

**Report to the Joint Standing Committee on
the Environment and Natural Resources**

**Result of Analysis Required by
2021 Public Law, Chapter 67,
Resolve, *To Analyze the Impact of
Sea Level Rise***

January 2022

Contacts:

Maine Department of Agriculture, Conservation and Forestry
amanda.beal@maine.gov

Maine Department of Defense, Veterans Affairs and Emergency Management
anne.p.fuchs@maine.gov

Maine Department of Environmental Protection
melanie.loyzim@maine.gov

Maine Department of Inland Fisheries and Wildlife
judy.camuso@maine.gov

Maine Department of Marine Resources
deirdre.gilbert@maine.gov

Maine Department of Transportation
joyce.taylor@maine.gov

Maine Office of the Attorney General
peggy.bensinger@maine.gov

PURPOSE

Public Law Ch. 67 *Resolve, To Analyze the Impact of Sea Level Rise*, enacted June 16, 2021, directed the Department of Agriculture, Conservation and Forestry, the Department of Defense, Veterans and Emergency Management, Maine Emergency Management Agency, the Department of Environmental Protection, the Department of Inland Fisheries and Wildlife, the Department of Marine Resources, the Department of Transportation and the Office of the Attorney General to review the laws and rules they are charged with administering under the Maine Revised Statutes and, by January 1, 2022, recommend to the Joint Standing Committee on Environment and Natural Resources any changes necessary to:

1. Incorporate consideration of 1.5 feet of relative sea level rise by 2050 and 4 feet by 2100 into administration of those laws and rules; and
2. Implement the strategy designated as "Strategy F3¹" in the state climate action plan issued by the Maine Climate Council in 2020 pursuant to the Maine Revised Statutes, Title 38, section 577 to enhance community resilience to flooding and other climate impacts.

The Committee may report out legislation to implement those recommendations.

BACKGROUND

2019 Public Law, Chapter 476² created the Science and Technical Subcommittee of the Maine Climate Council and charged the Subcommittee with establishing science-based sea level rise projections for the State's coastal areas. The Subcommittee delivered those projections to the Maine Climate Council in its [*Scientific Assessment of Climate Change and its Effects in Maine*](#) in September 2020, with the recommendation that Maine should manage for the highly probable scenario of 1.5 feet mean sea level rise by 2050 and 3.9 feet by 2100. The Subcommittee's Assessment provides consistent guidance for all state agencies to incorporate across their programs with widely varying connections to investments, projects, and other decisions that are impacted by rising sea level.

The Council unanimously accepted this recommendation for inclusion in Maine's 2020 Climate Plan "Maine Won't Wait"³, along with "Strategy F" to Build Healthy and Resilient Communities. Within Strategy F, the Council recommended incorporating official state sea-level rise projections into regulations by 2022, to require regular updates to ensure the projections utilize the latest scientific data, and to develop and implement updated land-use regulations,

¹ Emphasize Resilience Through Land-Use Planning and Legal Tools • Develop and implement updated land-use regulations, laws, and practices by 2024 in order to enhance community resilience to flooding and other climate impacts. (p. 15)

² 2019 Public Law, Chapter 476 (L.D. 1679), [An Act To Promote Clean Energy Jobs and To Establish the Maine Climate Council](#), emergency signed, June 26, 2019

³ [Maine Won't Wait: A Four-Year Plan for Climate Action](#) adopted by the Maine Climate Council December 1, 2020

laws, and practices by 2024 in order to enhance community resilience to flooding and other climate impacts.

ANALYSIS

The agencies identified in this resolve coordinated to complete the required analysis. Staff and program managers assembled a preliminary list of laws and rules administered by each agency where regulated activities could be impacted by sea level rise, storm surges or flooding. This included recommendations from the Maine Climate Council's Community Resilience Planning Sub-Group. Staff then reviewed the applicable standards to identify where revisions are necessary to ensure activities and development appropriately account for predicted changes.

The agencies determined that Maine law currently provides broad, guiding authorities that enable the agencies to establish more specific requirements, guidelines, and design criteria that can evolve with advancements in science and technology, and changes in our climate. Maine law also provides for local control and decisions to customize actions and responses to address specific community needs.

Many agencies in state government manage and protect resources that are impacted by sea level rise, and each has their own system of rules, policies, guidance, and practices. There is no one-size-fits-all approach to including sea level rise predictions into those systems. Each agency will need to tackle specific legal and technical questions, and to work with stakeholders who have interest and expertise in those specific areas. Many state laws and rules are also connected to federal laws and rules, and the agencies have delegated authority to implement programs subject to federal oversight. The agencies identified in this resolve regularly work together, and with other state agencies, to implement many of the statutes and rules identified in this report, as well as in the development of guidance and policies. Maine's state agencies will continue to coordinate on development of legislative and regulatory changes to address the impacts of climate change.

During their review, the agencies named in 2021 Public Law, Resolve Chapter 67 recognized the need to incorporate considerations for environmental justice in work pertaining to sea level rise. Frontline communities are those most impacted by the effects of climate change, often literally on the front line of sea level rise, and often those with the least resources available to increase their resiliency to those effects. The agencies expect that the directive provided by 2021 Public Law, Chapter 279 (LD 1682) will result in consistent definitions for environmental justice in the laws and rules implemented by all state agencies. Therefore, no separate recommendations were developed for Resolve Chapter 67.

Details of each agency's individual analysis are provided below.

DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY

Maine law establishes land use authorities and responsibilities for the Department of Agriculture, Conservation and Forestry (DACF) in Titles 30-A, in the organized parts of the state, in Title 12, in the unorganized and deorganized areas of the state, and in Title 38 for timber harvesting in the shoreland zone. These laws establish the authority for local comprehensive planning and land use regulation, within which municipalities identify tools and resources to plan for and manage future development within their jurisdictions. In organized municipalities and in the jurisdiction of the Maine Land Use Planning Commission, these laws encourage appropriate residential, recreational, commercial, and industrial land uses and prevent development that is unduly proximate to waters or roads, prevents pollution, and conserves ecological and natural values.

In addition, the Director of the Bureau of Forestry (a.k.a. Maine Forest Service) at DACF has authority for the application of Statewide Standards for Timber Harvesting and Related Activities in Shoreland Areas (01-669 CMR Ch. 21, Section 11,B,4,c).

Title 5 of the Maine Revised Statutes authorizes the operations of the Land for Maine's Future Fund and public acquisitions of title or interest in lands of public interest, and Title 12 authorizes the Director of the Bureau of Public Lands to designate ecological reserves.

DACF reviewed what laws and rules apply to the above activities, whether the law or rule sets standards for the preparation of plans, local regulations, and for the location or design of development, and whether amending existing statutory language would facilitate addressing climatic effects – see DACF Relevant Statutes below.

Given the expansiveness of the language in Public Law Ch. 67 *Resolve, To Analyze the Impact of Sea Level Rise*, DACF summarizes here several areas where the Bureau of Agriculture, Food and Rural Resources (BAFRR) touches on “land-use regulations, laws, and practices” (see Footnote 1). The operations of the Agricultural Water Management Board and the Nutrient Management Review Board (in Title 7) are administered by the Commissioner of DACF and the BAFRR Director. The new Healthy Soils Program will be administered by the BAFRR, and the network of Soil and Water Conservation Districts receive partial funding from DACF (both in Title 12). Finally, DACF is expanding its resources to the agricultural community regarding solar siting considerations; it does not have regulatory jurisdiction regarding solar development.

As noted in the report of the Science and Technical Subcommittee, there is one statutory obligation passed in 1985 (Title 38, Chapter 19 §§ 1801-1803) that refers to Coastal Management Policies with mention of coastal hazards to development from flooding and sea level rise. Section 1801 (4) Hazard Area Development states:

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...

However, this legislation did not assign a state agency to oversee it or to develop regulations, so the goal of guiding development away from areas susceptible to sea level rise was not implemented. As this policy is primarily one of land use, the most practical agency to develop regulations would be the Municipal Planning Assistance Program within DACF with

collaboration across agencies including DEP, DMR, and MDOT. In addition, and in keeping with the tone of the recommendations of the Community Resilience Planning, Emergency Management and Public Health Working Group, DACF recommends that Section 1801 (4) Hazard Area Development be revised:

Encourage growth and development in areas that avoid hazards associated with sea-level rise, coastal storms, flooding, landslides and other climate hazards with consideration for the use and design lifespan.

DACF Relevant Statutes

- Land for Maine’s Future (5 M.R.S. §§ 6200-6211)
- Use Regulation (12 M.R.S. §§ 681-689)
- Ecological Reserves (12 M.R.S. § 1805)
- Comprehensive Planning and Land Use Regulation Act⁴ (30-A M.R.S. §§ 4301-4483)
- Timber harvesting in shoreland areas (38 M.R.S. § 438-B)

- *Land for Maine’s Future* (5 M.R.S. §§ 6200-6211)

The Land for Maine’s Future Board, Fund, and associated responsibilities are authorized in 5 M.R.S. §§ 6200-6211. The fund consists of the proceeds from the sale of any bonds authorized for the purposes set forth in subsection 3 and any funds received as contributions from private and public sources for those purposes. The proceeds of the Land for Maine's Future Fund may be applied and expended to acquire property or an interest in property for Working Farmland Access and Protection, Conservation and Recreation, and Working Waterfront. In the first session of the 130th Legislature, 5 M.R.S. § 6207 was amended such that “acquisitions funded by the Land for Maine's Future Fund, the board shall give priority to projects that conserve lands with multiple outstanding resource or recreation values or a single exceptional value, that help the state's natural ecosystems, wildlife and natural resource-based economies adapt to a changing climate,” among other changes. With this change, there are no other statutory changes anticipated at this time.

- *Use Regulation* (12 M.R.S. §§ 681-689)

The Use Regulation chapter of Title 12 provides the statutory authority for planning and land use regulation in the unorganized and deorganized areas of the state. This chapter creates the Land Use Planning Commission (Commission) and establishes the purpose of its authority, including: to preserve public health, safety, and general welfare; to support and encourage Maine's natural resource-based economy and strong environmental protections; to encourage appropriate residential, recreational, commercial and industrial land uses; and, to honor the rights and participation of residents and property owners while recognizing the unique value of these lands and waters to the state. The Legislature declares it to be in the public interest to

⁴ Also known as the Growth Management Act.

encourage well-planned and well-managed multiple-use, including conservation of land and resources, and to encourage and facilitate regional economic viability.

The statute directs the Commission, acting on principles of sound land use planning and development, to adopt rules for determining the boundaries of land use districts, and to prepare land use standards, prescribing standards for the use of air, lands, and waters. Specifically, the statute states that:

Land use standards must be interpreted and applied by the Commission as minimum requirements, adopted to reasonably and effectively promote health, safety and general welfare and ensure compliance with state plans and policies. 12 M.R.S. § 685-A(4)

In addition, the statute directs the Commission to prepare an official comprehensive land use plan and to use the plan as a guide in developing specific land use standards and delineating district boundaries. The Commission’s Comprehensive Land Use Plan (CLUP) includes several policies under the Air and Climate Resources goal, including one that directs the Commission to, “[a]s part of a coordinated state effort, evaluate how the Commission’s development policies and standards impact climate change and make appropriate revisions.” (p. 11)

The Commission implements the above statutory provisions, primarily in Chapter 10 of its rules. The Commission has established a goal to consider policy development and Chapter 10 rule revisions addressing sea level rise and other climatic impacts, particularly in Section 10.25(T), Activities in Flood Prone Areas.

Based on a review of the statute, and in consideration of Strategy F3 in the climate action plan, there is one suggested change in **12 M.R.S. § 685-B(1-A), Exceptions**. The section provides that a permit is not required for the repair and maintenance of an existing road culvert or for the replacement of an existing road culvert, as long as a replacement culvert is, among other requirements, “[n]o more than one standard culvert size wider in diameter than the culvert being replaced.” This requirement is outdated, inconsistent with language in a similar exemption under Title 38 (38 M.R.S. § 480-Q(2-D)), and establishes a disincentive for landowners to improve the capacity of a water crossing to pass floodwaters during a repair or replacement project. The language in 12 M.R.S. § 685-B(1-A) should, at a minimum, be made consistent with Title 38. Alternatively, the exception could be removed. In that case, as provided in Chapter 10, repair and replacement of road culverts would generally be allowed *without a permit* subject to the activity specific standards for Roads and Water Crossings, Section 10.27(D), which were updated by the Commission in 2019.

- *Ecological Reserves* (12 M.R.S. § 1805)

The Director of the Bureau of Parks and Lands may designate ecological reserves on public lands pursuant to requirements established in 12 M.R.S. §1805 for public input, development of a management plan, use designations, resource protection measures, and acreage limitations. Ecological reserves may serve as an opportunity for carbon storage; however, more discussion and research is warranted.

- *Growth Management Act* (30-A M.R.S. §§ 4301- 4483)

The Growth Management Act, formally known as the Comprehensive Planning and Land Use Regulation Act, establishes a program of growth management to accomplish a set of fourteen state goals (30-A M.R.S. § 4312 (3)). The fourteenth of these state goals, (30-A M.R.S. § 4312(3)(N)), notes 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 plan for:

[T]he 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.

In addition, the Growth Management Program elements of 30-A M.R.S. § 4326 include the following with respect to sea-level rise:

4-A. Addressing sea level rise. A municipality or multi-municipal region that is in the coastal area may include in its comprehensive plan projections regarding changes in sea level and potential effects of the rise in sea level on buildings, transportation infrastructure, sewage treatment facilities and other relevant municipal, multi-municipal or privately held infrastructure or property and may develop a coordinated plan for addressing the effects of the rise in sea level. For the purposes of this subsection, "coastal area" has the same meaning as in Title 38, section 1802, subsection 1.

Finally, 30-A M.R.S. § 4346 provides for a technical and financial assistance program. However, this program has experienced an 80% reduction in staff in the last 15 years and, as a result, has provided minimal assistance to regional councils and very limited grant support from the Maine Coastal Program to individual municipalities on a broad range of issues, despite the need for assistance. The [Community Resilience Partnership](#) (CRP), launched on December 1, 2021, in the Governor's Office of Policy Innovation and the Future, was authorized by the 130th Legislature. The state budget authorized \$4.75 million and, with additional private funds, the CRP will disperse \$5 million in grants over the next 2-3 years. These funds are targeted to multiple types of regional organizations⁵ and communities to develop projects that reduce energy use and prepare climate vulnerability assessments and resilience plans. The recommendations herein are intended to provide statutory guidance and support for the implementation of these climate resilience plans.

Recommended/Potential Statutory Changes:

DACF has identified several sections within Title 30-A as potential targets for revision to facilitate consideration of climate impacts and implementation of the strategy designated as "Strategy F3" in the state climate action plan issued by the Maine Climate Council. Title 30-A offers the opportunity to enhance community resilience to sea level rise, flooding, and other climate impacts through the preparation of climate vulnerability assessments and

⁵ regional planning organizations, councils of governments, regional economic development organizations, non-profits, county governments, academic institutions and cooperative extension programs, and for-profit enterprises

community resilience or local climate action plans. Potential changes in Title 30-A, described below, could enable and guide the preparation of these plans.

In turn, Title 30-A already authorizes municipalities to regulate the location of development relative to floodplains and areas of impact from sea level rise, and to protect ecosystems and natural habitats that can mitigate the impacts of sea level rise. Likewise, with a clear resilience plan that is duly adopted as part of a local Comprehensive Plan, Title 30-A already enables municipalities to prepare an infrastructure assessment and capital investment plan. Emergency management plans can, and in some cases already do, include coordinated hazard prevention and response in local and regional public service agreements. These plans and inter-local agreements also offer measures to address temperature extremes and to monitor and prevent occurrences of tick-borne disease.

[LD 1616](#), *An Act To Ensure That Municipalities and Multimunicipal Regions of Every Size and Capacity Have Guidance on Climate Adaptation and Resilience Strategies for Policy, Implementation and Investment Decision Support*, carried over from the first session of the 130th Legislature, offers a legislative “landing pad” for the statutory changes to Title 30-A recommended in this report, where further development of draft statutory language could occur. These changes could include:

Definitions (30-A M.R.S. § 4301)

Review and revise definitions to incorporate climate considerations:

§ 4301. Definitions of:

- Critical rural area (to include reference to flood prone area and flood buffer areas)
- Rural area (to include erosion mitigation and water retention)

Develop new definitions to incorporate climate considerations such as:

§ 4301. Definitions of:

- Accommodation zone⁶
- Coastal hazard area⁷
- Conservation zone⁸
- Frontline communities (coordinate with LD 1682 for consistency)
- Hard armoring⁹

⁶ Potential definition: a municipally or multi-municipally designated coastal hazard area designed to allow for continued development while requiring that structures be sited and built to be more resilient to impacts. This area could include areas with intense to moderate existing development, some ecologically sensitive resources, and limited viability for hard-shoreline armoring.

⁷ Potential definition: areas susceptible to a combination of future sea level rise, erosion, landslides, and flooding from storm surge

⁸ Potential definition: a municipally or multi-municipally designated coastal hazard area designed to facilitate protection of natural resources and provide for the gradual relocation of development in highly vulnerable areas. This area could include highly vulnerable areas that have sensitive natural resources and that are unsuitable for hard-shoreline protection (such as sea walls and bulkheads).

⁹ Potential definition: protecting the shoreline from erosion using physical barriers, including but not limited to the construction of bulkheads, seawalls, revetments, dikes, and groins.

- Community resilience plan or local climate action plan¹⁰
- Climate Action Plan (cross reference to Title 38, section 577)
- Low Impact development¹¹
- Environmental Justice (coordinate with LD 1682 for consistency)
- Climate change (as defined in *Maine Won't Wait*)
- Resilience (as defined in *Maine Won't Wait*)

Growth Management Program Elements (30-A M.R.S. § 4326)

Inventory and Analysis

With the inclusion of a definition of a community resilience or local climate action plan, such a plan can be considered an “interrelated document” (see Comprehensive Plan definition 30-A M.R.S. § 4301(3)) or an amendment to a Comprehensive Plan without needing an entire re-write of a local Comprehensive Plan. In addition, to provide guidance on what to include in a community resilience plan, DACF recommends adding a new inventory and analysis item (to become 30-A M.R.S. § 4326(1)(L)) that includes, for a community resilience or local climate action plan, the preparation of a climate vulnerability assessment specific to the locality. This new inventory item would address the fourteenth State Goal (30-A M.R.S. § 4312(3)(N)) concerning sea level rise as well as Goals A through J, particularly Goals A, B, E, F, G, H, I, and J. As noted in 30-A M.R.S. § 4325 addressing cooperative municipal growth management activities, and in multiple other sections of Title 30-A, this new inventory item could be achieved through a collaborative regional analysis. In fact, such a regional assessment of vulnerability is often a far more efficient use of municipal time and resources.

The purpose here is to enable/authorize towns to prepare climate vulnerability risk assessments and community resilience or local climate action plans as separate documents that are part of a municipal Comprehensive Plan for the purposes of authorizing zoning, rate of growth, and impact fee ordinances (see 30-A M.R.S. § 4352), but do not necessarily require an update to the entire Comprehensive Plan. This distinction is drawn for several reasons. First, the inventory and analysis and the policies and strategies of a recent (2-5 year old) Comprehensive Plan may adequately address the needs of both a vulnerability assessment and a community resilience or local climate action plan. A municipality may be able to point to existing work, add some additional detail, and have a sufficient policy basis for regulatory changes. Second, some physical and natural circumstances may remain unchanged for even longer (0-10 years). There may be no need to duplicate an inventory of certain natural or constructed features within

10 Potential definition: A planning and decision-making document produced by a process that assembles information about climate and health risks and evaluates options for action by individuals, committees, or offices in municipal and tribal governments who are responsible for planning, implementing, and monitoring the activities that reduce climate risk, improve health, and build the community’s capacity to manage crises; and utilizes community dialogue and participation that ensures the voices and needs of the most vulnerable citizens are elevated and prioritized.

11 Potential definition: a land planning and engineering design approach to managing stormwater runoff through on-site natural features to protect water quality and replicate pre-development hydrology through infiltration, filtering, storing, evaporating, and detaining runoff close to its source.

a municipality. Finally, the Comprehensive Plan may be completely out of date (greater than 12 years). Given increasing climate vulnerabilities, there may be a need to prepare the vulnerability assessment and community resilience plan – and make regulatory decisions as a result – without a full update to an older Comprehensive Plan.

In all these cases, the municipality would acquire sufficient public input and policy information to change their capital investment plans to address the climate risks they face. Note that none of these recommended changes reduce any of the extensive public participation requirements in the entirety of the Growth Management Act.

Addressing “other climate impacts”

The growth management program elements already include guidance on addressing sea-level rise, see 30-A M.R.S. § 4326(4-A), also excerpted above. DACF recommends a new element: “addressing other climate impacts” to become 30-A M.R.S. § 4326(4-B). The language of such a new section could run parallel to § 4326(4-A) without the specific reference to “in the coastal area” and refer to the impacts documented in a municipal or multi-municipal climate vulnerability assessment. In this way, any locality can refer to their own specific circumstances and vulnerabilities as well as those documented in the report of the Science and Technical Subcommittee of the Maine Climate Council or other risk assessment tools in existence or under development.

Technical and financial assistance program (30-A M.R.S. § 4346)

If the recommendations above - to add a definition of a community resilience or local climate action plan and to provide clarity around the inclusion of such a plan into a local Comprehensive Plan - are adopted, then the technical and financial assistance programs of § 4346 could also support preparation of a community resilience or local climate action plan. The Legislature may choose to specifically mention that funds can be used for the preparation of a vulnerability assessment or a community resilience or local climate action plan; however, the language of § 4346(H) is expansive enough to allow use of these funds for these purposes.

The “regional council assistance” that is called for in 30-A M.R.S. § 4346(4) recognizes the potential efficiency gains of providing technical assistance at a regional scale. There are simply too many individual municipalities and far too few resources within state government to support the preparation of town-by-town assessments or plans on any subject, including climate vulnerability assessments or community resilience or climate action plans. In addition, there is substantial geographic, economic, and social variability across the state that regional organizations are best able to understand and assess. Where they exist, regional planning organizations are trusted partners to municipal leaders, who are often dues-paying members and Board representatives to the regional planning organization itself.

The funds forthcoming from the CRP could help regional planning organizations assist municipalities and even provide the necessary funding to re-establish their former organizational structures. Given the current absence of functioning regional planning organizations in some parts of the state, the CRP allows contractors, academic, for-profit and non-profit organizations (see Footnote 5) to provide this help to municipalities. This

approach will build capacity; however, as regional planning organizations are specifically identified in 30-A M.R.S. § 4346(4) “to develop regional education and training programs, regional policies to address state goals and regional assessments,” they will be called upon by their member municipalities to provide this assistance. Additional resources are needed that support regional planning organizations who in turn support municipalities with the technical assistance called for in 30-A M.R.S. § 4346(4).

Finally, the intent of the statutorily provided growth-related capital investments (30-A M.R.S. § 4349-A), and the cross reference to that section that guides the coordination of other state investments (30-A M.R.S. § 4346(5)), is to financially reward municipalities who designate local growth areas. This provision makes sense for investments in energy conservation and emission reduction measures in locally designated growth areas and would be consistent with the statute as written. However, investments in climate resilience, whether in facilities, land acquisition, or infrastructure, may not be appropriately targeted to a locally designated growth area. A new section, **30-A M.R.S. § 4346(6)** could be called “preference for climate readiness” and award preference to municipalities with climate vulnerability assessments and community resilience or local climate action plans when making state investments and awarding grant money to implement projects that increase climate resilience.

- *Timber harvesting in shoreland areas* (38 M.R.S. § 438-B)

Pursuant to 38 M.R.S. § 438-B, statewide standards for timber harvesting in shoreland areas will go into effect beginning on the first day of January of the 2nd year following the year in which the Commissioner of Agriculture, Conservation and Forestry determines that at least 252 of the 336 municipalities identified by the Commissioner as the municipalities with the highest acreage of timber harvesting activity on an annual basis for the period 1999-2003 have either accepted the statewide standards or have adopted an ordinance identical to the statewide standards. The Maine Forest Service (MFS) at DACF anticipates that this threshold number of municipalities will be reached during 2022 and, as a result, MFS is preparing to embark on rulemaking to adjust MFS [Chapters 21 and 27](#) accordingly. No change to 38 M.R.S. § 438-B is necessary to address the legislative intent of LD 1572.

DACF Relevant Rules

DACF will review the following rules for necessary revisions to incorporate changes the Legislature authorizes to Titles 12 or 30-A pertaining to sea level rise and other climate impacts. Any proposed rulemaking will involve the opportunity for stakeholder input and public hearings. Additionally, revisions to Chapters 21 and 27 would require legislative review and approval through the major substantive rulemaking process.

- Chapter 208: *Comprehensive Plan Review Criteria Rule*

Establishes the criteria the Municipal Planning Assistance Program uses to review community comprehensive plans for consistency with the goals and guidelines of the Growth Management Act (30-A M.R.S. §§ 4312-4350).

- Chapter 2: *Definitions*

This rule establishes definitions that apply to terms as they appear in this chapter, the other chapters of the Land Use Planning Commission's rules, and the Commission's overarching statute.

- Chapter 10: *Land Use Districts and Standards*

Establishes land use standards for the use of air, lands, and waters for areas served by the Maine Land Use Planning Commission; designed to interpret, apply, and enforce the Commission's Statute and Comprehensive Land Use Plan.

- Chapter 21: *Statewide Standards for Timber Harvesting in Shoreland Areas*

Establishes statewide standards for timber harvesting and related activities in shoreland areas enforced by MFS. In general, timber harvesting activities in shoreland areas must protect shoreline integrity and not expose mineral soil that can be washed into water bodies, including nonforested freshwater and coastal wetlands, and tidal waters.

- Chapter 27: Standards for Timber Harvesting Activities within Unorganized and Deorganized Areas of the State

Establishes the procedures for notifying the MFS of proposed timber harvesting activities and sets the standards for regulating those activities. The rule applies to all land within the unorganized and deorganized areas of the state classified by the Land Use Planning Commission as protection districts or management districts pursuant to 12 M.R.S. §685-A(1), Activities within Unorganized and Deorganized Areas of the State.

DEPARTMENT OF DEFENSE, VETERANS AND EMERGENCY MANAGEMENT

Maine law establishes authorities and responsibilities for the Department of Defense, Veterans, and Emergency Management in Title 37-B. General provisions establish the Department of Defense, Veterans, and Emergency Management as a government body intended for the purpose of coordinating and improving the discharge of military affairs, veterans' services and emergency management matters. As a bureau of the Department of Defense, Veterans, and Emergency Management, the Maine Emergency Management Agency has the most direct intersect with sea level rise preparedness and mitigation. Per the Title 37-B, Chapter 13 Statute and 15-214 Rule Chapter references supplied below, Maine Emergency Management Agency (MEMA) serves as a non-authoritative, coordinating agency that defers to the established law and regulation set forth by alternate state and federal agencies with direct oversight for areas such as mitigation planning, climate adaptation planning, shoreland zoning, flood insurance mapping, building codes, land use planning, permitting, licensing, and certifications.

TITLE 37-B, CHAPTER 13 STATUTE CONSIDERATIONS:

§ 701. Title; purpose

- Agency – Establish the Maine Emergency Management Agency to lessen the effects of disaster on the lives and property of the people of the State through leadership,

coordination, and support in the 4 phases of emergency management: mitigation, preparedness, response, and recovery.

§ 702. Policy

- It is declared to be the policy of the State that all emergency management and homeland security functions be coordinated to the maximum extent with the comparable functions of the Federal Government, including its various departments and agencies, of other states and localities, and of private agencies so that the most effective preparation and use may be made of the nation's workforce, resources and facilities for dealing with any disaster that may occur.

§ 704. Director; duties

- Risk assessment: emergency planning guidance – Develop and disseminate risk assessment and emergency planning guidance in conformance with current federal requirements and national standards for use by the agency and county, regional and municipal jurisdictions.
- Comprehensive emergency management plan – Develop and maintain a comprehensive emergency management plan for the State that is in conformance with guidance developed under subsection 10; and
- Additional duties and authority – Carry out any additional duties and assume such additional authority as may be prescribed by the commissioner or the Governor.

§ 783. Disaster emergency plan

- Each municipality, county, and regional emergency management agency shall prepare and keep a current disaster emergency plan for the area subject to the jurisdiction. The plan must be approved by the jurisdiction's governing body. The plan must follow the risk assessment and planning guidance provided by the director under section 704, subsection 10 and address the hazards and threats that pose the greatest risk to the jurisdiction and the capabilities and actions needed to respond to and recover from disasters.

15-214 RULE CHAPTER CONSIDERATIONS

CHAPTER 3 DESIGN AND CONSTRUCTION STANDARDS FOR NEW OR RECONSTRUCTED DAMS

3.1 GENERAL PROVISIONS

- a. In accordance with the provisions of 37-B M.R.S. § 1063, it is the intent of these dam regulations to provide for the proper and safe design and construction of impounding structures not exempt from the law to the extent required for the protection of public safety.

3.71 The following are acceptable as design procedures and references:

- a. The design procedures, manuals, and criteria used by the United States Army Corps of Engineers.

- b. The design procedures, manuals, and criteria used by the United States Department of Agriculture, Soil Conservation Service.
- c. The design procedures, manuals, and criteria used by the United States Department of the Interior, Bureau of Reclamation.
- d. The design procedures, manuals, data, and criteria used by the United States Department of Commerce, National Weather Service.

ANALYSIS & RECOMMENDATIONS:

Current Statute and Rule language depicts Maine Emergency Management Agency as a coordinating agency structured to support state and federal law as it pertains to mitigation, preparedness response, and recovery. MEMA purposely defers to the authority of alternate agencies for formal recommendation of sea level rise scenarios for use in mitigation planning, and in support of flood mitigation project engineering. All FEMA Hazard Mitigation Assistance grant opportunities that support mitigation planning and project initiatives are subject to federal oversight. Alternate state agency oversight is evaluated on a case by case basis as involvement is dependent on approved project scope of work.

It is important to note that local jurisdictions are required only to have a disaster response and recovery plan. Local Hazard Mitigation Plans are not required, however a local entity (County or Municipality) is required to have a FEMA approved plan that abides by the appropriate Code of Federal Regulations (44 CFR 201 – Mitigation Planning) to be considered eligible for FEMA Hazard Mitigation Assistance grant funding.

CURRENT STAFFORD ACT MITIGATION PLANNING REQUIREMENTS

Per section 322 of the Stafford Act, [42 U.S.C. 5165](#), the key responsibilities of the State are to coordinate all State and local activities relating to hazard evaluation and mitigation and to:

- (1) Prepare and submit to FEMA a Standard State Mitigation Plan following the criteria established in [§ 201.4](#) as a condition of receiving non-emergency Stafford Act assistance and FEMA mitigation grants. In accordance with [§ 77.6\(b\) of this chapter](#), applicants and subapplicants for Flood Mitigation Assistance project grants must have a FEMA-approved mitigation plan that addresses identified flood hazards and provides for reduction of flood losses to structures for which NFIP coverage is available.
- (2) In order to be considered for the 20 percent HMGP funding, prepare and submit an Enhanced State Mitigation Plan in accordance with [§ 201.5](#), which must be reviewed and updated, if necessary, every 5 years from the date of the approval of the previous plan.
- (3) At a minimum, review and update the Standard State Mitigation Plan every 5 years from the date of the approval of the previous plan in order to continue program eligibility.
- (4) Make available the use of up to the 7 percent of HMGP funding for planning in accordance with [§ 206.434](#).
- (5) Provide technical assistance and training to local governments to assist them in applying for HMGP planning grants, and in developing local mitigation plans.

(6) For Managing States that have been approved under the criteria established by FEMA pursuant to [42 U.S.C. 5170c\(c\)](#), review and approve local mitigation plans in accordance with [§ 201.6\(d\)](#).

(d) **Local governments.** The key responsibilities of local governments are to:

(1) Prepare and adopt a jurisdiction-wide natural hazard mitigation plan as a condition of receiving project grant funds under the HMGP, in accordance with [§ 201.6](#).

(2) At a minimum, review and update the local mitigation plan every 5 years from date of plan approval of the previous plan in order to continue program eligibility.

Per 44 CFR 201 – Mitigation Planning

To be considered effective the plan must include the following elements:

(1) Description of the *planning process* used to develop the plan, including how it was prepared, who was involved in the process, and how other agencies participated.

(2) Statewide *risk assessments* that provide the factual basis for activities proposed in the strategy portion of the mitigation plan. Statewide risk assessments must characterize and analyze natural hazards and risks to provide a statewide overview. This overview will allow the State to compare potential losses throughout the State and to determine their priorities for implementing mitigation measures under the strategy, and to prioritize jurisdictions for receiving technical and financial support in developing more detailed local risk and vulnerability assessments. The risk assessment must include the following:

(i) An overview of the type and location of all natural hazards that can affect the State, including information on previous occurrences of hazard events, as well as the probability of future hazard events, using maps where appropriate;

(ii) An overview and analysis of the State's vulnerability to the hazards described in this [paragraph \(c\)\(2\)](#), based on estimates provided in local risk assessments as well as the State risk assessment. The State must describe vulnerability in terms of the jurisdictions most threatened by the identified hazards, and most vulnerable to damage and loss associated with hazard events. State owned or operated critical facilities located in the identified hazard areas must also be addressed;

(iii) An overview and analysis of potential losses to the identified vulnerable structures, based on estimates provided in local risk assessments as well as the State risk assessment. The State must estimate the potential dollar losses to State owned or operated buildings, infrastructure, and critical facilities located in the identified hazard areas.

FEDERAL PLANNING CLIMATE CHANGE CONSIDERATIONS

Comprehensive Preparedness Guide: FEMA recently released version 3.0 of their “Developing and Maintaining Emergency Operations Plans; Comprehensive Preparedness Guide (CPG) 101.” Formal planning guidance now indicates that planners must (1) consider how climate change could affect the community in the future, (2) how climate change is affecting the frequency and intensity of these hazards and altering their community’s risk profile, and (3) include estimates for how climate change may introduce new hazards or increase the potential impacts from existing hazards.

FEMA Strategic Plan 2022-2026: FEMA has announced that one of their top three goals for the next four years is to “lead whole of community in climate resilience.” FEMA has the goal of enhancing the nation’s ability to anticipate, prepare for, and adapt to future climate conditions. This starts with fostering a common understanding of how climate change will reshape emergency management, and includes building better resources and tools to drive FEMA’s understanding of future risk and enhance the agency’s ability to act. With the support of these tools, FEMA will be engaging state, local, tribal, territory, private sector, and nonprofit partners in developing climate resilience through systems-based, community-wide investments in climate adaptation.

Hazard Mitigation Planning: The National Emergency Management Association is working to put forth a bill to amend verbiage within section 322 of the Stafford Act, [42 U.S.C. 5165](#). The purpose if the bill is to require specific language on risk and vulnerabilities due to climate change and to integrate consideration of climate change adaptation, natural and nature-based hazard mitigation, and risk reduction techniques. Should this change be written into law then all FEMA-approved Hazard Mitigation Plans will be formally and directly required to address vulnerabilities associated with climate change.

CONCLUSION:

Maine Emergency Management Agency has reviewed the laws and rules it is charged with administering and does not have any recommendations to submit to the Joint Standing Committee on Environment and Natural Resources regarding relative sea level rise considerations nor implementation of “Strategy F3” from the 2020 state climate action plan. We look forward to implementing new climate change practices as they’re written into federal law and administered by the Federal Emergency Management Agency. We also look forward to our continued partnership with the state agencies that maintain authority over climate adaptation planning, shoreland zoning, flood insurance mapping, building codes, land use planning, permitting, licensing, and certifications as we collaboratively work towards a standardized approach to sea level rise considerations.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Maine Revised Statutes establishes most authorities and responsibilities for the Department of Environmental Protection (DEP) in Title 38, with some additional authorities in Title 32 and 35-A. These include laws that regulate land uses in order to protect water quality, wildlife habitat, and other natural resource values. Sea level rise and other climate-related changes to water levels impact many activities and facilities regulated by DEP, such as:

- Development in or near waterbodies, wetlands, and designated resources
- Development that changes stormwater flows
- Wastewater discharges
- Storage tanks
- Landfills
- Hazardous waste generators
- Contaminated sites

DEP reviewed what laws and rules apply to those activities, whether the law or rule sets standards for the location or design of development, and whether existing statutory language must be amended for climatic effects to be incorporated in DEP rules.

DEP - Relevant Statutes

- Stormwater Management Law (38 M.R.S. § 420-D)
 - Shoreland Zoning Act (38 M.R.S. §§ 435-449)
 - Natural Resources Protection Act (38 M.R.S. §§ 480-A – 480-JJ)
 - Site Location of Development Act (38 M.R.S. §§ 481- 489-E)
 - Waste Management (38 M.R.S. §§ 1301 - 1319-Y)
-
- *Stormwater Management Law* (38 M.R.S. § 420-D)

The Stormwater Management Law applies to construction of any project that includes one or more acres of disturbed area, with a variety of exemptions. It does not establish quantitative or performance standards; it directs DEP to adopt major substantive rules to establish quantity and quality standards for storm water. DEP implements this law in Chapter 500, and plans to revise the rule to incorporate considerations for sea level rise and other climatic impacts to stormwater.

- *Shoreland Zoning Act* (38 M.R.S. §§ 435-449)

The Shoreland Zoning Act requires municipalities to adopt shoreland zoning and land use control ordinances for shoreland areas, within 250 feet of the normal high water line of any great pond, river and saltwater body, within 250 feet of the upland edge of wetlands, and within 75 feet the high water line of a stream. The Act establishes certain minimum standards all municipal shoreland zoning ordinances must be consistent with and directs DEP to adopt minimum guidelines all municipal shoreland zoning ordinances must be no less stringent than.

DEP implements the Shoreland Zoning Act through DEP's rule Chapter 1000: Guidelines for Municipal Shoreland Zoning Ordinances. The Act and Chapter 1000 provide flexibility for municipalities to address their specific zoning needs, many of which are developing climate resilience plans to address issues such as the highest astronomical tide and reconstruction in

inundation zones. However, the Act's restrictions may preclude some resiliency measures where construction is appropriate or necessary for public safety, infrastructure, local services, or economic needs. Legislation has been introduced for consideration in the 130th Legislative Session to address such a restriction in LD 1809, *An Act To Allow Exceptions to the Height Limitations under the Shoreland Zoning Law*.

- *Natural Resources Protection Act* (38 M.R.S. §§ 480-A – 480-JJ)

The Natural Resources Protection Act (NRPA) identifies the State's rivers and streams, great ponds, fragile mountain areas, freshwater wetlands, significant wildlife habitat, coastal wetlands and coastal sand dune systems as resources of state significance. NRPA requires review and permitting by DEP of a variety of activities if the activity is located in, on or over any protected natural resource or is located adjacent to a defined subset of these protected natural resources, including larger freshwater wetlands, coastal wetlands, great ponds, rivers and streams. NRPA prohibits activities that cause unreasonable impacts, including unreasonably interfering with the natural flow or surface or subsurface waters and causing or increasing flooding. NRPA directs DEP to establish rules for impact analyses.

DEP implements this law in Chapters 305 (NRPA Permit-by-Rule), 310 (Wetlands and Waterbodies Protection), 315 (Assessing and Mitigating Impacts to Existing Scenic and Aesthetic Uses), 335 (Significant Wildlife Habitat), and 355 (Coastal Sand Dune Rules). DEP plans to revise Chapters 305 and 355 to incorporate considerations for sea level rise and other climatic impacts.

- *Site Location of Development Act* (38 M.R.S. §§ 481- 489-E)

The Site Location of Development Act (SLODA) authorizes the DEP to regulate the location of development of state or regional significance that may substantially affect the environment, in order to insure that such development will be located in a manner which will have a minimal adverse impact on the natural environment within the development sites and their surroundings. SLODA applies to development of 20 acres or more, structures that occupy a total of 3 acres or more (including parking lots), larger subdivisions, oil terminal facilities, oil or gas exploration, and off-shore wind power projects of 3 megawatts or more.

SLODA includes qualitative standards for permissible projects, including the requirement that a developer must make adequate provision for fitting the development harmoniously into the existing natural environment and that the development must not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities.

DEP recommends adding a new subsection 38 M.R.S. §484(3)(I) to include consideration of sea level rise in the harmonious fit standard:

I. In determining whether a developer has made adequate provision for fitting the development harmoniously into the existing natural environment, the department may consider the effect of at least 1.5 feet of relative sea level rise by 2050 and 4 feet by 2100.

As with other provisions in subsection 484(3), major substantive rulemaking will be necessary to provide greater specificity about how this new standard will be applied to different circumstances. If the Legislature makes this change to SLODA, the DEP plans to revise Chapter 375 accordingly.

- Waste Management (38 M.R.S. §§ 1301 - 1319-Y)

The Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S. Chapter 13, establishes requirements for licensing solid waste facilities including several sections that require consideration of a facility's proximity to surface water. Subsection 1310-N(1-A)(C) recognizes facility impacts to water quality. The Act mirrors the Site Law requirement for "harmonious fit" in 38 M.R.S. § 1310-N(2-F)(C): "The applicant has made adequate provision for fitting the proposed solid waste facility harmoniously into the existing natural environment and the proposed solid waste facility will not unreasonably adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities." The Act also mirrors the Site Law provision regarding flood hazards in 38 M.R.S. §1310-N(2-F)(G): "The department shall issue a license for a new or expanded solid waste facility when it finds, in part, that the project will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to a structure."

The Department recommends amending the harmonious fit requirement in subsection 1310-N(2-F)(C) to mirror recommended changes to the same provision in the Site Location of Development Act:

C. The applicant has made adequate provision for fitting the proposed solid waste facility harmoniously into the existing natural environment and the proposed solid waste facility will not unreasonably adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities. In determining whether an applicant has made adequate provision for fitting the development harmoniously into the existing natural environment, the department may consider the effect of at least 1.5 feet of relative sea level rise by 2050 and 4 feet by 2100.

Rulemaking will be necessary to provide greater specificity about how this new standard will be applied to different circumstances. If the Legislature makes this change to the Maine Hazardous Waste, Septage and Solid Waste Management Act, the DEP plans to revise Chapter 400 accordingly.

DEP - Relevant Rules

The Resolve does not require rulemaking, but the Maine Department of Environmental Protection has identified rule Chapters for revision in 2022 in the Department's Annual

Regulatory Agenda posted on the Maine Secretary of State's website, and additional regulatory considerations below.

Many DEP rules provide flexibility for environmental impact analyses to evolve with the latest available science, or specifically incorporate consideration of more extreme climatic conditions. For example, Chapter 854: *Standards for Hazardous Waste Facilities* requires locating facilities to prevent adverse impacts to water quality, including consideration of "hydrogeological characteristics of the facility and surrounding land, including the topography of the area around the facility". Chapter 200: *Metallic Mineral Mining* has similar provisions, but also specific elements such as requiring stormwater designs for 500-year storm events.

- Chapter 305: *Natural Resource Protection Act - Permit by Rule Standards*
DEP plans to propose revisions to Chapter 305 to incorporate updated designs for stream crossings, and to provide additional permitting options for living shorelines, other shoreline stabilization projects and dune restoration projects.
- Chapter 310: *Wetlands and Waterbodies Protection*
DEP is evaluating potential revisions to Chapter 310 to support living shoreline and infrastructure resiliency projects. DEP will coordinate with the U.S. Army Corps of Engineers and Maine Department of Transportation to ensure projects continue to meet federal requirements.
- Chapter 355: *Coastal Sand Dune Rules*
Chapter 355 includes design requirements based on predictions for a 2-foot rise in sea level in the next 100 years. DEP is evaluating potential revisions to Chapter 355 to incorporate updated sea level rise predictions, to support living shoreline and other resiliency projects, and to update a variety of federal references.
- Chapter 377: *Review of Roads Under the Site Location of Development Law*
Chapter 377 contains standards for roads subject to review under SLODA. DEP is evaluating potential revisions to Chapter 377 to update standards for bridge and stream crossing design, and to protect new roads from projected sea level rise impacts.
- Chapter 400: *Solid Waste Management Rules: General Provisions*
Chapter 400 contains provisions for licensing all types of solid waste facilities, and includes details for fitting a solid waste facility harmoniously into the natural environment. If the Legislature amends 38 M.R.S. §1310-N(2-F)(C) as recommended above, the Department will revise Chapter 400 through routine technical rulemaking to provide additional specificity about how the standard will be applied.
- Chapter 500: *Stormwater Management*
DEP plans to propose revisions to Chapter 500 to update a variety of stormwater system design standards, and to incorporate modernization changes to application processing. DEP plans to utilize a consensus-based rulemaking process to engage interested persons in the development of these revisions prior to a formal proposal to the Board of Environmental

Protection. Notice initiating the consensus-based process and soliciting participants will be issued in 2022.

- Chapter 600: *Oil Discharge Prevention and Pollution Control Rules for Marine Oil Terminals, Transportation Pipelines and Vessels*
DEP plans to propose revisions to Chapter 600 in 2022 to incorporate sea level rise predictions in siting restrictions and spill containment requirements for terminals in areas with higher flood and inundation risk.
- Chapter 1000: *Guidelines for Municipal Shoreland Zoning Ordinances*
Chapter 1000 provides minimum ordinance requirements for municipalities implementing the Shoreland Zoning Act. Many municipalities still need to revise their ordinances to meet the minimum requirements established in Chapter 1000, which provide flexibility for municipalities to address their specific zoning needs, including changing surface water levels in both marine and inland environments. DEP will revise Chapter 1000 to incorporate any legislative changes to the Shoreland Zoning Act, and will coordinate with other state agencies to provide guidance to municipalities to address sea level rise and other climatic impacts on shoreland zones.

Information about DEP rulemaking and opportunities for public engagement is available at <https://www.maine.gov/dep/rules/index.html>.

DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

Maine law establishes most authorities and responsibilities for the Department of Inland Fisheries and Wildlife (IFW) in 12 M.R.S., Part 13. In statute the Department is directed to preserve and protect and enhance the inland fisheries and wildlife resources of the state. As part of those statutes and subsequent actions the Department already has many tools and programs in place that will allow it to respond to threats to the persistence of these species. These laws also contain specific provisions that establish protections for endangered and threatened species.

As part of that effort the Department of Inland Fisheries and Wildlife worked closely with other state agencies and NGO partners to develop Maine's Wildlife Action Plan. This included the designation of dozens of Species of Greatest Conservation Need in the latest 2015 edition of the plan. The Wildlife Action Plan identified many strategic nonregulatory actions that could help limit further declines of these species. Implementation of the plan and state identified priorities will be central to the Department's actions in response to all threats to the persistence of these species including climate change and sea level rise.

In addition to that the Department works with other state agencies where most of the regulatory authority for the protection of fish and wildlife habitat lies, specifically with DEP and ACF, including the following:

- Use Regulation (12 M.R.S. §§ 681 – 689)
- Comprehensive Planning and Land Use Regulation Act (30-A M.R.S. §§ 4301- 4483)

- Stormwater Management Act (38 M.R.S. § 420D)
- Shoreland Zoning Act (38 M.R.S. §§ 435 - 449)
- Timber harvesting in shoreland areas (38 M.R.S. § 438-B)
- Natural Resources Protection Act (38 M.R.S. §§ 480A - 480JJ)
- Site Location of Development Act (38 M.R.S. §§ 481- 490)
- Waste Management (38 M.R.S. §§ 1301 - 1319-Y)

Recommended updates to these laws and associated rules are summarized by each agency under their respective headings within this report.

In addition, IFW recommends updating its 2014 Maine Endangered and Threatened Species Listing Handbook to more explicitly identify habitat loss resulting from sea level rise, as well as other climate considerations, into the existing list of criteria used to determine species vulnerability. Such a change would increase the handbook's consistency with *Climate Change and Biodiversity in Maine: Vulnerability of Habitats and Priority Species* (Manomet 2014), and subsequent 2015 State Wildlife Action Plan designation process for Species of Greatest Conservation Need. Such a change would not require modifications to 12 M.R.S. §12803 or IFW Rule Chapter 8 Endangered Species. Sea level rise also will result in shifts in the distribution of some wildlife species, which, over time, will require IFW to update mapped Significant Wildlife Habitats (Department Rule Chapter 8) and Essential Habitats (IFW Rule Chapter 8). However, no changes to Title 12 or these rule chapters are required to facilitate these updates.

DEPARTMENT OF MARINE RESOURCES

The Department of Marine Resources is established to conserve and develop marine and estuarine resources; to conduct and sponsor scientific research; to promote and develop the Maine coastal fishing industries; to advise and cooperate with local, state and federal officials concerning activities in coastal waters; and to implement, administer and enforce the laws and regulations necessary for these enumerated purposes (12 M.R.S. § 6021). The Commissioner has broad regulatory authority to ensure the conservation and propagation of marine resources through limitations on take by time, method, number, weight, length, or location (12 M.R.S. § 6171). The Commissioner may adopt emergency regulations when necessary to protect marine organisms from unusual damage or imminent depletion.

The impacts of climate change have significant and direct effects on fisheries management. Warming waters can cause changes in coastal currents, disrupting the phytoplankton that form the basis of the ocean food web. New species of algae create the potential for new forms of harmful algal blooms, requiring close monitoring to ensure the protection of public health. Shifting stocks cause interstate management bodies to grapple with challenging allocation questions. The Department strives to manage for the resiliency of Maine's marine fisheries and aquaculture industries as they adapt to these and other changes in ecosystem conditions. While the consequences of climate change are pervasive in the Department's work, the Department has not identified any laws or rules that it is charged with

administering that would necessitate any changes to incorporate consideration specifically of sea level rise.

DEPARTMENT OF TRANSPORTATION

The general authorizing statute for the Maine Department of Transportation (MaineDOT) states:

23 M.R.S. § 4204. Declaration of policy

It is declared to be the policy of the State of Maine that adequate, safe and efficient transportation facilities and services are essential to the economic growth of the State and the well-being of its people and that the planning and development of such facilities and services shall be coordinated by a state department of transportation with overall responsibility for balanced transportation policy and planning.

MaineDOT acts as a first responder by clearing the roads after a natural storm event to ensure other first responders can assist in public safety work. The infrastructure system needs to be usable during natural disasters and storm events.

MaineDOT has design guidance that states MaineDOT will strive to accommodate a 4 foot Sea Level Rise. There are situations where that might have significant property or wetland impacts. MaineDOT has also changed design guidance for culvert sizing from a 25 year storm event to a 100 year storm event. Many municipalities use MaineDOT design guidance.

OFFICE OF THE ATTORNEY GENERAL

The Office of the Attorney General (OAG) has not identified any laws or rules that it is independently charged with administering as the lead agency that would necessitate any changes to incorporate consideration of sea level rise and other effects of climate change. The OAG notes that it often has enforcement authority with respect to various laws and rules administered by other agencies, including Maine's environmental and natural resource laws and rules generally administered by agencies such as DEP, DACE, DIFW, and DMR in the first instance. Accordingly, the OAG is participating in this joint report and will not be filing a separate report in response to LD 1572.

RECOMMENDATIONS

The agencies included in Public Law Ch. 67 *Resolve, To Analyze the Impact of Sea Level Rise* recommend that the Legislature consider the following changes to the statutes administered by the agencies:

- Amend 12 M.R.S. § 685-B(1-A), Exceptions, to make consistent with Title 38 (38 M.R.S. § 480-Q(2-D)). Alternatively, the exception could be removed. In that case, as provided in Chapter 10, repair and replacement of road culverts would generally be allowed *without a*

permit subject to the activity specific standards for Roads and Water Crossings, Section 10.27(D), which were updated by the Commission in 2019.

- Review and revise Definitions 30-A M.R.S § 4301 to incorporate climate considerations as detailed above.
- Add new 30-A M.R.S. § 4326(1)(L) to state:

L. for a community resilience or local climate action plan, the preparation of a climate vulnerability assessment specific to the locality; collaborative regional analyses are strongly encouraged.

- Add new 30-A M.R.S. § 4326(4-B). The language of a new subsection 4-B could run parallel to § 4326(4-A) without the specific reference to “in the coastal area” and refer to the impacts documented in a municipal or multi-municipal climate vulnerability assessment.
- Add new 30-A M.R.S. § 4346(6) “preference for climate readiness” that awards preference to municipalities with climate vulnerability assessments and community resilience or local climate action plans when making state investments and awarding grant money to implement projects that increase climate resilience.

Additional resources are needed that support regional planning organizations who in turn support municipalities with the technical assistance called for in 30-A M.R.S. § 4346(4).

- Add new 38 M.R.S. § 484(3)(I) to state:

I. In determining whether a developer has made adequate provision for fitting the development harmoniously into the existing natural environment, the department may consider the effect of 1.5 feet of relative sea level rise by 2050 and 4 feet by 2100, as specified by department rule adopted in accordance with section 489-E.

- Amend 38 M.R.S. § 1310-N(2-F)(C) to state:

C. The applicant has made adequate provision for fitting the proposed solid waste facility harmoniously into the existing natural environment and the proposed solid waste facility will not unreasonably adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities. In determining whether an applicant has made adequate provision for fitting the development harmoniously into the existing natural environment, the department may consider the effect of 1.5 feet of relative sea level rise by 2050 and 4 feet by 2100, as specified by department rule.

- Amend 38 M.R.S. § 1801 (4) Hazard Area Development to state:

4. Discourage Encourage growth and new development in coastal areas where that avoid hazards associated with sea-level rise, because of coastal storms, flooding,

landslides or sea level rise, it is hazardous to human health and safety and other climate hazards with consideration for the use and design lifespan;

and assign the Municipal Planning Assistance Program within DACF as the agency to develop associated regulations with collaboration across agencies including DEP, DMR, and MaineDOT.

In 2022 and later, the agencies will utilize existing authorities to revise rules, policies, guidance, and related materials to incorporate consideration for projected sea level rise and other climatic effects. The agencies will proactively engage with stakeholders, particularly frontline communities, to ensure the practical effects of revisions are fully considered and that state actions will provide equitable benefit to Maine's most impacted citizens and communities. These processes may reveal the need for additional changes to Maine law that will be proposed in agency bills in future legislative sessions.