

**This is the response of the Town of Lamoine to the issues raised by Phil Carey's letter of June 4, 2019, and attachments thereto, following the State's review of the Lamoine Comprehensive Plan dated March 20, 2019.**

The Town makes the following changes, shown in red, to the March 20 Plan.

The following text is to replace that on pages 26-28 of the March 20 Plan

## **Natural Resources**

The citizens of Lamoine have committed resources and much voluntary time addressing the preservation of their natural surroundings. They have designated the natural beauty of the Lamoine peninsula and its many natural resources as a high priority for future preservation. Continued conservation of critical natural resources needs to be supported through government and community actions which:

- (a) maintain a variety of habitats supporting plants and wildlife;
- (b) assure the diversity of natural communities;
- (c) preserve ample tracts of land (e.g., unbroken blocks) for healthy wildlife populations; and
- (d) link both land and sea habitats through designated land areas (e.g. travel corridors).

## **Introduction**

Important natural resources in Lamoine consist of 6 habitat blocks and 12 habitat crossing connectors as seen on Beginning with Habitat maps in Appendices B2 through B6.



The availability of high quality habitat for plants, animals and fish is essential to maintaining abundant and diverse populations for both ecological, economic and recreational purposes. Lamoine is home to many important resources, including several rare species and significant habitats. Beginning with Habitat (BwH), a collaborative program of federal, state and local agencies and non-governmental organizations, is a habitat-based approach to conserving wildlife and plant habitat on a landscape scale. The goal of the program is to maintain sufficient habitat to support all native plant and animal species currently breeding in Maine. BwH compiles habitat information from multiple sources, integrates it into one package, and makes it accessible to towns, land trusts, conservation organizations and others to use proactively.

### **Focus Areas of Statewide Ecological Significance**

Beginning with Habitat (BwH) Focus Areas are landscape scale areas that contain exceptionally rich concentrations of at-risk species and natural communities and high quality common natural communities, significant wildlife habitats, and their intersection with large blocks of undeveloped habitat. These non-regulatory areas are intended as a planning tool for landowners, conservation entities, and towns. BwH Focus Areas, unlike some other habitat values, are tied to specific environmental settings and are not geographically transferable. Thus they warrant place-specific conservation attention through a variety of methods ranging from conservation acquisition to focused implementation of best management practices. Lamoine contains a large portion of the Taunton Bay Focus Area, of statewide significance for its high tidal fluctuations and expansive tidal estuaries.

According to the Maine Department of Inland Fisheries and Wildlife (MIFW), “Maintaining a network of these large rural open spaces protects future opportunities for forestry, agriculture, and outdoor recreation.” In 2019, there are three Town of Lamoine parks, (Lamoine Beach Park, Marlboro Beach Park and Bloomfield Park on Blunt’s Pond) and the Lamoine State Park According to the Maine Natural Areas map, there are six conservation easement properties: three parks totaling over 80 acres. (Lamoine Beach Park, Marlboro Beach Park, and Lamoine State Park); three private. In addition, 2019 town tax records show 109.8 acres on Open Space tax status, 438.6 acres in Farm Land tax status and 360 acres in Tree Growth tax status. ~~parcels in~~ conservation easement totaling 209 acres (Hartline Easement, Coleman Mixed Woods, and Simons. There are also four properties with a total of 175 acres in Open Space tax status.

There are numerous trails across private lands which are used for snowmobiling, hiking and other recreational uses. Lamoine has critical natural resources including wildlife habitats, deer wintering areas, scenic vistas, vernal pools, wetlands, and shorelands. Rare plants in Lamoine include American Sea-blite, Rare and Exemplary Natural Communities include Black Spruce Woodland and Brackish Tidal Marsh. As part of Lamoine's ongoing commitment to natural resource planning and protection, there needs to be an updated inventory of critical natural resources in the Town.

## **Animal Habitat**

Lamoine's natural features include a bald eagle's essential habitat area located in Raccoon Cove, Kilkenny Cove, and on the Jordan River. Bald eagles are not considered endangered, but are listed as a species of special concern. They are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Other important bird species include waterfowl and wading birds. Much of Lamoine's shore frontage is intertidal and shallow subtidal habitat for shorebirds and waterfowl. The upper portions of the Skillings and Jordan Rivers and all of Raccoon Cove have the highest possible rating with respect to habitat suitability for multiple species of shorebirds and waterfowl which are in decline or are identified as threatened or endangered. Rare birds in the Frenchmen Bay and Skillings River areas include the arctic tern, bald eagle, and upland sandpiper. The upland sandpiper is considered to be endangered, and according to the Maine Department of Inland Fisheries and Wildlife (MDIFW), require large fields, with open shortgrass areas such as blueberry barrens, meadows, pastures, hayfields, and fallow agricultural fields. (See Appendix B3.)

Great Blue Herons are also part of the shoreland habitat in Lamoine.

Along with many birds, Lamoine also has a deer population which is dispersed over the whole peninsula. Only one deer wintering area is designated by MDIFW, located south of Walker Road and west of Route 204 (see Appendix B3: High Value Plant and Animal Habitats), but there have been reports of over 30 deer crossing Martins Cove in the winter of 2015-16, which indicates that there is now more than one area.

Bear visitations to Lamoiners have become a regular summer event in several areas, and there have been annual sightings of moose. On occasion a bobcat is spotted.

Small animals include rabbits, fishers, raccoons, skunks, coyotes, fox, squirrels, woodchucks, beavers, weasels, and chipmunks. Lamoine also has a large population of turkeys.

## Wetlands and Vernal Pools

Wetlands and vernal pools are recognized in Lamoine's ordinances and in the Open Space Report as important to the peninsula's environment, providing diverse benefits such as flood flow control, sediment retention, plant and animal habitat, finfish habitat, and/or shellfish habitat. Many of the 40 wetlands serve more than one of these functions. The most common types of wetlands are inland from the shore and dispersed throughout the community (see Appendix B5: Wetlands Characterization). As depicted on the map, the largest wetland is located between the Mill Road and Lamoine Beach Road. Conservation of freshwater wetlands and stream buffers in coastal watersheds are considered a key component in marine resource conservation by the Maine Department of Inland Fisheries and Wildlife.

Vernal pools located in Maine are underrepresented in the National Wetlands Inventory (NWI) data maps because of their seasonal nature. The Department of Inland Fisheries and Wildlife advises using local knowledge and other data sources when evaluating wetlands, and should be considered relative to the watershed when assessing wetland resources. There are vernal pools located in Lamoine and are subject to setbacks.

## Plants

~~Lamoine has two plants that are ranked as being rare (Maine Department of Conservation Natural Areas Program). The Canada burnet (*Sanguisorba canadensis*) is considered critically imperiled because of its extreme rarity and has a ranking of S1, which is the highest ranking of scarcity. Another plant, American sea-blite (*Suaeda calceoliformis*), has a ranking of S2 because of its vulnerability to further decline and its rarity. It is usually found near the upper intertidal limit and has also been found in salt marshes or sandy or gravelly shores. See Appendix B3: High Value Plant & Animal Habitats.~~

### Rare and Exemplary Botanical Features

The Maine Natural Areas Program (MNAP), within the Department of Agriculture, Conservation and Forestry, documents rare, threatened, or endangered species and rare and exemplary natural communities. There are currently no rare or exemplary botanical

features mapped within Lamoine. The MNAP only surveys with landowner permission, and this lack of rare plant data for the Town may indicate minimal survey efforts rather than confirm the absence of rare plants or exemplary natural communities here.

The following text is to replace that on pages 31 to 33 of the March 20 Plan.

### *Fresh Water Resources*

Lamoine has several fresh water streams flowing to the sea, one Great Pond, and a few private ponds used for fire protection. There is no municipal water supply. Drinking water is provided primarily through individual wells and one small consumer-cooperative water company. All water is drawn either from fractured bedrock or a formally defined sand and gravel aquifer. Continued preservation and conservation of adequate and safe fresh water for the Town will require combined efforts and participation of citizens, town committees and officials, and those who mine the gravel pits.

### **Introduction**

Lamoine is fortunate to have fresh water resources that currently meet the needs of its



citizens. The town, however, does not have a town-wide water supply that can be protected by a single buffer. Most drinking water (the area around Lamoine Corner served by Cold Spring Water being the exception) is from individual wells at each home or place of business. (Two additional public water systems are located in Lamoine – Emera Maine – Lamoine Service and Lamoine State Park provide services on their locations and are not owned or managed by the Town of Lamoine.) These wells draw water from the Lamoine sand and gravel aquifer or, commonly, cracks in the granite bedrock beneath it. The town must protect the aquifer from contamination or institute a public water system throughout the town, at what can only be assumed would be prohibitive expense.

As is discussed in other sections of this Plan, it is not anticipated that future development in Lamoine will require such large volumes of water usage to warrant the development of an additional public water system to meet the needs of a densely settled area. In 2019, Lamoine approved amendments to its Building and Land Use Ordinance defining “cluster housing” and setting standards for cluster housing development. These standards provide that such projects must have a common water supply unless the developer demonstrates that adequate ground water is available at all locations proposed for individual water supplies.

Streams in Lamoine have been of exceptional purity in recent history, but have the potential to carry pollutants to the fertile intertidal area around town and to the ocean. The interconnectedness and interdependence of Lamoine’s coastal ecosystems (including marine estuaries and fishery resources, streams and ponds, wetlands, and watersheds) have been discussed in the Marine Resources section. The potential impact of climate change on all these resources of fresh and salt water will need to be an important area of assessment and adaptation as we plan toward the future.

In this chapter we will focus on the underground and inland water bodies not fully discussed in the other sections.

## **Streams**

Lamoine has five primary streams, and several other flowing water resources which provide riparian habitats, especially the four flowing into the upper Jordan Skillings River estuary. See Appendix B2: Water Resources & Riparian Habitats.

Three streams are named: Spring Brook, Archer’s Brook and Martins Brook. Two are unnamed. Three of these streams – Spring Brook, Martins Brook, and an unnamed

stream – originate in the town of Hancock. Two streams originate in Lamoine – Archer’s Brook from large wetlands and the other unnamed one near Needle’s Eye Road. All of these streams flow into the marine estuaries of the Lamoine peninsula.

Three streams flowing into the Mud Creek estuary – Spring and Archer’s Brook and one unnamed – are more notable in their wetland functions providing ecological benefits such as flood and storm-water runoff control, erosion control and sediment retention. In addition, they contribute individually in varying degrees to the stream bed and estuary ecosystem nurturing a range of animal and plant habitat (including emergent vegetations, forested and forested/shrub-scrub, and shrub-scrub). See Appendix B5: Wetlands Characterization.

## **Freshwater Bodies**

Lamoine has only one freshwater body – Blunts Pond, a Great Pond of about 35 acres with a perimeter of approximately .9 miles and a maximum depth of seven (7) feet. Lamoine has established Bloomfield Park, which provides picnic and bathroom facilities and supports recreational activities such as swimming, small boating and fishing on a portion of a town-owned parcel which also contains a snowmobile club building. The adjacent Bloomfield Park is managed by the Lamoine Parks Commission, which is currently reviewing and researching the recharge source(s) of the pond, undertaking analysis of the small area of thick aquatic plants, and monitoring water quality. ~~Provides public picnic and bathroom facilities, supporting recreational water activities of swimming, small boating and fishing. It is managed by the Lamoine Parks Commission, which is currently reviewing possibilities for researching the recharge source(s) of the pond, analysis of the small area of thick aquatic plants and for monitoring the water quality.~~ The Town has recently accepted a donation of 45 acres around the pond to increase recreational opportunities and protect the natural values of the pond.

The following text and chart are to replace those on pages 46 and 47 of the March 20 Plan, respectively

## **Forestry**

An aerial view of Lamoine provides the striking realization that around 85% of its land mass (9,664 acres of approximately 11,000 acres) is forestland. Evergreens dominate almost half of forested acres, with the other half supporting mixed forests shared with some deciduous woods and forested wetlands. (Open Space Report, 2013). Common tree species include eastern white pine, balsam fir, red spruce, white spruce, eastern hemlock, and red maple (U.S. Department of Agriculture data).

The total number of acres registered in the State's Tree Growth program has not changed significantly in the last 10 years, with approximately 3% of the total forested land, ~~36007.4~~ acres, registered in 2015<sup>9</sup>. Lamoine records for 2015 show 9 registrations in this program. A total of ~~109.8209~~ acres are also in Open Space tax status conservation easements. Two conservation easements have forested walking trails open to the public. Within that 209 acres, 141 acres are jointly enrolled in the Tree Growth program, leaving 68 acres listed solely in conservation easement (open space) status.

Timber harvesting in Lamoine varies from year to year but shows a slight decline in the past 10 years (Table 8) Looking at 5 year intervals, the average annual harvest from 2000 to 2004 was 294.4 acres, declining in the 2005–2009 period to 156.4 acres, and ~~to in~~ 2010–14 to 145.6 acres. The total number of ~~harvested forested~~ acres during the period 2001 to 2017<sup>4</sup> was ~~3170.52,628~~, (average: 186.5) or about ~~32%~~<sup>27.2</sup> of the forested acreage in Lamoine.

**Table 8: Summary of Timber Harvest, Lamoine, 2000-2017**

Year	Select ion harvest, acres	Shelterwood harvest, acres	Clearcut harvest, acres	Total harvest, acres	Land use change, acres	Number of active notifications
2000	226	128	0	354	3	20
2001	134	25	0	159	0	12
2002	150	0	0	150	0	14
2003	354	0	0	354	0	21
2004	255	200	0	455	19	22
2005	202	125	0	327	67	16
2006	149	0	0	149	134	10
2007	238	0	0	238	2	14
2008	36	0	0	36	29	11
2009	32	0	0	32	0	7
2010	217	0	0	217	0	12
2011	141	0	0	141	19	26
2012	157	0	0	157	0	13
2013	115	45	5	165	70	12
2014	48	0	0	48	10	7
<u>2015</u>	<u>4.5</u>	<u>0</u>	<u>0</u>	<u>4.5</u>	<u>0</u>	<u>4</u>
<u>2016-2017</u>	<u>55</u>	<u>0</u>	<u>0</u>	<u>55</u>	<u>3</u>	<u>4</u>
<u>Total</u>	<u>2647.5</u>	<u>523</u>	<u>5</u>	<u>3170.5</u>	<u>356</u>	<u>225</u>
<u>Average</u>	<u>155.73</u>	<u>30.76</u>	<u>.3</u>	<u>186.5</u>	<u>20.9</u>	<u>13.23</u>

Source: Data compiled from Confidential Year End Landowner Reports to Maine Forest Service. To protect confidential landowner information, data is provided only where three or more landowner reports reported harvesting in the town.

Balancing preservation and conservation, and maintaining the nature and beauty of Lamoine are constant priority goals stated by Lamoiners throughout all studies and reports since the 1996 Comprehensive Plan. Lamoine’s 2011 Shoreland Zoning Ordinance ~~includes specific regulations for shoreline tree management beyond the State’s guidelines for timber harvesting~~ repeals municipal regulation of timber harvesting and adopts State timber harvesting standards (Section 4(B)). Lamoine’s 2013 Gravel Ordinance includes specific regulations for removal of vegetation that will maintain the natural forest and woodland environment. An Open Space Report and

Inventory was presented by the Lamoine Conservation Commission in 2013, identifying areas for the Town's focus.

The following text is to replace text on pages 74 and 75 of the March 20 Plan.

## **Lamoine Public Facilities and Services**

The public facilities and services provided by Lamoine today include:

- Town Office
- Town staff, including town administrator
- Volunteer firefighting services and fire house, including four motor vehicles, a rescue boat and 27 volunteers
- Emergency response system (social media, firefighters connected by radio, local television)
- Lamoine Consolidated School (public, K-8)
- Solid waste management and recycling system (Lamoine Transfer Station)
- Planned storm water runoff (in Marlboro)
- Privately owned public water supply (consumer co-op, including Lamoine Consolidated School)
- Ambulance services (through contract with County Ambulance)
- Historical Society
- Three cemeteries
- Three town parks: Bloomfield Park, Lamoine Beach Park and Marlboro Beach (where expansion is pending), with a Mud Creek picnic area in the planning stages.
- Lamoine Beach Park (state owned)
- Harbor master and moorings
- Salt/sand shed and contract for road maintenance services, including plowing and sanding
- Town storage shed (the old “Anderson” garage)
- Town roads

Lamoine also partners with neighboring communities to share services, reduce costs, and/or improve services. These partnerships include:

- School administration, staff, and some activities (shared superintendent and superintendent’s office, special education director, teacher evaluation team, and some sports and joint-trip activities)
- Firefighting (with Trenton, Hancock, and Ellsworth and all of Hancock County)

- Emergency management (with Hancock County Emergency Management Agency)
- Ambulance services (private corporation, with whom we contract)
- Police services provided by the Hancock County Sheriff's Office and the Maine State Police
- Waste management through a fifteen-year contract with the Penobscot Energy Recovery Company (PERC) and a new recycling contract with ECOMaine.
- Propane and oil bidding program (with Hancock, Sullivan and Gouldsboro) to negotiate lower prices for public facilities
- Joint salt purchase program (through the Hancock County Planning Commission)
- Library (Ellsworth Public Library)
- YMCA (Downeast Family YMCA in Ellsworth)
- Frenchman Bay Regional Shellfish Ordinance (for clammers in a 7-town region)
- Participation in the Mount Desert Island League of Towns (offers an annual government elected officials meeting, annual household hazardous waste disposal program, and other ad hoc shared programs)
- Member of the Maine Municipal Association and affiliate groups (offers some limited shared legal services, training, and legislative advocacy/lobbying)

Lamoine does not provide the following facilities and services:

- Storm water management facility
- Public sewer system (primarily single-family septic fields and subsurface waste water disposal systems, maintained by individual owners, pumped as needed by private contractors)
- Municipal water supply (Note there are three public water systems located in Lamoine: Cold Spring Water Company, Emera Maine – Lamoine Service, and the Lamoine State Park. None of these are owned or managed by the Town of Lamoine.)

The following text is to replace text on pages 87 to 89 of the March 20 Plan.

## **Shoreland Zoning Ordinance**

Lamoine has developed a Shoreland Zoning Ordinance in compliance with State law. It was enacted in 1974 and has been amended many times. The purposes of the Shoreland Zoning Ordinance are:

to further the maintenance of safe and healthful conditions; to prevent and control water pollution; to protect fish spawning grounds, aquatic life, bird and other wildlife habitat; to protect buildings and lands from flooding and accelerated erosion; to protect archaeological and historic resources; to protect commercial fishing and maritime industries; to protect freshwater and coastal wetlands; to control building sites, placement of structures and land uses; to conserve shore cover and visual as well as actual points of access to inland and coastal waters; to conserve natural beauty and open space; and to anticipate and respond to the impacts of development in shoreland areas. (Section 1)

The Shoreland Zoning Ordinance applies to all areas within 250 feet of the high-water line of any great pond, river or saltwater body; within 250 feet of the upland edge of a coastal or freshwater wetland; and within 75 feet of the high-water line of a [designated?] stream. The Ordinance also applies to all structures extending beyond the normal high-water line of a water body or within a wetland.

All told, the Ordinance applies to 25.6 miles of tidal, pond or stream frontage. The Shoreland Zoning districts comprise about 772 acres, or about 7 percent of the town's land area. According to town figures from 2016, about 30% of lots with dwelling units on them contain land in the Shoreland Zone.

The Ordinance divides the shoreland area into five zones: Limited Residential, Limited Commercial, Commercial Fisheries/Maritime Activities; Stream Protection, and Resource Protection (see Shoreland Zoning Districts map in Appendix C3).

The largest district is the Limited Residential zone, encompassing almost all of the tidal coastline as well as the shore of Blunts Pond. According to the Assessors database, the 408 parcels in the Limited Residential zone represent about 90 percent of the Town's shorefront, and 73 percent of the acreage of all parcels covered by the ordinance.

The Resource Protection zone protects the Mud Creek/ Archer Brook marshes upstream of Mud Creek Road; the Jordan River just below Jordan River Road; Old Point; and a

section of shoreline adjacent to Lamoine Beach Park. This zone contains 23 parcels accounting for less than two percent of the town's shorefront and about 3 percent of the area of parcels subject to the ordinance.

The Limited Commercial zone contains only one parcel and accommodates existing marine commercial uses at Seal Point.

The Stream Protection zone protects Spring Brook and the stream from Blunts Pond to Raccoon Cove (See Appendix C6 for proposed ordinance).

Finally, the Commercial Fisheries/Maritime Activities zone, with 3 parcels, accommodates the beaches at Lamoine State Park, Lamoine Beach Park, and Marlboro Beach.

~~Shoreland Zoning Ordinance Amendments to bring Lamoine's ordinance into compliance with State requirement have been drafted (See Appendix C6) but are not adopted as of the drafting of this Plan.~~

Lamoine's 2011 Shoreland Zoning Ordinance repealed municipal regulation of timber harvesting and adopted State timber harvesting standards (Section 4(B)). (Shoreland Zoning Ordinance amendments are pending before the Town, but will not change the Town's commitment to State standards (see Appendix C6)).

The following text is to replace text on pages 98 to 101 of the March 20 Plan.

## **Critical Natural Resources**

The State's criteria for comprehensive plans require the Future Land Use Plan to distinguish areas where critical natural resources are present and where they are absent, and to describe proposed regulations and non-regulatory measures designed to ensure that these resources are protected from the impacts of incompatible development.

"Critical natural resources" are defined as follows:

- (1) Resource Protection District areas as set forth in MDEP Guidelines for Municipal Shoreland Zoning Ordinances;
- (2) Wetlands of special significance as defined in MDEP Wetlands and Waterbodies Protection Rules;
- (3) Significant wildlife habitat as defined in the Natural Resources Protection Act;
- (4) Threatened, endangered and special concern animal species habitat as identified and mapped by MIFW pursuant to the Maine Endangered Species Act;
- (5) Significant freshwater fisheries spawning habitat as identified and mapped by MIFW or MDMR;
- (6) Natural communities that are defined and mapped as critically imperiled, imperiled or rare;
- (7) Areas containing plant species declared to be threatened or endangered by the MDACF.
- (8) Coastal sand dune systems as defined in the Natural Resources Protection Act;
- (9) Fragile mountain areas as defined in the Natural Resources Protection Act; or
- (10) National Natural Landmarks designated by the National Park Service pursuant to its National Natural Landmark Program.

These critical resource areas are shown on the Beginning with Habitat maps in Appendices B2 through B6 and on the Shoreland Zoning Districts map in Appendix C3. The following Critical Resource Areas are present in Lamoine:

- (1) Resource Protection District areas  
(see Appendix C3: Shoreland Zoning Districts Map)
  - Mud Creek/Archer's Brook marshes upstream of Mud Creek Road;
  - the Jordan River just below Jordan River Road;
  - Old Point; and
  - a section of shoreline adjacent to Lamoine Beach Park.

These zones contain approximately 2,400 feet of shorefront, representing less than two percent of the town's shorefront.

(2) Wetlands of Special Significance

(see Appendix B3: High Value Plant & Animal Habitats)

Tidal waterfowl/wading bird habitats – entire shoreline except an area between Lamoine Beach and Berry Cove

(3) Significant wildlife habitat

(see Appendix B3: High Value Plant & Animal Habitats)

~~o Tidal waterfowl/wading bird habitats – entire shoreline except an area between Lamoine Beach and Berry Cove~~

- o Inland waterfowl/wading bird habitats – Blunts Pond, Spring Brook, north of Woodcock Lane, and Lamoine Beach
- o Shorebird areas – Raccoon Cove
- o Candidate deer wintering area – south of Walker Road and west of Route 204

(4) Threatened, endangered and special concern animal species habitat

(see Appendix B3: High Value Plant & Animal Habitats)

- o Bald Eagle habitats – Jordan River near Bear Point Road, western end of Raccoon Cove, and Meadow Point

The Natural Resources section of this Plan addresses these critical resource areas and includes additional information on habitats in and around Lamoine.

Lamoine does not have occurrences of the following Critical Natural Resources:

~~(2) Wetlands of special significance~~

- (5) Significant freshwater fisheries spawning habitat
- (6) Natural communities that are critically imperiled, imperiled or rare
- (7) Areas containing threatened or endangered plant species
- (8) Coastal sand dune systems
- (9) Fragile mountain areas
- (10) National Natural Landmarks

The Implementation Program includes the following proposed measures to protect these resources (Natural Resources strategies 3.1–3.5, Fresh Water Resources strategy 1.4, and Marine Resources strategy 3.5):

- In the Building and Land Use Ordinance and Shoreland Zoning Ordinance, designate overlay zones for Critical Natural Resource areas including wetlands, wildlife habitat areas, significant habitat types, large undeveloped habitat and natural resource blocks, and historic and geologic sites, etc.
- Develop specific land use standards and necessary zoning revisions for protection and preservation of the unique natural, historic and geologic features in the Critical Natural Resource overlay zones.
- Designate areas where residential and business development should be located along roadways or contiguous to existing development in order to limit development of wildlife habitats, wetlands and forests.
- Adopt open space zoning/conservation subdivision regulations to encourage preservation of significant open space tracts, wildlife habitats and other important natural resources, incorporating clearly defined standards for protected open spaces and connections to adjacent open spaces.
- Require all applicants under the Lamoine Site Plan Review Ordinance and the Lamoine Subdivision Ordinance to work with the Maine Department of Inland Fisheries and Wildlife (MDIFW), Maine Natural Areas Program (MNAP), and the Beginning with Habitat (BwH) Program to identify environmentally sensitive areas to be preserved and enhanced.
- Maintain and update the ordinance governing the extraction of ground water for commercial use.
- Designate floodplains, as identified by the latest Federal Emergency Management Agency information, as resource protection areas within the shoreland zoning ordinances.

The following text is to replace text on pages 110 to 111 of the March 20 Plan.

## **Fresh Water Resources**

### **State Goal**

To protect the quality and manage the quantity of the State's water resources, including lakes, aquifers, great ponds, estuaries, rivers, and coastal areas.

### **Town Goal**

To protect all of Lamoine's fresh water resources.

### **Policies**

1. Protect Lamoine's groundwater in order to provide a safe, adequate household water supply free from contamination and capable of maintaining adequate recharge capacity.
2. Continue and increase voluntary water monitoring and support for maintaining high water quality.
3. Assure that Blunts Pond is a safe place for public recreation.
4. Regulate development around Blunts Pond consistent with the Town's Shoreland Zoning Ordinance.
5. Protect Blunts Pond's surface water resources by properly administering the Town's Shoreland Zoning Ordinance and collaborating with the Maine Department of Environmental Protection in its efforts to administer the Natural Resources Protection Act.

The following text is to replace text on pages 121 to 123 of the March 20 Plan.

## Fresh Water Resources

Policies	Strategies	Implementation
1. Protect Lamoine’s groundwater in order to provide a safe, adequate household water supply free from contamination and capable of maintaining adequate recharge capacity.	1.1 Assure management of rainwater runoff in new development and redevelopment projects.	Planning Board
	1.1.1 Assure that all subdivisions and developments that require Site Plan Review have a stormwater management plan that uses best management practices (e.g. use of detention/retention ponds).	
	1.1.2 Encourage the use of permeable surfaces for roads and other paved areas.	
	1.2 Encourage use of communal wells and septic systems in problem areas and subdivisions that propose cluster and/or open space development.	Planning Board
	1.3 Protect freshwater resources around gravel pits, including former gravel pits that no longer have a gravel permit, and other activities determined to threaten contamination.	Planning Board Code Enforcement Officer
	1.3.1 Assure regular, frequent and objective oversight of gravel company water testing.	
	1.3.2 Assure public access to results of required water quality testing (posted on the town website, etc.)	
	1.3.3 Prevent contamination	

		from dumping or depositing materials which pose a threat of contamination of groundwater.	
	1.3.4	Inventory former gravel pits that have not been converted to any productive use, and encourage research into possible uses of such pits and sources of funds for their conversion into productive use.	
	1.4	Maintain and update the ordinance governing the extraction of ground water for commercial use.	Planning Board
	1.5	Use best practices to keep winter roads safe in ways which avoid groundwater contamination.	Select Board
2. Continue and increase voluntary water monitoring and support for maintaining high water quality.	2.1	Continue support for the GET WET! Program, and encourage broader participation.	Conservation Commission Lamoine Consolidated School
	2.2	Provide materials to the public on conservation practices that residents can employ to help assure adequate supplies of safe groundwater.	Conservation Commission Lamoine Consolidated School
	2.3	Encourage research to identify low-lying, undeveloped uplands where coastal marshes, beaches, and other intertidal natural communities can migrate inland with sea level rise.	Conservation Commission Planning Board
	2.4	Consider grant opportunities to determine risks to fresh water resources in Town from sea level rise and extreme weather events.	Conservation Commission Planning Board

3. Assure that Blunts Pond is a safe place for public recreation.	3.1 Support a focused study of Blunts Pond that includes regular water testing and monitoring of plant growth, identifies the Pond's source of recharge, and recommends any necessary steps to preserve water quality and quantity.	Conservation Commission Parks Commission Planning Board
<u>4. Protect Blunts Pond from erosion and pollution</u>	<u>4.1 Complete the acquisition of the former Whitcomb property on Blunts Pond and work with Frenchman Bay Conservancy to create a management plan which protects the conservation values of Blunts Pond and the property</u>	<u>Select Board</u> <u>Conservation Commission</u> <u>Planning Board</u> <u>Parks Commission</u>
	<u>4.2 Regulate development around Blunts Pond consistent with the Town's Shoreland Zoning Ordinance.</u>	<u>Planning Board</u> <u>Code Enforcement Officer</u>

The following text is to replace the text on page 97 of Appendix B: Natural Resources of the March 20 Plan.

## **Appendix B: Natural Resources**

The documents in this Appendix B include detailed maps from Maines Beginning with Habitat program, which are dense with information. They are in the Lamoine Town Hall in poster size and can be accessed edible through the Town website ([lamoine-me.gov](http://lamoine-me.gov)) or the Beginning with Habitat website ([www.beginningwithhabitat.org](http://www.beginningwithhabitat.org)). There are also useful maps produced by the State of Maine and the *Mini-Handbook of Lamoine's Groundwater Hydrology* by Lamoine resident Willem Brutsaert, Ph.D.

**This concludes the proposed changes to the Lamoine Comprehensive Plan dated March 20, 2019.**