is sufficient and the terms of state technical assistance and review are clear, communication with local governments is often less effective. A major reason for this issue is frequent turnover of elected and appointed local officials resulting in yet another challenge: a lack of understanding of mitigation concepts and who should be involved in mitigation planning. As a result, local communities may not prioritize mitigation planning when they address community needs, and very little is understood about the benefits of mitigation assistance. Ultimately this leads to challenges with communities participating in LHMPs, receiving signed resolutions to adopt the LHMP, and a consecutively low level of interest in mitigation grants or an assumption that they are not worth the effort.

A potential solution for challenges related to communication and mitigation literacy is to simply provide more frequent mitigation training. However, this is hindered by a third major challenge: MEMA, the county and regional entities, and local governments all have limited capacity to accomplish these training goals. There is a need to increase staff and to encourage retainment in the profession of emergency management at all levels of government to address this gap in capacity.

A fourth major challenge, also related to a lack of local capacity, is that communities are often not prepared for the effort required to finalize an application for FEMA's Hazard Mitigation Assistance programs. As a result, there may be several communities who become interested in mitigation assistance but eventually choose not to follow through on a full application.

The following are some additional challenges faced by mitigation planners and the State NFIP coordinator in Maine. These issues have arisen from MEMA's experience managing FEMA programs (PDM, HMGP, and FMA), working with Joint Field Offices when available, and assisting counties and municipalities with the preparation of hazard mitigation plans.

With a relatively small population dispersed throughout 492 jurisdictions, most communities have a population under 4,000. As a result, staff in town offices often have many responsibilities where nearly all local emergency managers wear several hats. While they understand the importance of mitigation and planning activities, more immediate responsibilities often take priority over long term planning. Regional multi-jurisdictional planning is challenging with the rural nature of Maine because attendance at meetings often requires commutes of significant time and distance to attend meetings. The challenge of time and distance is exasperated in the most rural parts of Maine because many of them do not have reliable communication infrastructure to support remote meetings.

With a small economy, Maine's greatest resource is its people. However, Maine has the oldest median age in the country, and many employees and volunteers across the state are within retiring age. This means a significant number of state employees, whose decades of institutional knowledge contribute to this Plan, will retire in the coming years. Maine continues to have a high rate of volunteerism, which is critical to the operation of local fire departments and shelters. However, volunteer participation rates are in decline as Maine's population continues to age.

Mitigation needs in Maine still exceed the availability of mitigation resources. The 16 county mitigation plans include over 2,000 local mitigation actions. The funding need for these projects collectively is hundreds of millions of dollars. By comparison, Tropical Storm Irene produced only \$297,000 in HMGP funds for Maine. The largest HMGP available to the state since 2000 was \$3,800,000. The PDM program offered a federal share of \$3,000,000 per project, and Maine won several PDM grants. However, Congress continually reduced the funding, and most communities do not have the resources for a nationally competitive

process. Resource constraints for the vast majority of the towns prevent most communities from applying for either. It has become clear to state officials that the 406 Program must be better utilized to meet mitigation needs.

Approximately 56% of Maine's 492 local jurisdictions have populations under 2,500. None are known to have the engineering, planning or other staff expertise needed to prepare nationally competitive applications for FEMA's HMA program. Most of the projects identified by smaller towns are road-related mitigation projects that probably would not compete well against more pressing national needs.

With construction material and labor costs increasing due to inflation, towns are severely limited in how much they can accomplish purely through capital improvement budgets.

NFIP challenges are primarily caused by a lack of capacity at the local level to ensure compliance with the program and to request and participate in Community Assistance Visits (CAVs) and Community Assistance Contacts (CACs). This limits local and state coordination for NFIP. Also, both for NFIP and MUBEC, there is limited local capacity to track and engage in trainings for these programs covering a large number of NFIP-compliant communities. In terms of flood mitigation, there are challenges associated with communication between federal grants and planning specialists, and state agencies. MEMA identifies a need for joint workshops between FEMA grants specialists, FEMA planning specialists, the NFIP program, and other federal agencies to improve federal, state, and local coordination.

#### [Proposed Solutions to Improve Local Planning Capacity](#)

MEMA has now established a long-term 36+ month technical assistance schedule to ensure that LHMPs are approved prior to plan expiration. MEMA now plays a more active role in ensuring that planners either apply for assistance funds or show that they have the capabilities required to update their LHMP to new FEMA guidelines. All planners are notified of funding opportunities that support completion of LHMP updates, particularly BRIC or other opportunities that provide regularly scheduled application periods. Grant funds would go towards consulting fees or other assistance fees that directly lead to updates to LHMPs or establishment of new LHMPs.

Currently MEMA is also implementing university grants that provide support for interns who will assist with planning technical assistance and community outreach. There is also a growing partnership with Volunteer Maine to apply funds that would support volunteers to work directly with rural counties and local governments through funding from the Northern Border Regional Commission. Longer term plans include use of BRIC funds to establish a multi-year internship program that will give students first-hand experience in government work and allow them to apply their skills to find solutions to real-world challenges at local levels, offering a stronger partnership with counties and local governments and improve their confidence in mitigation programs.

These actions aim to improve state and local planning capacity by increasing the number of staff involved in planning tasks. With a greater level of assistance, MEMA will be able to focus more effort on improving training resources that support mitigation literacy, prioritization of mitigation actions, and utilization of funds at the community level. MEMA is also encouraging use of new technology and online tools to streamline the process for LHMP updates, such as online survey platforms, risk assessment maps, and all resources listed, referenced, and otherwise provided in this SHMP update.

MEMA is required by FEMA to perform a statewide capability assessment (Stakeholder Preparedness Review SPR) every year and a risk assessment (Threat and Hazard Identification and Risk Assessment THIRA) every three years to receive FEMA Emergency Management Performance Grant funding. These assessments cover all hazards including the natural hazards analyzed in the SHMP, they help standardize MEMA's process for sharing and receiving risk assessment data and hazard mitigation priorities, and there are obvious ways in which the all-hazard risk/capability assessments are integrated into this plan. Communication issues pose a further challenge to

accomplishing these assessments because they require technical input from many state, county, and local stakeholders. To streamline the process for risk and capability assessment completion, MEMA is proposing a new spreadsheet-based approach that promises to better capture the county and local context of community risk and capabilities to mitigate against, prepare for, respond to, and recover from any disaster. The new format also clarifies the link to their LHMP risk/capability assessments that they accomplish every five years.

Finally, communication challenges also suggest a fundamental issue with the equitable provision of mitigation technical assistance to the whole community. Currently, MEMA is first identifying gaps in equity by collaborating with community assistance partners listed in Section 1 – Planning Process and using geographic indices such as the Social Vulnerability Index<sup>80</sup>, Climate & Economic Justice Screening Tool<sup>81</sup>, FEMA RAPT<sup>82</sup>, the National Risk Index<sup>83</sup>, and other products. To address equity gaps, MEMA will encourage use of resources listed in this section that conform with the Justice40 Initiative or provide clear support for equitable, whole community outcomes.

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<sup>80</sup> SVI: <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>

<sup>81</sup> CEJST: <https://screeningtool.geoplatform.gov/en>

<sup>82</sup> FEMA RAPT: <https://www.fema.gov/emergency-managers/practitioners/resilience-analysis-and-planning-tool>

<sup>83</sup> NRI: <https://www.fema.gov/flood-maps/products-tools/national-risk-index>



## 5.3 Problem Statements

The Planning Team has defined a series of problem statements based on vulnerabilities found in the Risk Assessment and capability gaps identified from State and Local Capabilities. These problem statements represent current needs for improvement in Maine’s hazard mitigation program and they have been used to restructure the Mitigation Strategy.

- Regional, tribal, and local hazard mitigation planning capabilities are limited, posing challenges for completing approvable LHMPs.
- Sub-applicants of the FEMA Hazard Mitigation Assistance grant program often find the application, review, and reporting process difficult to timely complete.
- NFIP policy trends indicate that Maine residents in flood risk areas are likely underinsured, with an insurance deficit also anticipated for other natural hazards.
- There is uncertainty about how climate change will influence the location, extent, and occurrence of natural hazards, and how development impacts community vulnerability to these hazards.
- Sea level rise and other climate change impacts have increased coastal hazard impacts to unprecedented levels.
- Numerous state assets are identified as vulnerable to flooding, coastal storms, erosion, wind damage, and other natural hazards identified in this plan, requiring complex, expensive, and long-term solutions
- Public water supplier problem statements: Sea level rise will likely increase contamination of coastal freshwater aquifers with seawater, increases in nuisance flooding increases public health risks from water supply contamination, and recent prolonged episodes of drought put public water suppliers at risk of water shortages.
- The future threat of Tier 2 hazards and their sensitivity to climate change is underestimated by emergency managers but has increased in concern for our Towns and Communities and State Agencies due to preparing for the hazard is unrealistic and could become a disaster for Maine.
- Maine's dam infrastructure is aging, and the Dam Safety Program is currently understaffed, facing significant challenges with implementing dam risk reduction. [HHPD3]
- The Forest Protection Division is under-resourced for large wildfire events with limited capacity for hazard mitigation, and Maine’s administrative plan for the FMAG and HMGP Post Fire requires updates. [FMAG2]
- Maine SHMP products are underutilized for informing other planning efforts that would benefit from the natural hazard risk/capability assessments and mitigation strategy. State agencies are proactive in plan integration.
- Though current technical assistance and administration needs are met, a growing interest in the HMA program has led to an unprecedented number of grant applications with potential future capacity issues.
- State mitigation/resilience grant programs have limited cross-agency coordination, posing challenges for applicants wishing to pursue the most eligible and least competitive funding sources.
- Plan integration is limited by a lack of collaborative map and data production and sharing.
- Maine needs stronger standards for evaluating the effectiveness of mitigation projects to keep pace with greater investment in hazard mitigation assistance.
- The HHPD program is unused in Maine. [HHPD3]
- Though there have been gradual improvements in mitigation literacy, frequent turnover in local government, creation of new programs, and other challenges reduce awareness of and interest in the hazard mitigation program.
- Previous SHMP Risk assessment products lack accessibility and are underutilized as an educational tool.

- Future changes in risk will require new, effective mitigation actions informed by a diversity of subject matter experts.
- More engagement is needed with local businesses for a comprehensive hazard mitigation planning process.
- Land use planning and development practices do not necessarily incorporate the comprehensive range of natural hazard impacts present in Maine.
- Traditional mitigation actions tend to rely on built infrastructure with less prioritization for natural solutions.
- Hazard mitigation planning lacks integration with management practices for vulnerable natural systems, cultural historic sites, and other assets valuable to Maine's tourism and resource-based economies.
- Maine lacks implementation of a common equity protocol.
- Many knowledge gaps remain regarding the diversity of Maine's hazard mitigation equity landscape.
- Many community action agencies are focused on immediate housing/vulnerability challenges and lack capacity to plan for long-term equitable hazard mitigation.

In Section 6 – Mitigation Strategy, the Planning Team assigns updated mitigation goals to help define solutions to these problems. Mitigation Partners have provided specific actions that will help address the problem statements and fulfill the goals.