Appendix B: Review of Federal and State Laws, Regulations, Policies, and Plans

The Department of Fish and Game reviewed all regulations, policies, and plans as they relate to biodiversity conservation to understand existing protections they provide for biodiversity, identify gaps, and inform and align our recommendations with existing efforts to conserve natural resources, transition to clean energy, and achieve environmental justice.

Federal Biodiversity Protections

Many bedrock federal environmental laws are critical for biodiversity conservation in Massachusetts, including but not limited to, the federal Endangered Species Act, the Clean Water Act, the National Environmental Policy Act, the Lacey Act, the Migratory Bird Treaty Act, the Marine Mammal Protection Act, the Magnuson–Stevens Fishery Conservation and Management Act, the National Ocean Sanctuaries Act, John D. Dingell, Jr. Conservation, Management, and Recreation Act, the Wild & Scenic Rivers Act, and more. The Land and Water Conservation Fund is called out below because of its importance to land conservation.

Massachusetts collaborates closely with numerous federal agencies on biodiversity conservation—most notably U.S. Fish & Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA), Atlantic States Marine Fisheries Commission (ASMFC), U.S. Forest Service (USFS), U.S. Department of Agriculture (USDA), U.S. Geological Survey (USGS), U.S. Army Corps of Engineers (USACE), National Park Service (NPS), U.S. Food and Drug Administration (FDA), Federal Emergency Management Agency (FEMA), Bureau of Ocean Energy Management (BOEM), Federal Energy Regulatory Commission (FERC).

Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF) was established by Congress in 1964 to fulfill a bipartisan commitment to safeguard natural areas, water resources, and cultural heritage, and to provide recreation opportunities to all Americans. The fund helps strengthen communities, preserve history, and protect the national endowment of lands and waters. Since its inception in 1965, the LWCF State and Local Assistance Program has funded more than 46,000 projects in every county in the country.

State Laws & Regulations

Massachusetts Environmental Policy Act

The Massachusetts Environmental Policy Act (MEPA) requires that state agencies study the environmental consequences of their actions, including permitting and financial assistance. It also requires them to take all feasible measures to avoid, minimize, and mitigate damage to the environment by studying alternatives to proposed projects, as well as develop enforceable mitigation commitments, which will become conditions for the projects, if and when they are permitted.

MEPA applies to projects that exceed review thresholds and that require a state agency action, specifically that they are either proposed by a state agency or are proposed by municipal, nonprofit or private parties and require a permit,

financial assistance, or land transfer from state agencies. MEPA review is not a permitting process. MEPA requires public study, disclosure, and development of feasible mitigation for a proposed project. It does not pass judgement on whether a project is environmentally beneficial, or whether a project can or should receive a particular permit. Those decisions are left to the permitting agencies. MEPA review occurs before permitting agencies act, to ensure that they are fully cognizant of environmental consequences of their actions.

The MEPA Office, on behalf of the Secretary of the Massachusetts Executive Office of Energy and Environmental Affairs, is responsible for the day-to-day administration of the MEPA review process. The MEPA review process provides meaningful opportunities for public review of potential environmental impacts of projects for which specific actions by state agencies are required. It requires state agencies to study the environmental impacts of projects requiring state permitting, financial assistance or land disposition, and to use all feasible measures to avoid, minimize, and mitigate damage to the environment. If damage to the environment cannot be avoided, MEPA requires state agencies to minimize and mitigate the damage to the maximum extent practicable.

Massachusetts Endangered Species Act

The Massachusetts Endangered Species Act (MESA) was enacted in December 1990 (M.G.L c.131A) and is administered by the Department of Fish and Game's Division of Fisheries and Wildlife's (MassWildlife) Natural Heritage & Endangered Species Program (NHESP).

The Massachusetts Endangered Species Act and its implementing regulations:

- Protect rare species and their habitats by prohibiting the "Take" of any plant or animal species listed as Endangered, Threatened, or Special Concern
- Establish procedures for the listing and protection of rare plants and animals
- Outline project review filing requirements for projects or activities that are located within a Priority Habitat of Rare Species
- Provide clear review timelines and establish an appeal process for agency actions

The official list of Endangered, Threatened, and Special Concern species as defined in Section 10.60 of Chapter 321 of the Code of Massachusetts Regulations. The MESA List is prepared under the authority of the Massachusetts Endangered Species Act (MESA). Under this act (MGL c. 131A and its implementing regulations (321 CMR 10.00)), MESA-listed species are protected from "take". In reference to animals, "take" means to harass, harm, pursue, hunt, shoot, hound, kill, trap, capture, collect, process, disrupt the nesting, breeding, feeding or migratory activity or attempt to engage in any such conduct, or to assist such conduct. In reference to plants, "take" means to collect, pick, kill, transplant, cut or process or attempt to engage or to assist in any such conduct. Disruption of nesting, breeding, feeding or migratory activity may result from, but is not limited to, the modification, degradation or destruction of habitat.

As of 2024, 180 species of animals and 273 species of plants are protected under MESA. These 453 native species are listed as Endangered, Threatened, or of Special Concern and are tracked in a database. These species are either at risk, or may become at risk, of extinction. Rarity in the state, population trend, and overall threat are the main criteria used to determine extinction risk. Priority Habitat is based on the known geographical extent of habitat for all state-listed rare species, both plants and animals, and is codified under MESA. Habitat alteration within Priority Habitats may result in a take of a state-listed species and is subject to regulatory review by NHESP.

Massachusetts Wetlands Protection Act

The Massachusetts Wetlands Protection Act (General Laws Chapter 131, §40; the Act) protects important water-related lands such as wetlands, floodplains, riverfront areas, and other areas from destruction or alteration. Wetlands Protection Act Regulations 310 (CMR 10.00) are promulgated by the Commissioner of the Massachusetts Department of Environmental Protection (MassDEP) pursuant to the authority granted under The Wetlands Protection Act, M.G.L. c. 131, § 40. The Act sets forth a public review and decision-making process for activities that could harm wetlands and impact public and private water supply, ground water supply, flood control, storm damage prevention, prevention of pollution, shellfish resources, fisheries, or wildlife habitat.

Wetlands are land areas that contain surface water all or part of the time—this includes streams, floodplains, and other areas that may be dry for a significant portion of the year. The most commonly regulated wetlands are bordering vegetated wetlands, which are wetlands that share a border with a stream, pond, or lake. A floodplain is a type of wetland resource area that floods following storms, prolonged rainfall, or snowmelt. Three types of floodplain areas are protected under the Act: coastal areas, areas bordering rivers and streams, and certain isolated depressions that flood at least once a year. The Act also covers banks, dunes, beaches, vernal pools, land under lakes and ponds, and riverfront land under or within 200 feet of rivers and streams, or 25 feet of some urban river. MassDEP specifically regulates activities in or near these areas within an established buffer zone. Most work proposed to be done in those areas requires a permit (known as an Order of Conditions) from the local conservation commission. Regulations for the Act (310 CMR 10.00), and related guidance and policy documents, are issued by MassDEP.

Massachusetts Water Management Act

The Water Management Act (M.G.L. c. 21G; WMA) became effective in March 1986. The WMA authorizes MassDEP to regulate the quantity of water withdrawn from both surface and groundwater supplies. The purpose of these regulations (310 CMR 36.00) is to ensure adequate water supplies for current and future water needs. The WMA consists of a few key components, including a registration program and a permit program.

Certain water users had the ability to register their existing water withdrawals based on their water use between 1981 and 1985. The registration program established the renewable right of previously existing water withdrawals over 100,000 gallons per day on average, per river basin, between the years of 1981 and 1985. MassDEP issued registration statements to document these registrations. The last day to register was January 4, 1988. Either registrations or permits may be transferred. Registration transfers for cranberry cultivation can only be for this continued use.

Since 1988, persons planning to withdraw water from ground or surface sources in excess of an annual average of 100,000 gallons per day or 9 million gallons in any three-month period must apply for a WMA Permit. Withdrawers typically requiring a permit include public water suppliers, 18-hole golf courses, cranberry growers, ski areas, sand and gravel facilities, fish hatcheries, and agricultural and industrial users. Withdrawers with a Water Management Registration do not need a permit if they do not increase withdrawals over their registered volumes or add any new withdrawal points to their system.

Massachusetts Areas of Critical Environmental Concern

Areas of Critical Environmental Concern (ACECs) are areas within Massachusetts where unique clusters of natural and human resource values exist, and which are worthy of a high level of concern and protection. Such areas are identified and nominated at the community level and reviewed and designated by the Secretary of Energy and Environmental Affairs, following procedures set out in regulation (301 CMR 12.00). Designation of an ACEC increases environmental oversight by increasing state permitting standards through elevated performance standards and lowering thresholds for

review. Since 1975, 30 ACECs have been designated covering approximately 268,000 acres in 76 communities, from the Berkshires to the North Shore and Cape Cod.

The Department of Conservation and Recreation (DCR) administers the ACEC Program on behalf of the Secretary. The purpose of the ACEC Program is to preserve, restore, and enhance critical environmental resources and resource areas of the Commonwealth of Massachusetts. The goals of the program are to identify and designate these ecological areas, to increase the level of protection for ACECs, and to facilitate and support the stewardship of ACECs. DCR has a close working relationship with many agencies throughout the state. Together, these agencies provide information on a variety of resource management issues, grants to communities and organizations, and technical assistance for planning, research, and project design and permitting.

Proactive stewardship and collaboration are essential to achieve the purpose and goals of ACEC designation. State agency programs and actions alone cannot successfully preserve and manage these resources and ecosystems. ACEC communities, local citizens, agencies, and organizations can work together to identify problems, develop stewardship goals, collect information about natural resources, design management approaches, monitor resource quality, and conduct public outreach to protect, restore, and enhance the ACEC resources.

Massachusetts Ocean Sanctuaries Act

The Massachusetts Ocean Sanctuaries Act establishes five Ocean Sanctuaries in state waters and defines prohibited and allowed activities in these areas. The Act also requires the Executive Office of Energy and Environmental Affairs (EEA), through its Office of Coastal Zone Management (CZM)to protect the Ocean Sanctuaries from exploitation, development, or activities that would significantly alter or otherwise endanger their ecology or appearance, and EEA and its agencies cannot issue any permits or license contrary to the provisions of the Act. CZM is responsible for the care, oversight, and control of Ocean Sanctuaries and works with EEA agencies to implement the Ocean Sanctuary regulations at 301 CMR 27.00. There are five Ocean Sanctuaries: Cape Cod, Cape Cod Bay, Cape and Islands, North Shore, and South Essex. These Ocean Sanctuaries include most of Massachusetts marine waters except for Mount Hope Bay and an area of Massachusetts Bay from the Lynn/Swampscott border to Brant Rock in Marshfield.

Massachusetts Article 97

Article 97 of the Amendments to the Massachusetts Constitution establishes a right to a clean environment including its natural, scenic, historical, and aesthetic qualities for the citizens of the Commonwealth. Article 97 also declares the conservation of natural resources a public purpose and provides that land or easements subject to Article 97 shall not be used for other purposes or disposed of without a two-thirds roll call vote of the Legislature. An Act Preserving Open Space in the Commonwealth (codified at M.G.L. c. 3, § 5A), also known as the Open Space Act, established in statute requirements and a process for submission to the legislature of petitions to authorize the use for another purpose or disposition of land subject to Article 97 of the Amendments to the Constitution of the Commonwealth.

Massachusetts Chapter 91

The Commonwealth's primary tool for protection and promotion of public use of its tidelands and other waterways is Massachusetts General Law Chapter 91. The Commonwealth formally established the program in 1866, but the philosophy behind Chapter 91 dates back to the earliest days of the Massachusetts Bay Colony, most notably in the Colonial Ordinances of 1641–1647. The Colonial Ordinances codified the "public trust doctrine," a legal principle that dates back nearly 2000 years, which holds that the air, the sea and the shore belong not to any one person, but rather to

the public at large. The oldest program of its kind in the nation, Chapter 91 regulates activities on both coastal and inland waterways, including construction, dredging and filling in tidelands, great ponds and certain rivers and streams.

Through Chapter 91, the Commonwealth seeks to preserve and protect the rights of the public, and to guarantee that private uses of tidelands and waterways serve a proper public purpose. While other agencies, including the Department of Environmental Management, Massachusetts Coastal Zone Management and the Division of Fisheries and Wildlife, play a role in preserving public rights in public trust lands, the Waterways Regulation Program, the section of MassDEP that oversees Chapter 91, is the primary division charged with implementing the "public trust doctrine" that seeks to, among other goals, preserve pedestrian access along the water's edge for fishing, fowling and navigation, protect and promote tidelands for commercial fishing, shipping, passenger transportation, boat building and repair, and marinas.

Massachusetts Conservation Commissions Act

The Conservation Commissions Act sets the duties and responsibilities of conservation commissions in Massachusetts cities and towns. The official agency charged with the protection of a community's natural resources, each municipal Conservation Commission also advises other municipal officials and boards on conservation issues that relate to their areas of responsibility. In Massachusetts, conservation commissions' authority comes from several sources: the Conservation Commission Act (MGL Chapter 40 section 8C) for open space protection; the Wetlands Protection Act (MGL Chapter 131 section 40) for protecting wetlands and waterways; and the home rule provisions of the state constitution for non-zoning wetlands bylaws.

Massachusetts Policies & Plans

Recommendations of the Climate Chief

In 2023, Climate Chief Melissa Hoffer, through the Office of Climate Innovation and Resilience, published the **Recommendations of the Climate Chief** which outlines a whole-of-government approach to the climate crisis and presents thirty-nine recommendations focused on concrete strategies around funding, protecting environmental justice communities, and advancing workforce, and economic development. One such recommendation, in support of Executive Order No. 618, calls for the Department of Fish & Game to develop nation-leading biodiversity conservation goals for 2030, 2040, and 2050, elevating biodiversity as the key to climate mitigation and adaptation.

Clean Energy and Climate Plan for 2050

In 2022, the Executive Office of Energy & Environmental Affairs published the Clean Energy & Climate Plan for 2050 (CECP), Massachusetts' comprehensive and aggressive plan to achieve net zero greenhouse gas emissions in 2050. The CECP highlights a broad suite of specific goals, strategies, policies, and actions to reduce statewide gross greenhouse gas (GHG) emissions by at least 85% below the 1990 baseline level, and conserve and enhance carbon sequestration on natural and working lands to help achieve Net Zero in 2050. The CECP charts out the way Massachusetts will achieve the emissions limit in 2050 through building a future in which the heat in homes, power in vehicles, and the electric grid can all operate with minimum reliance on fossil fuels. While this plan sets out policies specific to each of the sectors of the economy, the CECP recognizes that clean energy technologies across sectors face some common challenges and solutions. These challenges will be addressed through cross sector strategies such as expanding workforce development, supporting clean energy innovation, and ensuring a thriving and just economic transition that will benefit everyone.

Conserving natural and working lands is a key strategy of the CECP. To limit the loss of sequestered carbon and maintain ongoing carbon sequestration capacity on natural and working lands, Massachusetts aims to permanently conserve at least 40% of Massachusetts lands and waters by 2050, develop solar siting guidelines consistent with the protection of critical Massachusetts land and habitats, and evaluate and set additional regulatory pathways to limit forest clearing. To conserve at least 40% of Massachusetts by 2050, the Commonwealth and its conservation partners will need to permanently protect an additional 685,000 acres, averaging an additional 25,000 acres annually between 2023 and 2050. To enhance nature-based carbon sequestration, the Commonwealth will expand tree planting to at least 64,400 additional acres of urban and riparian areas by 2050. The Commonwealth aims to reduce GHG emissions on natural and working lands through wetland restoration, including eelgrass and salt marsh restoration, and healthy soil practices.

Resilient Lands Initiative

The EEA Resilient Lands Initiative aims to protect and improve the quality of life for residents of every Massachusetts community through strategic land conservation, restoration, and stewardship initiatives that conserve and enhance the health of the forests, farms, and soils. The Initiative recognizes the key role farms, forests, and soils play in protecting human and natural communities; providing drinking water and food supplies; enabling healthy outdoor recreation; powering a green economy; supporting municipal fiscal stability; protecting wildlife habitat; sequestering and storing carbon; and reducing vulnerability to climate impacts such as urban heat islands, flooding, sea level rise, and drought.

Healthy Soils Action Plan

The EEA Healthy Soils Action Plan provides an assessment of the condition of our soils and a blueprint for how we can effectively conserve and protect, restore, and properly manage our soils to improve the vitality of nature around us and the health and quality of life of our residents. It describes specific actions and strategies to address soil vulnerabilities to climate change and natural hazards, land conversion, and degradation from land management for five land cover types: forests, wetlands, agriculture, developed open space, and impervious soils.

ResilientMass

The EEA ResilientMass Plan identifies strategies and specific, measurable actions state agencies can take—individually or through inter-agency partnerships—to address risks to the human health and safety, communities, critical assets and infrastructure, natural resources, governance, and economy of the Commonwealth. Goals include increasing collaboration across all levels of government on inclusive policies for addressing hazards; employing science-based decision-making to improve effectiveness of resilience and hazard mitigation strategies; increasing resilience of state assets and services; implementing adaptation actions for communities and ecosystems; and ensuring actions to reduce hazards and climate risks consider climate mitigation and prioritize nature-based solutions.

ResilientCoasts

ResilientCoasts is led by Massachusetts Office of Coastal Zone Management (CZM) and is still under development. This plan—which was identified as a priority action within the state's ResilientMass Plan for ensuring the state is prepared to withstand, rapidly recover from, adapt to, and mitigate natural hazard events—will develop a comprehensive statewide framework for coastal resilience, including establishing Coastal Resilience Districts and identifying options to proactively manage coastal hazards within districts and coastwide.

Environmental Justice Strategy

The Environmental Justice (EJ) Strategy consists of initiatives and programs to advance environmental justice and equity across EEA and its agencies. This document is designed to inform and assist staff in planning and implementing programs and policies under EEA's purview. It is also a tool for public engagement. Core environmental justice strategies include meaningful engagement, analyzing project impacts, language access plans, staff trainings, and metrics and tracking.

MassWildlife's Biodiversity Initiative and BioMap

MassWildlife's Biodiversity Initiative (BDI) supports active habitat management projects that directly benefit rare and declining wildlife species and plant communities. BDI brings together Restoration Ecologists, Wildlife Biologists and Foresters to conduct active habitat management projects to conserve biodiversity that directly benefit wildlife species and plant communities of greatest conservation need identified in the Commonwealth's State Wildlife Action Plan (SWAP).

BioMap is a tool created by MassWildlife in partnership with the Nature Conservancy in Massachusetts to guide strategic protection and stewardship of lands and waters that are most important for conserving biodiversity in Massachusetts. It is an interactive map that identifies those areas that are most critical for biodiversity conservation at multiple scales. BioMap identifies 2.4 million acres of Core Habitat and Critical Natural Landscapes of which approximately 44% (1.1 million acres) is protected currently. If fully conserved, these areas will ensure the protection of our extraordinary biodiversity and a vibrant quality of life for today and for future generations.

State Wildlife Action Plan

The MassWildlife 2015 Massachusetts State Wildlife Action Plan outlines the Species of Greatest Conservation Need (SCGN) across the state and contains the required elements to receive federal funds through the State Wildlife Grant Program. The 2015 MA SWAP contains 540 SCGN, 24 SWAP Habitats, and an outline of projects and actions aimed at conserving and monitoring these species. An updated SWAP will be release in 2025.

Farmland Action Plan

The Massachusetts Department of Agricultural Resources (MDAR) Massachusetts Farmland Action Plan guides actions to ensure farmland and farming are available and viable now and in the future in Massachusetts. There are three goals identified: (1) accelerate the permanent protection and stewardship of farmland; (2) increase access to farmland; and (3) support and enhance the viability of farms and farmland. Massachusetts' farms not only provide sustenance, but support wildlife and pollinators, buffer against flooding and recharge groundwater supplies, store carbon, and improve soil health.

Forests as Climate Solutions

EEA's Forests as Climate Solutions Initiative will expand existing state programs, invest in forest conservation, enhance a network of forest reserves, and develop forest management guidelines based on the latest climate science. These guidelines will apply to state lands, and the Healey-Driscoll Administration will also provide incentives for private landowners to adopt them to maximize the climate benefits of their forests. In 2024, the Healey-Driscoll Administration announced a comprehensive work plan outlining strategies to protect and manage forest lands while prioritizing efforts to address climate change impacts. Key elements include: increasing the amount of conserved forest land; expanding forest reserves by adopting a goal of 10% of forested lands across all ownerships as reserves; issuing a list of priority projects, cutting plans, and other information critical to enhance transparency and communication about forest management goals; updating existing incentives, regulations, and land conservation programs to prioritize carbon

sequestration and storage; utilizing techniques from the Climate Forestry Committee to optimize carbon management and increase resilience to climate change; expanding monitoring across all state-owned forests; and developing a dashboard to track metrics to provide more data on forests, designed to better inform land conservation and management goals

Ocean Management Plan

The Office of Coastal Zone Management Massachusetts Ocean Management Plan protects critical marine habitat and important water-dependent uses and provides a management framework for ocean-based projects in Massachusetts. The ocean plan identifies and maps the protected areas to avoid (e.g., critical habitat for whales, sea birds, fish resources, and benthic habitat, as well as high value fishing and important navigation and recreation areas) and establishes performance standards to minimize impacts of ocean development.