

BAR HARBOR OPEN SPACE PLAN

Creating a Shared Vision for Open Space

Town of Bar Harbor, Maine



A document that our citizens will use to celebrate the rich history of open space in our town, to plan for the future, and as a toolkit complete with strategies to assist individuals, community groups and the town meet the goals of a shared vision.



2014-2020



Bar Harbor Open Space Plan

2014-2020

Prepared by:

The Bar Harbor Conservation Commission under award NOAA CZM NA12N0S4190084 to the Maine Coastal Program from the National Oceanic and Atmospheric Administration, U.S. Department of Commerce. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the National Oceanic and Atmospheric Administration or the Department of Commerce.

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Cover photo: Aerial view of Bar Harbor looking west toward Cadillac Mountain in Acadia National Park, courtesy of Acadia National Park.

The Town of Bar Harbor Conservation Commission consists of seven members appointed by the Town Council. The purpose of the Conservation Commission is to maintain or enhance the conservation of natural or scenic resources, to protect natural streams or water supplies, to promote conservation of swamps, wetlands, beaches or tidal marshes, to enhance the value to the public of abutting or neighboring parks, forests, wildlife preserves, nature reservations or sanctuaries or other open areas or open spaces, to effect or enhance public recreation opportunities, to preserve historic sites, to implement the plan of development adopted by the Planning Commission of the municipality, and to promote orderly urban or suburban development.

*A clear stream, a long horizon,
a forest wilderness and open sky—
these are man's most ancient possessions.
In a modern society, they are his most priceless.*

~ LYNDON B. JOHNSON, Thirty-sixth US President (1963—68), 1908—73

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Acknowledgements

The Bar Harbor Open Space Plan was prepared by the Town of Bar Harbor Conservation Commission, in partnership with many project partners including: Acadia National Park, Friends of Acadia, Maine Coast Heritage Trust and the Maine Farmland Trust, and the Mount Desert Biological Laboratory. Project assistance was provided by FB Environmental Associates. Additional assistance was provided by the town's planning department and administrative staff, and staff and students from College of the Atlantic.

Funding for the plan was provided by a grant from the Maine State Planning office, direct funding from the Town of Bar Harbor, and generous volunteer support including countless hours of research and writing by the Open Space Plan Steering Committee whose members include:

- Carla Haskell Conservation Commission (Recreation)
- Cynthia Ocel Conservation Commission (Scenic/Cultural)
- Dessa Dancy Conservation Commission (Water Resources)
- Enoch Albert Conservation Commission (Water Resources)
- Jill Weber Conservation Commission (Water Resources)
- John Kelley Acadia National Park (Recreation)
- Jane Disney Mount Desert Biological Laboratory (Water Resources/Working Lands)
- Jesse Wheeler Conservation Commission (Natural Resources)
- Misha Mytar Maine Coast Heritage Trust (Working Lands)
- Stacy Benjamin Maine Farmland Trust (Working Lands)
- Stephanie Clement Friends of Acadia (Scenic/Cultural)

Special thanks to the following people who provided assistance with the plan, including data or other resources, critical review of drafts, facilitation of public meetings, etc.

- Alexandria Miller College of the Atlantic
- Angela Chamberlain Town of Bar Harbor
- Ben Emory College of the Atlantic
- Bruce Jacobson Citizen, Bar Harbor
- C.J. Walke Maine Coast Heritage Trust
- Dennis Kiley Farmer, MDI
- Fredrick Bianchi Worcester Polytechnic Institute
- Gordon Longsworth College of the Atlantic
- Jennifer Berry Town of Bar Harbor
- Jennifer Jespersen FB Environmental
- Jeremy Deeds FB Environmental
- Justin VonDongen Town of Bar Harbor
- Karen Anderson Acadia National Park
- Ron Beard Emeritus Extension Professor, Univ. of Maine Cooperative Extension

Thank you to the many members of the community who participated in the April 17, 2014 Community Forum, for thoughtful guidance and perspective on open space planning in our town.

Acknowledgements

The 2020 Update Process:

Since the OSP's creation in 2014, much work has been accomplished improving the Plan's chapters, goals, and strategies through the effort and assistance of the following people:

- Elissa Chesler Conservation Commission
- Jacquie Colburn Conservation Commission
- Mike Handwerk Conservation Commission
- Will Matteson Conservation Commission
- Jeff Miller Conservation Commission
- Kaitlyn Mullen Conservation Commission
- Erickson Smith Conservation Commission
- Jill Weber Conservation Commission
- Jesse Wheeler Conservation Commission
- Kim Zdenek Conservation Commission
- Cornell Knight Town of Bar Harbor
- Michele Gagnon Town of Bar Harbor
- Bethany Leavitt Town of Bar Harbor
- Steve Fuller Town of Bar Harbor
- Steve Weed Town of Bar Harbor
- Bob Osborne Town of Bar Harbor
- Janna Richards Town of Bar Harbor
- Jon Carter Maine Lobsterman's Association
- Stephanie Clement Friends of Acadia
- Jane Disney MDI Biological Lab
- Misha Mytar Maine Coast Heritage Trust
- Stephan Ressel College of the Atlantic

The Conservation Commission would also like to acknowledge and thank all those who participated in the Town Council / Conservation Commission Open Space Planning workshop in July of 2016 as well as those who participated in the Conservation Commission's Landowner's Open Space Forum in November of 2016.

2020 Bar Harbor Open Space Plan

Summary and Foreword by Bar Harbor Conservation Commission

As stated within Bar Harbor Municipal Codes (Chapter 31-62 A), the mission of the Conservation Commission is to enhance the conservation of natural or scenic resources; to protect natural streams or water supplies; to promote conservation of swamps, wetlands, beaches or tidal marshes; to enhance the value to the public of abutting or neighboring parks, forests, wildlife preserves, nature reservations or sanctuaries or other open areas or open spaces; to effect or enhance public recreational opportunities; to preserve historic sites; to implement that plan of development adopted by the Planning Board of the municipality; and to promote orderly urban or suburban development. With this mission in mind and as an outcome of several years of collaboration and effort, the Bar Harbor Conservation Commission is pleased to present the 2020 Open Space Plan, a revised version of the Bar Harbor Open Space Plan dated June 2014.

The 2020 Open Space Plan provides inventories of our Town's valuable natural and community resources, including natural habitats, water, scenic, cultural, and recreational resources, and working lands and waters. The 2020 Open Space Plan also provides 'vision for how to protect' and 'celebrate what we have' sections for each resource, along with a compilation of goals and strategies that will further identify, protect, develop, or use Bar Harbor's open spaces. In particular, the Open Space Plan's goals and strategies offer a suggested framework for the community as it addresses pressures on our open spaces, including pollution and development, as well as future planning challenges facing our Town's Planning Department. These goals are voluntary in nature and are designed to educate our community and provide the vision, previously shared by many generations within our community, to protect and/or provide environmental stewardship of our Town's natural beauty, land, water, and resources.

The Conservation Commission will periodically update the Open Space Plan to reflect completion or modification of goals. Our Open Space Plan efforts and long-term vision will maximize the many beneficial impacts of our community's open spaces for future generations, particularly when portions of the Plan continue to be utilized within several goals and strategies in Bar Harbor's Comprehensive Plan.

The Conservation Commission wishes to thank everyone involved with the making and revising of Bar Harbor's 2020 Open Space Plan. Please enjoy reading the Bar Harbor 2020 Open Space Plan. It truly is created by a community proud of its history and the special meaning and wonderment of nature that can only be found on Mount Desert Island and our surrounding communities.

2020-2021 Conservation Commissioners:

Jacque Colburn

Kaitlyn Mullen

Mike Handwerk

Kim Zdenek

January 11, 2021



Development of a Community Open Space Plan

Why and How Was This Plan Developed?

Open space plans are commonly used by town governments for many communities in the state of Maine.

After receiving input from citizens, Town staff, and consultants; the residents of Bar Harbor approved the 2007 Comprehensive Plan at a Town Meeting. As an intermediate task within its 10-year life, the Comprehensive Plan calls for the Bar Harbor Conservation Commission (“the Commission”) to develop an Open Space Plan (“OSP”) for the Town: “To encourage voluntary protection of Bar Harbor’s important natural, scenic, and cultural resources as well as establish an open space lease and acquisition program.”¹ The Town Council asked the Commission to complete the first part of that task, focusing on supporting voluntary preservation efforts in the community. The Council supported the Commission’s pursuit of grants to move planning forward, and helped to ensure OSP completion by voting to fund the work in the Fiscal Year 2014 budget, a move approved by Bar Harbor’s citizens at the June 2013 Town Meeting. As of 2020, an open space lease and acquisition program has not moved forward.



Photo: National Park Service

A scenic view from Cadillac Mountain.

The Plan Development Process

The Commission sought the assistance of partners, found willing participants, and established the Open Space Partners, a group comprised of the Commission members and representatives of the following partner organizations:

- John Kelley, Acadia National Park;
- Stephanie Clement, Friends of Acadia;
- Misha Mytar, Maine Coast Heritage Trust;
- Stacy Benjamin, Maine Farmland Trust; and
- Jane Disney, Mount Desert Island Biological Laboratory.

The Commission worked with the Town Planning Department to hire a consultant with expertise in open space development, and eventually hired FB Environmental Associates (“FBE”). FBE collected existing information and relevant data regarding Bar Harbor’s open spaces. They then analyzed the data to determine what types of land were in the shortest supply or most in peril of disappearing.

The result of these efforts was published as the 2014 Bar Harbor Open Space Plan (the “2014 OSP”). This document combined the citizen input from the 2007 Comprehensive Plan with the extensive efforts of the Open Space Partners to delineate the various challenges and needs specific to our community’s open space planning. It defines the categories within Bar Harbor’s existing open space, and provides a road map for future planning in accordance with the community’s vision for its wild places. The document also identifies goals and strategies to meet these needs and resolve the several challenges facing preservation efforts. But much work still remains in order to provide practical implementation of these goals and strategies. In the years since 2014, the Commission has been developing the OSP to provide a more detailed approach to its various aims.

The 2020 Updated OSP provides, not only aspirational visions for the community’s future, but immediate actionable policy recommendations and proposals to the citizenry and stakeholders. The Commission has identified *potential* partners and responsible parties, as well as *potential* funding sources, for each of the goals laid out in the 2014 OSP. *Estimated*

Open space is undeveloped or minimally developed land or water area that has special value to the community. These areas may be large or small, publicly or privately owned.

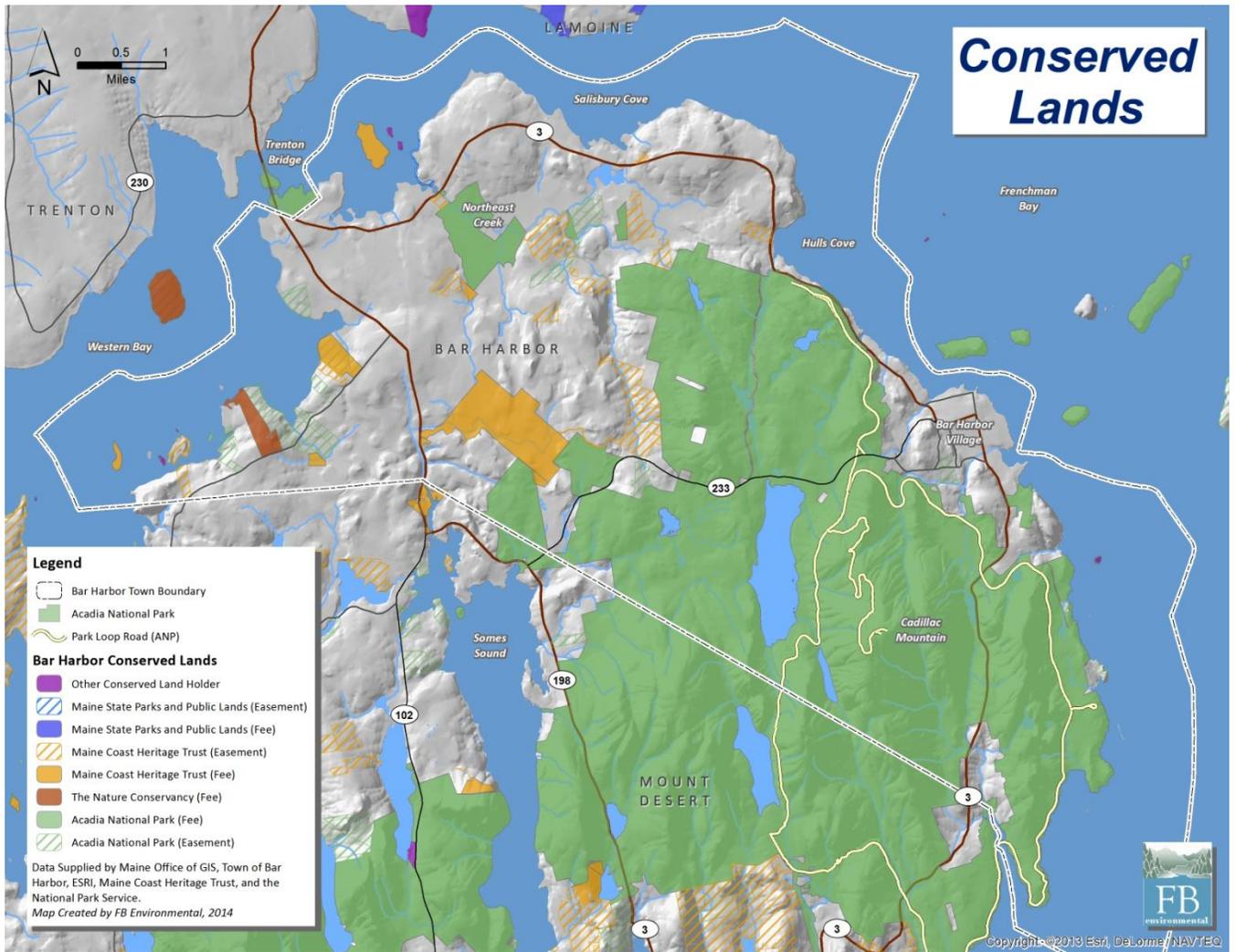


Figure 1. Conserved lands in Bar Harbor as of 2013.

Table 1. Summary of conserved land by landholder in Bar Harbor as of 2013.

Name of Holding	Landowner	Area (ac)
Federal Land		
	Acadia National Park (fee)	12,926
	U.S. Fish & Wildlife Service (fee)	7
State/Regional		
	Maine Coast Heritage Trust (fee)	708
	Maine Department of IF&W (Management Transfer Agreement)	6
	The Nature Conservancy (fee)	102
Privately-Owned Land Under Conservation Easement		
	Acadia National Park (easement)	617
	Maine Coast Heritage Trust (easement)	746
	Maine State Parks & Public Lands (easement)	11
Town/Local		
	Town of Bar Harbor (Town Recreational Land)	33

Source: FB Environmental

total costs and timelines have also been provided, in addition to the current status of any projects that are already ongoing. This work has been compiled in a table corresponding with each chapter of the 2014 OSP, and has been included as Appendix A to the 2020 Update.

Bar Harbor farmers were interviewed during the winter and spring of 2013 to help inform the OSP chapter on working lands (Chapter Six). These interviews with local farmers, which identified challenges and barriers to farming in Bar Harbor, are collected in Appendix B.

On April 17, 2014 citizens were invited to a review session where they could offer input and feedback on the OSP. Notes from this session are recorded in Appendix C.

Recognizing that the future of Bar Harbor's open space relies on cooperation and input of the citizens as well as a broad range of public and private entities, the Commission has worked to articulate the OSP with an inclusive and collaborative tone. No single organization can ensure the long term survival of Bar Harbor's tradition of natural and cultural preservation. The Town is inviting all community members and stakeholders to come together for a conversation about what we can do together, now and tomorrow, to secure the long term character of our unique community. The list of actions described in the OSP provides recommendations to encourage the citizens of Bar Harbor to consider the future of our important natural, scenic, and cultural resources, and to be proactive in helping to protect these valuable spaces for the posterity of our town.

How Do We Define Open Space?

The Town of Bar Harbor defines open space as "Undeveloped or minimally developed land and water areas that have special value to the community, in one or more of the following categories:

- Natural Habitats;
- Water Resources;
- Scenic and Cultural Resources;
- Recreational Resources; and
- Working Lands and Working Waters.

Open space may be large or small, publicly or privately owned.



Photo: National Park Service

More than fifty Bar Harbor residents participated in the open space planning process.

Who Benefits From This Plan?

The two motivations for creating the OSP are to provide a planning tool for the Town and to reflect ecological and environmental concerns and values expressed by town residents.

Bar Harbor Town staff and planning committees will be able to use this OSP as a collection of open space resources and identified areas of high conservation value to help guide land use decision making. Town residents and landowners may also use the OSP to aid them in voluntary land conservation measures on their property.

Bar Harbor is characterized by the interplay of its beautiful natural setting; cultural institutions; and vibrant business community, including working farms and marine livelihoods. Ours is a town that has long valued the preservation of its unique character and priceless open spaces, exemplified nowhere more clearly than the development of Acadia National Park ("ANP") – an initiative spearheaded by citizens, and the first and only national park established through land donation, rather than government purchase. Few towns have a resource like ANP, one that protects and provides stewardship of important natural and cultural resources. In addition, Bar Harbor established town parks to provide areas for community gathering and enjoyment, and the Village Improvement Association provided money, labor, and knowledge to create and maintain additional parks and walking paths. Over the years, land use has changed and our understanding of natural processes has increased. A new vision of open space uses and needs has emerged.

Since the implementation of the 2007 Comprehensive Plan, Bar Harbor's citizens have become aware of new pressures on our open spaces, and new challenges we face in planning for our town's future. Citizens' concerns about the health of the Northeast Creek watershed have resulted in Town-funded cooperative surveys, the results of which have indicated threats from pollution and development pressure. Pollution, development, and increased tourist visitation are affecting our open spaces. The people of Bar Harbor have also expressed an interest in planning for the challenges brought by a changing climate: sea-level rise, the encroachment of invasive plant and animal species, and storms with greater intensity and altered timing.

Open space planning is a way to address these concerns and decide how to meet these challenges.

A current inventory (2013) of conserved lands in Bar Harbor indicates that 15,143 acres of land in the town are currently protected, 89% of which are part of ANP. (Figure 1, Table 1).

References

1. Town of Bar Harbor. *Comprehensive Plan Update: Bar Harbor, Maine*. June, 2007.
Online: <http://www.barharbormaine.gov/ArchiveCenter/ViewFile/Item/95>.



The Future of Natural Habitats in Bar Harbor

Protecting our Natural Habitats

Bar Harbor contains a diverse and unique landscape of geology, topography, and hydrology that supports an abundance of natural habitats. The largely undeveloped, forested landscape across Mount Desert Island ("MDI") makes the ANP region feel and function bigger than its boundaries would suggest. An important characteristic of a natural area is to maintain healthy plant and animal communities that can live harmoniously with humans.

The presence of the significant natural resources within and around ANP clearly attracts people to the Bar Harbor area, thereby providing significant economic benefits. It is important to protect natural areas outside ANP boundaries, too. The reasons for this are to provide a connected landscape for wildlife movement, and habitat diversity that contributes to the health of the ecosystem.

Conservation of undeveloped lands within Bar Harbor is integral to achieving the primary goal of the 2007 Bar Harbor Comprehensive Plan, which describes the preparation and adoption of an open space plan that: "not only identifies and establishes linkages among land currently in conservation easement and other key open spaces, but also identifies regulatory and other strategies to preserve the Town's most important natural and cultural resources."

A Vision for Natural Habitats

Our vision for the future of Bar Harbor retains the impressive landscapes filled with a diverse array of plants and animals. Large tracts of contiguous forests could be the source for clean watersheds that extend from mountains to sea. Shellfish flats remain an uncontaminated source of food for waterfowl and people. Improved connectivity of waterways could allow for the unimpeded movement of diadromous fish, otters, and other riparian wildlife to flourish. Reduced impact of roads and development near wetlands can allow for the continued health of the exemplary communities supporting flora and fauna that rely on pristine ecosystems. Invasive species can be managed so as not to degrade our native natural communities.



Photo: Brigit Bewsaw (Maine Coast Heritage Trust)

Aerial view of Kittredge Brook.

Bar Harbor is intimately connected with MDI and ANP economically, ecologically, socially, and culturally; and therefore has a motive to maintain a rural and wild character beyond ANP boundaries.

By creating systems and plans that allow for smart growth, we can meet the development needs of Bar Harbor while protecting wetlands, vernal pools, groundwater, and other essential habitats needed by plants and animals.

Why Do We Need to Protect Natural Habitats?

Coastline habitats are particularly vulnerable, with threats including shoreline development, eelgrass and mussel bed decline, and marine worm over-harvesting. Maintaining good water quality and preventing the encroachment of invasive species on freshwater wetlands should also be a priority. The Maine Natural Areas Program ("MNAP") of the Department of Agriculture, Forestry and Conservation recommends working with willing landowners to permanently protect undeveloped areas and significant features. It also encourages landowners and town officials to maintain enhanced riparian buffers; to maintain natural hydrological regimes by avoiding drainage or impoundment of wetlands, streams, or adjacent water bodies; and to identify and restore tidal restrictions. Current projections of warming temperatures suggest the sea-level will rise at least two feet in the next century.¹ Low-lying coastal habitats will begin to migrate inland, potentially

altering shoreline areas and often meeting barriers to marsh migration. Examples of this include the area around Bar Harbor’s Oceanarium, extending from Thomas Bay across Rt. 3 (Figure 1) to Rt. 102, and also in the upper reaches of the Northeast Creek estuary.

Conservation of low-lying undeveloped uplands, where coastal marshes or other inter-tidal natural communities can migrate inland with sea-level rise, should be encouraged. For example, the Northeast Creek watershed has been identified as an important scenic and cultural resource to the residents and visitors of Bar Harbor. The targeted conservation of this system will ensure the protection of the habitats within.

Human activity can have unintentional impacts on ecologically sensitive areas. Certain types of land use surrounding protected areas may alter ecological processes within their boundaries.² Natural habitats surrounded by intense land uses, such as urban or suburban development, are more vulnerable than more wild places. Examples of vulnerability may include ‘edge effect’ and ‘habitat fragmentation.’ Edge effect occurs when clear-cutting next to large intact forests increases disturbance rates and mortality in the forest habitat at the edge of the clear-cut zone. Habitat fragmentation—the separation of once contiguous ranges—results in a decrease in species diversity and richness. Habitat fragmentation is often noticed decades or even centuries after its cause.

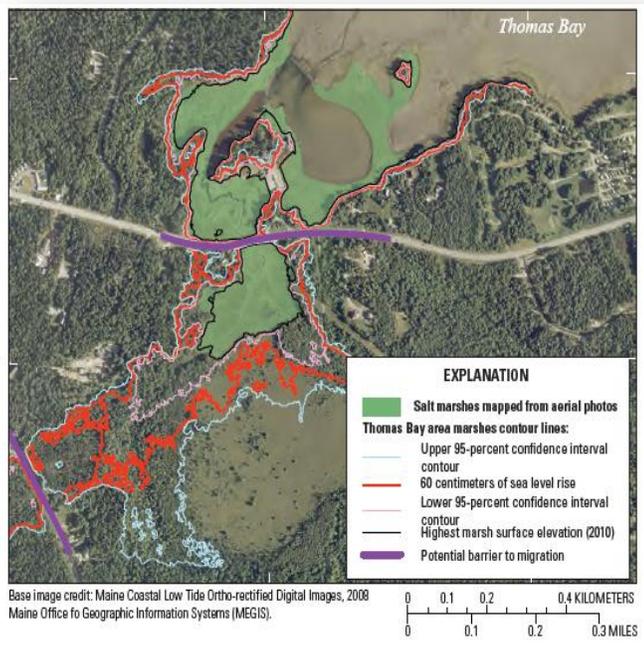


Figure 3. Anticipated sea-level rise for the Thomas Bay area, Bar Harbor, Maine.

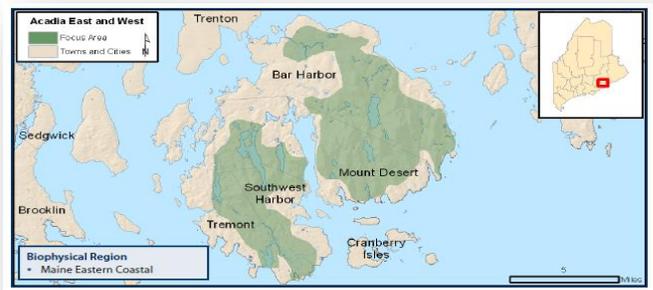


Figure 2. The Acadia East Focus Area includes a significant portion of land in Bar Harbor. These are areas of statewide ecological significance.

Source: MNAAP

A Case for Habitat Protection:

BEAVER EXPAND OPEN WETLAND HABITAT FOR AMPHIBIANS

“Beavers have not only increased the number of available breeding sites in the landscape for pond-breeding amphibians, but the resulting mosaic of active and abandoned beaver wetlands is likely to provide suitable breeding habitat for a diversity of species.”

Beavers are ecosystem engineers. They impound streams to alter habitat for food and shelter. Extirpated from Mount Desert Island due to trapping, the species was re-introduced in 1921 by George B. Dorr. The population remained low until after the fire of 1947 that promoted more desirable tree species to grow, such as aspen and birch.

Beaver have increased quality habitat for pond-breeding amphibian species changing forested wetlands to open, ponded wetlands with increased connectivity. High species richness of amphibians is directly related to beaver activity and connectivity of wetlands.

With a stable population of around 100 beavers in Acadia National Park today, it is important to keep large, forested and non-forested wetlands intact, especially low in the watershed where sites are more suitable for beaver.

Source: Cunningham, J.M., Calhoun, J.K. and Glanz, W.E. 2006. *Patterns of Beaver Colonization and Wetland Change in Acadia National Park. Northeastern Naturalist, Vol. 13, No. 4, pp. 583-596.*

Source: Nielson & Dudley, 2013

MDI ecosystems have benefited from large areas of undisturbed land, chiefly within ANP. However, continued pressure surrounding its borders will have detrimental effects on its ecosystems, and the natural communities which rely on it.

Celebrate What We Have

Tidal Waterfowl & Wading Bird Habitat

Tidal waterfowl and wading bird habitats are almost continuous along the shoreline of Bar Harbor, and are characterized as breeding, migration and staging, or wintering habitats. Habitats may include seaweed communities, reefs, emergent wetlands, mudflats, and eelgrass beds. There are certain areas where waterfowl congregate for food, shelter, and migration. Areas surrounding seabird nesting islands and areas documented as wading bird rookeries are also important. Barrow's Goldeneye is threatened in the state of Maine, and is known to congregate in the narrows between Bar Harbor and Lamoine. Wading bird habitat is primarily located among large wetland areas or ponds, as well as some slow-moving streams. This habitat is essential for species in need of areas for breeding, feeding, roosting, loafing, and

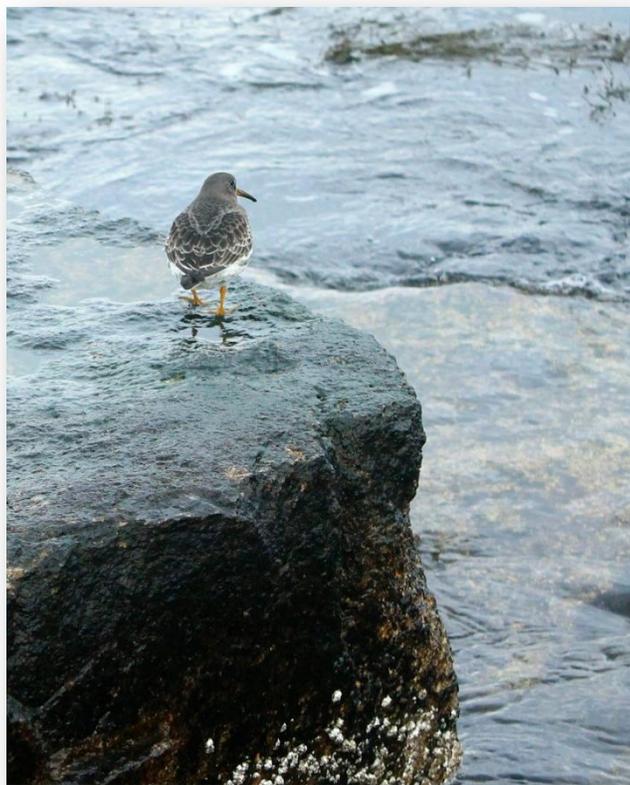


Photo: Jesse Wheeler

Purple sandpipers (Calidris maritima) have the northernmost winter range of any shorebird, and utilize Bar Harbor's rocky shores for their winter habitat.

migration. A complete list of seasonal birds in the watershed of Frenchman Bay can be found in the Bar Harbor Comprehensive Plan (Figure V.I.2).

Rare Wildlife Habitat

The MNAP has identified twelve plant species and eight animal species in Bar Harbor as threatened (T), endangered (E), or of special concern (SC) (see Table 2). The State has also identified three areas in Bar Harbor as habitat for rare animals.

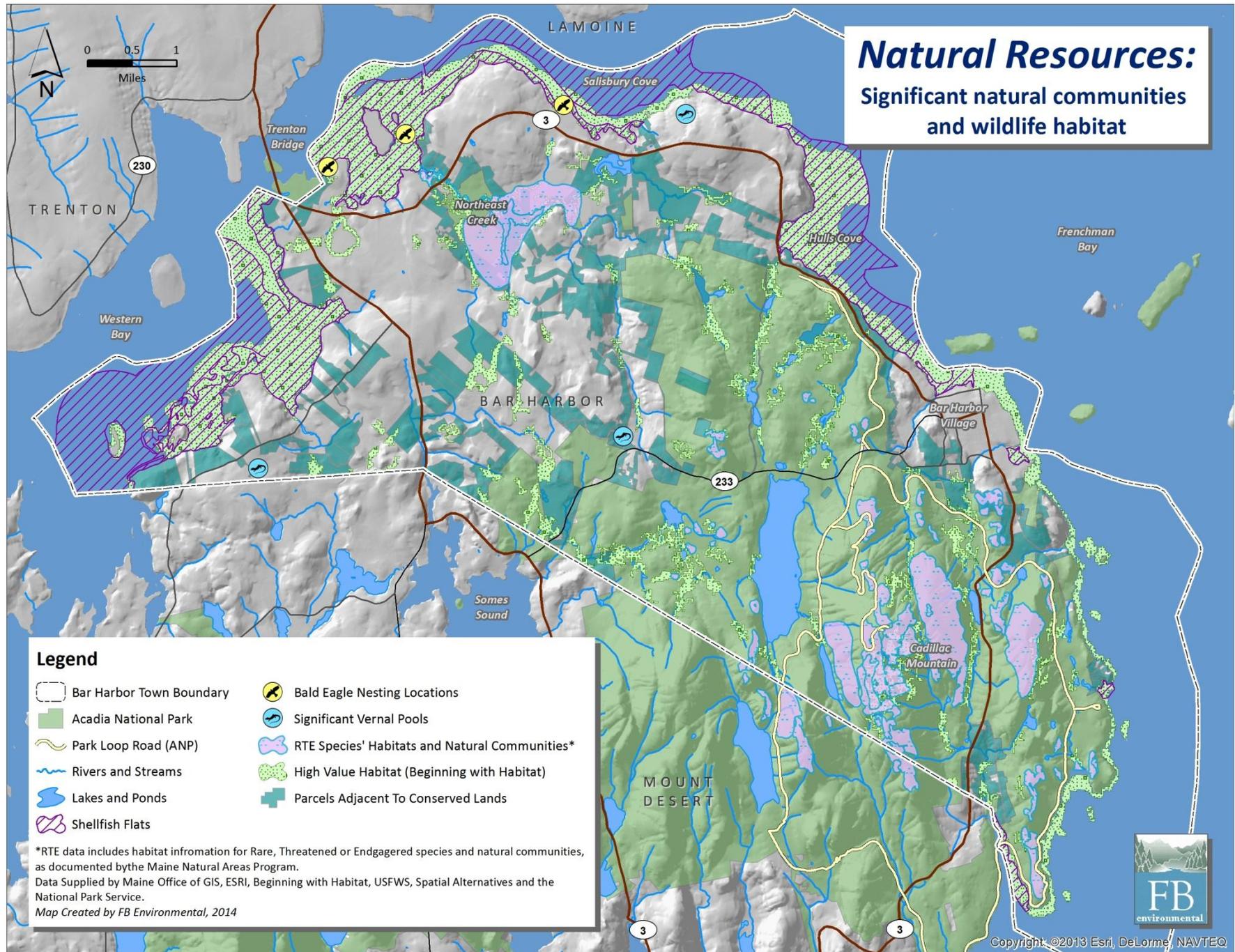
The state has also identified three areas in Bar Harbor as essential habitat for bald eagles (Figure 4), which means that the areas are within a nesting territory occupied by bald eagles during at least one of the three most recent years, and are either intact for two consecutive years, or the only extant nest in the territory. As of 2013, there were three nesting site locations on the northern shores of Bar Harbor, including one on the island of South Twinnie.

Bar Harbor also provides habitat for species that suffer from diseases like the fungus that produces white-nose syndrome in many native bats. Both the Northern Long-eared Bat and the Little Brown Bat have experienced dramatic population declines due to white-nose syndrome in the state of Maine, resulting in their inclusion on the State's endangered species list.³ More research is needed to fully understand the implications of this disease on local populations, but protection of roosting and maternity sites is undoubtedly needed. To protect the Northern Long-eared Bat, the U.S. Fish and Wildlife Service's ("USFWS") rule 4(d) prohibits "incidental take that may occur from tree removal activities within 150 feet of a known occupied maternity roost tree during the pup season (June 1 to July 31) or within a 1/4 mile of a hibernation site, year-round."⁴ However, many of the roosting sites may be on privately owned lands within the Town of Bar Harbor. The USFWS does not require a landowner to conduct a survey on their land; however, surveys for roosting or hibernating bats will facilitate project planning and reduce uncertainty.

Rare and Exemplary Natural Communities

There are ten types of "Rare and Exemplary Natural Communities" in Bar Harbor (Table 2), many of which are represented in ANP. These broad classes of natural communities are recognized as important for conservation: those that are rare, and those that are common but in exemplary condition. Fresh Meadow, in the Northeast Creek watershed, is an example of a raised level bog ecosystem.

Other communities, such as pitch pine woodlands, northern white cedar woodlands, and maritime spruce-fir forests are all located within the boundaries of ANP. However, community assessment outside of ANP boundaries is incomplete. Additional rare and exemplary natural communities and rare, threatened, or endangered plants and



Map: FB Environmental

Figure 4. Significant natural communities and wildlife habitat in Bar Harbor as of 2014.

Table 2. Rare, threatened and endangered species in Bar Harbor.

Common Name	Scientific Name	State Status
Rare, Threatened and Endangered Plants		
Comb-leaved Mermaid-weed	<i>Proserpinaca pectinata</i>	E
Dwarf Rattlesnake Root	<i>Prenanthes nana</i>	E
New England Northern Reed Grass	<i>Calamagrostis stricta</i> <i>ssp. inexpansa</i>	E
Swarthy Sedge	<i>Carex adusta</i>	E
Nantucket Shadbush	<i>Amelanchier nantucketensis</i>	T
Prototype Quillwort	<i>Isoetes prototypus</i>	T
Secund Rush	<i>Juncus secundus</i>	T
Smooth Sandwort	<i>Minuartia glabra</i>	SC
Northern Bog Sedge	<i>Carex gynocrates</i>	SC
Mountain Sandwort	<i>Minuartia groenlandica</i>	SC
Alpine Blueberry	<i>Vaccinium boreale</i>	SC
Appalachian Fir-clubmoss	<i>Huperzia appalachiana</i>	SC
Rare, Threatened and Endangered Animals		
Peregrine Falcon	<i>Falco peregrinus</i>	E
Bald Eagle	<i>Haliaeetus leucocephalus</i>	SC
Carolina Saddlebags	<i>Tramea carolina</i>	SC
Swamp Darner	<i>Epiaeschna heros</i>	SC
Tule Bluet	<i>Enallagma carunculatum</i>	SC
Wood Turtle	<i>Glyptemys insculpta</i>	SC
Purple Sandpiper	<i>Calidris maritima</i>	unknown

Source: Maine Natural Areas Program

animals may exist on private lands. These communities are an important asset, particularly where they border conservation areas or where their conservation provides contiguous habitat.

Vernal Pools & Freshwater Wetlands

Vernal pools are small temporary bodies of water that form in shallow basins during early spring. They are fed by rain or snow-melt, and may or may not dry up at the beginning of summer. These pools are free of predatory fish and therefore make excellent environments for certain organisms to live and breed. Indicator species that may be found in Bar Harbor include amphibians like the wood frog, spotted salamander, and fairy shrimp. State criteria for a significant vernal pool include an abundance of these indicator species or the presence of a particular endangered species. These criteria can be found in the Maine Department of Environmental Protection ("DEP") Rules, Chapter 335. Bar Harbor has three known significant vernal pools that have been mapped by the State of Maine (Figure 4). It is



Photo: Anne Wheeler

The northern shores of Bar Harbor host three active bald eagle nests.

likely that additional significant vernal pools exist in other areas of Bar Harbor.

While only three vernal pools have been determined to be significant under state law, a 2008 study of vernal pools in Bar Harbor indicated that there are another 24 non-significant vernal pools and 297 potentially significant vernal pools ranging in size from 80 square feet to 27,340 square feet (0.63 acres). These pools are scattered throughout the town, and may or may not be located within a mapped wetland.

While most vernal pools are of natural origin, there are some that are man-made or were historically altered in some way and are located near roads, driveways, buildings, or other development. Because the majority of the potential vernal pools have not been field-verified, it is likely that they will not meet the state definition of a significant vernal pool, or will otherwise not be under the jurisdiction of town, state, or federal regulations.⁵

Existing Town ordinances for Shoreland Standards (125-68 B(12)(a)) include setbacks of at least 75 feet from the edge of a significant vernal pool for new structures, and the Natural Resources Protection Act ("NRPA") regulations require a permit if a landowner wants to make "unreasonable" impacts within 250 feet of the high-water mark of the significant vernal pool. (See the fact sheet "Vernal Pools: A Significant Wildlife Habitat" on the State of Maine website for more details.) Education of landowners may encourage the protection and further verification of significant vernal pools through citizen-science and other cost-affective measures.

Table 3. Exemplary natural communities in Bar Harbor.

Community Type	Microhabitat	State Status
Rare and Exemplary Natural Communities		
Dune Grassland	Fore and back dunes associated with sand beaches; beachgrass and patchy shrubs dominant.	S2
White Cedar Woodland	Partial to nearly closed canopy woodlands in an upland setting, on rocky slopes (10-50%). Soils thin (0-30cm) and acidic. Known only from coastal areas.	S2
Birch-Oak Rocky Woodland	Partly forested to sparsely vegetated slopes of loose acidic to circumneutral boulders, occurring as talus from cliff above or, less commonly, as boulder fields on more level terrain. Vegetation patchy.	S3
Brackish Tidal Marsh	Intertidal reaches in coastal impoundments, or between saltmarshes and freshwater marshes in larger tidal rivers. The downstream limit of this community is usually marked by the dominance of <i>Spartina alterniflora</i> along tidal creek riverbanks.	S3
Jack Pine Woodland	Found on rock outcrops or thin sandy soils over till, mostly along the eastern coast or along lakeshores in central-northern Maine. Soils are nutrient-poor, excessively well drained, and often contain evidence of fire.	S3
Pitch Pine Woodland	Open forest of <i>Pinus rigida</i> (with lesser amounts of other conifers and/or oak) on ledges or rock outcrops; elevations up to 300 meters. Soils are nutrient-poor and excessively well drained. Heath shrubs are common in the understory. Mostly coastal.	S3
Red and White Pine Forest	Coniferous forest with red pine and white pine on slopes or low ridges and xeric to dry-mesic soils, often sandy or bouldery and usually with bedrock close to the surface.	S3
Low-elevation Bald	Bedrock, ledges, and summits of igneous and high-grade metamorphic rocks usually at low to moderate elevations fairly near the coast.	S3
Maritime Spruce - Fir Forest	Forests of exposed maritime locations. Soils often have a thick organic mat over a thin mineral layer. Cool temperatures and frequent fogs create comparatively mesic conditions. Variants include patches dominated by fir, heart-leaved paper birch.	S4
Raised Level Bog Ecosystem	Raised (but not concentrically patterned) peatlands in basins with mostly closed drainage. Sphagnum dominates the ground surface and is the main peat constituent. Sometimes treed with <i>Picea mariana</i> and <i>Larix laricina</i> .	S4

S2 Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or vulnerable to further decline.

S3 Rare in Maine (20-100 occurrences).

S4 Apparently secure in Maine.

Source: Maine Natural Areas Program



Photo: Anne Wheeler

Protecting vernal pools and the upland habitat around them is a high priority for the Town of Bar Harbor.

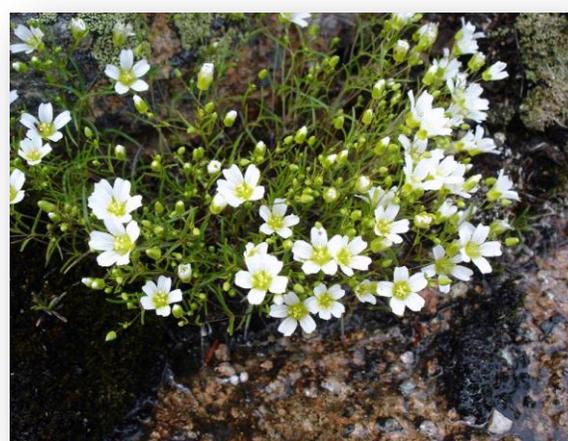


Photo: Jill Weber

*Mountain sandwort (*Minuartia groenlandica*), is a state listed species of special concern located in Bar Harbor.*

Protecting Thomas Bay's Archipelago

"Due to the incredible generosity of a conservation-minded landowner, Thomas Island will forever provide essential habitat for waterfowl, shorebirds, and other wildlife."



Photo: Maine Coast Heritage Trust

Looking south toward Thomas Bay; North and South Twinnie Islands (left) and Thomas Island (right).

The archipelago of Thomas Island, South Twinnie, and North Twinnie islands provide excellent wildlife habitat, and are located between Thomas Bay and Mount Desert Narrows in Bar Harbor. Thomas Island is the largest of the three with neighboring South Twinnie containing a productive bald eagle's nest. The shallow waters and swift currents surrounding Thomas Island support important winter habitat for migrating black ducks, diving sea ducks, migrating shorebirds, wading birds, and wintering peregrine falcons and bald eagles. Thomas Island also provides undisturbed foraging, loafing, and roosting habitats, as well as alternate nesting sites for the South Twinnie bald eagles.

The successful conservation of these islands and the wildlife habitat they support is due to impressive partnership and open space planning by the former landowner, Maine Coast Heritage Trust ("MCHT"), Maine Coastal Islands National Wildlife Refuge (formerly Petit Manan Wildlife Refuge), the Gulf of Maine Coastal Program, and others. This habitat protection initiative helped to save this ecologically sensitive area from a potential future as a campground or high-end residential development. The Thomas Island story serves as a great example of how conservation partners draw upon collective skills and strengths to accomplish meaningful projects.

South Twinnie Island (3 acres) was sold to MCHT for a "bargain sale" in 2001, and then transferred to the USFWS in 2003. South Twinnie's active eagle nesting history would now be protected forever.

In 2005, ***Thomas Island*** was conserved by MCHT with grant help from the USFWS National Coastal Wetlands program and Ducks Unlimited. The incredible generosity of a single conservation-minded landowner resulted in permanent preservation of land that provides essential habitat for waterfowl, shorebirds, and other wildlife. This allowed the undeveloped, 65-acre island to be protected, along with 57 acres of mudflats and intertidal wetlands that support large concentrations of shorebirds and waterfowl.

The third island of the archipelago, ***North Twinnie Island***, was secured through the partnership of MCHT and Petit Manan Wildlife Refuge in 2007. Help for this transfer came from Maine's Congressional delegation and money from the Land and Water Conservation Fund. The purchase of North and South Twinnie was strongly recommended by the Refuge's comprehensive plan for their seabird-nesting habitat.

Bar Harbor contains a large area of freshwater wetlands that support a high diversity of plants and animals. Many nesting, migratory, or overwintering species rely on wetlands for food and breeding habitat. More than half of Maine's rare plant species are found in wetlands, and at least one rare plant species is found in each of Acadia's wetland types.⁶

Freshwater Fisheries

Several freshwater streams in Bar Harbor support high-value brook trout habitat (Figure 5). Kebo Brook and Cromwell Brook have headwaters that start in ANP but then flow through developed areas of downtown before running into Cromwell Harbor. Both of these systems have been identified as high priority restoration sites by the National Park Service because of stream barriers that restrict fish passage, such as perched culverts and crossings blocked by debris.⁷

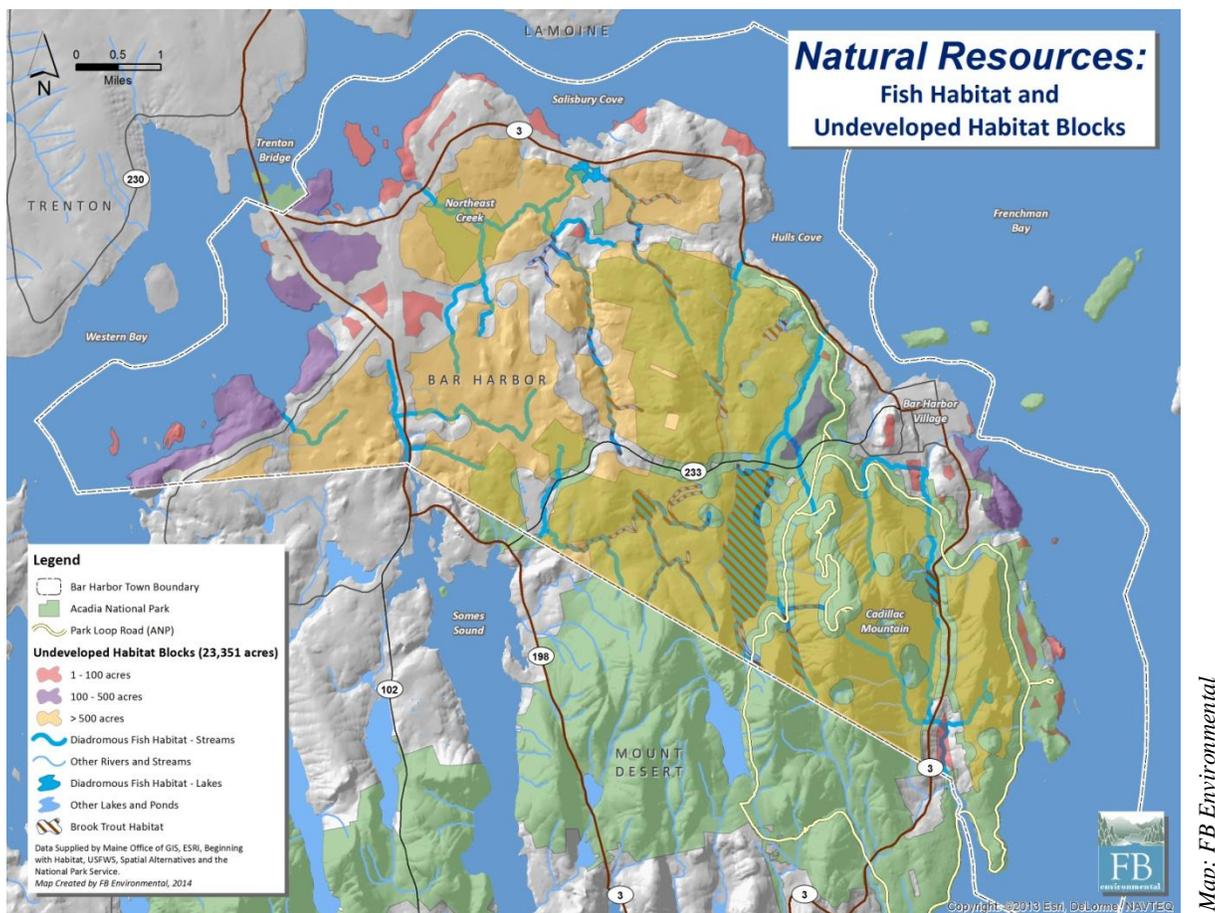
Studies have shown that forested buffers of at least 100 feet upland of stream and riverbanks should be protected for cold-water fisheries, including brook trout.⁸ Shade in the summertime is critical for fishery survival.



Photo: Erickson Smith

Brook trout require high levels of dissolved oxygen found in clean, clear and natural streams.

Even very small increases in water temperature can stress fish and lower oxygen levels. Maine's Shoreland Zoning regulations require vegetated buffers within 75 feet of certain streams. Landowners may choose to protect vegetated stream banks and pond shores beyond the legal requirement.



Map: FB Environmental

Figure 5. Fish habitat and undeveloped habitat blocks in Bar Harbor as of 2014.

The overdevelopment of stream outlets near the ocean can critically affect wildlife species that rely on these productive estuarine areas for food and cover, including river otters, diadromous fish, and wading birds such as herons and American bitterns.

Unfragmented Blocks of Land

Large blocks of land, relatively unbroken by roads and with little development, are important to maintain habitat for animals that have large home ranges (Figure 5). The Maine Department of Inland Fish & Wildlife defines undeveloped habitat blocks as areas of at least 100 acres and 250-500 feet from improved roads and development, depending on intensity. Larger blocks of undeveloped habitat are described as "unfragmented forest" (500 acres or more) that are important for area-sensitive wildlife species associated with forested habitats.

The State of Maine's "Beginning with Habitat" planning tool identified large unfragmented blocks based on land use and land cover data from 1991 and 1993 and road data from the 1970s. Blocks between 1 and 19 acres are home to species common to urban and suburban landscapes (e.g., raccoons, skunks, and squirrels). Blocks of 50 acres of grassland or 250 acres of forest are sufficient to provide habitat for birds that are uncommon to smaller grasslands and forests. Moose, bald eagles, goshawks, and similar species usually require 500 to 2,500 acres, while blocks of greater than 2,500 acres may hold the full complement of species expected to occur in Maine.⁹ Many of the species in the smaller acreage ranges also seem to do well in edge habitat or require more modest home ranges.

Wildlife species utilize different landscape types as well as home range sizes. This is evident with the Cape May warbler, which does not require a large home range but does require coniferous forest cover during the breeding season (Table 3). Forest-interior (at least 100m from forest edge) bird species are more abundant in areas with greater regional forest cover.¹⁰ Forest cover appears to have a greater effect on breeding bird distribution than forest fragmentation, indicating that decreasing overall forest cover may limit distribution of some breeding birds.¹¹

It will be important to identify wildlife corridors within Bar Harbor, but also between other towns: Mount Desert to the south, and areas of the mainland to the north across Eastern and Western Narrows. At the time the Plan was written, there were twenty-three undeveloped habitat blocks greater than 100 acres that have a portion of land in Bar Harbor. Eleven of these habitat blocks are greater than 500 acres in size (Figure 5.)

Habitat Connectivity

Bar Harbor's unique landscape and position on Mount Desert Island provides significant conduits along waterways and between mountains, which link the area to the southern and western parts of the island as well as migration between the mainland to the north. Maintaining these conduits in open space allows for the flow of genetic distribution of wildlife in both directions for many species, including songbirds, fur-bearers (mesofauna or small mammals), deer, and moose.

There may be landscape restrictions that reduce some species' ability to access unfragmented blocks. Roads that cross streams or wetlands and areas of high-density development can constrict wildlife travel corridors or cut them off entirely. It is most important to maintain continuity of forested regions around streams for migrating birds and other species needing travel corridors between larger habitat areas. Bar Harbor's unique landscape and position on MDI provides significant conduits along waterways and between mountains, which link the area to the southern and western parts of the island. Maintaining these conduits in open space allows for genetic flow in both directions for many species, including songbirds, fur-bearers (mesofauna or small mammals), deer, and moose. A few of these areas are found in Bar Harbor. Those areas most critical to wildlife are highlighted in Figure 4.

It is generally accepted that a minimum natural vegetative buffer of 300 feet is necessary for wildlife habitat surrounding rivers.¹³ The larger the buffer zones, the more valuable the area is, especially for larger animals and forest interior species that require more room. To maintain critical wildlife conduits, it will be important to protect as much of this minimum buffer as is feasible.

Identifying High Priority Areas for Open Space Protection: A Subwatershed Approach

The valuable natural habitats in Bar Harbor span across town, both in, and outside of Acadia National Park, in undeveloped forests, freshwater and coastal wetlands, in and adjacent to streams, on ridgetops, and every place in between. Watersheds, and the streams that flow through them provide linkages from one habitat to the next, from one side of Bar Harbor to the other, and provide a cross-island connection for many species of wildlife.

A major task for open space planning is to identify where the most valuable natural habitats occur in the town, and take actions to protect them. Because plants and animals do not abide by municipal boundaries, a clear approach to open space planning is to examine how these natural habitats co-occur and assess the results on a watershed scale. Co-occurrences are areas where two or more natural habitat features overlap.

Higher value can be assigned to areas with a greater number of co-occurrences, providing a series of "target areas" for open space protection.

Bar Harbor residents can aid this process by identifying any co-occurrences in their own neighborhoods, and by maintaining a firm understanding of their immediate watershed and the specific ecosystems it supports. Table 4 provides information about the types of species

that can be found in various local habits and how much range individuals need for distribution. This may help residents identify nearby natural communities.

Natural habitats in Bar Harbor were assessed using a co-occurrence model, and then six areas were identified as high priority for open space protection. These areas can be seen in Figure 6 on the page below.

Bar Harbor has a great tradition of wild habitat protection, but much work remains to be done if we are to continue this project in the 21st Century and preserve the work that has already been done.

For more information on proposed strategies for preserving habitats in Bar Harbor, see Appendix A, which provides actionable goals and strategies for future open space protection and community action.

Table 4. Bar Harbor wildlife species home range and utilization.

HOME RANGE AREA (ACRES)					SPECIES	HABITAT-BREADTH COMBINATIONS
1-10	10-50	>50	NR/NA			
					Black-throated green warbler	Forest only - Deciduous and Coniferous
					Cape May warbler	Coniferous Forest only
					Golden-crowned kinglet	Deciduous and Coniferous Forest-Krummholz
					Beaver	Wetlands in Deciduous and Coniferous Forest-Nonforest-Water
					Wood frog	Upland and Wetlands of Deciduous, Coniferous Forest-Krummholz-Nonforest
					Wood turtle	Upland and Wetlands in Deciduous and Coniferous Forest-Krummholz-Nonforest-Water
					American woodcock	Deciduous, coniferous upland and wetlands of Forest-Krummholz-Nonforest
					Ruffed grouse	Upland Deciduous and Coniferous Forest-NonForest
					Porcupine	Upland and Wetlands of Deciduous, Coniferous Forest-Krummholz-Nonforest
					Spotted salamander	Wetlands within Deciduous and Coniferous Forest-Nonforest
					Bald eagle	Deciduous and Coniferous Forest-Water
					Peregrine falcon	Upland and Wetlands in Deciduous and Coniferous Forest-Nonforest-Water
					Pileated woodpecker	Forest only - Deciduous and Coniferous
					Wild turkey	Upland Deciduous and Coniferous Forest-NonForest
					Bobcat	Upland and Wetlands of Deciduous, Coniferous Forest-Krummholz-Nonforest
					Coyote	Upland and Wetlands in Deciduous and Coniferous Forest-Nonforest
					River otter	Wetlands in Deciduous and Coniferous Forest-Nonforest-Water
					White-tailed deer	Upland and Wetlands of Deciduous, Coniferous Forest-Nonforest
					Northern long-eared bat	Upland and Wetlands in Deciduous and Coniferous Forest-Nonforest-Water

Source: Technical guide to forest wildlife habitat management in New England.¹⁰

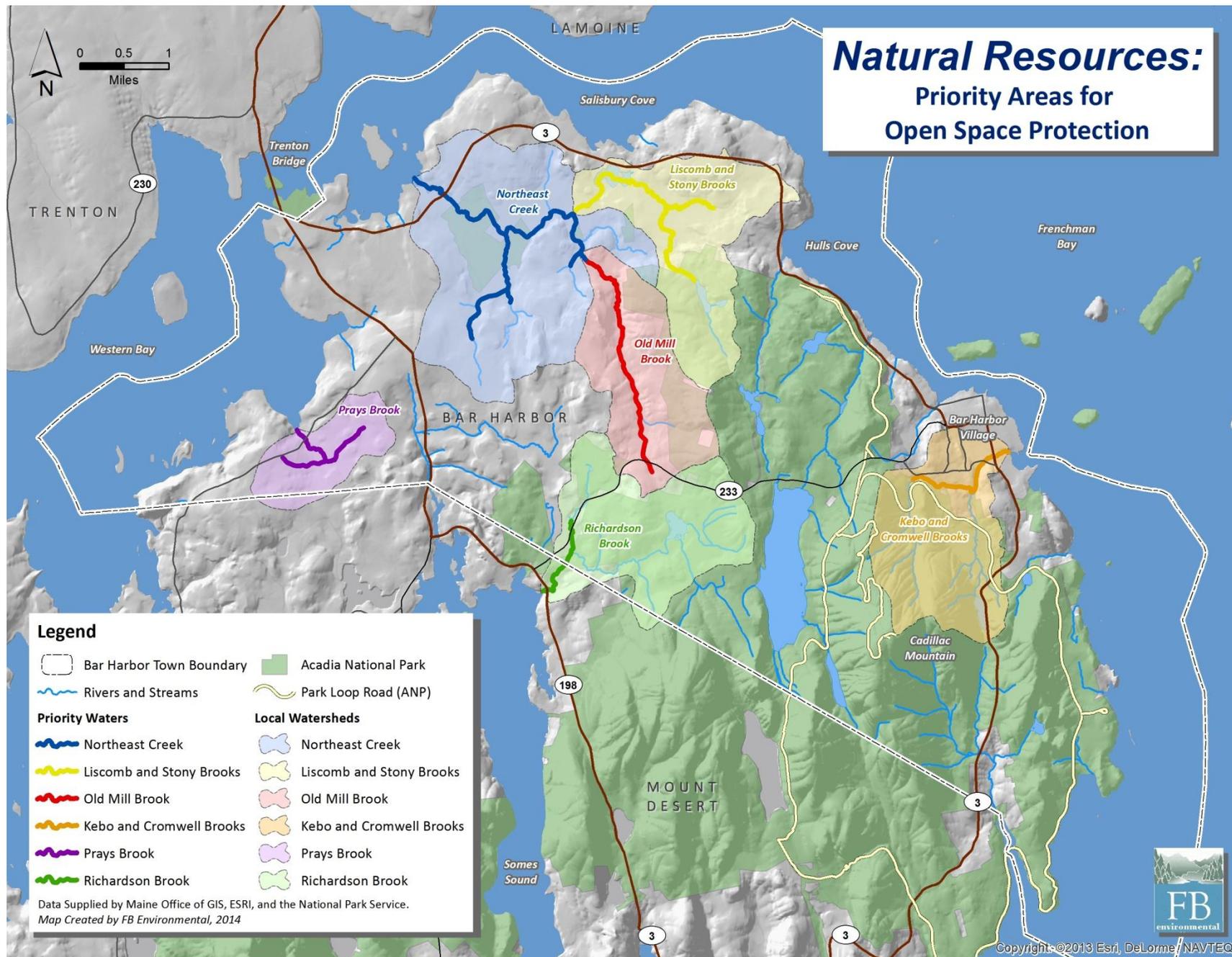


Figure 6. Priority subwatersheds for open space protection in Bar Harbor.

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The Future of Water Resources in Bar Harbor

Protecting Our Water Resources

The ability to protect the quality and quantity of water resources is inseparable from the ability to manage the land around it. For example, we can minimize the number of impervious surfaces such as roads, rooftops, and parking lots. These prevent water from infiltrating the ground naturally, altering natural drainage patterns, causing soil erosion, and delivering excess pollution from uplands to our drinking water. Open space conservation is one way to protect the land that has the greatest impact on water quality. Lands that should be considered include ridgetops, areas with shallow soil, areas without access to public sewers, buffer zones around bodies of water, wetlands, and vernal pools. Long-term protection of fresh surface water and coastal waters is important to our town because it gives us access to clean drinking water, allows us all the opportunity to recreate, and supports our maritime livelihoods.

A Vision for Water Resources

Our vision for the future is one where Bar Harbor's crystal waters are still among the town's defining characteristics. A healthy ocean remains vital to our island community. The town is graced with numerous lakes, ponds, streams, wetlands, and vernal pools that provide drinking water to town residents, and are home to a variety of wild plants and animals that enrich our everyday lives.

Groundwater, which is intricately connected to surface waters, will likely still be essential drinking water for those residents who are not connected to town water. Recognizing this, Bar Harbor residents may take care to protect all ponds, streams, wetlands, and vernal pools.

Our water resources continue to provide countless opportunities for recreation that benefit our residents and millions of annual visitors. Water features are also an integral part of memorable and prized scenic vistas. Residents and visitors should be continually educated about the importance of practices that maintain exemplary water quality and healthy marine and freshwater resources, which have long been the hallmark of Bar Harbor.



Photo: Friends of Acadia

Eagle Lake provides drinking water for residents of Bar Harbor.

Acadia National Park serves a key role in permanently protecting the high-quality water we enjoy in Bar Harbor. It is a huge asset that the town's primary supply of drinking water, Eagle Lake, is protected on all sides by ANP. Acadia boasts 14 great ponds, 9 smaller ponds, 41 named streams, and 5 natural springs. The NPS has played a key role in preserving many significant water resources in Bar Harbor. But much work has also been done by other individuals and organizations to protect water resources that are vital to the town but not located in ANP.

Why Do We Need to Protect Water Resources?

Water resources are vital to public health, essential to native wildlife, drive the local economy, and provide valuable ecosystem services. Ecosystem services are defined as benefits that people derive from ecosystems, including: food production, the provision of clean water, climate moderation, nutrient cycling, and recreational opportunities. Bar Harbor residents and visitors are the beneficiaries of a multitude of ecosystem services from water resources (Table 5.)

The abundant supply of fresh water, replenished by rain and snow, is caught within an extraordinary network of streams and waterfalls, ponds, lakes, forests, wetlands, and within unseen and untraceable cracks and fissures in the bedrock in an ever-changing process. It may come as a surprise that the rate of recharge of fresh water into our lakes and groundwater, and the speed at which it flows to the sea, are affected by the kinds of soils and plants in its path, by variations of slopes, and the number of impervious surfaces it encounters. However, because groundwater is an unseen and largely unknown resource, it is difficult to appreciate the vital connections between the quality of land in our watersheds and the quality and quantity of the water we drink.

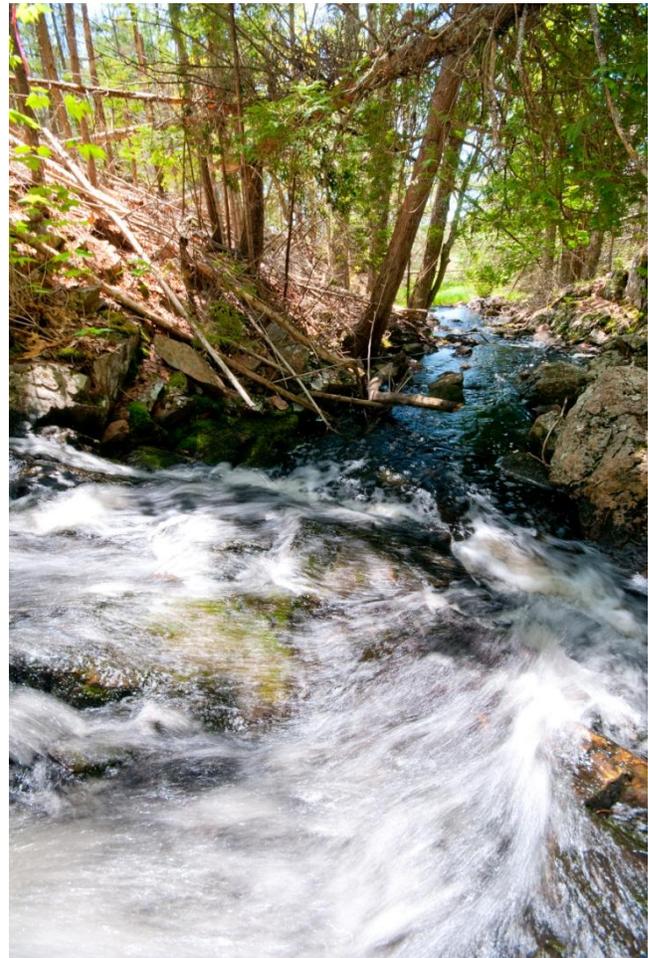


Photo: Brigit Besaw (Maine Coast Heritage Trust)

Kittredge Brook is among the 66.8 miles of creeks and streams in Bar Harbor.

Table 5. Water resource derived ecosystem services in Bar Harbor.

Water Resources	Ecosystem Services	Best Examples in Bar Harbor
Terrestrial Wetlands <i>(Scrub-shrub, forested wetlands, marshes, bogs, fens)</i>	<ul style="list-style-type: none"> Water filtration Water storage/flood control Pollutant trapping 	<ul style="list-style-type: none"> Wetland off Eagle Lake across from the High School Northeast Creek Cranberry Bog Rte. 102 on the way into Town Hill from off-island Jones Marsh and Stony Brook Heath
Terrestrial Wetlands Cont. <i>(Scrub-shrub, forested wetlands, marshes, bogs, fens)</i>	<ul style="list-style-type: none"> Drinking water quantity: <i>Conduit for recharge</i> Drinking water quality: <i>Pollutant trapping</i> 	<ul style="list-style-type: none"> Town Hill: <ul style="list-style-type: none"> <i>Indian Point Road</i> <i>Crooked Road</i> <i>Knox Road</i> <i>Old Norway Drive</i>
Surface Waters <i>(Lakes, ponds and streams)</i>	<ul style="list-style-type: none"> Water storage/flood control Groundwater recharge Wildlife Habitat Recreation 	<ul style="list-style-type: none"> Northeast Creek, Mill Creek Eagle Lake and others (<i>see Table 6</i>)
Coastal Wetlands: <i>(Salt marshes, brackish marshes freshwater tidal marshes, clamflats)</i>	<ul style="list-style-type: none"> Wildlife Habitat Flood Control Erosion Control Sediment Trapping Economic Benefit: <ul style="list-style-type: none"> <i>- Direct through clam, mussel, and worm resources for local harvesters;</i> <i>indirect through property protection</i> 	<ul style="list-style-type: none"> Northeast Creek Marsh at the Oceanarium on Rte. 3. Marsh at the head of the Island Clamflats at Hadley Point

Groundwater

The town's municipal water supply and sewer systems serve 4,625 residents (2013 Bar Harbor Water Division report) within a very small geographic area of Bar Harbor—only about two square miles of downtown, part of Hull's Cove, and DeGregoire Park. In recent years, public water supply lines, but not sewer lines, have been extended to cottages, campgrounds, and other properties along Route 3 in Ireson Hill and Salisbury Cove for summer use. The rest of Bar Harbor is entirely dependent upon private wells and private septic systems. Regulations protect the town's public water supply, but there are fewer laws to protect private wells. As population growth has expanded into outlying areas, threats to groundwater quality have increased.

Maintaining the quantity and quality of water in existing private wells is critical. Future development could degrade existing water supplies, or result in dry or contaminated wells. The town recognizes the need for better information to protect vulnerable hydrogeologic resources from possible adverse impacts of residential development, and in 2004 it commissioned a study to evaluate growth trends, examine the potential impacts on groundwater, and recommend ways to protect the quality of the town's drinking water.¹

The report found that the Town faces a larger and more difficult problem with respect to water quality, particularly the potential for contamination from septic systems—especially in areas where conditions create a more vulnerable physical setting (e.g. areas with thin soils, areas of exposed bedrock, and groundwater recharge areas). Land use changes that increase the risk of groundwater contamination include: 1.) insufficient distance (<100 ft.) between septic systems and wells, 2.) increased impervious surfaces that decrease groundwater recharge potential, and 3.) the replacement of natural forests and fields with residential lawns and impervious surfaces, which reduces the natural buffering against nutrient and chemical-laden surface water runoff, and diminishes groundwater recharge.

Lakes Ponds & Streams

We are very fortunate in Bar Harbor that many of our lakes, ponds, and streams are located in Acadia National Park, or originate there. This confers a great deal of protection on these water resources. Detailed information concerning lakes and streams can be found in the 2008 National Park Service report titled “Assessment of Natural Resource Conditions in and

A Case for Clean Water

The death of 13 guests at the Bay View House had Bar Harbor's hotel owners worried.

It was the fall of 1873, and news reports of the summer's typhoid outbreak threatened the village's otherwise positive reputation as a summer resort throughout the east coast. The typhoid problem was localized to the single hotel, but visitors at a second hotel, the Rodick House, simultaneously experienced an outbreak of the less dangerous illness, *scarlatina*. The double outbreak was certain to create a perception that it was the village itself that was unhealthy, sending potential summer visitors elsewhere in following years. In the gloomy fall of 1873, it seemed probable that none of Bar Harbor's 15 hotels would reopen and survive the 1874 season.

A doctor on the scene believed that the well at the Bay View House was contaminated with sewage, and published his findings in a Boston medical journal. Because contaminated water was identified as the problem, a solution was to pipe in clean water from outside of town to insure a safe drinking supply. Coupled with an advertising campaign to publicize the new water system in Boston, New York, and Philadelphia, a clean water supply just might allay public fears and save Bar Harbor's fledgling resort industry from impending doom. Thus, the Bar Harbor Water Company was officially born in February 1874.

Source: Peter Morrison, 2008, History of the Bar Harbor Water Company 1873-2004.

The Problem - Bar Harbor's population has continued to grow with ever-increasing water needs. Outlying areas are converting from vacant or agricultural lands to areas of low to medium density residential development. While the need for water quality and quantity has increased, so have the threats from increased runoff and pollutants.

Recommendation - To ensure a clean, plentiful water supply in the future, we need to continue to protect the Eagle Lake watershed and focus efforts to limit impervious surfaces in outlying areas of town.

Open Space Planning - A large portion of the Eagle Lake watershed is within the park boundary. The town should maintain good lines of communication with park staff, make sure that Town projects compliment the work already being done to protect water quality, and seize opportunities to work collaboratively with the NPS to protect our clean drinking water supply. The town should also require developers to adopt low-impact development techniques for all future development to help offset the effects of impervious surfaces on private wells and other natural resources in the rural areas of town.

Adjacent to Acadia National Park, Maine.”² Some lakes and streams have been identified as “favorite places”³ by the community, including Northeast Creek, Hamilton Pond, Millbrook, Millbrook Falls, and Kittredge Brook.

Bar Harbor residents might be astounded to learn that although our town is only 45 square miles in size, it hosts 66.8 miles of creeks and streams and 691 acres of lakes and ponds. Some of these streams flow through culverts under town roads and private drives. Properly sized and oriented culverts are necessary for drainage and fish passage.

Wetlands and Vernal Pools

Wetlands are areas where water covers the soil or is present at or near the surface of the soil long enough to result in waterlogged (hydric) soils that favor the growth of specially adapted plants (hydrophytes). There are many different types of wetlands including forested wetlands, such as cedar or red maple swamps; and non-forested wetlands, such as marshes, fens, and bogs. Bar Harbor’s ordinances currently protect wetlands that are two acres or greater in size.

Vernal Pools are temporary to semi-permanent pools occurring in shallow depressions in forested landscapes. Because they are not suitable habitat for fish, vernal pools provide the ideal primary breeding habitat for amphibians such as wood frogs, blue-spotted and spotted salamanders, and invertebrates such as fairy shrimp, as well as habitat for other wildlife including several of Maine’s endangered and threatened species.



Photo: Enoch Albert

Fawn Pond in Acadia National Park is a small headwater lake in the upper Northeast Creek watershed. The pond is located upstream of Lake Wood, which flows to Hamilton Pond via Stony Brook, and eventually into Northeast Creek near Thomas Bay.

Table 6. Lakes and ponds in Bar Harbor.

Waterbody	Area (acres)
Eagle Lake	465.9
Hamilton Pond	40.7
Bubble Pond	33.0
Aunt Betty Pond	31.5
Witch Hole Pond	23.8
Lower Breakneck Pond	20.7
The Tarn	18.9
Lake Wood	16.8
The Bowl	10.4
Upper Breakneck Pond	9.1
Beaver Dam Pond	7.5
Fawn Pond	4.1
New Mills Meadow Pond	3.2
French Hill Pond	3.0
Halfmoon Pond	1.0
Sunken Heath Pond	0.8
Great Meadow Pond	0.2
TOTAL	691

Source: FB Environmental

The Land-Water Connection

Our ability to protect water quality is closely linked to our ability to protect open space- undeveloped forests, wetlands, farmlands, and fields- by reducing the amount of impervious surfaces, minimizing the density of housing in areas without access to public sewer, and protecting buffers around the waterbodies and wetlands we depend on for recreation and our livelihoods.

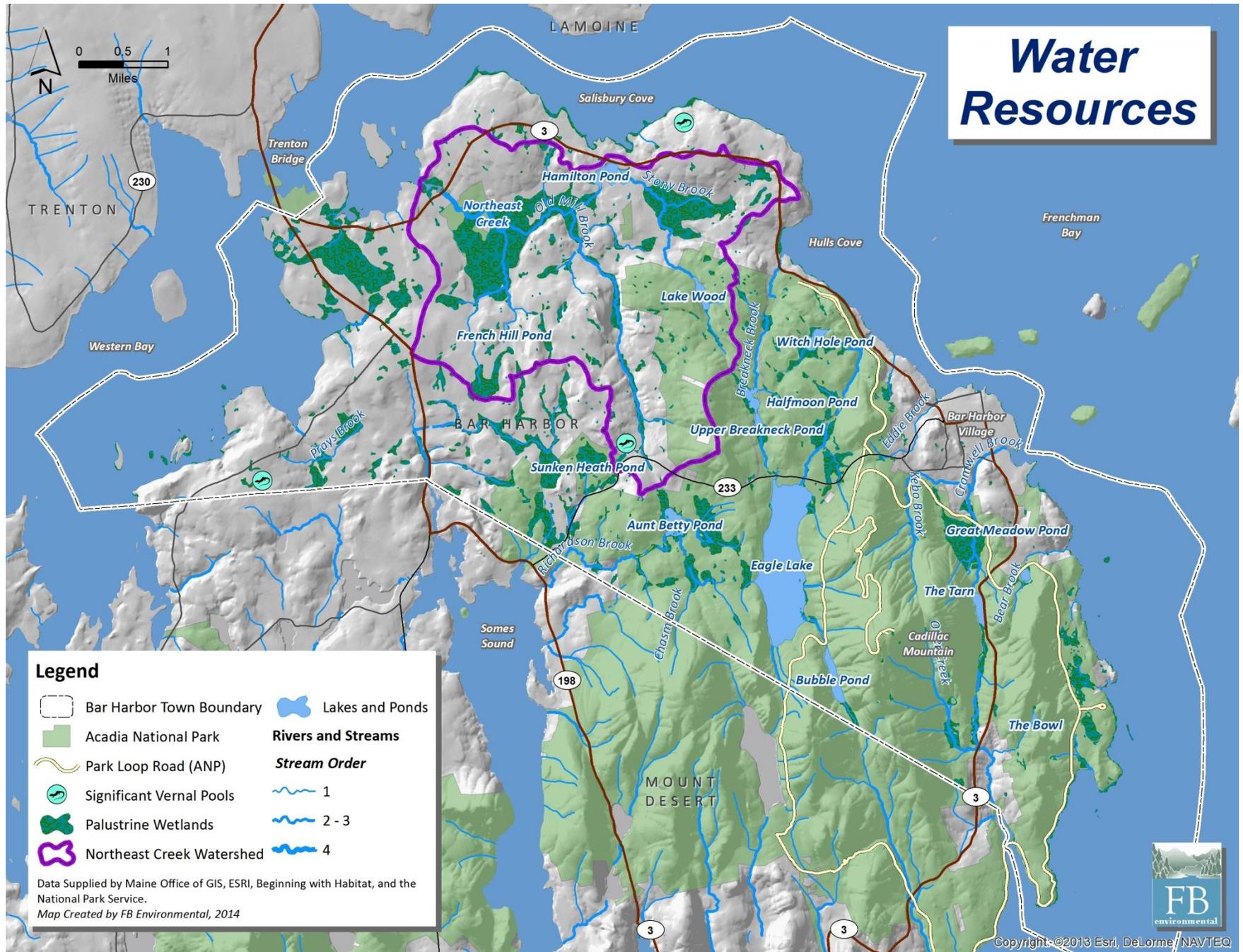


Figure 7. Water resources features in Bar Harbor.

In the spring, water is retained in vernal pools, allowing these species to breed and their young to mature and move to adjacent land. There are three vernal pools in Bar Harbor classified as “significant” by the DEP (Figure 7), and many other “non-significant” vernal pools known to local residents that are also considered “favorite places.”³

Why are Wetlands Important?

A 2008 survey of wetlands, surface waters, and vernal pools in Bar Harbor indicated that these resources are distributed across 4,215 acres throughout the town (15% of the land area), but are more prevalent in the less-mountainous western half of Bar Harbor.⁴ Some of these wetlands are large and diverse, including several large bog or fen-type wetlands; while forested and shrub-dominated wetlands are most common. Table 7 provides a list of surface waters and wetland types and their size in Bar Harbor. This section provides a description of some of these ecosystem services:

Flood Control - Wetlands are like sponges. They tend to form in depressions or low spots in the landscape. After a storm event, water flows out of them, evaporates into the air, and percolates into the ground, decreasing the water in the wetland. Then, when the next storm comes, water flows into wetlands, filling them up and diminishing the possibility of a flood downstream. The roadside wetlands along Eagle Lake Rd. (Rt. 233) perform this valuable service.

Water Storage - Some surface waters and wetlands hold water like giant basins. Water in these basins (often lakes and ponds) can be used for drinking water supply (e.g., Eagle Lake), recreation (e.g., Hamilton Pond), or as wildlife habitat.

Water Recharge - Other wetlands release their water slowly, often into brooks, or even into small cracks in the underlying rocks, where it moves to natural underground reservoirs for storage.

Sediment Retention - As water flows, it picks up particles. When water enters a wetland, the rate of flow slows, and sediments drop out. Typically, the water exiting a wetland is clearer or less turbid. One of the most important examples of a wetland that performs this service is the Northeast Creek watershed. The wetland at the base of the watershed acts as a filter before freshwater flows back to the ocean, across vital shellfish beds and nursery habitat for marine organisms, and into Frenchman Bay, where lobsters and other commercially valuable species depend on clean water for their survival.

Water Filtration & Pollutant Trapping - As water flows through wetlands, nutrients contained in



Photo: Jill Weber

Richardson Brook wetland, located at the outlet of Aunt Betty's Pond, provides valuable functions such as flood control and pollutant trapping.

Table 7. Types and extent of wetlands in Bar Harbor.

Wetland Type	Area (acres)
Coastal <i>Estuarine and marine</i>	72
Pond/Lake	717
Stream/River	111
Emergent <i>Marshes and wet fields</i>	244
Scrub-Shrub	1,448
Forested	1,559
Open Water	64
TOTAL	4,215

Source: Stantec (2008)³

sediments are trapped. Wetland plants take up nutrients dissolved in the water. Water that is not filtered through wetlands, but which flows directly into a larger body of water (pond, lake, or ocean), can be so nutrient-rich that an algal bloom may occur. When this happens, the algae use up oxygen and can harm fish and other animals.

Habitat - Wetlands provide habitat for plants and animals. They are often isolated, safe, and quiet places where birds and animals can feed, rest, and reproduce.

Marine Resources

In all, Bar Harbor has 39.6 miles of ocean coastline, with multiple points of public waterfront access for recreation and commerce. Bar Harbor's 2007 Comprehensive Plan set forth a specific goal to protect Bar Harbor's marine resources industry while increasing commercial and public shore access. Progress has been made toward this goal; however, it will require continued diligence to assure the sustainability of Bar Harbor's marine resources and the cleanliness and beauty of Bar Harbor's shoreline.

Marine Environment Management

Bar Harbor's 2007 Comprehensive Plan also calls for the management of the marine environment, coastal islands, and their related resources, to preserve and improve the ecological integrity and diversity of marine communities and habitats, to expand understanding of the productivity of the Gulf of Maine, and to enhance the economic value of the town's renewable marine resources.

Another aspect of the Comprehensive Plan specifically requires monitoring of marine resources and water quality in the Hadley Point area, as this is an important access point for both commercial and recreational harvesters. There are potential negative impacts of increased use of the Town's boat launch, including the promotion of this area as a popular dog park, which can interfere with ongoing resource harvesting, and/or aquaculture activities.

In 2007, Bar Harbor received a grant from the Gulf of Maine Council on the Marine Environment to restore eelgrass beds between an aquaculture lease site and the clam flats on the west side of Hadley Point. The Bar Harbor Marine Resources Committee worked with numerous community members to implement the project including MDI Biological Laboratory in Salisbury Cove. The Laboratory has continued to raise funds and implement restoration projects within the Hadley Point area while monitoring water quality at Hadley Point. The water quality is good: transparency remains high and dissolved oxygen is sufficient to support marine invertebrates and fish. As a result of six summers of eelgrass restoration, eelgrass coverage within the 14-acre restoration area expanded from <1% in 2007 to over 20% by 2012. Unfortunately, all eelgrass in upper Frenchman Bay was lost in 2013. Since eelgrass is important for stabilizing sediments, preventing shoreline erosion, absorbing excess nutrients, and functioning as habitat for numerous marine species, the future of marine resources and water quality at Hadley Point, and along the entire northeastern shoreline of Bar Harbor, is uncertain, and monitoring should be continued.

CASE STUDY: Eddie Brook

An interesting assessment of what can happen to a stream if left to general inattention is described in the Eddie Brook Watershed Survey report.⁵ The brook originates in Acadia National Park, and then runs through a residential section of Bar Harbor.

Residents who remember the brook when they were young describe a "wonderful small waterway alive with brook trout, frogs... a pathway to self-discovery".

The survey found evidence of various pollutant types including toxic substances, bacteria, nutrients and sediments. Residential development likely led to the release of these pollutants into Eddie Brook, which decreased the stream's water quality. This in turn affected the fish and other organisms that live in the stream. The polluted water eventually flowed into Frenchman Bay across the clam flats around The Bar.

- **Nutrients** such as phosphorous and nitrogen can promote algae blooms and deplete oxygen, killing fish and other animals. Sediment increases turbidity (cloudiness), which in turn reduces plant growth and alters food supplies for aquatic organisms.
- **Sediments** can damage fish gills and affect clams and mussels.
- **Bacteria** in the water can result in illness, shellfish bed closures, swimming restrictions, and contaminated drinking water.
- **Toxic** substances may be carcinogenic, and can contaminate ground and surface drinking water supplies.

The watershed survey educated citizens through community meetings, brochures, press coverage, and by involving citizen volunteers. The plan moving forward was to encourage landowners to plant vegetative buffers, to limit the use of fertilizers, to eliminate toxic substances from their properties, to support the watershed management plan, and ultimately, to improve water quality and restore Eddie Brook to the well-loved stream known in days gone by.

Groundwater Quality and Quantity

In 2004, Stratex, LLC, performed a hydrogeologic resource evaluation¹ focused on quantity and quality of hydrogeologic resources outside the areas served by the Bar Harbor public water system. Based on a review of well data, published reports, geologic maps, and precipitation data, the study concluded that Bar Harbor is likely to have enough water to supply current dwellings as well as most of the dwellings predicted under the projected scenario for 2034. There is little to no data on ground water quality in Bar Harbor. Based on a nitrogen loading study published by the USGS in 2013, nitrogen levels in Northeast Creek have been increasing, but how this relates to nitrogen levels in well water has not been documented.⁶

Protected Wetlands & Vernal Pools

Bar Harbor citizens recognize that wetlands are valuable town assets and they decided, through town code, to protect all wetlands two acres or more in size, rather than those at least ten acres in size, as mandated by State regulations. Significant vernal pools are protected under statute. Town maps all document significant vernal pools and the Town Government participates in ongoing surveys to document additional significant pools.

While only three vernal pools have been determined to be significant under state law, (another 24 pools were determined to be non-significant) there are potentially many more. A 2008 study of vernal pools in Bar Harbor indicates that there are approximately 297 potential vernal pools. These pools are scattered throughout the town and have not been formally mapped. While small, these potential vernal pools are estimated to cover 22 acres.⁶ Vernal pools provide temporary storage of precipitation, and are often connected to the groundwater table. For these reasons, and others, protecting these natural resource features in our town is imperative.

Lakes, Ponds & Streams

Since the publication of the 2004 Eddie Brook Watershed Survey,⁴ upgrades to the Bar Harbor sewer system, vegetative buffer plantings by students along the brook, and road improvements on West Street extension have all led to improvements in the brook and in marine water quality out near the Bar Island sandbar. In addition, the town has replaced a culvert on Kebo Street that will improve fish passage and flood control. Public works staff have also installed similar culverts on lower Ledge lawn Avenue at the confluence of Kebo and Cromwell Brooks.



Photo: Kathy VanGorder

The Northeast Creek watershed encompasses 24% of the town's land area (Figure 7).

The Frenchman Bay Plan

The 2007 Comprehensive Plan also calls for the development and adoption of management plans for Frenchman Bay, Mount Desert Narrows, Eastern Bay, and Western Bay. A new group has emerged called the Frenchman Bay Partners, which includes representation from eight municipalities around the bay, including Bar Harbor.

The vision of the Frenchman Bay Partners is a healthy and sustainable future for Frenchman Bay, where multiple users can enjoy the inherent beauty and benefit from the ecological and economic viability of the bay. This group is engaged in a process known as conservation action planning for the entire Frenchman Bay watershed, which includes Frenchman Bay, Mount Desert Narrows, and Eastern Bay. This process prioritizes habitats and species of particular concern. For the Frenchman Bay area, these include eelgrass habitat, mudflats, benthic habitats, and habitats for diadromous fish such as alewives and elvers (eels).

Strategies of the partners include restoring eelgrass habitat; identifying sources of bacterial pollution in order to open polluted clam flats; conducting benthic surveys in an effort to understand the status of benthic habitats which support lobsters, scallops, sea cucumbers, sea urchins, and other commercially important marine resources; and identifying and removing barriers to fish passage in local streams.⁷ The outcome of this strategic partnership will benefit more than just the town of Bar Harbor; the entire region benefits from the economic stimulus of a healthy bay with intact habitats and vibrant fisheries.

Commercial Species Landings

The habitats identified in the Frenchman Bay planning process support over \$10 million of commercially important species, including, in order of economic

value: lobsters, bloodworms, mussels, and soft-shell clams.

Committees Supporting the Marine Environment

The Bar Harbor Marine Resources Committee, the Harbor Committee, the Conservation Commission, and the Cruise Ship Committee all provide the opportunity for significant input by citizens and involvement in harbor and coastal issues. The ongoing commitment of the town to work with these committees will ensure that the harbor, the Bar Harbor shoreline, marine resources, and public assets related to the marine environment are well maintained for future generations.

The Bar Harbor Marine Resources Committee has made significant progress managing clam resources at Hadley Point. They are now focused on getting closed clam flats open at the mouth of Northeast Creek by working with the College of the Atlantic and the Maine Department of Marine Resources to examine land use practices in the Northeast Creek watershed and identify sources of bacterial pollution.



Photo: Maine Coast Heritage Trust

View from Thomas Island in Upper Frenchman Bay.

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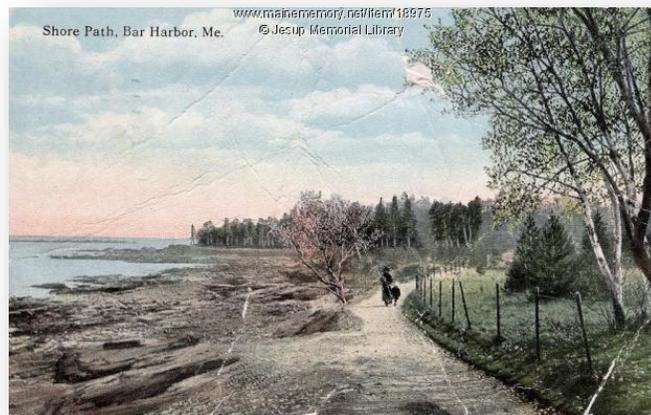
A Continued Appreciation for the Rich Scenic & Cultural Resources in Bar Harbor

A long history of land conservation and historic preservation exists in Bar Harbor. Groups such as the Hancock County Trustees of Public Reservations and Mount Desert Island's Village Improvement Associations were early proponents of protecting the region's scenic resources. Charles Eliot, George Dorr, and others who were active in the Trustees, negotiated and funded the purchase of privately held scenic lands incorporated as Sieur de Monts National Monument in 1916. The Bar Harbor Village Improvement Association created, and continues to maintain, many of Bar Harbor's trails, including the beloved Shore Path, which was established in 1880. Preservation of cultural resources was a driving force behind the original Abbe Museum at Sieur de Monts in 1929. The original evolved into the contemporary year-round museum in downtown Bar Harbor, which is a unique research and education center for Wabanaki history and culture.

There is a deep, enduring connection to the natural beauty and cultural character found within Bar Harbor's borders. Society's need for public access to natural beauty and inspirational scenery is growing as more land is lost to accommodate our nation's increasing population and its needs. Town residents value unobstructed views for both personal and community health. Parks and monuments reflect some of the earliest recreational development including trails, cottage foundations, encampments, and other remnants of the historic development of Bar Harbor. In addition, residents respect the traditional uses of this area's diverse natural resources by native peoples and early settlers, which include fishing, foraging (e.g. berry picking and fir tipping), hunting, trading, farming, quarrying, shipping, and recreation.

A Vision for Scenic and Cultural Resources

Our vision for the future sees Bar Harbor's scenic and cultural resources continue to be appreciated and enjoyed by all. Our outstanding scenic vistas and small-town setting still attract people to the area to live, work, and play. The Town will have the potential to formally protect the natural and cultural soundscapes, as well as the dark, star-filled skies. Our partnerships with ANP and other stakeholders will help to protect these valuable resources. Smart development focuses on smaller, selected areas of the town, allowing for open space and maintaining scenic



The Shore Path circa 1921.

Photo: Maine Memory Network

road corridors.

Well-thought-out protective measures preserve Bar Harbor's historic and picturesque character, driving the local economy. Residents will always be the most important partners in this effort and must remain engaged in the protection of these vital resources.

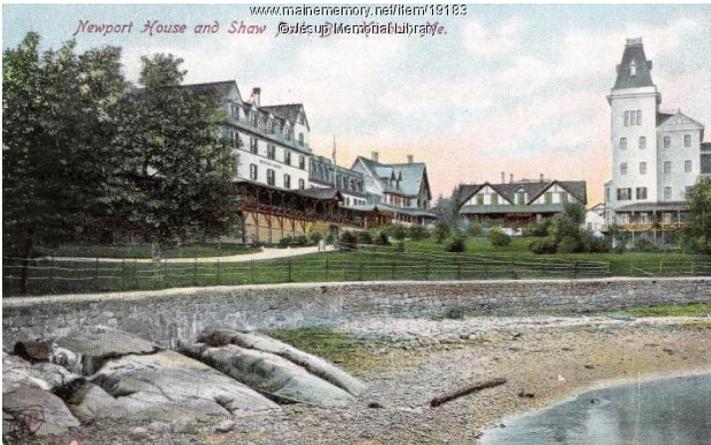
Why Do We Need to Protect Scenic and Cultural Resources?

Stories are a part of every landscape. Archaeological evidence exists for the seasonal villages and temporary encampment sites of the Wabanaki peoples. Mount Desert Narrows, Northeast Creek, Hadley Point, Salisbury Cove, Hulls Cove, and Bar Island Sandbar serve as reminders of the ways of life of the first peoples of Maine. Native peoples' use of local habitats and resources have long helped maintain MDI's beauty and integrity.

European explorers and missionaries landed on the island in the 1600s; by the 1800s settlers were arriving in large numbers to engage in fishing, shipbuilding, farming, and lumbering. Beginning in the mid-1800s, landscape painters, primarily from New York, came to spend summers on the island. Awed by the scenic beauty of the area, they captured it on canvas. Their city art shows attracted other summer residents who wanted to see for themselves the rocky shores and pristine places displayed in galleries and in print. Some of these works are exhibited in prominent museums including the National Gallery of Art in Washington DC.

Over a Century of “the Best Kind of Work”

In the late 1800s the perceived loss of American wilderness led to a greater interest in preserving scenic areas and improving community life. Locally this movement resulted in the formation of the Bar Harbor Village Improvement Association ("VIA") in 1881.



The long-standing mission of the Bar Harbor VIA is to “preserve and develop the natural beauties of the place, and to enhance their attractions by such artificial arrangements as good taste and science may suggest...” Over the years the Bar Harbor VIA has been recognized as providing “the best kind of work of which such an organization is capable,” with particular attention given to their work on scenic roads, a bicycle path, and foot-paths “giving access to picturesque localities.”

The success of the Bar Harbor VIA led to the incorporation of other village improvement societies and associations on Mount Desert Island at the turn of the century. Unlike most VIAs in the country at the time, these societies worked cooperatively through a joint path committee. Their combined efforts created approximately 250 miles of recreational walking paths across the island.

The Bar Harbor VIA is likely the town’s longest running non-profit organization. The VIA’s Board of Directors and officers meet annually to prioritize projects and update policies as needed. One of the first functions of the newly formed VIA in 1881 was the care of the Shore Path, which it still maintains today. Besides maintaining the historic Shore Path, the VIA was gifted the natural areas of Glen Mary Park in 1894, cares for the How Memorial behind the Wonder View Inn, and owns Bald Rock in Frenchman Bay. Local structures that have benefited from the VIA’s recent work include the Village Green Clock and the Veterans’ Memorial, as well as the Hulls Cove Schoolhouse.

Working with private partners, the Bar Harbor VIA continues to do “*the best kind of work*” giving residents and visitors alike access to beautiful, historic, and safe places in the community.

Open Space Planning

Local community organizations have a tradition of working collaboratively with Town Government, landowners, developers and the public to actively plan for, protect, and manage open space resources in the area. The examples of private landowners voluntarily allowing the Shore Path to cross their land for the good of all, and other citizens donating land parcels for community enjoyment and recreation illustrate the vital role private sector organizations can play in conservation. The long-standing efforts of the VIA continue to benefit all members of the Bar Harbor community.

Source: Personal Communication, Dick Cough, President, Bar Harbor VIA

Through generous land donations, Acadia National Park was created in the early 1900s to preserve significant natural and cultural areas for the enjoyment of all. Generations of seasonal visitors have descended upon Bar Harbor to soak up the scenery ever since.

A large service industry grew out of the need to accommodate the increasing influx of tourists. Seasonal and year round businesses and institutions were established. All of these people and their relationships to the environment have helped shape the natural, historic, and cultural landscape we know today. Our scenic and cultural resources, including ANP, are significant reasons why Bar Harbor continues to thrive as an international tourist destination.

The Town of Bar Harbor has important cultural and scenic resources that do not exist within the boundary of ANP. The Park boundaries were set by Congress in 1986 and are not likely to change. Future efforts to protect these assets must be accomplished by other means.

Celebrate What We Have

Scenic Resources

In 2006, the Town held public visioning sessions as part of the Comprehensive Plan development process, which resulted in a list of “Favorite Places” important to local residents. Some of these places are open spaces valued for their scenic nature or shared human heritage: Agamont Park, the Village Green, Northeast Creek, Hadley Point, Hulls Cove Beach, the Bar Island Sandbar, Town Beach, Kebo Valley Golf Course, College of the Atlantic’s campus, and the Blagden Preserve (Figure 8). People voiced concerns about disappearing farmlands, waterways, tree-lined roads, and the nighttime scenery of starry skies in Bar Harbor.

In addition to the 2006 list of “Favorite Places,” in 2009–2010, the Hancock County Planning Commission (“HCPC”) conducted an inventory of scenic coastal views from public places, such as roads, parks, waterbodies, hiking trails, and scenic roadside turnouts in Bar Harbor and throughout Hancock County (Figure 8).¹ The definition of scenic resources used by the HCPC is: “Public areas, features, and sites that are recognized, visited, and enjoyed by the general public for their inherent visual qualities.” Volunteers traveled the main roads of Bar Harbor and used the State of Maine’s Scenic Assessment Handbook² to assign points and rank each view based on eight indicators of quality, such as shoreline configuration, water views, vegetation, and landscape composition. Fourteen views

were ranked in the Town of Bar Harbor (Table 8). A score of 70 or above ranked the scenic view as one of state or national significance. Those with scores of 50–69 were deemed of regional significance, and those from 30–49 are of local significance.

The scenic inventory recommends that future work be done on each of these views to measure visual accessibility (i.e. the area’s traffic density) and public recognition (i.e. if the view is identified in a comprehensive plan, scenic byway corridor plan, or other public documents).

Route 3 is deemed an All-American Roadway by the National Scenic Byways Program, therefore its views have additional significance to a large population of

Table 8. *Ranking of scenic views in Bar Harbor.*

Scenic View	Total Score	
Cadillac Mountain Summit	95	} State or National Significance
Bar Harbor Town Pier	92	
Eagle Lake (from 233)	82	
Old Soaker	82	
MDI Bluffs (Rt. 3)	79	
Northeast Creek (Rt. 3)	77	
Oak Hill Cliff	72	
The Causeway (view west)	70	} Regional Significance
Salisbury Cove	58	
Bubble Pond (from parking lot on Park Loop Rd.)	57	
Hulls Cove (Rt. 3)	56	} Local Significance
The Causeway (view east)	45	
Hamilton Pond (Rt. 3)	39	
Jones Marsh	39	

Source: HCPC, 2010



Millions of visitors enjoy the scenic views of Bar Harbor every year from the top of Cadillac Mountain.

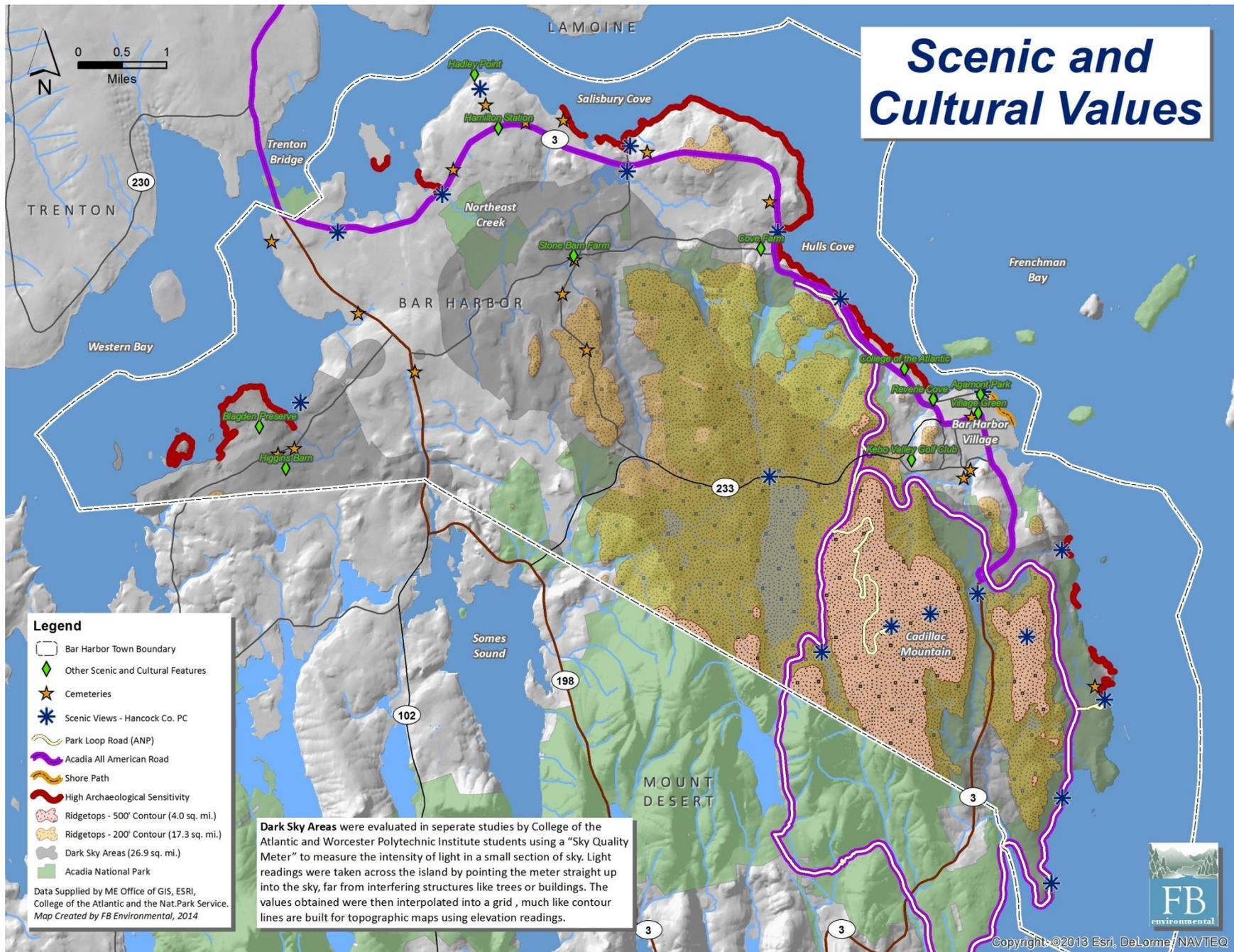


Figure 8. Scenic and Cultural Resources in Bar Harbor as of 2013.

visitors that drive along it.

Additional work could also be done to identify the areas that are critical to maintaining the scenic qualities of the public views inventoried by HCPC.

MCHT has performed viewshed analysis on MDI. This high-resolution data enables MCHT to factor in elevation, tree composition, and other factors to determine what areas can be seen from a viewpoint. This will help identify areas for protection for scenic qualities. MCHT conducted viewshed analysis from four locations in Bar Harbor as part of the OSP development process (Figure 9). This analysis could be replicated for other locations in the town, as well as from the waters of Frenchman Bay, looking towards the mountains of MDI, to better assess the scenic impacts of proposed developments.

Undeveloped Hilltops

While much of Bar Harbor's highly scenic land is protected in Acadia National Park, there are important privately held lands that were identified in the Comprehensive Plan as "Favorite Places." Some of these are protected through conservation easements which were entered into voluntarily by landowners (e.g. the fields along Crooked Road at the Stone Barn, and the fields along the Cromwell Harbor Road), but others may not have such protections (e.g. Kebo Valley Golf Course, Hamilton Station, etc.).

Voluntary maintenance and management of large tracts of land including the fields around the Stone Barn and the large tract of land maintained by the MacQuinn family on Route 3 preserve scenic vistas in their natural or historically agricultural state. These and other landowners should be recognized for their stewardship efforts.



Photo: John Kelly

Privately held hilltops (greater than 200 ft) in Bar Harbor are vulnerable to development pressures.

CASE STUDY:

Protecting Bar Harbor's Scenic Hills

Many of Bar Harbor's mountain summits, such as Dorr and Champlain Mountains, are protected from development because they are inside Acadia National Park. Several smaller summits that are closer to downtown Bar Harbor remain in private ownership. These hill properties are very important to protecting scenic views within Bar Harbor, as well as from Acadia National Park and Frenchman Bay. **The following are examples of tools that have been used to ensure that the scenic qualities of these properties remain.**

- 1) **A conservation easement** has been used by the Thorndike Family to protect portions of Amory Hill, an 18-acre property bordering Spring Street and the Cromwell Harbor Road in Bar Harbor. The eight acres under easement form an undeveloped field cherished by many as a good location to view deer and wild turkeys. The higher elevation portions of the property contain a main house and guest house and have wonderful water and mountain views to the east, west, and south. Conservation easements are perhaps the best way for landowners to retain their property, while ensuring that important scenic values are protected for the public.
- 2) **Landscaping, fully shielded light fixtures, and natural colors** are being used by the developers of a new Hampton Inn hotel on Norman Road to help the structures blend into the environment. As the hotel will sit on a hilltop visible from the Acadia National Park Loop Road, the developers agreed to seek permission from the Hampton Inn chain to use a brown color scheme to lessen the visual impact from park viewpoints. Other hotels in the area could consider using these voluntary scenic protection measures.
- 3) **Height restrictions** have been secured by the Town of Bar Harbor as a way to prevent future buildings on a Strawberry Hill property from towering above the tree line. In 1980, College of the Atlantic granted a conservation easement to the town on this property that, among other things, limited the height of future buildings on the property to 30 feet if flat-roofed, or 36 feet if the roof is angled. Such height restrictions help keep structures close to the tree line, thereby protecting scenic views.

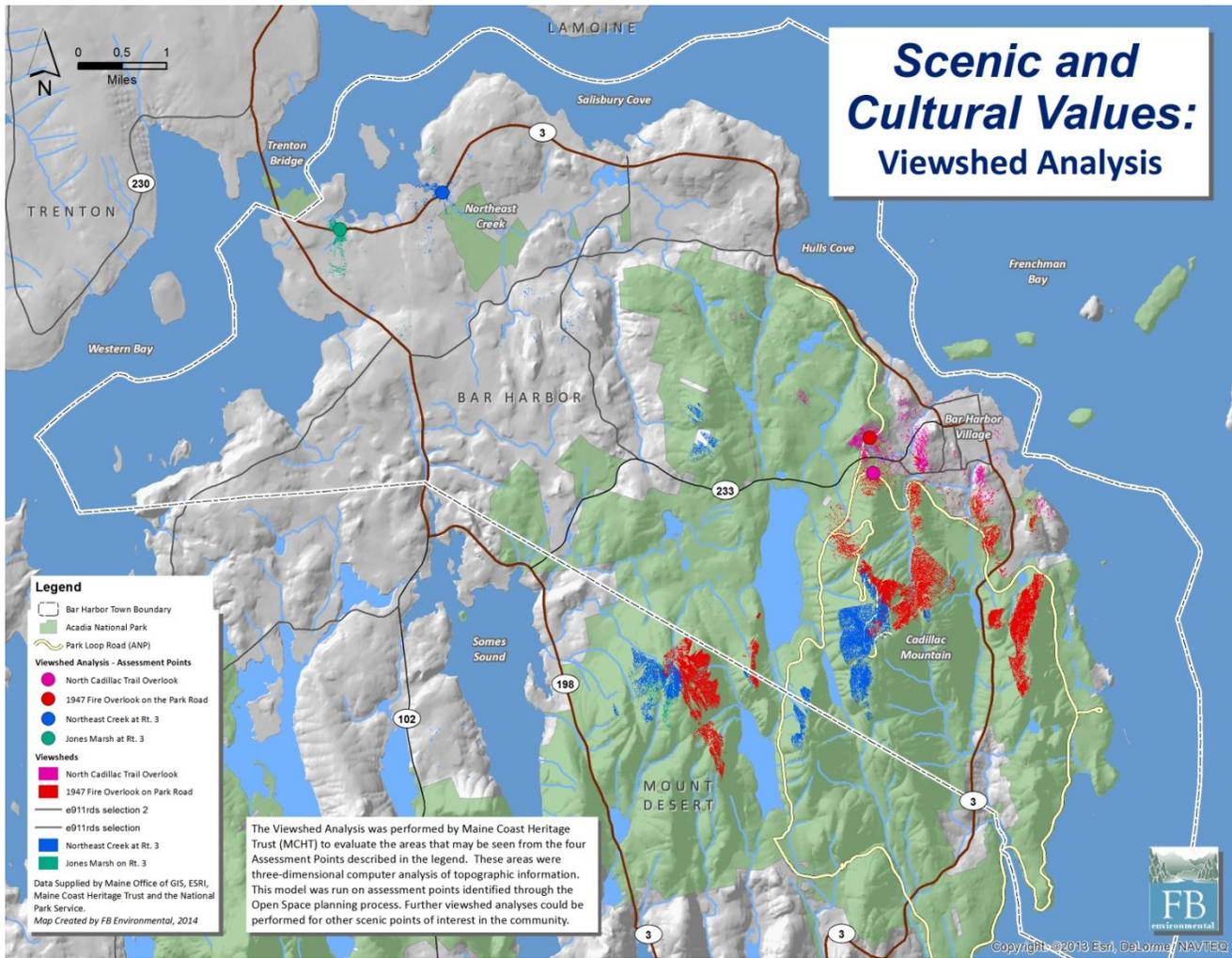


Figure 9. A viewedshed analysis for four locations in Bar Harbor.

Inevitably, landowners may consider development of their properties. Mechanisms like conservation subdivisions, which concentrate development on a portion of the property, leaving the rest as conserved open space, can provide the flexibility to help protect the landowners' legacy of stewardship in perpetuity.

Properties located on higher elevation lands and ridgelines are particularly important for open space protection, as buildings and other structures stand out on the horizon. The scenic values of hilltops can be protected through a variety of means including voluntary and incentivized conservation easements, and building height or architectural design restrictions.

Approximately 17.3 square miles of land in Bar Harbor is located on ridgetops above 200 feet in elevation. Of this total area, 4.0 square miles are above 500 feet (Figure 8). While much of this land is located within the ANP boundary, there are several prominent hilltops outside of the park with scenic values that should be preserved.

Dark Night Sky

Another distinctive feature mentioned in the 2007 Comprehensive Plan as one of Bar Harbor's favorite resources, is our dark night sky.³ As light pollution increases throughout the eastern United States, Bar Harbor and ANP are becoming a destination for



Photo: Stellarium

Example of dark sky scale ranging from 1: "Excellent dark sky site" to 9: "Inner City sky".

Protecting Bar Harbor's Dark Night Skies

“Presently more than two thirds of the US population cannot view a clear dark sky... The lightscape of Acadia National Park is of great value and significance not only to the park itself, but also to the entire Mount Desert Island area and neighboring communities”³.

Bar Harbor is fortunate to be one of the darkest places on the East Coast of the United States. Low levels of light pollution enable residents and visitors to see the Milky Way, satellites, and a plenitude of stars and planets. Dark night skies are recognized as important natural resources worthy of protection by the Bar Harbor Comprehensive Plan, as well as the National Park Service's Management Policies. The town passed a lighting ordinance in 2007 that requires new development projects to adhere to dark sky lighting standards by implementing protection measures, such as using fully-shielded outdoor lighting. Bar Harbor, Acadia National Park, and the surrounding communities annually celebrate the region's dark night skies through the Acadia Night Sky Festival (www.acadianightskyfestival.com).

The Problem- Bar Harbor's lighting ordinance requires that new development projects take steps to preserve night skies. It also requires correction of the most egregious sources of light pollution on existing development (such as those causing glare on roadsides or the water), and it recommends that as non-conforming light fixtures are replaced, they are converted to dark sky compliant fixtures. The difficulty lies in monitoring and enforcing the ordinance on existing development.



Photo: Acadia National Park

The photograph on the left demonstrates glare created by an unshielded outdoor light fixture at Acadia National Park's entrance station. Upon renovating the station and using fully shielded outdoor lighting fixtures that direct light downward where it is needed, the National Park Service was able to better illuminate the entrance station and reduce light pollution and glare.

Recommendations- Additional steps should be taken to encourage residents, businesses, and Emera Energy to convert outdoor lighting to fully-shielded light fixtures that direct light where it is needed rather than allowing it to bleed upward into the atmosphere. Acadia National Park and The Jackson Laboratory have taken great strides to replace wasteful outdoor lighting fixtures (see photographs above). The town could also work with Emera Energy and funding partners to convert street lights to dark sky compliant fixtures. All of these efforts will help ensure that Bar Harbor's night skies remain dark so that future generations can continue to enjoy the town's scenic celestial resources.

stargazers. The quality of Acadia’s night skies was first inventoried by College of the Atlantic students in 2008, and then updated by Worcester Polytechnic Institute in 2013.⁴ According to the report, the MDI area is one of the most accessible and highly visited places in the eastern United States where a clear, dark sky can still be seen, showing a vast number of stars and a clear view of the Milky Way.⁴

While Bar Harbor does not have the darkest skies on MDI, it still has very high quality locations (approximately 27 square miles) worthy of protection (Figure 8). The Acadia Night Sky Festival, which is based in Bar Harbor, has grown into a popular autumn tourism event that celebrates our night sky. It attracts over 5,000 visitors and has gained national and international press coverage.

Protecting this resource requires education, building and design standards for illumination, and sensible use of lighting on roadways in collaboration with utility companies. Bar Harbor should work with surrounding communities to achieve dark sky preservation goals. Design guidelines for shielded lighting should be enforced, and the Design Review Board will need to remain vigilant to ensure that the lighting ordinance is revised as needed when new lighting and signage styles and technologies emerge. A demonstration of lighting on public buildings was recently performed at MDI High School as a student project. Dark sky protection is also compatible with public safety through reduced glare and increased night vision.

Table 9. Historic archaeological sites in Bar Harbor, Maine.

Name	Type	Time Period
Winskeag Settlement	Native American Homestead	17th & 18th Cent.
Indian Point House	American Domestic	19th Cent.
Schooner Head Battery	American Gun Battery	19th Cent.
Pray Meadow House #1	American Domestic	19th & 20th Cent.
Pray Meadow House #2	American Domestic	19th Cent.
C.J. Hall Quarry	American Quarry	19th & 20th Cent.
Water Tower or Standpipe	American Water Tower	19th Cent.

Source: MHPC



The Village Green, circa 1908.

Source: Maine Memory Network

Cultural Resources

Cultural resources are often associated with human activities; and may include areas traditionally used for economies, religion, recreation, food, and medicine, as well as historic buildings and cemeteries. For the purposes of the Open Space Plan, historic buildings are not included. The Village Green; Northeast Creek; the Bar Island Sandbar; and Kebo Valley, one of the oldest golf courses in the country, are examples of cultural land assets identified by Bar Harbor residents as significant. Northeast Creek and Bar Island have also been recognized by the Maine Historic Preservation Commission ("MHPC") as having Native American sites.

The very nature of cultural resources makes them unique and irreplaceable. Because their preservation and maintenance is potentially impacted by changing climate, advance planning is needed. Potential flooding, more frequent and powerful storms, rising seas, and changing vegetation related to climate change will require monitoring, documentation, and adaptability in in order to conserve the traditional sense of place and community stewardship.



Ledgelawn cemetery is the largest cemetery in Bar Harbor.

Photo: Sarah Inghram

Historic and Prehistoric Archaeological Sites

Seventeen sites of prehistoric archaeological significance (below ground) have been identified in Bar Harbor. These sites date back as far as 6,000 – 7,000 years. All are located on the shoreline, and in general, are threatened by human impacts from development, amateur digging, and natural forces such as sea-level rise and storm erosion.

Seven additional sites within the town boundary have been identified as historic archaeological sites by the MHPC (Table 9), but their exact location has not been mapped to prevent damage. In addition, historic trails have been mapped by the Olmsted Center for Landscape Preservation (Pathmakers: Cultural Landscape Report for the Historic Hiking Trail System of Mount Desert Island). While a number of prehistoric sites have been identified in the past, there is no record of a professional historic archaeological survey for Bar Harbor.

Cemeteries

Cemeteries are important to Bar Harbor's open space because, presumably, they will never be developed, and they are located all across town (Figure 8). Cemeteries are important open spaces that provide habitat for plants and animals, provide peaceful walks and scenic views, and provide a historic record of town residents.

According to Cemeteries of Cranberry Isles and the Towns of Mount Desert Island,⁵ there are 22 cemeteries in Bar Harbor, ranging in size from a single stone to more than seven acres.

Bar Harbor cemeteries are managed through a variety of mechanisms. Some are town-owned and maintained; others are owned or maintained by non-profit organizations. The majority, however, are private burying grounds. Ledgelawn, the largest cemetery in Bar Harbor, has also granted easements to the town and to Friends of Acadia for construction of sidewalks and trails along its perimeter.

A Note about Development near Archaeological Sites

Maine statutes (30-A MRSA 4401-4407 and 38 MRSA 435- 449) require that archeological surveys be conducted if a subdivision is proposed within or adjacent to areas deemed to be archeologically sensitive or potentially sensitive or archeological sites that are listed or eligible to be listed in the National Register of Historic Places.

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The Future of Recreation in Bar Harbor

Outdoor recreation is not a new concept for the residents of Bar Harbor. With 44% of the town's land area within Acadia National Park, the town benefits from easy access to premier recreational opportunities such as hiking, swimming, biking, bird watching, horseback riding, snowmobiling, and cross-country skiing.

Outdoor recreation has many benefits, including:¹

Good for the economy: Recreation boosts economic growth by creating job opportunities, enhances tourism that supports local business, and increases property values.

Good for nature: Recreation provides environmental benefits by raising ecological awareness, appreciation for the natural world, and greater public involvement in environmental issues.

Good for the body and mind: Psychological benefits of recreation include the reduction of stress, improved self-esteem, confidence, creativity, and personal growth. Outdoor activity supports aerobic, cardiovascular, and muscular fitness as well.

Good for social life: Recreation instills pride in the community and affords social benefits such as bonding with friends and like-minded people.

A Vision for Recreation in Bar Harbor

Our vision for the future of recreation in Bar Harbor is one where the town continues to be a world-renowned recreational destination for residents and visitors alike. Town recreational areas will address the needs of residents and vacationers of all ages. There will be improved public access to our more than 25 miles of coastline for boating, swimming, and fishing. The town has become more pedestrian-friendly, with roads and paths for biking, running, and walking. These pedestrian friendly paths and lanes will connect the family-friendly recreation areas interspersed throughout town. Our villages: Salisbury Cove, Bar Harbor, Otter Creek, Halls Cove, and Town Hill will provide public recreational access to the diverse natural environments and public open spaces in our town.

Future generations will have year-round access to convenient outdoor recreation in our pleasant surroundings. Conservation land in rural areas will provide opportunities for traditional outdoor pursuits,



Photo: Billy Helprin (Maine Coast Heritage Trust)

Preserving open space provides outdoor recreation opportunities that benefit our mind, body, spirit and the local economy.

while the quality of life in new and older neighborhoods is enhanced by trees, nearby parks, quiet streets, and pedestrian and bicycle connections to other neighborhoods, parks, ball fields, schools, and nature preserves.

A History of Trail Building in Acadia National Park²

The Town of Bar Harbor is intricately connected to the trails at Acadia National Park. This connection began in the late 1800s, a period of extensive planning and trail building, much of which was sponsored by local village improvement societies such as the Bar Harbor Village Improvement Association. By 1915, more than 200 miles of trails existed on Mount Desert Island. Even today, local groups such as Friends of Acadia provide resources to repair the over one hundred miles of trails in the park.

Source: National Park Service²

Why Do We Need to Protect Recreational Resources?

Acadia National Park is a valuable resource, serving as a significant recreational asset to residents of Bar Harbor. Access to healthy, fun outdoor activities is the underlying motivation for many residents to live here and for most tourists to visit and support the local economy. Recreational resources not only draw in potential customers for traditional tourism businesses, but also provide opportunities for entrepreneurs to start recreation-based businesses. Beyond these economic factors, access to outdoor recreation is simply the life-blood of a healthy, happy community.

As a town, we can choose to support this access in a number of ways. For example, Eagle Lake not only serves as the town's public drinking water supply, but also provides year-round recreational opportunities. However, public access to town-owned beaches for recreational uses, such as fishing and boating, remains limited. A few town-owned water access areas, such as Northeast Creek and the public beach near the Town Pier, have shown signs of high nutrient loading and will require vigilant management.

Pedestrian & Bicycle Connections

Pedestrian connections within the village of Bar Harbor are strong. However, bicycle connections from neighborhoods to our public open spaces (including town parks) and among different town villages is difficult. Encouraging bicycling and pedestrian transit has the added benefit of preserving open space by



Photo: Kathy Van Gorder

Winter in Bar Harbor provides a multitude of recreational opportunities as seen here at Northeast Creek.

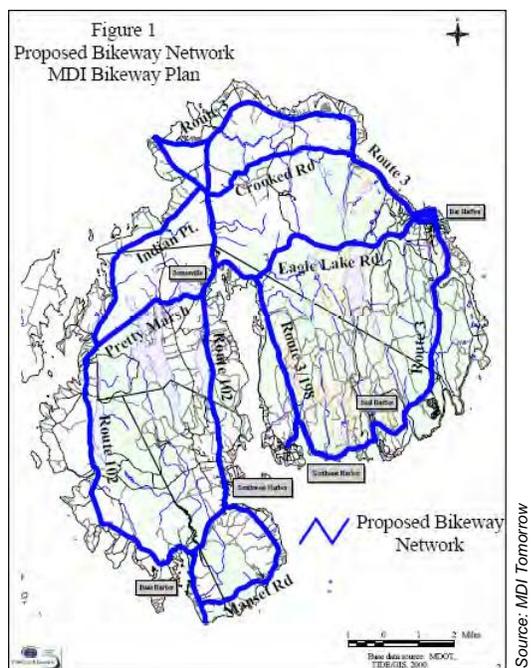
reducing parking and traffic congestion in the village, as well as at larger campuses like the Jackson Laboratory and College of the Atlantic.

In 2003, MDI Tomorrow commissioned a study to examine bicycle and pedestrian topics on the island. A survey conducted as part of the study found that 18% of respondents used a bike some of the time for transportation purposes. When those who did not use bikes were asked why they had made that choice, more than twenty percent cited unsafe roads as the reason. Almost seventy percent felt that encouraging walking and biking should be a high or very high priority for the future of the MDI area. Eighty-five percent supported the strategy of widening road shoulders and adding sidewalks to encourage walking and biking.

In 2002, the Maine Department of Transportation ("DOT") contracted to develop a Bikeway Plan for Mount Desert Island.³ Primary purposes of the plan were to guide public investment to improve bicycle facilities, increase safety, and stimulate increased use of bicycles for transportation and recreation. Over 70 miles of potential bikeways were presented for further analysis (Figure left). The plan concluded that bicycling could be best encouraged and promoted by widening road shoulders in appropriate locations and by providing bicycle racks at key destination points and downtown locations to ensure secure and convenient bicycle parking.

Robust Recreational Opportunities

Acadia National Park is a wonderful resource for the Town of Bar Harbor, but it is not our only valuable open space resource. Promoting greater awareness of additional opportunities for recreation can safeguard tourism in the event of unexpected disruption in park



Proposed bikeway network for MDI.

access, and provide quiet places for residents and visitors during the heavily trafficked seasons.

In 2013, the federal government shut down from October 1st through the 16th, peak foliage season for the tourists and town residents who benefit from the natural beauty of the fall foliage. Aside from the obvious economic effects of losing business from leaf-peepers, another outcome of the shutdown, and temporary closure of Acadia National Park, was that residents, who were accustomed to easy access to recreation, turned to recreational opportunities outside of the park.

Recreational Facilities and Amenities

Another documented need in Bar Harbor is preservation of open space for recreational facilities and amenities to support "active recreation," especially on the western side of town, where many year round residents are concentrated.³ This includes public playgrounds and ballparks for our youth and families. Town Hill Playground, a popular location for families with small children, is a great example of a public/private arrangement to preserve recreational open space.

Cross-Island Trail

Residents of Bar Harbor have indicated their desire to establish a Cross-Island Trail. The purpose of the trail would be to provide connections from community to community, and access to open space and recreational opportunities. The Comprehensive Plan calls for the town to work with agencies, non-profits, and property owners to obtain easements and construct linkages to establish the trail. Progress toward the Cross-Island Trail should be reviewed to determine the need and feasibility of obtaining this goal.

Celebrate What We Have

Acadia National Park

The Town of Bar Harbor has an excellent relationship with the National Park Service, and will continue to support their mandate to protect and maintain ANP. The park occupies 44% of Bar Harbor's land area. ANP contains more than one hundred miles of trails and 45 miles of carriage roads, providing access to walking, hiking, bicycling, jogging, and horseback riding. ATVs are not allowed anywhere in the park, but snowmobiles are allowed on most paved roads, and on some of the carriage roads. Cross-country skiers and snowshoers have access to the carriage roads and trails, and the unplowed portions of the Park Loop Road. In addition, lesser known activities, such as skateboarding, are allowed on the Park Loop Road when it is clear of snow



Photo: National Park Service

Bicyclists enjoying use of the Carriage Roads near Eagle Lake in Acadia National Park.

but still closed to vehicle traffic (between December and April).

Acadia National Park provides access to many of the most scenic parts of the famous rocky Acadian shoreline, as well as Sand Beach (the town's primary swimming beach) and Compass Harbor beach. The park also holds conservation easements on lands that are not generally open to the public yet provide open space values other than recreation, such as high-value natural or scenic resources.

Town Parks

At the turn of the century, village improvement associations created some of the smaller town parks that are treasured to this day. These types of voluntary, community-minded efforts set a precedent for open space protection and access to public recreational opportunities totaling 33 acres of land in Bar Harbor (Table 10). Along the Bar Harbor shoreline, the Town owns oceanfront access at the Town Pier, the beach at Agamont Park, and the park at Hadley Point. The Town owns and maintains the only two boat ramps in the community: a concrete ramp at the Town Pier and another concrete ramp at Hadley Point. Other points of public access include: Indian Point Town Landing and Clark Cove (public road), Northeast Creek/Thomas Bay, The Bar, Bridge Street, 1 West Street, and Grant Park. Many of these launch sites are best used with small boats and at high water.

The Town owns a number of other recreational facilities including the Ball Field, several public parks, playgrounds, and picnic areas (Table 10). These facilities are located relatively close to town and provide opportunities for local residents and visitors. The town also holds a conservation easement on the 4½ acre Millbrook Preserve off Old Norway Road.

Table 10. Bar Harbor town parks & facilities as of 2013.

Name	Size	Description
Agamont Park	1.52ac	<i>Located on Main and West St., this park includes a partially shrub and tree shaded lawn overlooking the waterfront, harbor, and Porcupine islands. Located in town and used for events like open-air art shows. The park adjoins the grounds of the Bar Harbor Inn on the east side. Agamont Park received extensive renovations in 2005.</i>
Athletic Field/Ball Field	13.34 ac	<i>The Ball Field is located about three-quarters of a mile from the center of town on Main and Park St. Facilities include: two Little League fields, three soft ball fields, two tennis courts, one basketball court, one skateboard ramp (across the street), and two large green areas. A year-round skate park is located at the Athletic Field for ice-skating and skate boarding. One of the town's most popular recreational areas, the Ball Field is used constantly for games, events and private pursuits. The Athletic Field's deed restricts use to recreational pursuits only. Three lots, with about 40 spaces, provide parking for the Ball Field. Parking is also available on nearby streets.</i>
Barker Park	5,500 sf	<i>Barker Park, at 53 Cottage St., is a small in-town park next to the post office. The park was purchased by the town in 1998. The Park provides bench seating and a granite sculpture.</i>
Glen Mary Pool	5.9 ac	<i>Located at Glen Mary and Waldron Rd., this park has a wading pool, restrooms and changing room. The pool is open for swimming in the summer and serves as a skating surface in the winter. The Parks and Recreation Committee have recommended the drainage around the pool be upgraded and the surface of the pool needs to be reconstructed and painted. There is parking for some cars in a lot at the park.</i>
Grant Park	1.79 ac	<i>Located on the shore off Albert Meadow, this park is used regularly but not as heavily as Agamont Park and the Village Green. It attracts residents and visitors, has parking for about 45 vehicles, and provides access to the privately owned Shore Path. Grant's Park is one of the last town parks still needing renovations. The first step in developing a master plan for the renovation is a survey, scheduled to take place in FY08.</i>
Hadley Point Landing/Picnic Area	5.24 ac	<i>Hadley Point offers access to the shore for boaters, clammers, picnickers and walkers on Hadley Point Rd. It is the most easily accessible spot for recreational clammers. There is a newly reconstructed boat launch. The park has a small lot for cars.</i>
Harborview Park	0.27 ac	<i>Located on West St., this waterfront park, built in 1989, is a deck between the two largest private wharves along West Street. It is an ideal location to watch harbor and street activities, as well as being a good rendezvous site. Furnishings include benches and a couple of planters. Parking is available in front of the park, along West Street.</i>
Millbrook Preserve (Falls)	4.5 ac	<i>This is a 4.5-acre property surrounding two waterfalls on Old Mill Brook. It was created to provide opportunities for day-time, low-impact outdoor recreation, natural observation and study by the public. The land was granted to the town in 1995 with protective conservation easements held by the Coastal Resource Center.</i>
Park Street Playground	0.59 ac	<i>Located across from the Athletic Field on Park St., the playground is within easy walking distance of several of the town's largest neighborhoods.</i>
Town Hill Playground	0.23 ac	<i>Community built playground: a portion of the land is owned by Blackstone Properties, LLC. The playground has equipment and a woodchip base.</i>
The Village Green	1.4 ac	<i>The Village Green is centrally located in the heart of the downtown on Main and Mount Desert St. The park sees a great deal of use both during the day and at night. Parking for the Green exists along the streets and in the nearby municipal lot, which holds about 110 cars. The Village Green was renovated in 2001.</i>

Additional public recreational opportunities associated with the town include:

The Bar- Located on Bridge St., a traditional walking area at low tide, kayak launching area.

Connors-Emerson Elementary School- A playground for use by students at Eagle Lake Rd. and Eden St.

Mount Desert Island High School- Located on Eagle Lake Road. Running track, tennis courts and athletic practice fields.

Route 3, Head of the Island- This pull-out picnic area is maintained by the Chamber of Commerce.

State and Land-Trust Resources

Additional land in Bar Harbor has been protected by the State and private land trusts, which provide public access, recreational opportunities, and/or open space protection. The MCHT and Maine State Parks and Public Lands hold easements on land in Bar Harbor (refer to Chapter 1 for holdings). Some of the MCHT easements on private land are open for public use, such as the Acadia Ridge Trail.

Private Facilities Open to the Public

There are numerous examples of privately owned lands accessible to the public for recreation (Table 11). The primary private facility that provides recreation in Bar Harbor is the Kebo Valley Golf Club. Kebo Valley opened in 1888, providing a new type of recreational opportunity in town. Kebo Valley describes itself as a "sanctuary, even to those who have never played the game of golf. It preserves hundreds of acres of land in their natural state, providing recreational resources which help draw thousands of visitors to Mount Desert Island... a haven amidst the hectic pace of a Bar Harbor summer."⁵



Photo: John Kelly?

The Town Hill Playground provides a safe, in-town recreational experience for families. Permanent protection is needed to prevent this privately-owned land from future development.

Table 11. Other recreational land/facilities open to the public as of 2013.

Name	Size	Description
Acadia Ridge Trail	2 mi	<i>This nearly 2-mile public trail meanders across privately-owned land abutting Acadia National Park from Norway Drive to the Acadian Woods Road. It was created through conservation easements donated to Maine Coast Heritage Trust, and is managed and maintained by Friends of Acadia.</i>
Blue Horizons Preserve	83 ac	<i>Maine Coast Heritage Trust's Blue Horizons Preserve is located in Town Hill on Indian Point Rd. The preserve protects scenic views along the Western Bay shoreline and offers recreational hiking opportunities for the public.</i>
Blagden Preserve	110 ac	<i>The Blagden Preserve is a 110 acre preserve on old estate grounds owned by the Maine Chapter of The Nature Conservancy. It is open to the public year-round and provides access to the shore. There are a series of trails through the woods to Western Bay. The preserve is open for day use year round. Picnicking, boat launching, and swimming are prohibited.</i>
Kittredge Brook Forest Preserve	516 ac	<i>Maine Coast Heritage Trust's Kittredge Brook Forest Preserve protects Kittredge Brook, MDI's longest unimpeded stream, and contains a recreational trail system that connects local neighborhoods with the island's high school. The trails provide connections to adjacent conservation lands and Acadia National Park.</i>
Pray's Brook Marsh	17 ac	<i>Pray's Brook Marsh Preserve, owned and managed by Maine Coast Heritage Trust, is a small, 17-acre preserve bordering Pray's Brook. Access is via Wetland Way off Oak Hill Rd. The preserve is a good location for watching wildlife.</i>
Shore Path	1/2 mi	<i>This nearly ½ mile path begins at the town beach and runs along the shore past inns, summer cottages and the town park. The path was built in the 1870s. It traverses private land for almost all of its length. The path is maintained by the Village Improvement Association and the landowners. Parking for the path is available at the town pier and at Grant Park. There is another access trail near the middle of the path.</i>
Kebo Valley Golf Club	~ 200 ac	<i>The Kebo Valley golf course is a private club that allows members of the public to play for a fee. The club facilities include an 18-hole golf course, a pro shop, locker rooms, a restaurant, snack bar, lounge and banquet room for up to 150 people. The course is open for golf from May to October. In the winter, the public is allowed free access to the course for sledding and cross-country skiing. The club has ample parking space.</i>

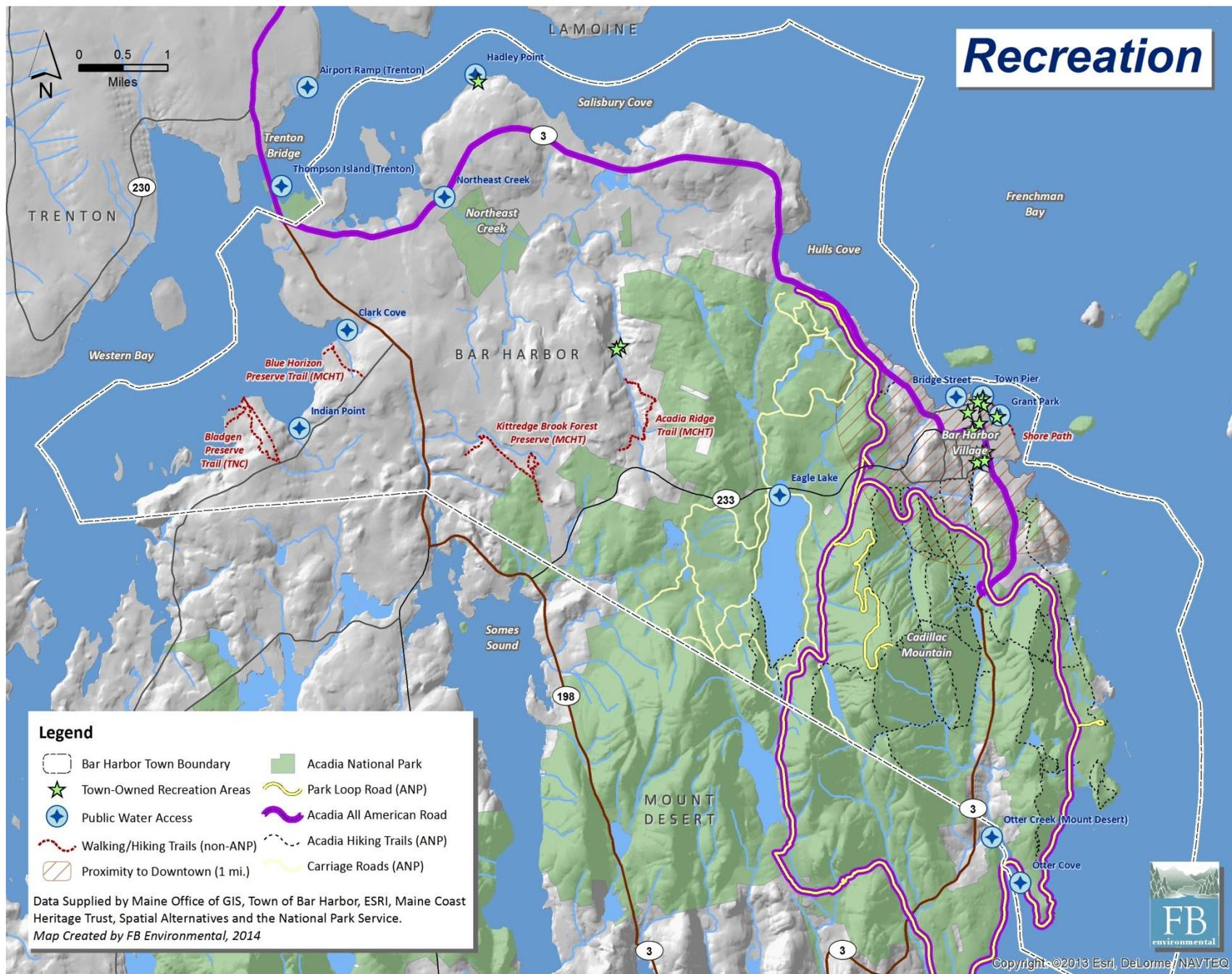


Figure 10. Recreational resources in Bar Harbor as of 2013.



Photo: Billy Heppin (Maine Coast Heritage Trust)

Multi-use trails provide year-round recreational opportunities such as winter hiking.

While privately owned facilities provide public access today, there is no guarantee that their status will not change in the future. As private development affects the rural districts and outlying villages, the Town should consider further development of public pathways and parks. The Town can assist residents of outlying villages to establish such parks on undeveloped land.

Additional Recreational Opportunities:

The Bar- Accessed from Bridge St., the sand bar between Bar Island and MDI is a traditional walking area at low tide and a kayak launching site.

Connors-Emerson Elementary School- Located at Eagle Lake Rd. and Eden St., the elementary school has a playground for use by students.

Mount Desert Island High School- Located on Eagle Lake Road, the high school offers a running track, tennis courts, and athletic practice fields.

Route 3, Head of the Island- This pull-off rest area is maintained by the Chamber of Commerce. An ANP picnic area on Thompson Island also affords a scenic recreational space for travelers on their way to Bar Harbor.

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The Future of Working Lands in Bar Harbor

Bar Harbor's economy and culture has long been dependent on the rich natural resources of our region, both on land and at sea. Our farmlands, working forests, and working waterfronts support a significant percentage of year-round residents through agricultural, marine, and tourism related industries. At the same time, these lands and waterways are critical for the character of our community, as working areas and as recreational areas. This chapter seeks to outline how our farmlands, working forests, and working waterfronts are used today, and how to ensure such uses continue in conjunction with the town's open space goals.

A Vision for Working Lands

Our vision for the future is one where the community continues to foster active use of working lands to the realization of numerous benefits. The growing interest in food security and the availability of healthy, locally grown food has already led to a renaissance of farming in Bar Harbor and the region. Farms are specializing and customizing to meet individual situations and markets. Local farms will create jobs, provide local fare to residents and visitors, and help retain a mosaic of landscape types that provide scenic open space and diverse habitats for native plants and animals. Protecting farmland in Bar Harbor will result in an increase in the number of small-scale local farms that can supply specialty products to local niche markets.

Because local attitudes toward farming are changing, more land is actively farmed and more food staples for Bar Harbor residents will be produced and processed locally. The sights, sounds, and smells of farming can continue to be commonplace around town. The farmer's markets can continue to thrive, and the availability of local products will increase at town grocery stores. Programs to help those lacking access to fresh, local foods are in place, and residents throughout town can become more aware of the benefits of local food. Bar Harbor and MDI schools can incorporate farming and local food programs into their curricula and food purchasing policies, while even growing some of their own food. Town officials have the ability to work in partnership with other organizations to protect important farmland from the pressures of development.



Photo: Maine Coast Heritage Trust

Working farms like the Smith Family Farm (above) are valuable open spaces in Bar Harbor.

Bar Harbor's forests can continue to be healthy. Sustainable forest management is an option for landowners to help defray the cost of owning and managing undeveloped land and is a tool for maintaining the health and habitats of our forest resource. Forestry operations can be conducted according to best management practices recommended by the Maine Forest Service to protect water quality.

Bar Harbor's working waterfronts should also be protected and preserved. Access points can become more abundant and well managed to fulfill both working and recreational needs, enabling the community's water-dependent businesses to thrive. Both residents and visitors alike can continue to value the town's working waterfront.

CASE STUDY: Young's Beach at Fisherman's Landing

When Ocean Properties purchased Young's Pier, adjacent to the Town Pier, there was concern among local fishermen that they would no longer have access to the shore for hauling out and cleaning boats. The Harbor Committee worked with Ocean Properties to assure the continued access of fishermen to the shore. Ocean Properties installed a bridge walk to their pier that can be raised up when fishermen plan to bring their boats ashore. Open communication between private and public entities will ensure that historic access points are maintained for future generations.

Why Do We Need to Protect Working Lands?

Working Farms

Agriculture has historically had a role in Bar Harbor and continues to have a small but important presence. Farmers provide locally produced food, a link to our historically agrarian culture, and protection for important natural resources including wildlife habitat, productive soils, and scenic resources.

Supporting active farm enterprises locally and regionally is important if Bar Harbor and MDI hope to maintain the presence of farming on the island and the availability of local fare for residents – both for the present and in the future. Because of high land values and limited land area, the greatest opportunities for sustaining existing agricultural resources and increasing agricultural activity in Bar Harbor come from relatively small-scale local farms. These can include farms supplying specialty products to local niche markets, community supported agriculture packages (CSA's), organic growers, and farmers who open their farms to the public for activities such as “pick your own” operations. Addressing municipal barriers to farmers can help foster success for local growers and keep land in production.

The Bar Harbor Comprehensive Plan highlights the importance of farming in our community, and identifies strategies to support and grow farms. Implementing these open space strategies and addressing new challenges for the next Comprehensive Plan, are critical to ensure that farming continues to be economically viable for Bar Harbor farmers.

Working Forests

Forestland is important for multiple reasons addressed in other sections of this document – for providing habitat, scenery, water quality, and recreational opportunities. While forestry is not a particularly large sector in Bar Harbor's economy, income from forest management activities can be important for individual landowners. This income generation along with the potential for property tax reductions through Maine's Tree Growth Current Use Tax program, makes forestry an important alternative to development in a community where the cost of owning undeveloped land can be significant.

Working Waterfront

Bar Harbor's location on the sea is an important part of the community's cultural heritage and economic vitality. Since the earliest days of European settlers in Maine, and the Wabanaki before them, residents have made a living harvesting marine resources from the waters surrounding Mount Desert Island. In the Civil



Photo: Maine Coast Heritage Trust

Stone Barn Farm, Bar Harbor, Maine.

War era, Frenchman Bay was one of the most prolific cod fishing grounds in the world! Today, lobsters are the primary species landed at the Bar Harbor Town Pier and nearby private wharves, but scallops, shrimp, urchin, clams, worms, sea cucumbers, glass eels, and other species are all harvested in nearby waters. Bar Harbor's commercial fishermen, long economic and cultural pillars of our community, rely on access to the water to make a living.

Bar Harbor is a diverse waterfront community. In addition to commercial fishing, our working waterfronts cater to multiple and varied water dependent businesses, including shellfish aquaculture operations, ferries and water taxis, sailing and fishing charters, sea kayak outfitters, boat tours, whale watch vessels, marine labs, and more. Numerous additional businesses, while they might succeed elsewhere than on the waterfront, are highly enhanced by their working waterfront locations, including educational institutions, waterfront seasonal rentals, hotels, and restaurants.

Bar Harbor's vitality is dependent on maintaining public and commercial access to the waterfront, including direct access through ramps, piers, and hand-carries, as well as shore access and open viewsheds. The economy, culture, and character of this community are reliant on such access. Because of high land values and limited waterfront land areas, the greatest opportunity for sustaining our waterfront economy and culture is to secure protection for the town's existing waterfront access, both public and private, and to seek opportunities to increase the inventory of accessible waterfront lands.

Bar Harbor's 2007 Comprehensive Plan set a specific

goal to promote access to the shore for commercial fishermen and the public. In order to accomplish this goal, specific policies were set and definitive strategies were included in the Comprehensive Plan. These policies have guided the implementation of numerous strategies that have indeed promoted waterfront access. Although progress has been made, it will require continued diligence to assure continued access to the Bar Harbor shoreline for commercial fisherman and the public.

Celebrate What We Have

Working Farms

Trends in agriculture in Bar Harbor have changed significantly over the past 70 years, both in terms of the number of active farms and the total acreage. In fact, between 1940 and 2013, there was an 83% decline in the total acreage of active farms (Figure 11). In 1940, 79 farms were spread over 4,016 acres, about 14 percent of the town's total acreage.¹ When the Maine Coast Heritage Trust did a farmland survey/inventory for the entire island in 1989-90, they identified 14 active farms spread over 811 acres of farmland. This inventory was updated in 2013 and found a slight increase in the number of active farms from 1990 spread over a smaller area (Figure 11). Although the surveys used slightly different metrics for identifying farms, it is clear that there was a significant decrease in the amount of land used for farming in Bar Harbor between 1940 and 1990, with a more modest decrease in the last decade or so.

Some of this historic farmland remains available for future agricultural use as inactive farmland. In 1990, MCHT identified 1,200 acres of inactive farmland divided among 23 properties. However, since 1990, the number of active and inactive farms has remained relatively the same, and yet, eight farm properties were converted to other uses in ways that made them unlikely to be available for agriculture in the future.

Much of this farmland coincides with the town's important agricultural soils. While approximately 9% of the land in Bar Harbor is comprised of important farm soils as identified by the United States Department of Agriculture (Table 12), many of these soils underlay areas of development and are not available for farming.

Working Forests

An estimated 17,789 acres in Bar Harbor are forested (representing 65% of Bar Harbor's total land area.)² However, only a small percentage of Bar Harbor's forested acres are actively managed for forest products.



Photo: Jane Disney

Hadley Point is regularly used by commercial fishermen and shellfish farmers who launch trailer-able vessels and land marine resources at the ramp for truck transport.

Community Supported Agriculture: A Financial Instrument for Farmers

CSA packages are a helpful tool for financing agricultural operations. In this model, customers pay the farmer an upfront lump sum in the early spring to finance preharvest operations. The farmer then packages seasonal produce bundles that the customer receives on a weekly basis throughout the summer and fall.

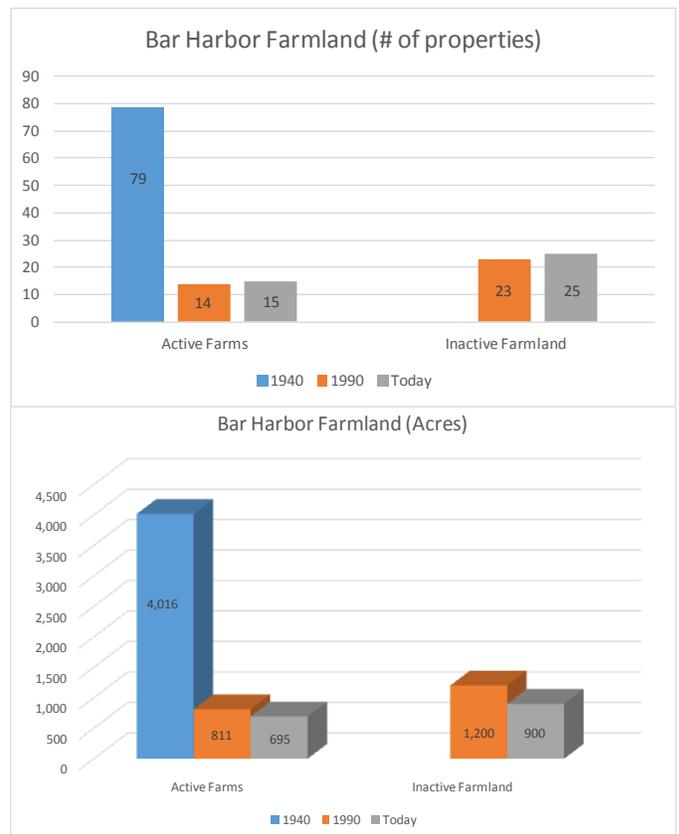


Figure 11. Bar Harbor farmland (1940-2013). Source: MCHT

Table 12. Extent of important farm soils (all values approximate).

Town	Prime Agricultural Soils		Soils of Statewide Importance		Sum of Prime and Statewide Importance		Total Acres
	Acres	% of Total	Acres	% of Total	Acres	% of Total	
Bar Harbor	973	3.6%	1,507	5.5%	2,480	9.1%	27,239
Mount Desert Island	2,258	3.2%	3,768	5.4%	6,026	8.6%	70,077
Hancock County	19,573	1.3%	107,463	7.2%	127,036	8.5%	1,485,269
State of Maine	830,000	4.0%	2,135,800	11.0%	2,965,800	15%	19,600,000

In 2012, there were 36 parcels totaling 930 acres enrolled in the Maine Tree Growth Program. This represents an increase in total acreage from 611 acres in 2002. According to Maine Forest Service records, between 1991 and 2002, there were twelve reported timber harvest operations conducted in Bar Harbor on 217 acres of forestland. Between 2002 and 2012, there were 48 reported timber harvest operations conducted on 590 acres of forestland. This information indicates an increase in both Current Use enrolled land and reported timber harvests over the last decade. Whether this increase is a result of development is unknown. What is certain is that the area of timber harvests in Bar Harbor has increased almost three-fold compared to the previous two decades.

Bar Harbor landowners face a number of challenges to manage their land as working forest. Timber harvesting is not an allowed use in many areas of town. Where timber harvesting is allowed, the town requires a forest management and harvest plan prepared by a licensed forester in accordance with the Maine Forest Service guidelines for "Developing a Forest Management Plan."³ The Land Use Ordinance requires that harvesting activities do not create single openings greater than 7,500 square feet and limits harvesting to no more than 40% of the volume of trees in a ten-year period. These standards are designed to protect the town's forests and other natural resources, but they can limit harvesting activities from being economical in certain cases. Additionally, forest management plans can be expensive to develop.

In many cases, forests in Bar Harbor tend to be former farmland that has grown thick with mature fir, or was part of the 1947 fire, which has resulted in mid-successional (mostly hardwood) forestland progressing to a mature spruce/mixed hardwood landscape. In many cases, it would be most profitable to aggressively remove fir and encourage spruce, a more commercially viable species.

Areas in Bar Harbor Valued by Residents for their Agricultural Character and Activities:

- Crooked Road Corridor
- Norway Drive
- Town Hill area/Gilbert Farm Road
- Head of the Island
- Hadley Point
- Hulls Cove

The regulatory environment combines with other challenges in Bar Harbor. Forest landowners may find it difficult to find a logger to harvest their property, despite the fact that there are several good loggers working in the area. Small average lot size and trends toward larger and more expensive equipment contribute to this problem. When you start with a small lot and are then restricted to low harvest volumes, logging becomes less profitable. New technology has pushed loggers to invest in bigger, more expensive machinery, which means loggers have higher costs in every project. This equipment investment demands a larger return than is often possible on small lots under regulatory limits.

Working Waterfront

Public and Private Access

The town of Bar Harbor has several points of public access to the waterfront on both Frenchman and Western Bays (Figure 12, Table 13). Commercial users of these bays can access these locations for landing of marine resources (both wild harvest and farmed), for tourism related activities and other water-dependent businesses, as well as recreational use. The current inventory of Bar Harbor's public waterfront access includes:

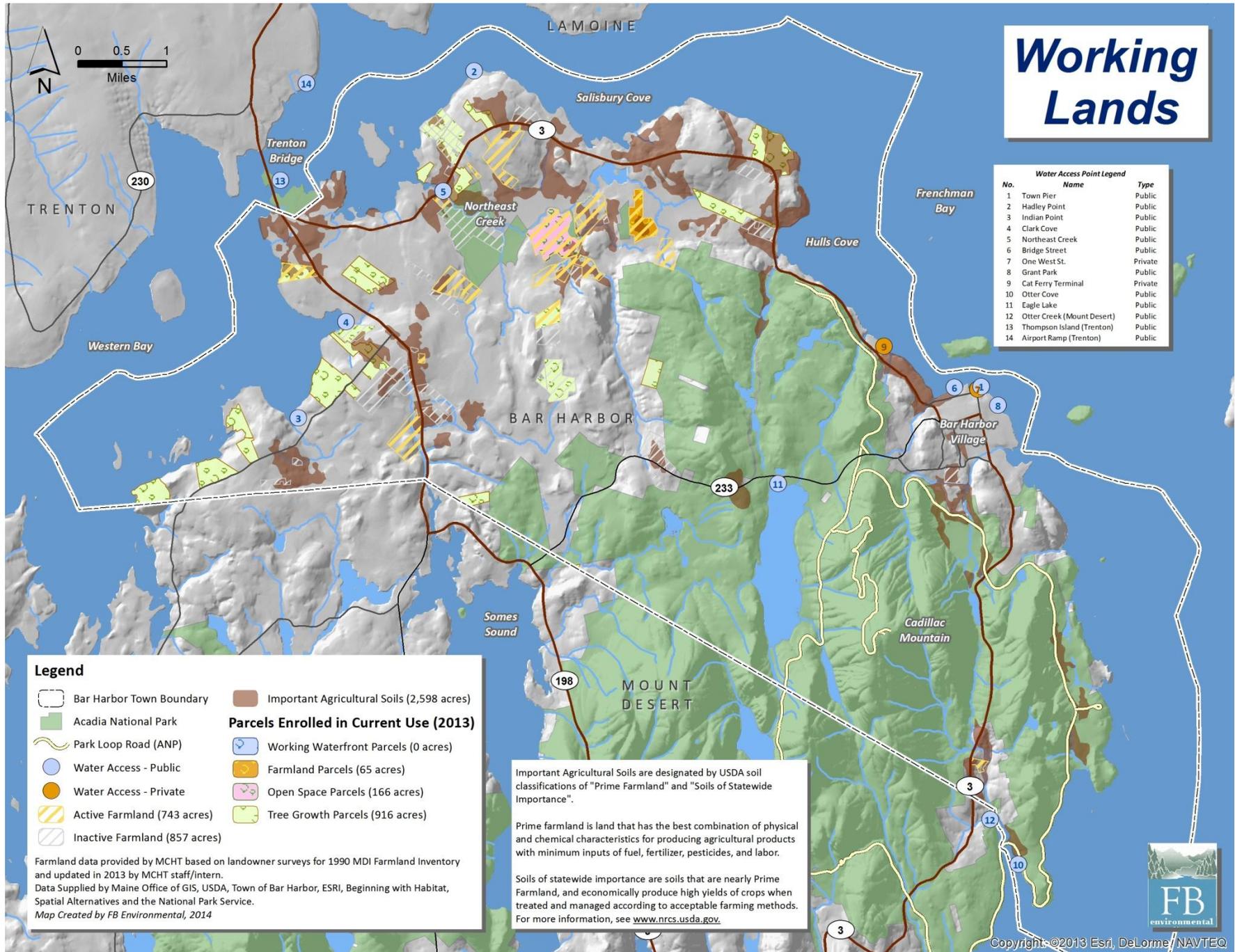


Figure 12. Important features of working lands in Bar Harbor as of 2013.

The Town Pier in downtown Bar Harbor provides access to outer Frenchman Bay and can receive passengers from large and small commercial passenger vessels. The ramp at the Town Pier provides boat and trailer access, though it is too short to provide all tide access.

Hadley Point off Hadley Point Road provides access to 4.5 acres of Town-owned land at the park on upper Frenchman Bay. The beach at Hadley Point provides recreational water access as well as access to hand-carried commercial operations such as sea kayak tours. The ramp at Hadley Point is regularly used by commercial fishermen and shellfish farmers who launch trailered vessels and land marine resources at the ramp for truck transport.

Other Access points include: Northeast Creek, Bridge St., 1 West St., Grant Park, the Ferry Terminal, and Otter Cove. Eagle Lake and Northeast Creek provide access to freshwater resources. (Table 13. List of public and private access points...to Figure 12)

Indian Point Town Landing & Clark Cove are located off Indian Point Road and Clark Point Road. Both provide access to Western Bay. In both cases, parking is extremely sparse, thereby limiting the functional use of these access points.

Waterfront Access outside of Bar Harbor includes Otter Creek on the Bar Harbor/Mount Desert town line, providing access to Otter Cove in Bar Harbor. Thompson Island and Airport Ramp in Trenton provide valuable access to Bar Harbor waters including the Narrows or Frenchman Bay.

In addition to the points of access listed above, there are a few points of access to the working waterfront at private commercial sites and across other private land.

Table 13. List of public and private waterfront access points in/near Bar Harbor (refer to Figure 12).

Water Access Point Legend		
No.	Name	Type
1	Town Pier	Public
2	Hadley Point	Public
3	Indian Point	Public
4	Clark Cove	Public
5	Northeast Creek	Public
6	Bridge Street	Public
7	One West St.	Private
8	Grant Park	Public
9	Cat Ferry Terminal	Private
10	Otter Cove	Public
11	Eagle Lake	Public
12	Otter Creek (Mount Desert)	Public
13	Thompson Island (Trenton)	Public
14	Airport Ramp (Trenton)	Public

Some landowners in Bar Harbor have acknowledged and honored historic uses of their property. These generous landowners provide critical access to the shoreline for hauling out boats for cleaning, and access to marine resources.

Unfortunately, private waterfront access runs the risk of being converted to non-compatible uses. For example, as private lands change hands, traditional handshake agreements can get lost, along with the access. Given that the majority of Maine's coastal access is privately owned,⁴ much of our waterfront access is at risk. Indeed, waterfront access has declined throughout Maine. The State has responded by creating incentives to protect working waterfronts. The "Working Waterfront Access

CASE STUDY: Access to the Waterfront

"For more than forty years clammers have accessed the mud flats in front of our family's house through our property. I am pretty sure that the access long predates my life, but I cannot say for sure. There is no viable access to the flats other than by water or across private land such as ours, and it only seems appropriate that traditional uses of the shore should continue if they do no harm. The bay is a shared resource to which we should all have access and for which we are all responsible. It shouldn't just be a postcard image or picture window view. When I was young, I remember my mother inviting an older gentleman, who had hurt himself and had limited ability to move about, to use the stairs from our place rather than struggling along the wooded wet path that most clammers use. There were other people, too, who parked regularly in our drive for any number of reasons; and I have continued to do as my mother. I hope we can all share and care for the bay whether we are on its edge, further upstream, or working and making a living on or by the water. The bay should be there for all of us, and I hope we will all step up to take care of it while we continue to share it in a multitude of ways." ~ *Anonymous*

Protection Program” is a state funding mechanism that offers financial support in exchange for a covenant, which limits the future use of the property to working waterfront. Maine also passed a Current Use Taxation for working waterfronts modeled after the state’s open space, tree growth, and farmlands taxation policies, providing landowner’s tax rebates for keeping their lands working waterfront (see Chapter 7 for details).⁵ To date, no Bar Harbor waterfront properties have taken advantage of these tools. However, there is an opportunity for the town to support willing waterfront landowners in securing waterfront access through their lands via either of these two programs.

Managing the Working Waterfront

The Harbor Committee in Bar Harbor, the Bar Harbor Publics Works Division, Planning Board, and Town Council worked together in the development of a new harbormaster’s office and port safety facility on the Town Pier in 2012-2013.

The harbormaster is better situated in the new location to oversee uses of the harbor, resolve parking and mooring issues, and communicate with marine resource users and visitors to the Pier about best practices along the marine waterfront. There is meeting space in this building that provides opportunities for public and private sectors to convene and discuss future issues related to accessing the working waterfront.

Cruise passenger fees have enabled improvements on the Town Pier and to nearby facilities that make the Pier more accessible and safe for visitors. These improvements include upgrades to facilities such as the harbormaster’s office, addition of port safety facilities, replacement of floating docks and pier railings, and the installation of the Newport Drive Comfort Station.

Moorings Access: Critical for Working Waterfronts

Harbor mooring is essentially closed to new vessels in Bar Harbor, though there are moorings in other areas of the community. Bar Harbor will continue to give mooring preferences to local commercial fishermen. Currently, there is no capacity for more moorings at the Town Pier. Although there is room in the harbor, there is not sufficient dinghy space at the Town Floats to support more moorings in the harbor.

With the installation of a cement boat ramp at Hadley Point, it has become easier for both commercial fishermen and recreational boat users to back boats down on trailers. The harbormaster has granted permits for a handful of new moorings just to the west of the point. Boaters need to use other small boats to get out to their moorings, or wait for a low tide when they can wade out. This area will not grow significantly as a mooring area, as this could prohibit shellfish harvesting and aquaculture operations in this

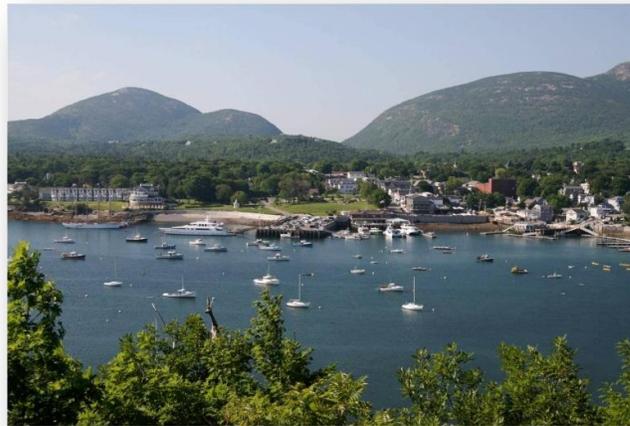


Photo: National Park Service

Planned open space provides public access to Bar Harbor’s working waterfront.

area.

People with waterfront property can obtain a permit for a mooring and keep personal boats off shore of their property. College of the Atlantic has helped to relieve some demand for moorings, as has the Bar Harbor Yacht Club, which seasonally adjusts the use of moorings and allows for some public use.

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Putting the Plan to Action

Implementing the Plan

Open space priorities were initially developed as a result of extensive work by the Open Space Plan Steering Committee, feedback from key stakeholders, and input from the public (Appendix C). After review of the plan in 2014, it was decided that a revision and update was needed in order to be more accessible to stakeholders and the public. The Conservation Commission has since received additional landowner and resident input as well as comments from the Town Council. The Commission revised the OSP in order to provide various users with several paths for voluntary protection of resources. This included updating information in the OSP and clarifying some of the strategies.

The OSP seeks to identify priority areas for open space protection using a combination of maps and public and private expertise that identify important open space resources. The maps and the Plan can be used by the Planning Board to be more proactive when incorporating open space in all future development proposals, especially in both “rural” and “critical rural areas” identified in the Future Land Use Plan (Chapter III.B. of the Comprehensive Plan).

The Northeast Creek watershed stands out as an area containing most of the high quality open space resources identified in the Plan, especially surface waters, scenic resources, prime agricultural lands, and significant wildlife habitat. Along the Crooked Road corridor in Town Hill are important opportunities both for natural habitat connectivity, as well as improved water access for recreation.

Writing a plan is the easy part; implementing the plan will require cooperation among many organizations including private, federal, state, and local partners.

This location is an example of where we can utilize co-occurrence priority areas to protect rare, threatened, and endangered species; and exemplary natural communities within high-priority sub-watersheds in Bar Harbor. Once unprotected parcels are identified, steps could be taken to provide permanent

protection in critical habitat zones. It will require the cooperation and collaboration of private landowners, organizations, and the town government to protect this valuable resource.



Photo: Enoch Albert

Sunset at Hadley Point Beach.

Funding Open Space

The 2007 Comprehensive Plan calls for an open space plan that will “...encourage voluntary protection of Bar Harbor’s important natural, scenic, and cultural resources as well as establish an open space lease and acquisition program.”

There are, however, additional ways to fund open space protection. The following section provides information relevant to help fund and implement plans in Bar Harbor, along with a description of some common programs:

Develop an Open Space Protection Program -

The Town could develop a multi-faceted land protection program dedicated to the conservation of open space. Similar programs used in other Maine communities (such as Falmouth) use a variety of funding sources to attain funds to purchase land (Table 14).

In addition to grant funding, the town could consider additional revenues to fund open space protection including:

Reallocation of Revenues¹ - Funds from the sale of tax acquired properties, sustainable wood harvest on town lands, and currently owned properties could be allocated to a land acquisition fund to purchase and protect parcels of land.

Dedicated Penalties and Fees¹ - The Town could dedicate money from penalties and fees, such as wetland violations, withdrawal penalties from the Current Use Tax Program, and shoreland zoning infractions, toward a land acquisition fund.

Open Space Impact Fee Ordinance² – An impact fee can help raise funds to protect valuable open space in town through assessment of new land developments. Model ordinances are available to help guide the development of a similar plan.

Local Land Bonds and Appropriations³ – The Town may develop local land bonds or appropriations. This demonstrates a strong local commitment to land protection, and usually offers more opportunity to leverage private and other public funds thereby stretching the local dollar.

Table 14. Possible sources of grant funding to support open space protection

Grant Program	Description
Beginning with Habitat http://www.beginningwithhabitat.org/pdf/Funding_12.27.07_Final.pdf	The Maine Natural Areas Program has developed a comprehensive list of grant opportunities for habitat conservation, improvement, and planning projects.
Community Forest Program http://www.fs.fed.us/spf/coop/programs/loa/cfp.shtml	Funds projects that protect forests and open space. Individual applications not to exceed \$400,000.
Land for Maine's Future Program http://www.landformainesfuture.org	Protects working farms and forests; ocean access; trails for snowmobilers, hikers, and bikers; pristine lakes, ponds, and rivers.
Federal Highway Bill Funding http://www.landtrustalliance.org	Acquisition of scenic or historic easements and sites, provides grants to land trust for acquisition of easements and fee simple title to property for recreational trails or other recreational trail corridors.
Land and Water Conservation Fund http://lwcfccoalition.org/	A federal program to conserve irreplaceable lands and improve outdoor recreation opportunities. Works in partnership with state and local efforts to protect and expand national parks, forests, and trails.
L.L. Bean Maine Land Trust Program http://www.mltn.org/resources/lbean-grant-guidelines.php	Supports local land-trust projects that enhance public access to conserved lands. Four to seven grants given annually not to exceed \$5,000.
Maine Coast Heritage Trust Revolving Loan Fund http://www.mltn.org/resources/conservation-funding.php	Provides short-term loans to qualified entities acquiring land for permanent conservation. Loans ranging from \$5,000 to \$400,000.
Maine DOT Transportation Enhancement Program http://www.maine.gov/mdot/pgaqcp/enhancement/	Funds activities related to surface transportation, including pedestrian and bicycle infrastructure and safety programs, scenic and historic highway programs, landscaping and scenic beautification, historic preservation, and environmental mitigation.
Maine DOT Safe Routes to School http://www.maine.gov/mdot/pgaqcp/enhancement/	Provides resources for infrastructure improvements for communities to improve conditions and raise awareness of the benefits of walking and biking to school.
Maine Trails Funding Program http://www.maine.gov/dacf/parks/grants/maine_trails_fund.html	A state matching grant to help maintain, improve, and enhance recreational trails in the state.
Maine Outdoor Heritage Fund https://www.maine.gov/ifw/grants/outdoorheritagefund/howtoapply.htm	Available to Natural Resource Agencies- but may be in partnership with other entities. Funding for fisheries, wildlife and habitat conservation projects, acquisition and management of public lands, endangered and threatened species conservation projects, and natural resources law enforcement.

Strategies for Open Space

The Town should work closely with the local land trusts, Maine Coast Heritage Trust, and Acadia National Park to encourage voluntary land conservation with willing landowners interested in open space protection. Conservation lease programs and conservation easements are two options for voluntary open space protection.

Establish a Conservation Lease Program - Privately held, priority open space land can be leased to a land trust or government agency in the interest of open space conservation. This develops a working partnership with the landowner to manage the property with specific goals, such as wildlife habitat or recreation. Examples include the Conservation Stewardship Program⁴ and Land for Maine's Future program.⁵ This type of collaboration has led to permanent land protection in other communities.

Encourage Conservation Easements⁶ – There are several areas within town that have significant open space value, but are privately owned. The Town should establish relationships with Maine Coast Heritage Trust and Acadia National Park to work with willing landowners who may be interested in donating or selling development rights of their land in the interest of open space conservation. Conservation easements ensure open space will be conserved for future generations while allowing the land to remain privately owned.

Encourage and Promote Current Use Tax Programs⁷ – The Tree Growth Tax Law and Farm and Open Space Tax Law were established in the 1970s to prevent property taxes from forcing productive woodlands, farms, and significant open spaces into tax delinquency or conversion to development. More recently, working waterfront land has been added to the laws. These programs make it easier for landowners to achieve a more manageable tax assessment. Current Use Tax programs can be a useful method that gives landowners monetary incentives to keep their properties undeveloped, providing a temporary level of protection from developmental sprawl.

As of 2013, only 37 parcels totaling 1,147 acres of land in Bar Harbor are enrolled in the state's Current Use Program.⁸ This includes one farmland property, one open space parcel, and 35 tree growth parcels. There are currently no parcels enrolled in working waterfront.

Next Steps

The Open Space Plan provides specific goals and strategies to protect valuable natural, scenic,

recreational, and working lands through open space conservation. These goals and strategies provide a road map by which residents, partnering agencies, land trusts, and other community groups can continue open space conservation. Implementing the OSP is as much about education and communication of strategies to the community as it is about defining priorities. Open space conservation may be focused on resources or may be guided by multiple open space values within a region.

STATE OF MAINE CURRENT USE TAX PROGRAMS⁹

Farmland: The property owner is required to have at least 5 contiguous acres in their tract of land. The land must be used for farming, agriculture, or horticulture and can include woodland and wasteland. Additionally, the tract must contribute at least \$2,000 gross income from farming activities, each year.

Open Space: There is no minimum acreage requirement with this program, but minimum areas and setbacks must be excluded from classification. The tract must be preserved or restricted in use to provide a public benefit. Benefits recognized include public recreation, scenic resources, game management, or wildlife habitat.

Tree Growth: The Property must be at least 10 acres of forested land used for commercial harvesting. A Forest Management and Harvest Plan must be prepared and a sworn statement to that effect submitted with the application. Applications include a map of the parcel indicating the forest type breakdown as well as all other areas not classified as tree growth.

Working Waterfront: Land must include a parcel or portion of a parcel of land abutting tidal waters or that is located in the intertidal zone (located between the high and low water mark) the use of which is more than 50% related to providing access to or in support of the conduct of commercial fishing (including commercial aquaculture) activities.

Several of the conservation concepts applied in the OSP and Appendix A are similar to key principles held by George B. Dorr. These “expressions of recurring principles (were) derived from (Dorr’s) long experience.”¹⁰ Briefly, these ten conservation concepts are: civic engagement, indivisible landscapes, complementarity, self-determination, ideal landscapes, temporality, promoting significance, selectivity, aesthetic coherence, and democratized beauty.¹¹ “Dorr was (also) one of the few pioneers who gave expression to key conservation principles – interpreted anew with each generation – of the modern environmental movement. More importantly, over four decades he applied these key concepts organizationally to create, develop, and prepare Acadia National Park for the challenges of the last half of the twentieth century.”¹² George Dorr’s long-term vision and principles continue to be a part of Bar Harbor’s Open Space Plan for the 21st century.

Education of property owners who own or reside in significant open space areas are integral to a successful implementation strategy. Specific documentation highlighting the nature and value of the resources and opportunities for protection should be provided to promote awareness and to connect willing landowners with resources necessary for taking voluntary action in line with the objectives of the OSP.

Recent Conservation Commission efforts have created goals and strategies for several chapters within the OSP (Chapters 2 through 6). The compilation of goals and strategies can be found in Appendix A. These goals and strategies are organized with the OSP chapter title and a list of the chapter’s relevant goals, strategies, and sub-strategies. Each goal and strategy is further defined with relevant actionable information including *suggested* responsible individual(s)/group(s), *possible* funding source(s), *estimated* schedule (number of years till consideration/action), and the priority/status of each strategy within the goal. A brief summary of each goal’s *estimated* expenses is also included. Several goals are identified by Conservation Commissioners as short-term or long-term priorities for future consideration and actions. The goals and strategies in Appendix A will be reviewed periodically by the Commission, and updated accordingly.

In addition, when specific priority areas are identified, the Conservation Commission should engage local conservation groups and land trusts for strategic assistance and collaboration to reach common goals. Aligning efforts and partnering with other entities in the area makes strategic sense. For

example, actively participating in the implementation of Acadia National Park’s Transportation Plan may influence future infrastructure development, like improved bike lanes.

The Commission will continue to work with stakeholders, the Town Council, other Town Boards and Commissions, and the public to successfully implement the OSP’s goals and strategies in order to protect valuable open spaces and resources in Bar Harbor.

As an example, the Commission would approach Town Council with potential OSP projects, possibly one to three per year, and work with Town Council to further define project’s timeline, scope and needs. The Commission would then periodically inform Town Council when the goal or strategy is completed, in addition to providing an OSP update when requested by Town Council.

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APPENDICES

Appendix A- Goals and Strategies for Preserving Open Space in Bar Harbor

Appendix B- Farmers Interviews

Appendix C- Open Space Forum- Public Feedback

Appendix A: Actionable Goals and Strategies for Preserving Open Space in Bar Harbor 2020

Chapter II: Protecting Natural Habitats

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
Chapter II, Goal 1: Provide Connectivity for Wildlife Habitat				
II.1.A) Increase or Maintain Connectivity Between Open Spaces, Especially Large Blocks of Land	Bar Harbor Conservation Commission ("BHCC") with MCHT	Land For Maine's Future ("LMF")	ongoing, 5 - 10 years	
II.1.A.i) Encourage local landowners to consider conservation easements with local conservation groups (ANP, MCHT, etc.) if they are interested in pursuing long term preservation of their property	BHCC, MCHT, ANP	N/A	ongoing, 5 - 10 years	
II.1.A.ii) Explore options for leasing critical wildlife corridors on private land, for use in those situations where landowners wish to keep the land undeveloped, but do not want to sell the property or grant a conservation easement at the present time	MDIFW Habitat Management Areas Designation	LMF	2 - 5 years	
II.1.A.iii) Take advantage of the Current Use program and Open Space Tax Laws, land valuation, and incentives to adjust property values based on open space	Property Owners with Bar Harbor Tax Assessor	Maine Revenue Service #21 Property Tax	< 2 years	
II.1.A.iv) The Town, developers, and landowners should work to ensure that the open space set aside in new subdivisions is the central design feature around which roads and buildings are organized, using a conservation subdivision strategy. The open space should be contiguous with open space on adjacent properties and be permanently protected from development. Measures should be taken to prevent roads and other forms of development from dividing the open space into smaller fragments in the future	Planning Board, land developers, landowners, engineers, and builders	N/A	< 2 years	

Appendix A: Actionable Goals and Strategies for Preserving Open Space in Bar Harbor 2020

Chapter II: Protecting Natural Habitats

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
I.1.A.v) Educate public, landowners and town officials about best management practices that reduce upland habitat fragmentation	BHCC	Conservation Commission Budget	2 - 5 years	
II.1.B) Increase or maintain connectivity along healthy stream passages and waterways	Schools and FOA			high priority
II.1.B.i) Have the Conservation Commission work with ANP, Department of Fish and Wildlife, and others to identify and map priority streams for Brook trout and diadromous fish habitat and buffer zones, particularly portions that may be between already protected watersheds (e.g. ANP, MCHT) and the Atlantic Ocean (e.g. Cromwell Brook)	BHCC, ANP, MDIFW, MCHT	N/A	< 2 years	Some streams are already identified
II.1.B.ii) Plan culvert size upgrade or raise roads in places where there are barriers to fish passage at stream crossings of roads and culverts	Public Works	Town Budget, DEP, Stream Crossing Grant	5 to 10 years	
II.1.B.iii) Protection of shoreland beyond the state mandated 75 feet minimum zoning is important in critical areas, particularly areas that show significant natural resource value. Landowners may consider voluntary expansions of buffer distances beyond 75 feet in an effort to protect water quality and stream habitat	BHCC and landowners	N/A	2 - 5 years	
II.1.B.iv) Restore riparian buffers by removing invasive plants and planting native plants to increase vegetated canopy cover and prevent erosion	BHCC, landowners, local garden clubs	Gulf of Maine Coastal Program	2 - 5 years	

Appendix A: Actionable Goals and Strategies for Preserving Open Space in Bar Harbor 2020

Chapter II: Protecting Natural Habitats

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
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Brief Summary of Goal 1 Estimated Expenses: Education and outreach to landowners related to voluntary conservation easements and shoreline buffers in concert with other organizations such as Maine Coast Heritage Trust is largely a matter of time and collaboration, although there may be a cost associated with educational flyers or pamphlets on land conservation. Recognition and implementation of open space preservation could take place at the time of new development and would be part of the development process. Costs to lease wildlife corridors on private land, identify and map priority streams, and raise culverts are unknown at this time and are anticipated to be part of a RFP process. Restoration of riparian buffers could be conducted in collaboration with non-profit organizations (e.g. FOA, MCHT), ANP, and schools.

Chapter II, Goal 2: Preserve Large, Undeveloped Habitat Blocks as well as Large, Contiguous Forest Blocks

II.2.A) Identify undeveloped habitat blocks and unfragmented forest blocks for protection	BHCC and MCHT	N/A	< 2 years	high priority goal (some data is already available)
II.2.A.i) Encourage the conservation of large, undeveloped habitat blocks of at least 100 acres and un-fragmented forest blocks of at least 500 acres through the use of tax incentives, such as the Tree Growth and Open Space Tax Program	Bar Harbor Tax Assessor and property owners	ME Renewal Service Bulletin #21 Current Use Property Tax	< 2 years	high priority goal
II.2.A.ii) Landowners that are enrolled in the states' Tree Growth or Open Space Tax program should be encouraged to include wildlife resources in the required forest management and harvest plan prepared with a consulting forester	landowners and foresters	N/A	< 2 years	high priority goal
II.2.A.iii) Provide education concerning the value and function of large habitat blocks, both for the community as a whole and for the landowners whose participation in the program is vitally needed	BHCC, MDIFW, local colleges and universities	BHCC budget	< 2 years	high priority goal
II.2.A.iv) Encourage cluster development through zoning, ensuring large areas, especially core habitat remain intact	Planning Board and Planning Department	N/A	2 - 5 years	high priority goal

Appendix A: Actionable Goals and Strategies for Preserving Open Space in Bar Harbor 2020

Chapter II: Protecting Natural Habitats

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
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Brief Summary of Goal 2 Estimated Expenses: Education and outreach to landowners related to voluntary conservation of forested areas and large undeveloped blocks would be conducted in concert with other organizations such of Maine Coast Heritage Trust and is largely a matter of time and collaboration, although there may be a cost associated with educational flyers or pamphlets on land conservation. Costs related to tax incentives such as Tree Growth and the Open Space Tax Program are unknown. Encouraging cluster development may require changes to the Zoning Ordinance.

Chapter II, Goal 3: Preserve Marine Habitats

II.3.A) Protect areas of commercial fisheries habitat (as described in Policy 4C of the 2007 Comprehensive Plan)				
II.3.A.i) Identify areas of the watershed upstream of shellfish beds that may need mitigation of pollutants and/or nutrient inputs	BHCC, Bar Harbor Marine Resources Committee ("MRC")	BHCC and MRC	< 2 years	
II.3.A.ii) Consult with a restoration ecologist to advise actions for restoring degraded systems/areas within the watershed	BHCC, consultant(s)	Town budget	2 - 5 years	
II.3.A.iii) The Town should continue to allocate clamming licenses and manage clamming grounds based on healthy population data and desirable harvest intensities	MRC	N/A		
II.3.A.iv) Issue reminder post-cards or emails to town residents for routine septic system maintenance. Encourage local septic servicing companies to offer group rates for neighborhoods	Town staff	Planning Department	< 2 years	
II.3.B) Protect Areas of Shorebird and tital waterfowl habitat				

Appendix A: Actionable Goals and Strategies for Preserving Open Space in Bar Harbor 2020

Chapter II: Protecting Natural Habitats

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
II.3.B.i) Create and post signage to reduce the disturbance of wading and shorebird populations during sensitive times of year, particularly restricting foot traffic and reminding people about leash rules for pet use in these areas	BHCC, BH Parks & Recreation Committee ("PRC")	BHCC	< 2 years	
Brief Summary of Goal 3 Estimated Expenses: The cost to print and mail reminder postcards regarding septic systems and to post signage to reduce the disturbance of wading and shorebird populations is anticipated to be less than \$5,000. Other costs are unknown but current studies and work by the Marine Resources Committee or College of the Atlantic could be leveraged. Ultimate mitigation and restoration would be part of a RFP process.				
Chapter II, Goal 4: Protect Freshwater Wetlands for Wildlife Habitat				
II.4.A) Monitor and protect significant vernal pools				
II.4.A.i) Have the BHCC, in partnership with College of the Atlantic and other local experts, continue to identify, monitor and document locations of significant vernal pools	BHCC and COA	N/A	< 2 years	
II.4.A.ii) Have the Conservation Commission, in partnership with COA and other experts, perform education and outreach about the importance of protecting significant vernal pools	BHCC and COA	N/A	< 2 years	
II.4.B) Identify and protect wetlands of two acres or more, including adjacent uplands				
II.4.B.i) Identify and map wetlands of two contiguous acres or more that may not otherwise be mapped	BHCC and DIFW	Town budget	< 2 years	
II.4.B.ii) Engage the state to monitor rare wetland flora and significant natural communities	BHCC and MNAP	N/A	2 - 5 years	

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Chapter II: Protecting Natural Habitats

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
II.4.B.iii) Educate landowners about wetland protection requirements and distribute this information with building permit application packets	BHCC, Planning Department and Code Enforcement	Town budget	< 2 years	
II.4.B.iv) Recommend to the State that the wetland protection evaluation be integrated into the onsite wastewater disposal process to enable the Town to map wetland locations and review development near wetlands	BHCC	N/A	< 2 years	
II.4.B.v) Discourage the use of pesticides and herbicides and encourage judicious use of fertilizers in setbacks from significant vernal pools and wetlands (See Chapter 3, Goal 2d)	BHCC	N/A	< 2 years	
II.4.C) Ensure protection of water quality and wildlife habitat within the Northeast Creek watershed and other high-priority subwatersheds identified in this plan	BHCC, Planning Board, Town Council, and schools	Cruise Ship Fund, Town budget, write grants	< 2 years	
II.4.C.i) Encourage farm, working forest, and working waterfront landowners to adopt and use best management practices to protect the quality of water and natural resources	BHCC	N/A	< 2 years	
II.4.C.ii) Educate residential landowners on practices to protect watersheds including a campaign to encourage regular septic system maintenance and information on household cleaning products, pesticides, and fertilizers	BHCC, Planning Department and Public Works	N/A	< 2 years	
II.4.C.iii) Using data from the 2013 USGS study, continue to monitor water quality trends with additional measures in 2020 and take corrective actions as needed to address runoff, pollutant, or nutrient inputs into the Northeast Creek watershed and other high priority watersheds	BHCC, Town Staff, United States Geological Survey ("USGS")	unknown	< 2 years	

Appendix A: Actionable Goals and Strategies for Preserving Open Space in Bar Harbor 2020

Chapter II: Protecting Natural Habitats

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
II.4.C.iv) Create a plan for monitoring septic systems within the Northeast Creek watershed, and monitor E. coli trends in the Creek	Town Code Enforcement and Planning Department	unknown	2 - 5 years	

Brief Summary of Goal 4 Estimated Expenses: It is anticipated that several of these subgoals would be part of a continued education effort on the part of the Conservation Commission in collaboration with other non-governmental organizations or ANP. Costs would be associated with printing informational materials. Costs to monitor water quality trends on a quarterly basis are assumed to be less than \$5,000 annually. Costs to map wetlands and vernal pools are unknown and would be part of a RFP process.

Chapter II, Goal 5: Protect Rare, Threatened and Endangered Species and Exemplary Natural Communities

II.5.A) Identify and protect natural communities				
II.5.A.i) Continue to identify the rare and exemplary natural communities of Bar Harbor using the MNAP planning tool "Beginning with Habitat" (refer to Tables 2 & 3 of Chapter 2)	MNAP, COA, University of Maine, Orono ("UMO")	State funded, potentially grant funded if partnering with universities	5 - 10 years	Most communities are mapped, updated every five years
II.5.A.ii) Identify and protect areas that are not already within conserved lands, conduct a more detailed survey to determine existence and full extent of the natural community	MNAP, MCHT, COA, local landowners	State funded, potentially grant funded if partnering with universities, foundation funding, tax incentives for protecting rare communities and species	5 - 10 years	
II.5.A.iii) Manage and remove invasive plants whenever possible on Town owned lands	BHCC, volunteers, Public Works Department, Wild Gardens of Acadia, local garden clubs, 6-12 grade science classes	Town budget, private foundation or corporate sponsorship funds	2 - 5 years	

Appendix A: Actionable Goals and Strategies for Preserving Open Space in Bar Harbor 2020

Chapter II: Protecting Natural Habitats

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
II.5.A.iv) Educate landowners through public programs, online content and print materials to identify and safely manage invasive plants frequently found in Bar Harbor	BHCC, MNAP, ANP, local garden clubs, volunteers, citizen science outreach groups	Town budget, private foundation or corporate sponsorship funds	< 2 years	
II.5.A.v) Work with state and federal agencies to prevent and/or respond to invasive pests and pathogens that could negatively affect natural communities	Maine Forest Service ("MFS"), BHCC, volunteers	State funded	< 2 years	

Brief Summary of Goal 5 Estimated Expenses: Overlap with other goals within this chapter could reduce costs. There is the opportunity to work with other stakeholders (e.g., the State, ANP, colleges) to achieve these goals and reduce costs, which are currently unknown.

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Chapter III: How Do We Protect and Support Water Resources

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
Chapter III, Goal 1: Protect the quality and manage the quantity of fresh water resources in Bar Harbor including groundwater and surface water.				
III.1.A) Use public education to encourage voluntary actions by individuals and groups to mitigate the effects of water contamination by:	BHCC	Cruise Ship Fund, Town budget, write grants, partner with ongoing COA classes	< 1 - 3 years	short term priority
III.1.A.i) Conserving water;	work with schools	Cruise Ship Fund, Town budget, write grants, partner with ongoing COA classes	< 1 year	short term priority
III.1.A.ii) Optimizing well siting;	work with local contractors	Cruise Ship Fund, Town budget, write grants, partner with ongoing COA classes	< 1 year	short term priority
III.1.A.iii) Minimizing site alterations;	work with Planning Department and Planning Board	Cruise Ship Fund, Town budget, write grants, partner with ongoing COA classes	< 1 year	short term priority
III.1.A.iv) Promoting infill areas served by public sewer and water through facilitating increased development and decreased lot sizes in these areas;	work with Planning Department and Planning Board	Cruise Ship Fund, Town budget, write grants	1 - 3 years	medium term priority
III.1.A.v) Managing composting, pet waste, herbicides, pesticides, and other harmful household products;	work with PRC and A Climate to Thrive ("ACTT")	Cruise Ship Fund, Town budget, write grants, partner with ongoing COA classes	< 1 year	short term priority

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Chapter III: How Do We Protect and Support Water Resources

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
III.1.A.vi) Utilizing shared septic systems and wells.	work with Planning Department and Planning Board	Cruise Ship Fund, Town budget, write grants, partner with ongoing COA classes	< 1 year	short term priority
III.1.B) Manage future residential and other development so that septic and well systems are constructed, sited, installed and maintained so as to:	work with Planning Board, Planning Department, and Town Council	Cruise Ship Fund, Town budget, write grants	5 - 10 years	long term priority
III.1.B.i) Have no impact above an established water quality standard;	work with Planning Board and Town Council	Cruise Ship Fund, Town budget, write grants	2 - 5 years	medium term priority
III.1.B.ii) Prevent existing wells from becoming contaminated or going dry;	work with Planning Board and Town Council	Cruise Ship Fund, Town budget, write grants	Ongoing	long term priority
III.1.B.iii) Protect unspoiled hydrologic resources by working with large-parcel landowners through voluntary easements, tax reductions and financial incentives and zoning that encourages/facilitation of condensed development on smaller areas of large parcels in conjunction with conservation of larger, highly sensitive areas of the parcel	work with Planning Board, Town Council, and COA	Cruise Ship Fund, Town budget, write grants	5 - 10 years	long term priority
III.1.C) Prepare ordinances that require development in sensitive areas to meet established performance standards that require sewer systems, community septic systems, and sufficiently separated well and septic systems to:	work with Planning Board and Town Council	Cruise Ship Fund, Town budget, write grants	5 - 10 years	long term priority
III.1.C.i) Limit impervious surfaces that decrease groundwater recharge;	work with Planning Board and Town Council	Cruise Ship Fund, Town budget, write grants	2 - 5 years	medium term priority

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Chapter III: How Do We Protect and Support Water Resources

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
III.1.C.ii) Restrict siting of septic systems in recharge areas, thin soil, exposed bedrock, and the upper 1/3 of watersheds;	work with Planning Board and Town Council	Cruise Ship Fund, Town budget, write grants	2 - 5 years	medium term priority
III.1.C.iii) Encourage property owners to limit replacement of natural forested and field areas with residential lawns;	work with Planning Board, Town Council, and COA	Cruise Ship Fund, Town budget, write grants	< 1 year and ongoing	short term priority
III.1.C.iv) Encourage sustainable lawn-care with minimal use of chemicals, pesticides, herbicides and careful use of amendments in conjunction with soil testing;	work with Planning Board and Town Council	Cruise Ship Fund, Town budget, write grants	< 1 year and ongoing	short term priority
III.1.C.v) Minimize disturbance of topsoil during site construction;	work with Planning Board and Town Council	Cruise Ship Fund, Town budget, write grants	< 2 years	short term priority
III.1.C.vi) Require low-impact development standards for new residential and commercial development that limits the amount of impervious cover and allows for enhanced infiltration of runoff.	work with Planning Board and Town Council	Cruise Ship Fund, Town budget, write grants	2 - 5 years	medium term priority
III.1.C.vii) Utilize shared septic systems and wells in higher density housing areas	work with Planning Board and Town Council	Cruise Ship Fund, Town budget, write grants	2 - 5 years	medium term priority
III.1.D) Prepare better maps of low recharge areas to establish boundaries for districts that allow or can support only very low density of development	work with Planning Board, Town Council, and COA	Cruise Ship Fund, Town budget, write grants	2 - 5 years	medium term priority

Brief Summary of Goal 1 Estimated Expenses: In order to accomplish Goal 1, an investment will be required in public outreach and educational materials, in optimal well-siting GIS mapping, in developing maintenance and monitoring standards for septic systems and communicating those standards to the public, and in helping the planning board encourage development proposals that incorporate water quality sustainability into their site and septic design.

Chapter III, Goal 2: Protect Bar Harbor's freshwater and coastal wetlands

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Chapter III: How Do We Protect and Support Water Resources

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
III.2.A) Maintain development setbacks of at least 75 feet from wetlands of two or more contiguous acres, including forested wetlands	Planning Board and Town Council	Town budget, private foundation grants	5 - 10 years	long term priority
III.2.B) Identify the location of and continue to protect rare and exemplary natural communities; amend the LUO to protect them through clustering and buffer provisions	Planning Board and Town Council, and Town Meeting	Town budget, private foundation grants, conservation grants	2 - 5 years	medium term priority
III.2.C) Create incentives and educational materials to encourage the planting of native species	Planning Board, Town Council, Wild Gardens of Acadia, Master Naturalists, local garden clubs, COA Education Program	Town budget, small private grants, corporate sponsorship, education/outreach grants	< 2 years	short term priority
III.2.D) Discourage the use of herbicides and pesticides in setbacks from significant vernal pools and wetlands	Planning Board, Town Council, Schools, COA, UMO, and ACCT	Town budget, small private grants, corporate sponsorship, education/outreach grants	< 2 years	short term priority
III.2.E) Educate landowners and citizens on the identification and voluntary protection of significant vernal pools through citizen science and school projects	Planning Board, Town Council, Schools, COA, Schoodic Institute, Adult Ed. Community	Town budget, small private grants, corporate sponsorship, education/outreach grants	2 - 5 years	medium term priority
Brief Summary of Goal 2 Estimated Expenses: Expenses incurred to accomplish Goal 2 include an investment in public outreach and educational materials, collaborating with citizen scientists and local school projects to raise awareness of vernal pool significance, and continuing to monitor development setback standards in wetland areas.				
Chapter III, Goal 3: Protect the marine environment and enhance the economic value of renewable marine resources by preserving and improving the ecological integrity of marine communities and habitats				

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Chapter III: How Do We Protect and Support Water Resources

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
III.3.A) Continue to collaborate with and provide financial support of the Marine Resources Committee and other groups	work with Town Council and Warrant Committee	Cruise Ship Fund, Town budget, write grants	ongoing	long term priority
III.3.B) Closely monitor water quality and marine resources in the Hadley Point area and take steps to protect marine resources from the negative impacts of increased use of the town's boat launch. Encourage responsible pet waste clean up in this area, or encourage other, less sensitive areas to be used for pet recreation and discourage marketing of this sensitive area as a pet friendly park	work with MRC, Main Healthy Beaches Program, PRC, Frenchman Bay Partners	Parks and Recreation budget (for pet waste cleanup), Marine Resources budget (for water quality monitoring)	ongoing for water quality monitoring; < 2 years for pet waste cleanup improvements	short term priority and ongoing
III.3.C) Continue efforts to restore clam flats and eelgrass beds near Hadley Point	work with MRC, Main Healthy Beaches Program, PRC, Frenchman Bay Partners	Cruise Ship Fund, Town budget, write grants	5 - 10 years	long term priority
III.3.D) Support implementation of management plans for Frenchman Bay and Western Bay by working with groups like the Frenchman Bay Partners and Friends of Blue Hill Bay	work with Frenchman Bay Partners, Friends of Blue Hill Bay, Friends of Frenchman Bay	Cruise Ship Fund, Town Budget, write grants	5 - 10 years	medium term priority

Brief Summary of Goal 3 Estimated Expenses: Expenses incurred to accomplish Goal 3 include providing funding for environmental baseline monitoring of water quality and marine resources, providing funding and developing collaborations to restore clam flats and eelgrass beds, and providing public outreach and educational materials that promote conservation of our marine resources, particularly near Hadley Point.

Appendix A: Actionable Goals and Strategies for Preserving Open Space in Bar Harbor 2020				
Chapter IV: How Do We Protect and Support Scenic and Cultural Resources?				
Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
Chapter IV, Goal 1: Inventory, prioritize, and protect Bar Harbor's scenic viewsheds				
IV.1.A) Working with Bar Harbor residents, MCHT, ANP, and other partner organizations, use viewshed analysis tools, including the State of Maine Scenic Assessment Handbook, to prioritize key scenic viewsheds in Bar Harbor visible from key scenic viewpoints	BHCC, Bar Harbor residents, MCHT, and ANP	Planning Department	2 - 5 years	already in progress
IV.1.B) Amend Land Use Ordinances to include viewshed preservation standards including design guidelines for building height on ridgelines	Town Meeting, Planning Board	N/A	< 2 years	No Progress though Identified in 2007 Comprehensive Plan
IV.1.C) Encourage private landowners to protect scenic assets through conservation easements	Design Review Board	N/A	ongoing	Ongoing, depends on property owners
IV.1.D) Recognize voluntary stewardship efforts with proclamations or awards	Town Council and local land trusts	grants and private funding	depends on organization's desire to present an award	As identified stewardship occurs
IV.1.E) Help landowners preserve their legacy of voluntary stewardship by encouraging conservation subdivisions if their properties are to be further developed	Town, MCHT, ANP, and State	Local, state, and private funding	depends on landowners	Ongoing, depends on property owners
IV.1.F) Ensure that Design Review Board considers color choices and architectural enhancements that help development blend with the natural environment within scenic viewsheds	Design Review Board and Town Council	private landowners	ongoing	ongoing
IV.1.G) Support commitments to regional, state, and national scenic preservation efforts and programs, such as the Scenic Byways program in which the Town is a participant with the Acadia All-American Road	Town, State, residents, and ANP	various agencies	ongoing	ongoing

Appendix A: Actionable Goals and Strategies for Preserving Open Space in Bar Harbor 2020

Chapter IV: How Do We Protect and Support Scenic and Cultural Resources?

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
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Brief Summary of Goal 1 Estimated Expenses: Expenses dependent on scope of work and budgetary approval. Viewshed analyses are estimated at less than \$10,000. Many of strategy expenses should be considered/approved within Town/Planning Department budget. Costs involving landowner development, Design Review Board, and scenic preservation efforts are variable and dependent on community need and interest.

Chapter IV, Goal 2: Protect scenic road corridors

IV.2.A) Update and implement Bar Harbor's scenic byways plan	Planning Board (Corridor Management Committee) and Planning Department	Planning Department	< 2 years to update, 2 - 5 years to implement	Route 3 construction (2017-2019) was completed with a Corridor Management Committee
IV.2.B) Develop a vista management plan for town owned land in viewsheds in collaboration with other affected property owners and stakeholders, clearly identifying responsible parties for maintenance	Vista Management Plan Committee, Public Works, Planning, stakeholders	New committee fund source out of Planning Dept.	2 - 5 years	Not started
IV.2.C) Develop a design plan for scenic approaches to villages, including guidelines for fence heights to avoid obstruction of scenic vistas	Design Review Board, Planning Board, Public Works	N/A	< 2 years	Not started
IV.2.D) Ensure that road construction and utility projects place utilities underground where feasible	BHCC, Planning Board, Public Works	Depends on the project	5 - 10 years	Not started
IV.2.E) Strengthen and refine land use ordinances to encourage increased density of development in village centers, and make use of voluntary, incentivized easements to facilitate and encourage clustered development of large tracts of rural open space	Planning Board and BHCC	N/A	< 2 years for inventory, 2 - 5 for LUO change	Not started

Brief Summary of Goal 2 Estimated Expenses: Expenses involving development, updating, and/or implementing plans are minimal (less than \$1,000 per plan). Infrastructure project expenses are dependent on scope of work, project timelines, etc., while costs involving changes to land use ordinances are unknown at this time.

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Chapter IV: How Do We Protect and Support Scenic and Cultural Resources?

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
Chapter IV, Goal 3: Encourage preservation of dark night skies as a unique characteristic of Bar Harbor				
IV.3.A) Educate residents on appropriate lighting application and design through participation in Acadia Night Sky Festival, Dark Sky community signage	BHCC, ANP, Town Council	Acadia Night Sky Festival organization, lighting companies, Town budget	annually, ANSF held each fall	ongoing
IV.3.B) Support ANP in becoming an International Dark Sky Park or Preserve and monitor Bar Harbor's impact on sky quality in ANP, taking corrective actions where feasible	Town Council, residents, ANP, COA, Worcester Polytechnic Institute's Dark-Sky Team, International Dark-Sky Association, League of Towns, FOA, and many others	Planning Department	2 - 5 years	ongoing
IV.3.C) Convert lighting on municipal facilities and streetlights to dark-sky compliant lighting	Town Council	Town budget	2 - 5 years	ongoing, planned capital projects
IV.3.D) Review and enforce the lighting ordinance:	Planning Department and Code Enforcement	Town budget	2 - 5 years	Not started
IV.3.D.i) Discontinue the use of old and non-conforming lighting within 10 years;				
IV.3.D.ii) Ensure that lighting requirements apply to commercial and residential properties;				
IV.3.D.iii) Ensure that lighting greater than or equal to 1800 lumens is covered by the ordinance;				

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Chapter IV: How Do We Protect and Support Scenic and Cultural Resources?

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
IV.3.D.iv) Warm color temperature LED lighting should be pursued as a viable and energy efficient alternative to current utility lighting.				
IV.3.E) Continue to monitor new technologies and signage styles and proactively establish lighting and signage guidelines	Planning Department	Town budget	5 - 10 years	Not started
IV.3.F) Collaborate with surrounding communities on dark sky protection efforts through League of Towns and other area organizations. For example, the effort to use dark sky compliant lighting on Route 3 required Towns to petition the Public Utilities Commission ("PUC") to establish rates for compliant lighting	League of Towns, all MDI area Conservation Commissions, ACTT, PUC	Ask ASNF organizers for advice on funding	2 - 5 years	Mount Desert already has established rates through PUC

Brief Summary of Goal 3 Estimated Expenses: Educational material expenses are estimated at less than \$1,000 annually. Town's support of ANP becoming an International Dark Sky Park is less than \$1,000, with possible corrective actions within scope of Town budget. Lighting review, enforcement, conversion, and/or guideline cost estimates are not known at this time. Island-wide collaboration is estimated at less than \$1,000, while PUC actions are estimated at less than \$10,000, depend on extent of previous regulatory work (NE Harbor).

Chapter IV, Goal 4: Encourage protection of the acoustical environment and reduce noise pollution

IV.4.A) To increase public awareness of the Town of Bar Harbor Noise Code: "The making, creation or maintenance of such loud, unnecessary, unnatural or unusual noises which are prolonged, unusual and unnatural in their time, place and use affects and is a detriment to the public health, comfort, convenience, safety, welfare and prosperity of the residents of the Town of Bar Harbor"	New public outreach task force	Town budget	< 2 years	not started
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Appendix A: Actionable Goals and Strategies for Preserving Open Space in Bar Harbor 2020

Chapter IV: How Do We Protect and Support Scenic and Cultural Resources?

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
IV.4.B) Future applicable business development should fall within established Environmental Protection Agency (EPA) noise guidelines and standards relative to community noise impacts as generated at business landowner location	Code Enforcement and Planning Board	N/A	5 - 10 years	For future development only. Identify ways to have this considered in the development planning process.
Brief Summary of Goal 4 Estimated Expenses: Noise Code public awareness costs are estimated to be \$1,000 to \$5,000, dependent on extent, frequency, and audience. Costs involving EPA noise guidelines are not known at this time.				
Chapter IV, Goal 5: Establish a priority list of land with cultural assets to be preserved				
IV.5.A) Work with Bar Harbor residents and local cultural groups, including the Abbe Museum, to identify unprotected cultural resources previously identified by Maine Historic Preservation Commission (MHPC) that may be on Town owned land, and work with these groups to seek funds to conduct a professional survey of historic archeological sites	Historic Sites Task Force, Abbe Museum, UMO	MHPC grants, coordinate with Bar Harbor Historical Society and Abbe for funding ideas	< 2 years for inventory, 2 - 5 years for funding and surveys	Not started
Brief Summary of Goal 5 Estimated Expenses: Costs for identification of unprotected cultural resources, as well as funding for surveys of historic archeological sites, are unknown at this time.				
Chapter IV, Goal 6: Work with partners to protect culturally important open space				
IV.6.A) Continue to work with the Village Improvement Association (VIA) and landowners to maintain and improve the Shore Path, for example, with path lighting and improved accessibility	Town, VIA, and landowners	Town budget, VIA, and landowners	< 2 years	ongoing
IV.6.B) Work with the MHPC to safeguard currently identified unique cultural and historic resources (see Table 9)	Town and MHPC	Town budget, MHPC, writing grants	5 - 10 years	Not started

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Chapter IV: How Do We Protect and Support Scenic and Cultural Resources?

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
IV.6.C) Encourage private landowners to conserve their cultural assets by engaging the historic societies, working with MHPC for review and evaluation of the site, and using mechanisms like conservation easements to safeguard the asset	Town and MHPC	private funding	5 - 10 years	ongoing
IV.6.D) Engage local organizations including the ANP, historical societies and Abbe Museum to evaluate local ordinances and municipal policies that may support and encourage preservation of our cultural heritage	Planning Department and Design Review Board	Town budget	5 - 10 years	ongoing

Brief Summary of Goal 6 Estimated Expenses: Collaboration costs with Village Improvement Association and MHPC are estimated at less than \$10,000 (per each strategy). Working, encouraging, and engaging with private landowners, as well as local organizations, are estimated at less than \$1,000 (per each strategy).

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Chapter V: How Do We Protect and Support Our Recreational Resources

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
Chapter V, Goal 1: Maintain Programs & Funds to Pay for Recreational Opportunities				
V.1.A) Continue to support the Town's Capital Improvement Program	Finance Director, Town Manager, and PRC	Town budget: enhance existing CIP	< 2 years	ongoing
V.1.A.i) Use funds for improvement of existing parks	Finance Director, Town Manager, and PRC	Town budget: enhance existing CIP	< 2 years	ongoing
V.1.A.ii) Use funds to invest in the Shore Path and the Cross-Island Trail	Finance Director, Town Manager, and PRC	Town budget: enhance existing CIP	2 - 5 years	not started
V.1.A.iii) Use funds to invest in new parks in designated villages	Finance Director, Town Manager, and PRC	Town budget: enhance existing CIP, private funding	5 - 10 years	
V.1.B) Allocate funding for ongoing maintenance of existing parks and recreational facilities	Town, State, and ANP	Town budget	annually	ongoing
V.1.C) Design planned road construction and improvement projects to include adequate, contiguous bicycle routes or lanes where feasible	Public Works, Planning Department, Bike Coalition of Maine ("BCM"), DOT, and ANP	Community Bike Grants from the BCM	5 - 10 years. (Proposed MDI Bikeway Plan)	long term priority
V.1.D) Continue to support the Cruise Ship Committee to:				
V.1.D.i) Make improvements to existing recreational, pedestrian and scenic experiences, such as underground electrical and communication lines, natural landscaping, streetscapes, pedestrian friendly areas, and parks	Town, ANP, and local nonprofits	Town budget, ANP, and local nonprofits	2 - 5 years	ongoing

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Chapter V: How Do We Protect and Support Our Recreational Resources

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
V.1.D.ii) Continue to support taxi funding, walking foot patrols, increased trash disposal, and hiring a restroom attendant, among others	Cruise Ship Committee ("CSC"), Town Staff, BH Chamber of Commerce ("CoC")	Port passenger fees, cruise excursion operators, etc.	ongoing	ongoing

Brief Summary of Goal 1 Estimated Expenses: The expenses associated with this Goal are a function of the type and scope of the projects that are undertaken. For example, updates to the Shore Path could be extensive, greater than \$10,000 if the retaining wall supporting the Path has collapsed and needs to be replaced. On the other hand, ongoing maintenance of existing parks may be something as inexpensive as placing fresh wood chips in the School Street Playground. Such expenses are covered in the Town budget.

Chapter V, Goal 2: Ensure Public Access to Town Beaches

V.2.A) Maintain public access and allow kayak and small boat launching with adequate parking via leasing of land or easement at Northeast Creek, Indian Point, Lookout Point Road, and Clark Cove	Partner with MCHT for Land Leasing	Maine State grants for public boat launches	5 - 10 years	long term priority
V.2.B) Maintain access for the public and encourage stewardship by users	Work with MCHT and ANP	Work with school and youth (scouting) groups for signage, etc.	ongoing	ongoing
V.2.C) Provide adequate parking and safe access to beaches	Property owners, such as Town, State, ANP, and/or land trust	Maine shore access grants	ongoing	long term priority
V.2.C.i) Conduct inventory of parking spaces and assess feasibility of safe visitor access to beaches	Planning Department	staff time	< 2 years	not started
V.2.C.ii) Provide sidewalks or walking paths between parking and beach	Public Works	staff time	2 - 5 years	long term priority

Appendix A: Actionable Goals and Strategies for Preserving Open Space in Bar Harbor 2020

Chapter V: How Do We Protect and Support Our Recreational Resources

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
V.2.C.iii) When shorefront properties are open to public recreation, address existing and/or anticipated parking needs to provide public access without creating nuisances for adjoining property owners	Planning Board	staff time	as needed	long term priority

Brief Summary of Goal 2 Estimated Expenses: Costs for inventory work should be minimal and would include primarily staff time. Designing and installing access such as sidewalks and/or paths could be between \$5,000 - \$10,000 or more depending upon the extent of the project.

Chapter V, Goal 3: Ensure Public Beaches are Clean and Waters Support Designated Uses such as Boating, Swimming & Fishing

V.3.A) Keep beaches clean and open for recreating	everybody			ongoing
V.3.A.i) Monitor town beaches by participating in Maine Healthy Beaches Program in collaboration with the Mount Desert Island Biological Laboratory ("MDIBL")	Frenchman Bay Partners, Harbormaster, MDIBL		ongoing	ongoing
V.3.B) Prevent stormwater runoff and associated pollutants from polluting beaches	Federal, State, and Town regulations	Federal, State, and Municipal governments, private developers	ongoing	ongoing
V.3.B.i) Implement nonpoint source pollution educational strategies to prevent nutrient and bacteria from entering beaches in stormwater runoff, e.g. stencil "drains to bay" at storm drains, watershed stewardship program, rain gardens	MDIBL Community Health Lab and Hancock County Soil & Water Conservation District	Americorps; ME 319 funds from non-point source pollution program	< 2 years	short term priority
V.3.B.ii) On town-owned roads, install storm drains with capture devices (snouts)	Ask Town Council to have every new storm drain replaced with a snout.	Capital Improvement Program for new snouts and maintenance	2 - 5 years	long term priority

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V.3.B.iii) Provide pet waste collection units in sensitive areas such as Hadley Point Beach, and/or provide education signage for pack it in / pack it out	PRC and Public Works	Town budget and private funding	< 2 years	short term priority

Brief Summary of Goal 3 Estimated Expenses: The cost for water quality monitoring is a function of the number and type of samples collected and analyzed and could be less than \$1,000 on an annual basis. The installation of snouts into existing or proposed storm drains could cost several thousands of dollars but is not known at this time.

Chapter V, Goal 4: Maintain, Improve, and Protect Existing Town Parks

V.4.A) Secure permanent protection of the Town Hill Playground	PRC and Blackstone Properties LLC. (owner)	Grants, user donations, etc. Grants may be available through Statewide Conservation Outdoor Recreation Plan (SCORP)	< 2 years	
V.4.A.i) Contact the property owner to discuss the possibility of a plan for purchase or long term lease of the property supported by a fundraising campaign or response to a grant opportunity	PRC and Blackstone Properties LLC. (owner)	Grants, user donations, etc. Grants may be available through Statewide Conservation Outdoor Recreation Plan (SCORP)	< 2 years	short term priority
V.4.B) Renovate Grant Park on Albert Meadow while respecting its natural open character view of Frenchman Bay and address water runoff issues on the southern boundary of the park				completed

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V.4.C) Provide for annual maintenance of the Park Street Playground and provide funds to assist in the reconstruction of the facility in collaboration with partners				completed
V.4.D.) Work with the MDI Skate Park Association to facilitate construction and maintenance of recreational facilities				completed
Brief Summary of Goal 4 Estimated Expenses: The cost to secure the Town Hill Playground is not known, but would be effected by current comparable property values. The costs to maintain the other existing town facilities would be included in Town's budget.				
Chapter V, Goal 5: Improve Existing and Create New Parks & Athletic Fields				
V.5.A) Construct new parks and athletic fields in designated villages to sufficiently serve the town				not started
V.5.A.i) Improve access to community playgrounds on the west side of the village of Bar Harbor, in the neighborhood west of Eden Street between West Street Extention and Eagle Lake Road	PRC and Town Council		2 - 5 years	not started
V.5.A.ii) Assess the need for a fenced dog park, and if necessary, identify suitable locations and funding sources	PRC	Collaborate with private BH dog park's ongoing fundraising efforts	ongoing	
V.5.A.iii) Assess the need, and if necessary build a new Little League field in town	PRC		2 - 5 years	medium term priority
V.5.B) Once a new park development has been identified, plan for adequate and safe pedestrian and bicycle access between the new recreational areas, schools, villages, and major employers	Public Works and Planning Department	Capital Improvement Fund	< 2 years	Look for opportunities during road rehab projects

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Brief Summary of Goal 5 Estimated Expenses: The costs associated with Goal 5 are not known but it is anticipated that the design and construction of a Little League field could be very expensive depending upon the site preparation work and facility amenities.

Chapter V, Goal 6: Support Preservation of the Shore Path

V.6.A) Establish and maintain a directory of new and existing landowners. Establish relationships with new landowners as property is transferred	Create a Town committee to take on this task	Town budget	< 2 years	short term priority
V.6.B) Continue to invest in and extend the Shore Path, if possible, as opportunities arise	VIA, BHCC	Grants, Town budget, private funding	ongoing	long term priority
V.6.C) Seek grant funding opportunities to work toward improved accessibility and Americans With Disabilities Act (ADA) compliance	VIA, BHCC	Grants and Matching Funds	5 - 10 years	long term priority
V.6.D) Amend the LUO to exempt land included in the Shore Path from lot coverage calculations and setbacks if access is protected by a permanent easement	Town Meeting, Town Council, Planning Board, BHCC	N/A	5 - 10 years	long term priority

Brief Summary of Goal 6 Estimated Expenses: The expenses associated with the implementation of Goal 6 to maintain, and possibly extend, the Shore Path, as well as achieve ADA compliance, are not known at this time.

Chapter V, Goal 7: Establish a Cross-Island Trail

V.7.A) Continue to work with groups such as other MDI Conservation Commissions, VIA, FOA, ANP, MCHT, and property owners to obtain easements and construct linkages as necessary to establish a cross-island bicycle and pedestrian trail	Create a collaborative group that includes Town representation to take this task on	Grants, donors, landowners, funding from all involved towns	> 10 years	long term priority
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Brief Summary of Goal 7 Estimated Expenses: The expenses associated with the implementation of Goal 7, to establish a cross-island trail, may involve property acquisition and/or easements across private properties. Those expenses are not known at this time.

Chapter V, Goal 8: Provide Linkages for Multi-Use & Nature Trails

V.8.A) Identify parcels adjacent to existing conserved lands with trail systems (including Acadia National Park) and develop public-private partnerships for connector trails for car free visitor access to larger trail networks	FOA, CoC, MCHT, Public/Private partnerships (mirror how the Great Meadow connector trail was established)	Capital campaign collaborations, search for other funding sources	ongoing	long term priority
V.8.B) Create incentives through reduced valuation for footpath and/or bike paths between residential areas	Town staff		2 - 5 years	long term priority

Brief Summary of Goal 8 Estimated Expenses: The costs to fulfill Goal 8 are associated with establishment of easements for the development of connector trails. A local land trust could provide a better estimate of scope of work and costs.

Chapter V, Goal 9: Be a Bicycle-Friendly Community

V.9.A) Develop a plan for bicycle transit between designated villages and institutional campus areas and work toward future implementation of the MDI bikeway plan	Work with Bike MDI, BCM, ANP (Transportation Plan), and ACTT to compare existing plans or plans in progress	Local bike shops, communities, ANP, BCM, Quimby Family Fund, bank foundations, etc.	2 - 5 years	**Identified as important to the community during public comment**
V.9.A.i) Create a bicycle and pedestrian committee in town working with stakeholders who are utilizing programs such as the Community Spokes Toolkit from the Bicycle Coalition of Maine	Establish a volunteer Town task force	Town funded; task force budget. Local corporate sponsorships, private foundation grants	< 2 years	short term priority
V.9.A.ii) Include bicycle lanes or paved shoulders in major road projects, when rights-of-way are available or pursue easements	Have a task force rep attend public DOT meetings dealing with proposed road widening	State and Municipal funding	Ongoing; see Rt. 3 Construction	long term priority

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Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
V.9.A.iii) Maintain and improve road surfaces and expand shoulders, whenever possible, to minimize hazards to bicyclists	Public Works	Adequate funding requests to the Town for Public Works to continue maintaining roads and shoulders	ongoing	long term priority
V.9.A.iv) Identify key locations in the community for signage and bicycle racks, while considering the location of parks, scenic byways, community facilities and events, and the Downtown Master Plan	new task force	small grant funding	< 2 years	short term priority
V.9.A.iv.a) Install and maintain appropriate signs and racks	new task force	small grant funding	< 2 years	short term priority
V.9.A.iv.b) Encourage businesses to support a bicycle friendly community with bike racks at businesses, offering consumer discounts, etc.	new task force	corporate sponsorship and small grant funding	< 2 years	short term priority
V.9.A.iv.c) Encourage major employers to facilitate bicycle commuter programs	new task force	State Transit funds, employer incentives, etc.	2 - 5 years	long term priority
V.9.B) Promote bicycle awareness and safety for children and adults	new task force	corporate sponsorship and small grant funding	< 2 years	short term priority
V.9.B.i) Create a bicycle and pedestrian committee in town working with stakeholders who are utilizing programs such as the Community Spokes Toolkit from the BCM http://www.bikemaine.org/biking-resources/community-spokes-toolkit.	new task force, YMCA, Bike MDI, Rotary Club, COA, Bike rental companies, etc.	corporate sponsorship and small grant funding	< 2 years	short term priority

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Chapter V: How Do We Protect and Support Our Recreational Resources

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
V.9.B.ii) Offer a Police Department sponsored, certified bicycle instructor led one-day bicycle safety course each year at the elementary school	Police Department and new task force	corporate sponsorship and small grant funding	< 2 years	short term priority
V.9.B.iii) In partnership with bike shops and local cycling organizations, promote traffic rules for cyclists and motorists. Provide public information and "share the road" signage to remind both residents and visitors of these rules	new task force	corporate sponsorship and small grant funding	1 year	short term priority
V.9.B.iv) Work with organizations that coordinate bicycle awareness campaigns and promote non-vehicular commuting such as Bicycle Month (May) and Commute Another Way Day	new task force	corporate sponsorship and small grant funding	< 2 years	short term priority
V.9.C) Improve incentives such as reduced valuation for bike path construction on private land between developments	Use snowmobile trail associations trail system as model, BCM, Bike MDI	Town funded via tax incentives	5 - 10 years	**Identified as important to the community during public comment**
V.9.C.i) Exempt bike paths from setbacks and lot coverage requirements	Planning Board	N/A	5 - 10 years	long term priority

Brief Summary of Goal 9 Estimated Expenses: Educational costs, such as signage, campaigns, training and safety courses associated with Goal 9 could be less than \$1,000 per strategy.

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Chapter VI: How Do We Protect and Support Working Lands				
Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
Chapter VI, Goal 1: Protect undeveloped important farming soils to ensure the production of local food now, and in the future				
VI.1.A) Through the Conservation Commission:				
VI.1.A.i) Investigate collaboration and grant funding with the American Farmland Trust ("AFT"), Maine Farmland Trust ("MFT") and Land for Maine's Future ("LMF") to develop a farmland preservation program	BHCC, MFT, AFT, LMF	Short term funding for inventory & development out of BHCC budget. Long term funding needed from grants	< 2 years to update inventory, 2 - 5 years to develop program, 5 - 10 years to implement with partners	not started
VI.1.A.ii) Work with MCHT to secure conservation easements, or Maine Farmland Trust to secure agricultural easements, on farm properties with willing landowners	BHCC, MCHT, MFT	Town budget and partner funding	2 - 5 years	not started
VI.1.A.iii) Connect new and current farmers with MFT's FarmLink program and Farms for the Future program for assistance with purchasing and leasing farmland	Comp. Plan strategy 1D3 - BHCC leads	MFT FarmLink	< 2 years	not started
Brief Summary of Goal 1 Estimated Expenses: Short term costs for investigation/inventory of farmland and soils is less than \$1,000, with long term grant funding for developing preservation program undetermined. Collaborative work with conservation or agricultural easements on farm properties are estimated at less than \$1,000. Educational efforts with farmers and FarmLink program are less than \$1,000.				
Chapter VI, Goal 2: Support local farming through local tax, economic development, and zoning policies				
VI.2.A) Continue to encourage and provide opportunities to educate about Maine State Current Land Use Tax Programs that reduce assessed values. These include Farmland Tax Law, Open Space, Tree Growth, and Working Waterfront	Town Assessor, Planning Board, and BHCC	N/A	< 2 years	ongoing

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Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
<p>VI.2.B) Through the planning or economic development office, facilitate the formation of an agricultural commission. This commission should be comprised of farmers and other stakeholders. It should be charged with helping to implement strategies from the Comprehensive Plan and proposing changes to local ordinances and municipal policies that would be supportive of farming. In addition to addressing municipal issues, this commission could potentially:</p>	<p>Town Council and Planning Board, Town Meeting & Warrant Process</p>	<p>Town budget, if Commission is established</p>	<p>2 - 5 years</p>	<p>not started</p>
<p>VI.2.B.i) Help address the barriers related to temporary housing for farm workers;</p>				
<p>VI.2.B.ii) Engage Maine Farmland Trust staff with farmers to find out what challenges they face, in effort to improve capacity;</p>				
<p>VI.2.B.iii) Sponsor workshops on topics of interest to farmers;</p>				
<p>VI.2.B.iv) Identify large parcel areas of important farm soils that are not developed and evaluate the feasibility of farming this land in the future;</p>				
<p>VI.2.B.v) Encourage farmers to adopt and use best management practices to protect the quality of water and natural resources;</p>				
<p>VI.2.B.vi) Evaluate water supply needs of local farmers and impacts to surrounding properties. Work with municipal officials to address water supply issues that arise;</p>				
<p>VI.2.B.vii) Help promote locally grown products; and</p>				

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Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
VI.2.B.viii) Work with other MDI communities, MCHT, COA and others to develop regional strategies for farming				
VI.2.C) Explore adoption of the Voluntary Municipal Farm Support Program that provides additional tax relief to farmers: http://www.maine.gov/dacf/ard/farmland_protection/voluntary_municipal_farm_support.shtml	individual farmers	N/A	2 - 5 years	not started
VI.2.D) Explore incentives that encourage purchasing of locally grown or harvested products for municipal programs and events, and encourage local institutions, schools, and year-round businesses such as Jackson Laboratory, School District AOS 91, MDI Hospital, MDI Biological Laboratory, grocery stores, and restaurants to do the same. Develop strategies with appropriate partners to increase the percent of available local and regional products purchased and used	Local food and farming organizations and BHCC	N/A	2 - 5 years	not started
VI.2.E) Review the Land Use Ordinance and follow agricultural strategies outlined in Policies 1D of the Comprehensive Plan that enhance agricultural operations in order to:	BHCC, Planning Board, Planning Department	Within current Planning Departmental budget	< 2 years	not started
VI.2.E.i) Optimize agricultural use in designated rural and rural residential areas as described in the Future Land Use Plan, Chapter III B-3 and III B-4 of Bar Harbor's Comprehensive Plan;	Planning Department and Code Enforcement	N/A	< 2 years	
VI.2.E.ii) As new planned unit developments are proposed, then prioritize planned development to limit the development footprint on prime agricultural soils;	Planning Department and Code Enforcement	N/A	2 - 5 years	

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Chapter VI: How Do We Protect and Support Working Lands

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
VI.2.E.iii) Encourage farmers to use best management practices to minimize soil erosion	UMO Extension Office and COA	N/A	< 2 years	

Brief Summary of Goal 2 Estimated Expenses: Costs for educational outreach with applicable State tax programs within scope of current Town departmental budget(s). Initial expenses with developing an agricultural commission are estimated at less than \$1,000. When agricultural commission is established, long term costs with farming strategies are considered within scope of current Town departmental budget(s). Investigative efforts with tax relief for farmers are estimated at less than \$1,000, while educational outreach encouraging locally grown products and programs is estimated at less than \$1,000.

Chapter VI, Goal 3: To protect the health of our forest resource, support programs that facilitate forest management

VI.3.A) Continue to encourage and provide opportunities to educate landowners of 10 acres or more about Maine State Current Land Use Tax Program - Tree Growth, that reduces assessed land values	BHCC, Town staff	N/A	2 - 5 years	not started
VI.3.B) Develop a list of local foresters that can provide services to small woodlot owners with smaller harvest volumes so that small working forests are viable	BHCC, Town staff	N/A	2 - 5 years	not started
VI.3.C) Promote the use of the Maine Forest Service Woods Wise program, which provides free advice, and a cost-sharing program, which can help with the cost of developing a forest management plan	BHCC, Town staff	N/A	2 - 5 years	not started

Brief Summary of Goal 3 Estimated Expenses: Estimated costs for the three strategies (encourage opportunities, develop list, and promote use) regarding forest management are minimal at this time.

Chapter VI, Goal 4: Accommodate increased commercial and recreational activity in the harbor at public access sites

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Chapter VI: How Do We Protect and Support Working Lands

Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
VI.4.A) Through the Harbor Committee, update and continue to implement the existing Harbor Management Plan to help ensure the availability of adequate, safe and environmentally sound waterfront access sites for both commercial and recreational users. The plan should:	Harbor Committee, BHCC, CSC, PRC, MRC, Harbormaster, Parking Solutions Task Force, fishing and recreational stakeholders	Harbor Committee Budget	5 - 10 years	not started
VI.4.A.i) Ensure that waterfront areas, including the area around town pier in Bar Harbor, continue to grow in a safe, environmentally sound, and economically prosperous manner supported by adequate parking	Harbormaster, CoC, MRC, commercial fisherman, and ecotourism operators	Harbor Committee Budget	< 10 years	
VI.4.A.ii) Balance competing uses among commercial, recreational, and tourism vessels within the harbor to ensure public safety and maximize public benefits. This could include expansion of facilities in Harborview Park	Harbormaster and PRC	Harbor Committee Budget	5 - 10 years	
VI.4.A.iii) Ensure that revenue from moorings and small and large passenger vessel visitation will support the Harbor Management Plan	Harbormaster, Town Staff	Harbor Committee Budget	5 - 10 years	
VI.4.A.iv) Include monitoring of town appropriations, revenues, and fees and adjust them as appropriate to meet the needs for investment in marine infrastructure	Harbor Committee, Harbormaster, mooring renters, FBBC or other marine contractors performing mooring maintenance	Harbor Committee Budget	5 - 10 years	
VI.4.B) Continue to develop the Bar Harbor ferry terminal property (121 Eden Street) to accommodate multiple uses that will make the most out of this unique and valuable waterfront property	(Former) Ferry Terminal Advisory Committee, local stakeholders, dock lessees	Town parking funds, Harbor Committee Budget	ongoing	Partially complete. Town purchased property; Bay Ferries Limited is lessee.

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Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
VI.4.C) Ensure adequate availability of moorings and access points for commercial fishing vessels	Harbor Committee, Harbormaster, commercial fisherman including student licensees	Harbor Committee Budget	< 2 years to identify locations, 2 - 5 years to ensure availability	not started
VI.4.D) Seek opportunities to improve access and increase parking at Clark Cove and Indian Point Town Landing access sites	Public Works, BHCC, PRC, commercial fishermen, Island Institute Economic Development and neighbors	Island Institute small grants	< 2 years	not started

Brief Summary of Goal 4 Estimated Expenses: Efforts to update/implement Harbor Management Plan are estimated at \$1,000 - \$5,000 per strategy, while costs for protections of waterfront areas are dependent on the addition of infrastructure, including adequate parking. Ferry terminal property purchased by Town for \$3.5 million, and current multi-year leasing contract total revenue estimated at over \$1 million. Property currently developed for international ferry services (multi-million \$ costs paid by Lessee), with development of marina and public access ongoing and in the future (multi-million \$ costs paid through Town parking funds and Town municipal budget). Mooring and access point costs dependent on mooring specifications, and Clark Cove/Indian Point Town Landing access and parking opportunity costs are estimated at less than \$1,000.

Chapter VI, Goal 5: To alleviate congestion at the Town Pier and add public access points to the Bar Harbor waterfront

VI.5.A) Secure access points for public use when property becomes available, through private-public partnership, purchase of waterfront properties, or other means	Town staff	Town budget and partner funding	5 - 10 years	not started
VI.5.B) Consider use of cruise passenger fees to expand public access to waterfront in other locations in Bar Harbor	CSC, Town staff	N/A	5 - 10 years	not started
VI.5.C) In Hulls Cove and Northeast Creek, evaluate the possibility of increasing access where Route 3 corridor abuts public waters through increased parking areas and accessibility	Design Review Board and Planning Department	Town budget and partner funding	5 - 10 years	not started

Brief Summary of Goal 5 Estimated Expenses: Estimated costs, for strategies to alleviate Town Pier congestion and provide additional waterfront public access points, are not determined at this time.

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Chapter VI: How Do We Protect and Support Working Lands				
Open Space Plan Chapter, Goal, and Strategy	Suggested Responsible Individual/Group(s)	Possible Funding Source(s)	Estimated Schedule	Goal Priority and Status of Strategy
Chapter VI, Goal 6: Maintain and increase working waterfront access via private land				
VI.6.A) Provide municipal tax incentives for private property owners to permit historical access to working waterfronts to continue in perpetuity	Town staff	Town budget	5 - 10 years	not started
VI.6.B) Encourage working waterfront landowners to enroll in Maine's Current Land Use taxation program for working waterfronts	Town staff	N/A	5 - 10 years	not started
Brief Summary of Goal 6 Estimated Expenses: Estimated costs, for strategies to maintain/increase working waterfront access, are not determined at this time.				

APPENDIX B. FARMER INTERVIEWS

Bar Harbor farmers were interviewed during the winter and spring of 2013 to help inform the open-space planning chapter on working lands. These interviews with local farmers identified the following challenges and barriers to farming in Bar Harbor, along with some good ideas (*categorized but in no particular order*):

Land Access and Affordability Issues

- Access to land for tilling and growing vegetables, pasturing livestock, or growing hay;
- Affordability of land that may be available for farming uses;
- Space constraints on island – farmers cannot grow enough to supply hospitals and schools;
- Competition for land with horse farmers;
- Farming on non-adjacent parcels creates challenges in terms of equipment, water and power;
- Issues relating to leased farmland:
 - short-term view vs. long-term view (nutrient cycling and sustainability);
 - impacts to resident landowner often unanticipated at first;
 - competition;
 - access to water and power;
- Information should be made available to landowners to help them think through a potential lease (including sample lease agreements);

Access to Farm Products and Services

- Lack of processing facilities in town or region – have to travel with livestock or products -150 miles to a slaughterhouse if want to sell to public;
- There is not a farmers’ cooperative in the area because there is no money in organizing a coop – need a grant to get one going;
- Higher cost of materials and services (such as veterinarians) due to lack of local and regional farming infrastructure;
- Large animal vets are far away and species dependent (e.g., goats) so training and availability are an issue – potential animal health issues are not addressed as a result;
- Access to good hay is a huge problem – need local source;

Ordinance Issues

- Local ordinances prohibiting processing of farm livestock or products, even farm kitchen processing – local resistance to any type of processing;
- Local ordinances prohibiting value added commercial activities like farm dinners, weddings, workshop events;

- Local ordinance restricting temporary housing for farm workers (provisions geared toward tourism, e.g., commercial campgrounds);
- Town should allow value added components needed to make farming profitable (e.g., tourist opportunities like café, ice cream parlor, farm work, farm tours);
- Setback requirements on private roads are impacting ability to maximize farm potential of some properties;
- Few areas with good farm soils in town – should be local ordinance prohibiting removal of such soils and development should be clustered away from good farm soils;
- Temporary signs for farmers markets are not allowed;
- Having farm animals is not a new use but is a traditional use and part of our heritage – 3-4 chickens are not a problem and should be allowed in most places;
- Local regulations need to be clear about what can't happen but flexible about what can happen (no motels);
- It is impossible not to violate avocational agriculture zoning provisions for animals – animal units would be better measure;
- Grandfathering of uses allows the continuation of bad practices;
- The Emery District has use conflicts;
- The Town allowing rezoning to more intensive uses is most serious issue now;

Miscellaneous Issues

- There is a lack of a business voice for farmers so those not knowledgeable about farming set policy in Bar Harbor;
- Non-profit organizations running farms compete with private farms and can have an unfair advantage (access to grants and private funding not available to for profit farmers);
- Need to foster more collaboration among farmers - A cooperative or community collective could help brand MDI food (MDI growers association)– MDI-grown does resonate with people and a map showing what is available where would be popular – along with decals for businesses and restaurants;
- It is nice for farmers to have connections with community through programs like Senior Farmshare – the Town could coordinate such a program (State paid \$50 for each share of groceries delivered);
- Town could engage farmers and neighbors to talk about issues – as some farming activities could evoke concern among neighbors – e.g., a slaughterhouse is desperately needed but is controversial though there is demand for local food - need targeted local neighborhood; outreach
- A brochure available about farming and hosting open farm days would help build awareness;
- Term easements may be a more suitable tool for microfarms because microfarms are portable and not as tied to the land;

- The Economic Development Task Force should have an interest in farming;
- Affordable insurance and affordable labor are big issues – 20% of payroll at one farm is workers' compensation insurance and cannot insure anyone under 16 years old though lots of kids want to come to work on the farm;
- Minimum wage is a problem for farms;
- Need stronger rules to protect farmers from liability claims – currently driven by insurance companies and attorneys;
- Sales tax on items purchased out of state and special use taxes on farm equipment are a big problem;

APPENDIX C. OPEN SPACE FORUM -PUBLIC FEEDBACK

COMBINED BAR HARBOR OSP PUBLIC MEETING NOTES ~ APRIL 17, 2014

WATER RESOURCES

All participants agreed that the most important goal is #1: Protection of groundwater, streams, etc. If the upland water resources are protected then the downstream water resources will reap the benefits of that protection.

During discussion, specific strategies came up. Here are some of them:

The majority of the public comments regarded some aspect of water resources within the Northeast Creek watershed.

Because of its size, diversity of habitats and connection to extensive uplands as well as marine environments, this focus is not surprising. They are summarized below in their own section, followed by comments listed as “Other”.

Northeast Creek:

1. Address the culvert problem on Crooked Road near the Wild Iris Farm. The culvert is too high; therefore water does not drain expediently off of the farm property after heavy rain. Rainwater backs up onto the field, mixing with horse manure. This could lead to increased nitrogen and bacteria flowing into the watershed as the field eventually drains.
2. Seek grant monies to assist with purchase or construction of manure sheds for local farms.
3. Initiate baseline monitoring in upland streams to determine where nitrogen inputs are originating in the Northeast Creek Watershed.
4. Consider periodic dredging of wetlands on the Stone Barn property, to keep water flowing freely through the watershed and into Northeast Creek.
5. Consider 5-acre build out in areas of the Northeast Creek Watershed most likely to contribute to excessive nitrogen loads to Northeast Creek. Enact ordinances to discourage or reduce the number of “lollipop” subdivisions along Crooked Road and Knox Road, which spread out development in the watershed.
6. Map areas where wells have suffered from insufficient water quantity in the past, in particular, the Crooked Road corridor and the area around the Stone Barn at the intersection of Norway Drive and Crooked Road.
7. Address the causes of bacterial pollution that are responsible for clam flat closures at Northwest Cove off of Indian Point Road and mouth of Northeast Creek. Consider the use of canines that can detect human sewerage. Perhaps watershed surveys in the vicinity of Prays Brook and Northeast Creek are warranted.

Other:

1. Plant vegetation in ditches along Schooner Head Road to prevent flow of sediments and nutrients and pesticides used on lawns into wetlands.
2. Explore ordinances to regulate pesticide and herbicide use on lawns in Bar Harbor. Consider a neighborhood incentive program like the “BayScaper Program” put in place by Friends of Casco Bay in Portland, Maine, where neighbors encourage neighbors to limit pesticide use.

Recommendations for Water Resources Map revisions or ancillary maps:

1. Show the Stone Barn Property and the Wild Iris Property as areas for attention and the streams in this vicinity as priorities for baseline monitoring of nutrients and bacteria.
2. Show the Crooked Road Corridor and area around the Stone Barn as areas of risk for water quantity insufficiencies during times of drought.
3. Indicate on map priority areas for improving water quality, quantity.
4. In order to encourage a limit on the extent of impervious surfaces in the Northeast Creek Watershed—show what a 5-acre build out would look like as compared to the current 1-acre build out that is now permitted.

NATURAL RESOURCES

Public Comments with greatest number of comments/most support:

- Fish passage;
- Travel corridors;
- Connectivity;
- Preserve through incentives; several people recommended management through ordinance.

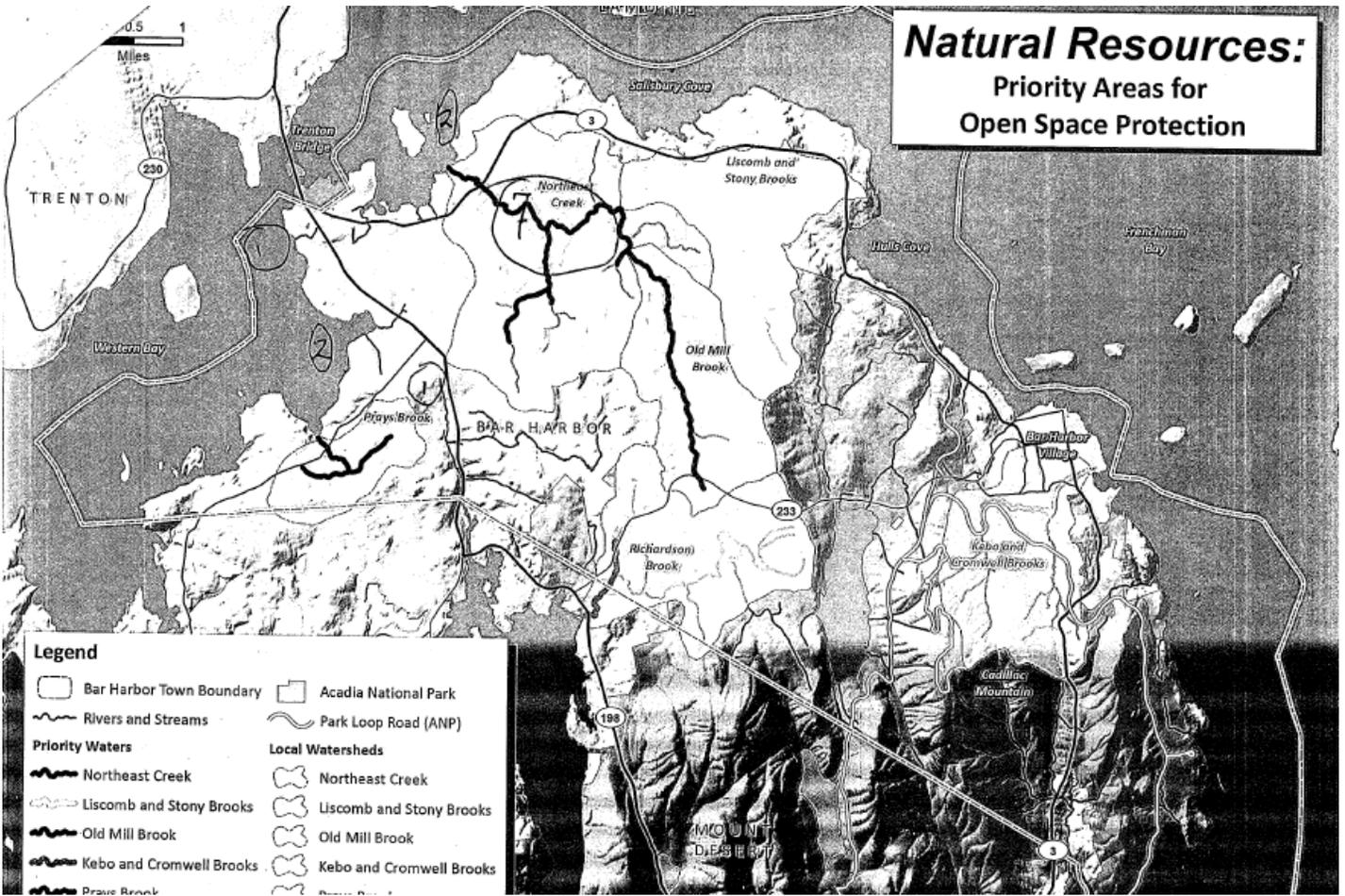
All comments:

- Consider renaming the chapter "Natural Habitats" to avoid things like gravel deposits, which are also natural resources;
- Maintain corridors for migration;
- Preserve and/or create connections between habitat blocks;
- Improve fish passage;
- Make sure that the goals for other chapters support habitat goals;
- Mention importance of invasive species management;
- Try to identify core blocks by combining layers (good suggestion, isn't it?);
- Consider the effect of easements on tax base and try to employ other methods;
- There are fewer vectors for invasive species spread if large blocks are maintained;
- For Vision: Develop systems and planning to allow development while still protecting habitat;
- For vision: ensure healthy, diverse marine habitats;
- Question: how many 500-ac undeveloped blocks are there in BH?;
- Quarrying threats (sedimentation);
- If we set near-shore marine habitat as the #1 priority, then EVERYTHING uphill has to be protected!;
- For Vision: There is unimpeded movement of diadromous fish;
- Encourage forestry activities that provide wildlife habitat;
- Look at how LUO can enhance habitat;
- Citizen Resources: Where can citizens go to get advice and assistance with habitat management?;
- Re-emphasize cluster development to protect habitat;
- Provide incentives for habitat protection;
- Pay attention to NE Creek;
- NE Creek: protect the system to protect habitats;
- Don't just plan: ACT!;
- Coordinate elements of working lands and habitat chapters to maximize benefits;
- Wildlife does not recognize town or park boundaries; seek partnerships;
- Maintain connectivity for animal travel from mainland;
- Identify important wildlife corridors;
- Manage human impacts: less driving, fewer roads, more modes of access (walking, biking);

Each person received three dots to place wherever they wanted. Most of the dots fell on the five goals that we had discussed. These are the results: **Goal 1 = 19, Goal 2 = 18, Goal 3 = 11, Goal 4 = 12, Goal 5 = 8**

The chapter title, Natural Resources, was said to be misleading since we aren't talking about granite quarries, mines, hydro dams, etc. these are natural resources that people could exploit. Suggestion to change back to Wildlife and Habitat.

**Natural Resources:
Priority Areas for
Open Space Protection**



SCENIC & CULTURAL RESOURCES

VISION STATEMENT ADDITIONS

- Mitigating ugly places;
- Screening e.g. developed areas;
- Viewsheds;
- Smaller development;
- Open spaces along roads;
- No one will come if open space not protected;
- Dark nights (2X);
- Views over large expanses of land;
- Diversity of landscapes;
- Historic Native American routes on island;
- Abundant wildlife populations;
- Integrated with community;
- Thoughtful development;
- Small town parks;
- Less traffic; less energy; more tranquility;
- Flow of transportation;
- Other sensory experiences e.g. auditory;

OTHER CATEGORIES OF SCENIC & CULTURAL RESOURCES (not on map)

- Wetlands;
- Quiet;
- Other farms not on the map;
- Roads e.g. Crooked, Cromwell Harbor;
- Park boundaries / adjacent lands;
- Old orchards;
- Water facility at Witch Hole;
- Views from water;
- Views from Crooked Rd. e.g. fresh water marsh;
- Long views;
- Island-wide planning;

GREATEST NEEDS FOR PROTECTION

Top choices:

- Road corridor experience;
- Landscape continuity / artificial boundaries, jurisdiction;
- NE Creek;
- Crooked Rd. and Norway Dr.;
- Tighter development with open spaces;

Other needs:

- Views from water;
- Small farms (2X);
- Wooded roadways / road corridors (3X);
- Views of mountains from Main St., framed by trees;
- Berry fields / picking;
- Tipping;

- Head of MDI;
- Roadside edges, invasive species;
- Private land fencing on Rte. 3 obstructing views;
- Views obstructed by cruise ships;
- The Bar;
- Hadley Pt. (accessible year round);
- Shore Path;
- Loss of dark skies / more dark sky enforcement (2X);
- Affordable housing – a balance;
- Buffering;

PROTECTION STRATEGIES

- Stronger ordinances without reducing tax base;
- Burying power lines;
- Open Space Fund;
- NPCA – gateway communities;
- Zoning;
- Utility companies & streetlights – giving more control to town;

RECREATION

Summary of Major Points:

1. Provide safe bicycle and pedestrian facilities along state and town roads;
2. Create bicycle and pedestrian linkages to open space from neighborhoods;
3. Preserve, improve, and promote public access to water for recreational use;
 - Create car-free access to recreation;
 - Ensure connectivity of open space with bike paths and hiking trails;
 - Preserve traditional access to open space;
 - Improve management of Hadley Point;
 - Increase awareness of local parks, but do not let them become overused;
 - Provide guidelines for how public should use local parks;
 - Create safe, convenient connections to open space;
 - Work with Maine DOT to construct bike lanes along state roads;
 - Secure land needed to provide connections between open space;
 - Support village connector trails from neighborhoods to Acadia National Park;
 - Create car-free access to open space and recreational areas;
 - Accommodate bikes of roads through island-wide master plan;
 - Invest in providing recreational opportunities on the west side of town;
 - Manage traffic to improve bicycle safety;
 - Improve boat ramps;
 - Ensure that the public has legal access to water;
 - Establish land acquisition fund to establish linkages and protect open space;
 - Make roads better for walking and biking;
 - Provide off-road access to high school;
 - Improve parking for access to Northeast Creek;
 - Develop playgrounds and ball fields close to growth areas;
 - Incorporate bike and walking paths in road projects;

- Consider the possibility of multiple uses in creating linkages for open space (e.g., wildlife corridor + bike path);
- Investigate the possibility of using private roads for public recreation and access to open space;
- Remove encroachments and improve public water access at Town Landing Road and Clark Cove Road;
- Add public school athletic facilities and COA to list of public recreation resources;
- Improve safety of Crooked Road for biking;
- Provide opportunities to enjoy the night sky;
- Create an off-road connection between Hulls Cove and Mill Brook Road;
- Create a "dog park."

WORKING LANDS

	Group 1	Group 2	Group 3
Vision/ Goals	<ul style="list-style-type: none"> • Seeing more value-added products • Vision should address livestock – growing and slaughter • Clearing land for farming • Improve access to working waterfront by limiting encroachment • Sustainability of working waterfront • Locating development in a way that maximizes protection of farm soils 	<ul style="list-style-type: none"> • We have adjusted our attitude (toward land in general and for post-oil farming) • More land is producing food (former fallow land) • Balance niche farming and growing staples for year-round residents • Addressed food insecurity in year-round population • Value-added processing is helping farming to be economically viable • Residents are aware of the benefits of local food • Local food is part of the school curriculum 	<p>Vision</p> <ul style="list-style-type: none"> • Encroachment to working waterfront has been addressed (#3 and #4 on map) • Energy production is a secondary use on working lands (e.g., solar) • Allow enhancement of working lands to help meet scenic and cultural goals <p>Goals</p> <ul style="list-style-type: none"> • Broaden scope of working lands – energy, etc. • Comprehensive • Make public more aware of working lands and their importance • Publicize • Take advantage of town/NGO partnerships
Issues	<ul style="list-style-type: none"> • Water for farming (brewery in Town Hill using water) • Drainage • Allow innovative offerings by farmers • How working lands interact with wildlife 	<ul style="list-style-type: none"> • Potential for development in Town Hill area • Shared farm equipment program • Cooperative • Keep cohesive blocks of farms • Northeast Creek (water quality conflicts?) • Ask owners of inactive farmland to lease part of their land to farmers • Use working forestland to help meet local needs for firewood 	<ul style="list-style-type: none"> • Is quarrying/mining working land? • Red tide is an issue for mussel farmers • Is golf course working land?
Places	<ul style="list-style-type: none"> • Crooked Road corridor • Norway Drive • Liscomb Farm – Town Hill • Whole Town Hill area (w/ good farm soils) • Head of the island 	<ul style="list-style-type: none"> • Crooked Road corridor • Town Hill – Gilbert Farm Road • Hadley Point – Hamilton, Sweet Pea, Heart of Eden • Hadley Point as working waterfront • Maintain working forest along shoreline – to protect water quality • Hulls Cove – Route 3 (McQuinn?) 	<ul style="list-style-type: none"> • Water access points • Hulls Cove – Cover Farm • Salisbury Cove – access for harvesting shellfish • Hadley Point • Old Ferry terminal as working waterfront (asset not being used) • Fishermen on town pier • Crooked Road – Gilbert Farm • Bridge Street • Babson Creek – access • Hulls Cove Beach – visitor access

