

Map 1. Regional Context



Map 2. Environmental Justice Populations New Marlborough Open Space & Recreation Plan Palmer Pond Lake 57 Buel YERY Stedman Pond Hartsvil A RISVIL Rad Wannan BOROUGH & Wahly Pond Threemile Pond Juniper Morley Pond Pond PD West ARE Lake Homes Road Pond it Baaan Hartnett Pond New NEW ALAR BOROL Marlborough Mill River 57 183 Southfield ER RD York Lake





Map 3. Zoning





Map 4. Soils and Geologic Features





Map 5. Unique Features





Map 6. Water Resources







Map 8. Actions







Jack Buckley, *Director*

February 12, 2016

Lauren Gaherty, Senior Planner Berkshire Regional Planning Commission 1 Fenn Street, Suite 201 Pittsfield, MA 01201

Re: Open Space Plan, 16-35284, Town of New Marlborough,

Dear Ms. Gaherty:

Thank you for contacting the Natural Heritage and Endangered Species Program (NHESP) regarding an Open Space and Recreation Plan for the Town of New Marlborough. Enclosed is information on the rare species, priority natural communities, vernal pools, and other aspects of biodiversity that NHESP has documented in New Marlborough. The town is encouraged to include this letter, species list, appropriate maps, and the BioMap2 town report in the Open Space and Recreation Plan.

Based on the BioMap2 analysis and additional information discussed below, NHESP recommends land protection in the BioMap2 cores or protecting lands adjacent to existing conservation land – or, best, a combination of both when feasible. All of the areas discussed below are important for biodiversity protection in New Marlborough. Land adjacent to the Cold Water Fisheries is also important

Enclosed is a list of rare species and natural communities known to occur or have occurred in New Marlborough. This list and the list in BioMap2 differ because this list and discussion include all of the uncommon aspects of biodiversity in New Marlborough that NHESP has documented and BioMap2 focused on occurrences with state-wide significance and included non-MESA listed species of conservation interest from the 2005 State Wildlife Action Plan (SWAP). In 2015, NHESP updated the SWAP and revised the list of species of conservation interest based on current information, and included plants. In addition, the NHESP database is constantly updated and the enclosed list may include species of conservation interest identified in town since BioMap2 was produced in 2010.

In early 2013 we sent each town copies of its *BioMap2* Town Report which were developed to provide local biodiversity information to assist in conservation efforts at the town or regional level. We encourage inclusion of the town BioMap2 report and fact sheets on its components in the OSRP: they are available from http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/land-protection-and-

management/biomap2/biomap2-town-reports.html. The BioMap2 components relevant to New Marlborough are BioMap2 Core Habitats for Species of Conservation Concern in Forest, Wetland and Aquatic Cores, and, in Critical Natural Landscape (CNL), Landscape Block and Upland Buffers of Wetland and Aquatic Cores. The components are described in full in the BioMap2 summary report.

http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/land-protection-andmanagement/biomap2/biomap2-overview-and-summary.html

[Please note that all of NHESP's web addresses have changed; web addresses in publications from before June 2013, including inside the BioMap2 report, will not work properly.]

I encourage you to download species, natural community, and BioMap2 fact sheets from our website to include in the OSRP with the species list and BioMap2 discussion:



http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/species-information-and-conservation/mesalist/list-of-rare-species-in-massachusetts.html; for non-MESA listed species of conservation interest (i.e., SWAP species): http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/species-information-andconservation/mesa-list/non-listed-species-of-conservation-interest.html and for natural communities:

http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/natural-communities/

The uncommon species in New Marlborough have a mix of habitat preferences, with many needing wetlands and the adjacent uplands, and a few being species of uplands. Many of the rivers in New Marlborough have been classified as Cold-water Fisheries, which support numerous species beyond cold water fish.

The rare birds known from New Marlborough are both associated with wetlands. American Bitterns (E) are heron-like birds that nest primarily in large cattail, tussock or shrub marshes and are very sensitive to disturbance. Bald Eagles (T) nest in tall trees along large lakes and rivers. The bulk of their diet consists of fish. Large lakes and rivers also support important winter congregations of Bald Eagles.

New Marlborough has one known rare salamander: Jefferson Salamander (SC). Adults and juveniles inhabit upland forests during most of the year, where they reside in small-mammal burrows and other subsurface retreats. Adults migrate during late winter or early spring to breed in vernal pools and fish-free areas of swamps, marshes, or similar wetlands. Larvae metamorphose in late summer or early fall, whereupon they disperse into upland forest.

There are multiple records Wood Turtles (SC) in New Marlborough, with the most recent sighting in 2013. These turtles nest in sandy upland areas and are susceptible to becoming road kill when they move among parts of their habitats. Loss of only a few adults annually can cause populations to decline because of turtles having low replacement rates due to low nest and juvenile survivorship. Protecting unfragmented forests with imbedded wetlands enhances the habitats of all these species and others, as well as protecting water quality. Streams and rivers are habitat for Wood turtles, preferably with long corridors of undeveloped, connected uplands extending on both sides of the waterways. Spotted Turtle (MESA-delisted SWAP species) have previously been observed in New Marlborough as well. Strong populations of Spotted Turtles in good habitat - large, unfragmented, protected open space - continue to be of interest for the conservation of this species. This small, dark-colored turtle with yellow spots on its carapace inhabits a variety of wetlands year-round and nests in nearby uplands during spring. Road and collection are the primary conservation concerns. Although they are MESA delisted they still remain a species of conservation interest.

Bridle Shiners (SC) are small (<5 cm) minnows that are found in schools swimming in and out of vegetation along the edges of open, clear water in lakes and ponds and slack areas of streams and rivers. They feed on small insects and other aquatic animals. Another rare fish species found in New Marlborough is the Longnose Sucker (SC). In Massachusetts, this torpedo-shaped fish is found mainly in cool upper sections of streams and rivers with rocky to gravel substrates. These fish may swim miles to deposit their eggs on clean and well oxygenated gravel substrates. Both of these species rely on New Marlborough's Cold Water Fisheries streams and rivers.

Four rare invertebrates occur in New Marlborough. The two amphipods, Taconic Cave Amphipod (E) and Piedmont Groundwater Amphipod (SC), are the only subterranean amphipods known in Massachusetts, and both occur in New Marlborough. The slightly larger Piedmont Groundwater Amphipod is found in springs in upland limestone areas. The Taconic Cave Amphipod is found in subterranean drainage systems of karst terrain, and is presumed to be at its southern extent here. Two uncommon dragonflies also have been observed in New Marlborough in association with the Coldwater Fisheries Rivers. Brook Snaketail (SC) are dragonflies whose nymphs can be found in clear, sand-bottomed streams with intermittent rapids, often flowing through dense woodland. Riffle Snaketails (T) are dragonflies whose larvae inhabit clear, cold, and rocky streams that are fast-flowing with relatively few pools.

Four rare mammals have been observed in New Marlborough: Little Brown Myotis (E), Northern Long-eared Bat (E), Tricolored Bat (E), and Rock Shrew (SC). Little Brown Myotis, Northern Long-eared Bats and Tricolored bats have recently been devastated by the White-Nose Syndrome, and it is not clear what the future holds for these species. Little Brown Myotis was once the most abundant bat species in the northern United States. This species preys heavily on flying aquatic insects. Forage areas include softwood regeneration areas, along forest roads, trails, streams, ponds and lakes in forest dominated landscapes. It may migrate hundreds of miles between winter and summer habitats. Known winter hibernacula include caves, abandoned mines, and hydroelectric dams. The Northern Long-eared Bat is a small bat with long ears which hibernates in mines and caves near its summer forested habitat. They are adapted to fly and capture

prey below the forest canopy, at small wetlands, and along forest edges. In summer, they typically roost in clustered stands of large trees in forest areas; however human-made structures are sometimes used. Tricolored bats are small bats which prefer partly open country with large trees and woodland edges and will avoid deep woods and open fields. Foraging activity is typical at the treetop level, over watercourses, and forest-field edges. Caves, mines and rock crevices are used extensively in winter for hibernation sites. In the summer, Tricolored bats will roost in the foliage of oak trees and occasionally in man-made structures. The Rock Shrew inhabits crevices of large mossy rock piles such as talus just beneath low, shaded cliffs, in cold, deep, damp coniferous forests, particularly old-growth forests with hemlock or spruce.

Botanically, New Marlborough is a very rich place. Twenty-nine MESA-listed plant species have been observed in New Marlborough, and 23 plants that are on the Watch List (WL) have been documented in here. The listed plant species observed within the past 25 years are described in more detail. Climbing Fumitory (SC) is an herbaceous biennial vine that can reach lengths of 10 feet. It is usually found in the shade climbing over talus at the base of cliffs. Hairy Agrimony (T) inhabits edges and openings within rich, rocky woodlands on steep slopes or ledges, often over circumneutral or calcareous bedrock. Interestingly, populations are present not only in the marble and traprock regions of the state, but also on Martha's Vineyard and Nantucket, indicating that this plant is not a strict calciphile. Its affinity for openings suggests that habitat conditions are most favorable when there is periodic disturbance. Dwarf Mistletoe (SC), a member of the Christmas Mistletoe family, is a very small fleshy shrub, usually no more than 0.8 inch tall that parasitizes spruce trees. In Massachusetts, Dwarf Mistletoe occurs in peatlands varying from kettlehole peat bogs to spruce-fir-birch headwater swamps, generally on the branches of black spruce (Picea mariana). Tuckerman's Sedge (E) in Massachusetts inhabits the rich soils of lowland river floodplain habitats such as oxbows, low depressions, forests, meadows, swales, and vernal pools. Intermediate Spike-sedge (T) is a densely tufted grass-like annual found on muddy, alkaline river banks and pond shores, usually during periods of low water when mud is exposed. Dwarf Scouring-rush (SC) is 4-8 inches, tall, evergreen, and grows as a dark green tuft of wiry stems. This member of the Horsetail family is found on moist banks and seepy wooded slopes and hillsides with springs and streams; they are often in ecotones between upland and wetland sites. Small Dropseed (E) is an annual grass that grows in calcareous seeps, flat rocks, riverside outcrops, and river shores. It is also found occasionally along roadsides and other disturbed open sites. This fern lives only in the gametophyte phase of the fern life cycle, never producing a sporophyte, the leafy spore-producing phase of most ferns that is most familiar to us. Consequently it is small and made of dense entangled filaments that resemble steel wool. It grows in moist, deeply-shaded crevices in many kinds of rocky substrates.

NHESP would be very interested in any observations of current populations of rare plants or animals.

Natural Communities are recurring assemblages of plants and animals in similar chemical, moisture, geological, and topographic environments. In Massachusetts, the types are defined in the *Classification of Natural Communities of Massachusetts*, available on the NHESP website http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/natural-communities/ . Occurrences of uncommon types – called Priority Natural Communities - are considered to be priority for conservation. All types of natural communities provide important habitat for common and uncommon species and support the biodiversity of the town. NHESP keeps track of documented occurrences of Priority Types of Natural Communities; a complete list of these is on the NHESP website. Exemplary examples of more common types of natural communities are also documented in the NHESP database.

Several Priority Natural Communities occur in New Marlborough; all of these are associated with the river and stream resources in town. The Priority Natural Communities are illustrated in blue-striped polygons on the enclosed map, with a label. Calcareous Seepage Marshes are marshy wetlands enriched by calcareous groundwater seepage in the southwestern corner of town. Of the three types of calcareous fen communities described in Massachusetts, they are intermediate in richness and botanical rarities. Spruce-Tamarack Bog communities are acidic forested peatlands with an overstory of black spruce and tamarack and an understory of heath shrubs on sphagnum moss. They occur in kettlehole depressions, watershed divides, and along pond margins. Red Spruce Swamps are forested wetlands with sphagnum lawns and red spruce dominant in the canopy. They occur primarily in stream headwaters or in poorly drained basins in the highlands of central and western Massachusetts. The Spruce-Tamarack Bog and Red Spruce Swamp are known to occur in the southeastern portion of town within Cookson State Forest. The Shallow Emergent Marsh community is a graminoid wetland found in broad, flat areas bordering rivers or along pond margins. The Shallow Emergent Marsh along Ironworks Brook is in good condition, and is extremely well buffered within a complex of high quality natural communities.

DFW's Fisheries section has identified environmentally sensitive streams throughout Massachusetts that provide important habitat for native Cold Water Fisheries (CFR, Coldwater Fisheries Resources). Buffers along these streams that maintain shade and filter inflowing sediments are important for maintaining their water – and habitat – quality. Stream crossings should be evaluated for, and maintained to allow, movement of fish, turtles, and other aquatic species. Identification of CFRs is based on fish samples collected by staff biologists and technicians with new streams sampled and evaluated yearly. New Marlborough has many stream segments that have been identified as CFRs, shown on the enclosed map. Many of New Marlborough's CFR streams coincide with BioMap2 Cores and CNLs, emphasizing the importance of these areas for protecting all aspects of biodiversity. More information on describing the CFRs is available from http://www.mass.gov/eea/agencies/dfg/dfw/wildlife-habitat-conservation/coldwater-fish-resources-list.html. CFRs in New Marlborough are illustrated as bright blue lines on the map.

Saris/Palis	Waterbody Name	Watershed	Towns
2103475	Whiting River	Housatonic	New Marlborough
2103500	Ginger Creek	Housatonic	New Marlborough
2103550	Brewer Brook	Housatonic	New Marlborough
2103575	Umpachene River	Housatonic	New Marlborough
			Monterey, New
2103625	Rawson Brook	Housatonic	Marlborough
			Sheffield, New
2103700	Ironwork Brook	Housatonic	Marlborough
			Sandisfield, New
3106875	Sandy Brook	Farmington	Marlborough

New Marlborough has 20 Certified Vernal Pools (CVPs) and 65 Potential Vernal Pools (PVPs) (identified from aerial photographs, needing verification on the ground; approximately ten of which have been certified). In addition, areas of swamps will provide habitat for vernal pool species. New Marlborough's vernal pools are shown on the included map. Locations of PVPs are available as a datalayer from MassGIS at http://www.mass.gov/anf/research-and-tech/it-serv-and-support/application-serv/office-of-geographic-information-massgis/datalayers/pvp.html . Clusters of vernal pools provide particularly good habitat for species that depend on vernal pools for habitat. The clusters mean that there are alternate habitats if something happens to one pool, and slightly different conditions in each may provide different habitats for pool dependent species. The CVPs are illustrated as small red stars, while the PVPs are open circles on the enclosed map.

The BioMap2 Core Habitats and Contributing Natural Landscape are particularly valuable in ecological terms, and important to the conservation of a variety of species. Completing conservation protection of unprotected land in those areas would enhance the viability of these special areas - size and continuity of open space is particularly important for supporting wildlife populations. Preventing habitat fragmentation is vital in protecting the ecosystem, for the rare species on the enclosed list, as well as for additional common species. Some polygons of both aspects of BioMap2 extend into other municipalities which then provide opportunities to protect large unfragmented areas that will provide the best opportunities to limit further species loss from the Town and region. The BioMap2 Core and CNL polygons are available from MassGIS: http://www.mass.gov/mgis/biomap2.htm. There is also an interactive application to see the broad outlines of the polygons in each Town that is linked from the NHESP website. BioMap2 is more up to date than BioMap and Living Waters, which it replaces.

BioMap2 and the original BioMap and Living Waters projects are focused on conservation and intended to be planning tools. They include non-regulated components of biodiversity and include broader areas than do the regulatory maps that NHESP also produces.

The NHESP Estimated Habitat maps are created for use under the Wetlands Protection Act and Priority Habitat maps for use under the Massachusetts Endangered Species Act. These two sets of maps are created for regulatory use, shown in the *Natural Heritage Atlas* (the 2008 Atlas, the 13th edition is still the current version). Note that Estimated Habitat is a subset of Priority Habitat: that is, Estimated Habitat shows a subset of all the species' habitats shown in Priority Habitat. These data layers are available from MassGIS, requiring

access to some form of GIS to view them, at <u>http://www.mass.gov/anf/research-and-tech/it-serv-and-support/application-serv/office-of-geographic-information-</u>massgis/datalayers/layerlist.html#ConservationRecreation

Town commissions and boards are encouraged to request the assistance of the Natural Heritage and Endangered Species Program in reviewing any project proposed in the habitat areas of the regulatory areas of the maps in the *Natural Heritage Atlas*.

Management and monitoring of conservation lands become important as acquisition and protection are accomplished. All wetlands particularly need to maintain their natural water regime, including normal fluctuations and connections with the uplands and other wetlands. Water quantity and quality are ongoing issues for wetlands. Another aspect of managing conservation lands that is important in many areas is controlling invasive non-native species that alter the habitat and occupy space that native species would otherwise use. We strongly recommend monitoring conservation land, and removing non-native species before they become a problem and impact native species.

Please note that this evaluation is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. Should new rare species information become available, this evaluation may need to be reconsidered.

Please do not hesitate to contact me at (508) 389-6390 or by email at karro.frost@state.ma.us if you have any questions.

Sincerely.

NHESP Conservation Botanist

cc: Melissa Cryan, EOEEA, DCS

Taxonomic Group	Scientific Name	Common Name	MESA Status	Most Recent Obs
Amphibian	Ambystoma jeffersonianum	Jefferson Salamander	SC	2008
Bird	Botaurus lentiginosus	American Bittern	E	2008
Bird	Haliaeetus leucocephalus	Bald Eagle	Т	2015
Crustacean	Stygobromus borealis	Taconic Cave Amphipod	E	1983
Crustacean	Stygobromus tenuis tenuis	Piedmont Groundwater Amphipod	SC	1991
Dragonfly/Damselfly	Ophiogomphus aspersus	Brook Snaketail	SC	2009
Dragonfly/Damselfly	Ophiogomphus carolus	Riffle Snaketail	Т	2009
Fish	Catostomus catostomus	Longnose Sucker	SC	2002
Fish	Notropis bifrenatus	Bridle Shiner	SC	2011
Mammal	Myotis lucifugus	Little Brown Myotis	E	2015
Mammal	Myotis septentrionalis	Northern Long-eared Bat	E	2000
Mammal	Perimyotis subflavus	Tricolored Bat	E	2015
Mammal	Sorex dispar	Rock Shrew	SC	1986
Reptile	Clemmys guttata	Spotted Turtle	WL	1986
Reptile	Glyptemys insculpta	Wood Turtle	SC	2013
Vascular Plant	Acer nigra	Black Maple	WL	1989
Vascular Plant	Adlumia fungosa	Climbing Fumitory	SC	2012
Vascular Plant	Agastache scrophulariifolia	Purple Giant Hyssop	E	1920
Vascular Plant	Agrimonia pubescens	Hairy Agrimony	Т	2007
Vascular Plant	Arceuthobium pusillum	Dwarf Mistletoe	SC	2009
Vascular Plant	Betula pumila	Swamp Birch	E	1978
Vascular Plant	Bidens beckii	Water Marigold WL		1912
Vascular Plant	Boechera laevigata	Smooth Rock-cress SC		1990
Vascular Plant	Botrychium tenebrosum	Swamp Moonwort WL		1984
Vascular Plant	Calystegia spithamaea	Low Bindweed	indweed E	
Vascular Plant	Carex aquatilis var. substricta	Water-Sedge	WL	1920
Vascular Plant	Carex baileyi	Bailey's Sedge	Т	Historic
Vascular Plant	Carex cristatella	Crested Sedge	WL	2007
Vascular Plant	Carex davisii	Davis' Sedge E		Historic
Vascular Plant	Carex diandra	Panicled Sedge WL		1916
Vascular Plant	Carex oligocarpa	Rich Woods Sedge	Т	1912
Vascular Plant	Carex pauciflora	Few-flowered Sedge	E	1913
Vascular Plant	Carex retrorsa	Hooked Sedge	WL	1987
Vascular Plant	Carex tuckermanii	Tuckerman's Sedge E		2007
Vascular Plant	Clematis occidentalis	Purple Clematis	SC	1915
Vascular Plant	Conioselinum chinense	Hemlock Parsley SC		1988
Vascular Plant	Cypripedium reginae	Showy Lady's-slipper E		1913
Vascular Plant	Desmodium cuspidatum	Large-bracted Tick-trefoil T		1989
Vascular Plant	Eleocharis intermedia	Intermediate Spike-sedge T		1988

Taxonomic Group	Scientific Name	Common Name	MESA Status	Most Recent Obs
Vascular Plant	Equisetum pratense	Meadow-horsetail	WL	1989
Vascular Plant	Equisetum scirpoides	Dwarf Scouring-rush	SC	2007
Vascular Plant	Equisetum variegatum ssp. variegatum	Variegated Scouring Rush	WL	1989
Vascular Plant	Eragrostis frankii	Frank's Lovegrass	SC	1987
Vascular Plant	Helenium autumnale	Common Sneezeweed	WL	1988
Vascular Plant	Heteranthera dubia	Water Star-grass	WL	1979
Vascular Plant	Juglans cinerea	Butternut	WL	2010
Vascular Plant	Lupinus perennis	Wild Lupine	WL	1919
Vascular Plant	Maianthemum trifolium	Three-leaved Solomon's Seal	WL	1990
Vascular Plant	Minuartia michauxii	Michaux's Sandwort	Т	Historic
Vascular Plant	Morus rubra	Red Mulberry	E	1920
Vascular Plant	Panicum philadelphicum ssp. philadelphicum	Philadelphia Panic-grass	SC	1920
Vascular Plant	Parietaria pensylvanica	Rock-pellitory	WL	1989
Vascular Plant	Penstemon hirsutus	Hairy Beardtongue	E	1919
Vascular Plant	Populus balsamifera ssp. balsamifera	Balsam-poplar	WL	1989
Vascular Plant	Potamogeton friesii	Fries' Pondweed	E	Historic
Vascular Plant	Ranunculus pensylvanicus	Bristly Buttercup	SC	1988
Vascular Plant	Ribes americanum	Wild Black Currant	WL	2007
Vascular Plant	Ribes triste	Swamp Red Currant	WL	1983
Vascular Plant	Salix candida	Hoary Willow WL		1978
Vascular Plant	Salix serissima	Autumn Willow	WL	1988
Vascular Plant	Solidago hispida	Hispid Goldenrod	WL	1912
Vascular Plant	Sparganium fluctuans	Floating Bull-reed WL		Historic
Vascular Plant	Sphenopholis nitida	Shining Wedgegrass	gegrass T	
Vascular Plant	Sporobolus neglectus	Small Dropseed	E	
Vascular Plant	Trichomanes intricatum	Appalachian Bristle-fern	Appalachian Bristle-fern E	
Vascular Plant	Viola renifolia	Kidney-leaf Violet	WL	Historic
Other (Ecological)		Certified Vernal Pool	20	
Other (Ecological)		Potential Vernal Pools	65	
Freshwater Community- other classification		Calcareous seepage marsh S2		1991
Freshwater Community- other classification		Red Spruce Swamp S3		2010
Freshwater Community- other classification		Spruce-tamarack bog S2		2000
Freshwater Community- other classification		Shallow Emergent Marsh	S4	1999

Fig 1: Town of New Marlborough Open Space and Recreation Plan



BioMap2

Guiding Land Conservation for Biodiversity in Massachusetts

New Marlborough

This report and associated maps provide information about important sites for biodiversity conservation in your area.

This information is intended for conservation planning, and is not intended for use in state regulations.

Produced by: Natural Heritage & Endangered Species Program Massachusetts Division of Fisheries and Wildlife

Commonwealth of Massachusetts

Produced in 2011

Preferred citation:

NHESP. 2011. BioMap2, Guiding Land Conservation for Biodiversity in Massachusetts: New Marlborough. Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries and Wildlife. Westborough, MA.

The preferred citation for BioMap2 is:

Woolsey, H., A. Finton, J. DeNormandie. 2010. BioMap2: Conserving the Biodiversity of Massachusetts in a Changing World. MA Department of Fish and Game/Natural Heritage & Endangered Species Program and The Nature Conservancy/Massachusetts Program.

http://www.mass.gov/dfwele/dfw/nhesp/land_protection/biomap/biomap2_summary_report.pdf

Funding for this project was made available by the Massachusetts Sub-Council of the Housatonic River Trustee Council under the auspices of the Massachusetts and Department of the Interior (DOI) Natural Resource Damages Assessment and Restoration Programs and contributions to the Natural Heritage & Endangered Species Fund.



Massachusetts Division of Fisheries and Wildlife 1 Rabbit Hill, Westborough, MA 01581 Tel: (508) 389-6360 Fax: (508) 389-7891 http://www.nhesp.org



For more information on rare species and natural communities, please see our fact sheets online at www.nhesp.org

BioMap2: Guiding Land Conservation for Biodiversity in Massachusetts New Marlborough

New Marlborough is located in southeast Berkshire County, in the lower Berkshire Hills along Massachusetts' border with Connecticut. It lies within the Housatonic River watershed, and several mid-size tributaries to the Housatonic flow from the town's higher elevations in the east and north toward its lowlands in the west and south. These streams - the Whiting, Umpachene, and Konkapot Rivers - ultimately join the Housatonic River mainstem further west and south in the Connecticut towns of Sheffield and North Canaan. New Marlborough contains extensive wetlands, totaling more than 2,300 acres; this is more than any other town in the Massachusetts portion of the Housatonic River watershed apart from Sheffield and Pittsfield. Most of these wetlands are located in the highlands of eastern New Marlborough, where shallow depressions in the plateaus of the Berkshire retain water along streams and in extensive areas of groundwater seeps. These wetlands, along with others found at lower elevations to the west along the Konkapot River, support a remarkable diversity of plants, animals, and natural communities.

New Marlborough is one of the less-populated towns in this part of the Berkshires, and also lacks the extensive commercial and industrial development present in towns like Pittsfield and Lee. As a result, many of its natural ecosystems remain relatively undisturbed, although past milling and agricultural activities near the town center shaped the landscape there and impacted both terrestrial and aquatic habitats. Some farming activity remains today; nearly 10 percent of the town's land is classified as agricultural. Much of the town's developed land is concentrated around the village of New Marlborough, as well as in the villages of Mill River to the west and Hartsville to the north. Most of these lands are residential. Southern and eastern parts of New Marlborough are largely undeveloped, although occasional residential areas are found in some areas, such as the southern reaches of the Konkapot River and the perimeters of Windemere Lake Reservoir.

Low elevation portions of New Marlborough, including the Konkapot River and the lower reaches of its immediate tributaries, are part of the Western New England Marble Valleys ecological region (see Figure 1). This is one of the most biologically rich ecoregions in Massachusetts and throughout New England, supporting a relatively high percentage of Massachusetts' state-listed species and natural communities. Expansive marshlands along



New Marlborough at a Glance

- Total area: 30,655 acres (47.9 square miles)
- Human Population in 2009: 1,507 people
- Open space protected in perpetuity: 11,163 acres, or 36.4% of the town's total area*

BioMap2 Components Core Habitat

- 8 Aquatic Cores: 303 acres
- 2 Forest Cores: 2,837 acres
- 34 Wetland Cores: 1,065 acres
- 2 Vernal Pool Cores: 299 acres
- 3 Priority Natural Communities: 141 acres

Species of Conservation Concern**

 1 amphipod, 4 insects, 2 fish, 2 amphibians, 2 reptiles, 1 bird, 1 mammal, 14 plants

Critical Natural Landscape

- 8 Upland Buffers of Aquatic Cores: 803 acres
- 22 Upland Buffers of Wetland Cores: 3,417 acres
- 4 Landscape Blocks: 19,988 acres

*calculated using MassGIS data layer "Protected and Recreational Open Space—November 2010" **see next page for complete list of species, natural communities, and other biodiversity elements

Species of Conservation Concern, Priority and Exemplary Natural Communities, and Other Elements of Biodiversity in New Marlborough

Amphipod

Piedmont Groundwater Amphipod (*Stygobromus tenuis tenuis*), Special Concern

Insects

Brook Snaketail (*Ophiogomphus aspersus*), Special Concern Ocellated Darner (*Boyeria grafiana*), Special Concern Riffle Snaketail (*Ophiogomphus carolus*), Threatened Zebra Clubtail (*Stylurus scudderi*), Special Concern

Fish

Bridle Shiner (*Notropis bifrenatus*) Special Concern Longnose Sucker (*Catostomus catostomus*), Special Concern

Amphibians

Jefferson Salamander (*Ambystoma jeffersonianum*), Special Concern Northern Leopard Froq (*Rana pipiens*), SWAP

Reptiles

Eastern Ribbon Snake (*Thamnophis sauritus*), SWAP Wood Turtle (*Glyptemys insculpta*), Special Concern

Birds

American Bittern (*Botaurus lentiginosus*), Endangered **Mammals**

Rock Shrew (*Sorex dispar*), Special Concern **Plants** Black Maple (*Acer nigrum*), Special Concern

Climbing Fumitory (Adlumia fungosa), Special Concern

Dwarf Mistletoe (*Arceuthobium pusillum*), Special Concern Dwarf Scouring-rush (*Equisetum scirpoides*), Special Concern Frank's Lovegrass (*Eragrostis frankii*), Special Concern Hairy Agrimony (*Agrimonia pubescens*), Threatened Hemlock Parsley (*Conioselinum chinense*), Special Concern Intermediate Spike-sedge (*Eleocharis intermedia*), Threatened Large-bracted Tick-trefoil (*Desmodium cuspidatum*), Threatened Small Dropseed (*Sporobolus neglectus*), Endangered Smooth Rock-cress (*Boechera laevigata*), Threatened Tuckerman's Sedge (*Carex tuckermanii*), Endangered Weft Bristle-fern (*Trichomanes intricatum*), Endangered **Priority Natural Community** Calcareous Seepage Marsh (Imperiled)

Spruce – Fir Swamp (Imperiled) Spruce – Tamarack Bog (Imperiled)

Other BioMap2 Components

Aquatic Cores Forest Cores Landscape Blocks Upland Buffers of Aquatic Cores Upland Buffers of Wetland Cores Vernal Pool Cores Wetland Cores

the Konkapot River and its floodplains in northern New Marlborough provide nesting and feeding habitat for the state-listed Wood Turtle, which burrows in the river bottoms and banks to hibernate during winter. American Bittern, a marshbird of the heron family, nests along the lower reaches of Whiting Creek in southern parts of town. Aquatic larvae of the dragonflies Zebra Clubtail and Brook Snaketail inhabit sandy-bottomed reaches of the Konkapot River, while adults dwell in nearby uplands. Calcareous groundwater seepage along the lower slopes of the Berkshire Hills supports the state-listed subterranean crustacean called the Piedmont Groundwater Amphipod, which resembles a small shrimp and lives only in springs connected to deep groundwater aquifers in limestone-rich areas like these.

A large portion of the elevated plateau in eastern New Marlborough lies within the Lower Berkshire Hills ecoregion and supports extensive tracts of forested land. It also contains many pockets of wetland habitat. Much of this land is part of the Cookson State Forest and is protected for conservation. In general, this part of the Lower Berkshire Hills is impacted little by roads or any kind of development. It supports species like the state-listed Jefferson Salamander, which breeds in vernal pools during spring and lives in drier areas of woodlands the rest of the year. The upper reaches of Harmon Brook in northeast New Marlborough support larvae of another state-listed dragonfly species, the Ocellated Darner. Several state-listed plants grow in these higher elevation areas as well, including Smooth Rock-cress, a plant of the mustard family, and Dwarf Mistletoe, a native parasite of Black Spruce. Two Priority Natural Communities, the Spruce – Fir Swamp and Spruce – Tamarack Bog, are also characteristic of these higher elevation forests and are found in southeast New Marlborough.

BIODIVERSITY CONSERVATION TARGETS IN NEW MARLBOROUGH: CORE HABITAT, CRITICAL NATURAL LANDSCAPE, AND PRIORITY CONSERVATION AREAS

Overview

In this section, we outline areas in New Marlborough that warrant special focus of conservation efforts locally, regionally, and throughout the state. Components of the Natural Heritage & Endangered Species Program's (NHESP's) statewide BioMap2 project, which incorporates NHESP data and includes findings of studies funded by the Natural Resource Damages Assessment and Resto-

Biodiversity Studies in Massachusetts and the Housatonic River Watershed

BioMap2 is a statewide biodiversity conservation plan produced in 2010 by MassWildlife's Natural Heritage & Endangered Species Program and The Nature Conservancy. It is designed to guide strategic biodiversity conservation in Massachusetts over the next decade by focusing land protection and stewardship on the areas that are most critical for ensuring the long-term persistence of rare and other native species and their habitats, Priority Natural Communities, and a diversity of ecosystems. BioMap2 is also designed to include the habitats and Species of Conservation Concern identified in the State Wildlife Action Plan (SWAP).

BioMap2 identifies two complementary spatial layers, Core Habitat and Critical Natural Landscape. Core Habitat identifies key areas that are critical for the long-term persistence of rare species and other Species of Conservation Concern, as well as a wide diversity of natural communities and intact ecosystems across the Commonwealth. Protection of Core Habitats will contribute to the conservation of specific elements of biodiversity. Critical Natural Landscape identifies large Landscape Blocks that are minimally impacted by development. If protected, these areas will provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience to natural and anthropogenic disturbances in a rapidly changing world. Areas delineated as Critical Natural Landscape also include buffering upland around wetland, coastal, and aquatic Core Habitats to help ensure their long-term integrity.

In 2008 and 2009, field surveys were carried out to improve knowledge of the region's biodiversity resources in towns in the Housatonic River watershed in western Massachusetts. During these surveys, coordinated by the Natural Heritage and Endangered Species Program (NHESP) with funds from the Natural Resources Damage Assessment and Restoration (NRD) Program, researchers collected important information about state-listed species and Priority Natural Communities of 19 towns in the region. Surveys were conducted by NHESP staff, expert consultants, academic researchers, and graduate students. Information on the surveys' findings was added to the NHESP database, combined with other NHESP data, and incorporated into Core Habitat of BioMap2. BioMap2 data layers, complete with these data and other information, are now available for use in conservation planning at the town, regional, and state levels.

ration Program (NRD) conducted in 2008 and 2009 as part of its Core Habitat and Critical Natural Landscape, were used to delineate and map these areas. The areas range in size from fewer than 10 acres to several thousand acres. Areas of Core Habitat, each called a BioMap2 Core (BC), and areas of Critical Natural Landscape (CNL), along with their associated components, are illustrated in Figure 2 and outlined in detail below. BioMap2 components described in this report are those that occur only in New Marlborough, although a given area of Core Habitat or Critical Natural Landscape listed here may extend outside of the town boundaries of New Marlborough and contain additional components.

To facilitate land protection and stewardship, NHESP further prioritized areas in each of the towns in the watershed using habitat size, habitat conditions, and other biodiversity indicators. Priority Conservation Areas (PCAs) were considered to be of high biodiversity value if they contained concentrations of state-listed species or Priority Natural Communities, or large areas of intact habitat. In each town, a total of one to six Town PCAs were designated; in New Marlborough, three were chosen. Each Town PCA contains part of at least one BioMap2 Core. Figure 3 illustrates how BioMap2 Core Habitat and Critical Natural Landscape relate to the distribution of Town PCAs in New Marlborough.

A larger scale prioritization was also conducted to select Regional PCAs of the highest conservation and stewardship value among all towns in Massachusetts' portion of the Housatonic River watershed. Regional PCAs often cross town boundaries and are quite large, ranging from 373 acres to more than 25,000 acres. Ecological connectivity within these Regional PCAs is important to biodiversity conservation, and these large units often include select Town PCAs that are of particular ecological significance to both the town and the region. In this way, biodiversity can be conserved at two scales: locally within each town and within a broader regional context. No Regional PCAs fall directly within New Marlborough. The nearest are located to the west in Sheffield along the Housatonic River mainstem (Regional PCAs 3 and 4) and to the north in parts of Monterey and Great Barrington (Regional PCA 8).

BioMap2: Guiding Land Conservation for Biodiversity in Massachusetts New Marlborough



Figure 1. New Marlborough falls within the Lower Berkshire Hills and Western New England Marble Valleys ecoregions, in the headwaters of the Housatonic River watershed.

Core Habitat and Critical Natural Landscape Components in New Marlborough

Areas of Core Habitat in New Marlborough, called Bio-Map2 Cores (BCs), are summarized here. Also described are the various components of each BC, which may include Species of Conservation Concern, Exemplary and Priority Natural Communities, or Aquatic, Forest, Vernal Pool, or Wetland Cores. Components of Critical Natural Landscape (CNL) associated with each BC are also provided. These include Upland Buffers of both Aquatic and Wetland Cores, as well as Landscape Blocks.

BC951, BC1029, BC1032, and BC1158 (no CNL); BC1108 and CNL 883

These BCs are small and distributed throughout the town, and provide habitat for various state-listed plant species.

Most are independent of any CNL, but a portion of BC1108 is within CNL883.

Dwarf Scouring-rush (Equisetum scirpoides), Special Concern: This is a perennial, evergreen fern-ally that grows in a variety of cool, usually wet habitats, including hummocks in swamps, moist streambanks, and seeps associated with conifer tree species.

Hairy Agrimony (*Agrimonia pubescens*), **Threatened**: This is a perennial herbaceous plant that occurs at forest edges and openings on steep slopes, or on ledges within nutrient-rich, rocky woodlands, especially in areas with calcareous bedrock or soils.

Hemlock Parsley (*Conioselinum chinense***), Special Concern**: Hemlock Parsley is a perennial herbaceous plant of forested swamps that have sparse canopy cover. It generally

BioMap2: Guiding Land Conservation for Biodiversity in Massachusetts New Marlborough



Figure 2. New Marlborough includes a total of 39 BioMap2 Cores (BCs; left), all part of BioMap2 Core Habitat, and four areas of Critical Natural Landscape (CNL; right). Overlap between these two layers is shown in Figure 3.

grows in enriched soils overlying calcareous bedrock. **Small Dropseed (Sporobolus neglectus), Endangered**: Natural habitats of this grass include calcareous seeps, flat rock outcrops, and river shores. It is also occasionally found along roadsides and in other disturbed, open sites.

Smooth Rock-cress (*Boechera laevigata***), Threatened**: This plant is a perennial herbaceous mustard of rocky woods, floodplains, and thickets.

Weft Bristle-fern (*Trichomanes intricatum***), Endangered**: This fern lives only in the gametophyte phase of the fern life cycle, never producing a sporophyte (the leafy, spore-producing phase that is most familiar to us). Consequently it is small and made of dense, entangled filaments that resemble steel wool. It grows in moist, deep-ly-shaded crevices in rocky substrates.

BC1112 and CNL883

BC1112 comprises 35 acres along East Hill Road in eastern New Marlborough. It provides habitat for a state-listed vertebrate species and is part of a Landscape Block of CNL883.

BC999 and CNL883

BC999 is located in southwestern New Marlborough. It

includes an Aquatic Core and Wetland Core and associated Upland Buffers of CNL883. This BC includes one state-listed plant, three state-listed animal species, and one Priority Natural Community:

Plants

Hemlock Parsley (*Conioselinum chinense***), Special Concern**: This species is a perennial herbaceous plant of forested swamps that have sparse canopy cover. It generally grows in enriched soils overlying calcareous bedrock

Amphibians

Northern Leopard Frog (*Rana pipiens***), SWAP**: Adults of this frog species can be found in marshes, wet meadows, and peatlands, often in the narrow transition zone between open water and uplands; they retreat to the water of ponds and small streams when threatened. Their tadpoles are herbivorous and require open water of sufficient permanence to develop.

Reptiles

Eastern Ribbon Snake (Thamnophis sauritus sauritus), SWAP: This is a slender, striped snake that is typically found in wetlands or along the edge of open water. It is an adept swimmer and generally feeds on amphibians, particularly frogs, as well as some fish and insects. American Bittern (*Botaurus lentiginosus*), Endangered: This mottled brown, heron-like bird feeds and nests primarily in large cattail, tussock, or shrub marshes, and is very sensitive to disturbance. Its coloring and unique behavior of pointing its bill skyward when threatened, sometimes swaying to mimic the movement of grasses in the wind, make it well-camouflaged in marsh habitat.

Priority Natural Communities

Calcareous Seepage Marsh (Imperiled): This Priority Natural Community is an uncommon marshy wetland enriched by calcareous groundwater seepage. Of the three types of calcareous fen communities described in Massachusetts, this one is intermediate in terms of nutrient richness and presence of indicator plants. This example of Calcareous Seepage Marsh is the largest of this community type in the state.

BC1007 and CNL883

BC1007 is located in the southeastern part of town along the Whiting River, and is part of Cookson State Forest. It includes a Wetland Core and is surrounded by an Upland Buffer and is part of a Landscape Block of CNL883.

BC1012 and CNL543

BC1012 is a small BC of less than four acres, located in southwestern New Marlborough just west of the Konkapot River. It includes an Aquatic Core, is surrounded by the Upland Buffer of CNL543, and supports one statelisted plant species.

BC1018 and CNL883

BC1018 is a 13-acre core located in a forested area east of the Konkapot River. It includes an Aquatic Core and associated Upland Buffer and is within a Landscape Block of CNL883. It supports one state-listed crustacean species:

Piedmont Groundwater Amphipod (Stygobromus tenuis) tenuis), Special Concern: This state-listed subterranean crustacean is found in limestone springs that are connected with deep aquifers, particularly in the southern Taconic Mountains and nearby areas in southwestern Massachusetts.

BC1023, BC1033 and CNL883

BC1023 and BC1033 contain areas of Wetland Core near Harmon Pond in south-central New Marlborough. Both are associated with Upland Buffers and are part of a Landscape Block of CNL883.

BC1044 and CNL883

BC1044 contains nearly 300 acres and includes a large

Vernal Pool Core. This BC lies within a Landscape Block of CNL883 and also supports several state-listed plant species:

Black Maple (Acer nigrum), Special Concern: This tree may reach a height of 130 feet tall and has dark bark. It grows best in rich, moist soils.

Climbing Fumitory (*Adlumia fungosa***), Special Concern**: This herbaceous vine grows on ledges in rocky areas of moist, shady woods, often growing over talus at the base of steep rock walls.

Large-bracted Tick-trefoil (*Desmodium cuspidatum*), Threatened: This plant species is a perennial legume that occurs in open, relatively dry deciduous woodlands, on talus slopes, and at forest edges.

BC1056 and CNL833

BC1056 is located in southern New Marlborough, just east of Harmon Pond, and consists of a Vernal Pool Core. It is within a Landscape Block of CNL883.

BC1060 and CNL883

BC1060 includes 105 acres of Wetland Core, and is situated both along the Whiting River and between Thousand Acre Swamp Reservoir and Windemere Lake Reservoir. It is surrounded by an Upland Buffer and is part of a Landscape Block of BC1060.

BC1068 and CNL883

BC1068 comprises nearly 4,000 acres in southeast New Marlborough and southwest Sandisfield, and includes reaches of Sandy Brook. Its portion in New Marlborough – just over 2,500 acres – is larger than any other core in the town. It includes a Forest Core and lies within a Landscape Block of CNL883. BC1068 also includes East Indies Pond and borders several other reservoirs along the Whiting River and its tributaries, and contains several Wetland Cores and associated Upland Buffers. BC1068 supports one state-listed plant and two Priority Natural Communities:

Plants

Dwarf Mistletoe (*Arceuthobium pusillum*), Special Concern: This plant is a native parasite of Black Spruce trees, and is typically found in peatlands.

Priority Natural Communities

Spruce – Fir Swamp (Imperiled): This natural community is a forested wetland dominated by Red Spruce and Balsam Fir trees. It is typically found along stream headwaters or in poorly drained basins of the higher, western and north-central parts of the state. This occurrence of Spruce – Fir Swamp is part of an extensive wetland complex, and lies in a wooded landscape where there little evidence of human disturbance.

Spruce – Tamarack Bog (Imperiled): This is an acidic forested peatland with an overstory of Black Spruce and Tamarack, and an understory of heath shrubs on Sphagnum moss. They occur in glacial kettlehole depressions, along watershed divides, and often near pond margins. This large example occurs along a stream and is underlain by Sphagnum moss. The tree canopy is open, shrubs in the understory are quite dense, and herbaceous plants are high in diversity. Beavers occasionally occur in this natural community, causing flooding through construction of dams.

BC1076, BC1085, and CNL883

BC1076 and BC1085 are located in central New Marlborough – the first along Canaan-Sandisfield Road just east of the Konkapot River and the other along East Hill Road near the Whiting River. Both include approximately 14 acres of Wetland Core and are surrounded by Upland Buffers within a Landscape Block of CNL883.

BC1101 and CNL883

BC1101 is located in southeast New Marlborough, parallel to Route 183 just south of East Hill Road. It includes a 17-acre Wetland Core and is surrounded by an Upland Buffer and is within the Landscape Block of CNL883.

BC1135 and CNL883

BC1135 lies to the north of sections of the Umpachene River near its confluence with the Konkapot River. It includes two Certified Vernal Pools that provide breeding areas for state-listed salamanders. BC1135's southwest corner lies within a Landscape Block of CNL883. This BC is somewhat fragmented by roads, and contains some areas of development along its perimeters. It supports one state-listed salamander species.

Jefferson Salamander (Ambystoma jeffersonianum), Special

Concern: Adult and juvenile Jefferson Salamanders inhabit upland forest during most of the year, where they reside in small-mammal burrows and other subsurface retreats. Adults migrate during late winter or early spring to breed in vernal pools and fish-free areas of swamps, marshes, or similar wetlands. Larvae metamorphose in late summer or early fall, then disperse into upland forests.

BC1137 and CNL883

BC1137 lies along the headwaters of the Whiting River, contains a Wetland Core, and is surrounded by an Upland Buffer and is within a Landscape Block of CNL883.

BC1145 and CNL883

BC1145 is located in eastern New Marlborough just north of East Hill Road, and parallels Route 183. It contains a Wetland Core that is surrounded by an Upland Buffer and in and Landscape Block of CNL883.

BC1185 and CNL883

BC1185 is located in eastern New Marlborough in the headwaters of the Umpachene River, near the confluence of Idle Hour Road and Route 183. It includes a Wetland Core and is surrounded by an Upland Buffer and is within the Landscape Block of CNL883.

BC1190 and CNL605

BC1190 lies in central New Marlborough near New Marlborough Branch Road and just west of the Umpachene River. It is separated by a road from a large Landscape Block of CNL883 that extends to the west. It includes a Wetland Core and is surrounded by an Upland Buffer of CNL605.

BC1201 and CNL883

BC1201 totals nearly 36 acres in east New Marlborough and west Sandisfield, and lies along the headwaters of Harmon Brook, upstream of Harnett Pond. Twelve acres are part of New Marlborough and include an Aquatic Core. BC1201 is surrounded by an Upland Buffer and is within the Landscape Block of CNL883, and is known to support one state-listed marshbird species:

American Bittern (*Botaurus lentiginosus*), Endangered: This mottled brown heron-like bird feeds and nests primarily in large cattail, tussock, or shrub marshes, and is very sensitive to disturbance. Its coloring and unique behavior of pointing its bill skyward when threatened, sometimes swaying to mimic movement of grasses in the wind, make it well-camouflaged in marsh habitat.

BC1225 and CNL883

BC1225 is located west of Harnett Pond. It contains a Wetland Core and is surrounded by an Upland Buffer and is within the Landscape Block of CNL883.

BC1226 and CNL622

BC1226 lies along a small tributary to the Umpachene River between Monterey Road and Route 57, just east of New Marlborough center in the northeastern part of the town. It includes a Wetland Core and is surrounded by an Upland Buffer of CNL622.

BC1235 and CNL883

BC1235 is a 10-acre BC that lies north of the village of

New Marlborough within a Landscape Block of CNL883. It includes a Wetland Core and is part of an Upland Buffer.

BC1236 and CNL883

BC1236 is an 18-acre BC in northwestern New Marlborough and consists of wetlands just west of the Konkapot River. It includes a Wetland Core and is surrounded by an Upland Buffer and is wirhin the Landscape Block of CNL883.

BC1252 and CNL883

BC1252 constitutes 687 acres along Brush Hill in western New Marlborough and eastern Sheffield, falling along the boundary between these two towns. Approximately half of its area lies within New Marlborough, and includes a Forest Core embedded in a Landscape Block.

BC1269, BC1273, BC1275, and CNL883

These BCs lie just west of the Konkapot River along the headwaters of Ironwork Brook in northwest New Marlborough, and include Gleason and Juniper Ponds and surrounding wetlands. Each supports a Wetland Core and is part of an Upland Buffer and is within the Landscape Block of CNL883.

BC1283 (no CNL)

This BC is less than one acre in size, falls along Route 183, and supports a state-listed plant species.

BC1301 and CNL883

BC1301 includes 112 acres in northwestern New Marlborough. Its western sections are part of a Landscape Block of CNL883. It includes a Certified Vernal Pool that provides breeding habitat for one state-listed salamander species:

Jefferson Salamander (*Ambystoma jeffersonianum*), Special Concern: Adult and juvenile Jefferson Salamanders inhabit upland forest during most of the year, where they reside in small-mammal burrows and other subsurface retreats. Adults migrate during late winter or early spring to breed in vernal pools and fish-free areas of swamps, marshes, or similar wetlands. Larvae metamorphose in late summer or early fall, then disperse into upland forests.

BC1308 and CNL883

BC1308 is a 931-acre BC that includes much of Konkapot River in New Marlborough, nearby wetlands and upland areas, and the lower reaches of select tributaries. It includes over 200 acres of Aquatic Core along the river, an additional 209 acres of Wetland Core, and several hundred acres of habitat for state-listed plant and animal species. The Aquatic and Wetland Cores, in the northern parts of BC1308, are surrounded by upland Buffers. Most of this BC is part of a Landscape Block of CNL883.

Plants

Black Maple (*Acer nigrum***), Special Concern:** This tree can grow to about 130 feet tall and has dark bark. It grows best in rich, moist soils.

Dwarf Scouring-rush (Equisetum scirpoides), Special Concern: This perennial, evergreen, herbaceous plant grows in a variety of cool and typically wet habitats, including hummocks in swamps, moist stream banks, and areas under conifers that contain seeps.

Frank's Lovegrass (Eragrostis frankii), Special Concern: This annual grass grows in open, sandy and silty river bars and river shores. In Massachusetts, Frank's Lovegrass is found only along the Housatonic and Connecticut Rivers, typically along sandy river riverbanks and within floodplain forests.

Intermediate Spike-sedge (*Eleocharis intermedia*), Threatened: This densely-tufted, grass-like annual is found on muddy, alkaline riverbanks and pond shores. It is usually visible during periods of low water when mud is exposed.

Tuckerman's Sedge (Carex tuckermanii), Endangered: This species is a perennial grass-like plant that grows in rich soils of oxbows and other depressions of river flood-plains.

Insects

Brook Snaketail (*Ophiogomphus aspersus***), Special Concern**: This is a dragonfly whose aquatic larvae can be found in clear, sand-bottomed streams that generally flow through dense woodland and have intermittent rapids. **Riffle Snaketail (***Ophiogomphus carolus***), Threatened**: This dragonfly inhabits clear, cold, and rocky streams that are fast-flowing and contain relatively few pools. Their aquatic larvae burrow in stream bottoms in areas that contain sand or other fine substrates.

Zebra Clubtail (*Stylurus scudderi***), Special Concern**: This dragonfly species inhabits lakes or mid-sized forested streams that are sandy-bottomed and have slow to moderate stream flows with intermittent rapids. Its larvae are aquatic and live on stream bottoms, while adults are terrestrial and inhabit nearby uplands.

Fish

Bridle Shiner (*Notropis bifrenatus*), **Special Concern**: The Bridle Shiner is a small, straw-colored minnow with a distinct dark lateral band that runs from the tip of the snout to the base of the tail. It is typically found in clear water in slack areas of streams and rivers, as well as in

lakes and ponds, and is sensitive to turbidity, invasive plant species, and severe changes in flow regime. This fish is generally associated with submerged aquatic vegetation, but also schools in areas of open water.

Longnose Sucker (*Catostomus catostomus*), Special Concern: This species is a torpedo-shaped fish with a snout extending beyond its downturned mouth. It is typically found in cool, lower order streams and rivers with rocky bottoms. These fish rely on clean and well oxygenated gravel substrates to rear their eggs. In Massachusetts, they are found only in the western part of the state.

Reptiles

Wood Turtle (*Glyptemys insculpta*), **Special Concern**: This is a medium-sized turtle with a sculpted upper shell and orange coloration on its feet and neck. Ideal habitat for this species includes streams and rivers such as the Konkapot River that have long corridors of undeveloped and interconnected uplands.

BC1331 and CNL883

BC1331 consists of 46 acres that lie along New Marlborough's boundary with Monterey. This BC is embedded in a Landscape Block of CNL883 and includes two Certified Vernal Pools – one in each town – that each provide breeding habitat for state-listed salamanders. The nearby forested landscape provides ample habitat for the salamanders during non-breeding periods, when they tend to inhabit dry, wooded areas. One state-listed salamander is documented in this core:

Jefferson Salamander (*Ambystoma jeffersonianum*), Special Concern: Adult and juvenile Jefferson Salamanders inhabit upland forest during most of the year, where they reside in small-mammal burrows and other subsurface retreats. Adults migrate during late winter or early spring to breed in vernal pools and fish-free areas of swamps, marshes, or similar wetlands. Larvae metamorphose in late summer or early fall, then disperse into upland forests.

BC1381 and CNL883

BC1381 is a nearly 1,200-acre core that mostly falls along upper reaches of the Konkapot River in Monterey, but 387 acres of it occur in New Marlborough, along Rawson Brook, a tributary of the Konkapot. It also includes parts of Harmon Brook in New Marlborough, just north of Harnett Pond. This area includes nearly 100 acres of Wetland Core, 17 acres of Aquatic Core, and is surrounded by Upland Buffers and is within the Landscape Blocks of CNL883. One dragonfly and one turtle species, each state-listed, are documented in BC1381. **Ocellated Darner** (*Boyeria grafiana*), **Special Concern:** Larvae of this dragonfly species typically inhabit clear, shallow, rocky, swift-flowing streams, as well as large, rocky lakes with little vegetation. Adults inhabit nearby uplands, often preferring forests with mixed coniferous and deciduous trees.

Wood Turtle (*Glyptemys insculpta*), **Special Concern:** This is a medium-sized turtle with a sculpted upper shell and orange coloration on its feet and neck. Ideal habitat for this species includes streams and rivers such as the Konkapot River that have long corridors of undeveloped and interconnected uplands.

BC1558 and CNL883

BC1558 is one of the largest cores in the region, extending primarily along the Housatonic River in Great Barrington and Sheffield and including stream corridors of tributaries and their sub-watersheds in these and other towns. It encompasses the rivers and streams themselves, as well as nearby uplands and floodplains. It also includes mountainous areas, such as East Mountain in Great Barrington and Sheffield. These areas are all included as part of BC1558 because they are physically and ecologically connected: the particular ecological value of each part is enhanced by protection of their interconnections within the BC. However, for ease of discussion, arbitrary subdivisions were made within the very large core, resulting in six different sub-areas that are somewhat spatially and ecologically distinct. These areas are given letter sub-labels of BC1558a through BC1558f. A very small, 6.3-acre portion of BC1558b falls within west New Marlborough along Ironwork Brook at the town's boundary with Sheffield. This area includes a Wetland Core, its associated Upland Buffer, and part of CNL883's large Landscape Block.



Figure 3. Core habitat (dark green), Critical Natural Landscape (light green), and Town Priority Conservation Areas (PCAs; reddish-brown grid) in New Marlborough. Town PCAs make up 5,816 acres in New Marlborough, or 19.0 percent of the town's total land area.

Priority Conservation Areas in New Marlborough

New Marlborough contains three areas designated as Town PCAs:

Town PCA 1: This PCA is located primarily along the Konkapot River throughout New Marlborough. It also includes upper reaches of Ironwork Brook, this stream's associated wetlands, and areas of open water in Gleason and Juniper Ponds. Extensive wetlands and floodplains in this PCA provide important habitat for state-listed dragonflies, birds, reptiles, and fish; most are associated with BC1308.

Town PCA 2: New Marlborough's second Town PCA is its largest in total area, encompassing just over 3,400 acres. It is located in the southeastern portion of the town, and is defined by a large Forest Core embedded within a Landscape Block. It includes the protected lands of Cookson State Forest. This PCA also includes many Wetland Cores along sections of the Whiting River and in the general vicinity of the East Indies Pond and Thousand Acre Swamp Reservoir.

Town PCA 3: New Marlborough's third Town PCA includes almost 1,000 acres and is located in the southwest corner of the town, just east of the Konkapot River near the town's boundary with Litchfield, Connecticut. It includes mountainous areas surrounding a small, marshy tributary of the Whiting River that flows through Campbells Falls State Park. This PCA supports many state-listed species, including Jefferson Salamanders that inhabit extensive forested areas and breed in vernal pools.

Glossary

Aquatic Cores (in BioMap2, a component of Core Habitat) include intact river corridors within which important physical and ecological processes of the river or stream occur, delineated using integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern. To identify those areas integrally connected to each river and stream, each river segment was buffered 30 meters. All wetlands wholly or partially contained within this buffer were then included, and the combination of the river channel, the adjacent buffer, and the connected wetlands make up this riverine Core Habitat.

BioMap2 Cores (BCs) (called Core Habitats in BioMap2) identify key areas that are critical for the long-term persistence of rare species and other Species of Conservation Concern, as well as a wide diversity of natural communities and intact ecosystems across the Commonwealth. Protection of Core Habitats will contribute to the conservation of specific elements of biodiversity.

Certified Vernal Pools are temporary ponds or other fishless wetlands that meet certain biological and physical criteria to be classified as essential breeding habitat for a number of amphibian and invertebrate species, such as Wood Frog, Spotted Salamander, Blue-spotted Salamander, Jefferson Salamander, Marbled Salamander, and Intricate Fairy Shrimp. The certification of vernal pool habitat in The Commonwealth is administered by the Natural Heritage & Endangered Species Program. A number of regulations incorporate protections for certified vernal pools (please see http://www.mass.gov/dfwele/dfw/nhesp/vernal_pools/ pdf/vpcert.pdf for more information).

Critical Natural Landscape (CNL) (part of BioMap2) identifies large natural landscape areas that are minimally impacted by development. If protected, these areas will provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience to natural and anthropogenic disturbances in a rapidly changing world. Areas delineated as Critical Natural Landscape also include buffering upland around wetland, coastal, and aquatic Core Habitats to help ensure their long-term integrity.

Cobbles are small hills or rocky knolls made of marble and quartzite. The alkaline soils derived from the calcareous rocks support a distinct and diverse flora. Examples include Bartholomew's Cobble in southern Sheffield and Tyringham Cobble in Tyringham.

Critically Imperiled natural communities typically have five or fewer documented sites or have very few remain-

ing acres in the state. Natural Community types ranked as Critically Imperiled are in the Priority Natural Communities category.

Disturbance, in an ecological sense, is an event that disrupts the normal structure and function of an ecosystem. Disturbances often produce bare soil and openings in forests where rapidly growing, sun-loving species, including invasive exotic species, can grow. Human activities have accelerated the number and types of disturbances in many ecosystems.

Ecoregions are areas of relatively homogeneous ecological systems, including vegetation, soils, climate, geology, and patterns of human uses.

Endangered species are in danger of extinction throughout all or a significant portion of their range or are in danger of extirpation from Massachusetts. Endangered is a category of state-listed species defined in the Massachusetts Endangered Species Act (M.G.L. c.131A) and listed in its regulations (321 CMR 10.00).

Exemplary Natural Communities are the best examples documented of relatively common (Secure) types of natural communities.

Forest Cores (in BioMap2, a component of Core Habitat) identify the best examples of large, intact forests that are least impacted by roads and development, providing critical "forest interior" habitat for numerous woodland species.

Fragmented Landscape, in ecological and conservation terms, refers to the idea that a large spatial area (the landscape) that in the past might have had connected habitats (for example, unbroken forest, continuous river, or undisrupted grasslands) have become interspersed with artifacts of human development that alter habitat and ecological processes – or that the human influence has come to dominate the land leaving patches, or fragments, of natural habitat surrounded by development.

Imperiled communities typically have 6-20 sites or few remaining acres in the state. Natural Community types ranked as Imperiled are included in the Priority Natural Communities category.

Landscape Blocks (component of BioMap2 Critical Natural Landscape), the primary component of Critical Natural Landscape, are large areas of intact and predominately natural vegetation, consisting of contiguous forests, wetland, rivers, lakes, and ponds, as well as coastal habitats such as

barrier beaches and salt marshes. Pastures and power-line right-of-way, which are less intensively altered than most developed areas, were also included since they provide habitat and connectivity for many species.

Landscape Context refers to taking the broadest view of the ability of ecosystems or species populations to maintain themselves where they are by considering the siting within the larger area. For example, a wooded area within a city park has a very different, urban context than a wooded area on a farm.

MESA (Massachusetts Endangered Species Act) (M.G.L. c.131A) and its implementing regulations (321 CMR 10.00) provide regulatory protection of rare species and their habitats. MESA protects rare species and their habitats by prohibiting the "Take" of any plant or animal species listed as Endangered, Threatened, or Special Concern by the MA Division of Fisheries & Wildlife.

Natural Communities are assemblages of species that occur together in space and time. These groups of plants and animals are found in recurring patterns that are classified and described by their dominant biological and physical features.

Nymphs, sometimes informally referred to as larvae, are the young, immature form of dragonflies and some other invertebrates. Dragonfly nymphs are aquatic. On maturing, they change into the flying terrestrial adults that are seen along rivers and lakes, and nearby uplands.

Priority Natural Communities include types of natural communities with limited distribution, or relatively few occurrences, and/or low acreages in Massachusetts.

Protected in Perpetuity refers to land owned as conservation land by a public entity in Massachusetts whose lands come under the authority of Massachusetts Constitution Article 97, or federal land owned by a federal conservation agency, or by a non-profit dedicated to land conservation; or for which the conservation values have been protected by legal restrictions on the deed or by a conservation easement (conservation restriction).

Secure types of natural communities typically have over 100 sites or abundant acreage across the state; excellent examples are identified as Core Habitat to ensure continued protection and are referred to as Exemplary Natural Communities.

Special Concern species have suffered a decline that could threaten the species if allowed to continue unchecked or occur in such small numbers or with such restricted distribution or specialized habitat requirements that they could easily become Threatened in Massachusetts. Special Concern is a category of state-listed species defined in the Massachusetts Endangered Species Act (M.G.L. c.131A) and listed in its regulations (321 CMR 10.00).

Species of Conservation Concern (in BioMap2, a component of Core Habitat) include those species that meet the criteria for listing under the Massachusetts Endangered Species Act, as well as a number of species that do not meet these criteria for listing, but are considered to be of conservation concern within Massachusetts, such as inclusion in the State Wildlife Action Plan (SWAP).

State-listed Species are species listed under the Massachusetts Endangered Species Act (M.G.L. c.131A) and its regulations (321 CMR 10.00). – that is, Endangered, Threatened, or Special Concern species.

SWAP (State Wildlife Action Plan), approved in 2006, the Massachusetts Division of Fisheries and Wildlife's State Wildlife Conservation Strategy, most often referred to as the State Wildlife Action Plan (SWAP), is a comprehensive document to help guide wildlife conservation decision making for Massachusetts' wildlife for many years.

SWAP Species were identified as being those in greatest need of conservation in the Massachusetts Division of Fisheries and Wildlife'State Wildlife Conservation Strategy, most often referred to as the State Wildlife Action Plan (SWAP).

Threatened species are likely to become Endangered in Massachusetts in the foreseeable future throughout all or a significant portion of their range. Threatened is a category of state-listed species defined in the Massachusetts Endangered Species Act (M.G.L. c.131A) and listed in its regulations (321 CMR 10.00).

Upland Buffers of Aquatic Cores (component of Bio-Map2's Critical Natural Landscape) identify protective upland areas adjacent to all Aquatic Cores. A variable width buffer, that extends deeper into surrounding unfragmented habitats than into developed areas, was used to include the most intact areas around Aquatic Cores. The conservation of wetland buffers will support habitats and functionality of each aquatic area, and also include adjacent uplands that are important for many species that move between habitat types.

Upland Buffer of Wetland Cores (component of BioMap2's Critical Natural Landscape) identify protective upland areas adjacent to all Wetland Cores. A variable-width buffer, that extends deeper into surrounding unfragmented habitats than into developed areas, was used to include the most intact areas around the Wetland Cores. The conservation of wetland buffers will support habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

Variant of a natural community refers to a named subtype of a more broadly defined type of community. In Massachusetts the term is not a formal designation, but rather is intended as an aid for understanding community relationships.

Vernal Pools, also known as ephemeral pools, autumnal pools, and temporary woodland ponds, typically fill with water in the autumn or winter due to rainfall and rising groundwater and remain ponded through the spring and into summer. They usually dry completely by the middle or end of summer each year. Vernal pools are unique wildlife habitats best known for the amphibians and invertebrate animals that use them to breed.

Vernal Pool Cores (BioMap2, component of Core Habitat) identify, based on a GIS model, the highest quality most interconnected clusters of Potential Vernal Pools (a dataset of likely vernal pools identified from interpretation of aerial photographs) and the habitat between them.

Vulnerable communities typically have 21-100 sites or limited acreage across the state. Natural Community types ranked as Vulnerable are in the Priority Natural Communities category.

Wetland Cores (BioMap2, component of Core Habitat) identify, based on a GIS model, the least disturbed wetlands within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated development. These wetlands are most likely to support critical wetland functions (i.e. natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Help Save Endangered Wildlife!

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New Marlborough

Produced in 2012

This report and associated map provide information about important sites for biodiversity conservation in your area.

This information is intended for conservation planning, and is <u>not</u> intended for use in state regulations.





Natural Heritage Endangered Species Program Massachusetts Division of Fisheries & Wildlife



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Critical Natural Landscape Summaries



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For more information on rare species and natural communities, please see our fact sheets online at <u>www.mass.gov/nhesp</u>.

Introduction

The Massachusetts Department of Fish & Game, through the Division of Fisheries and Wildlife's Natural Heritage & Endangered Species Program (NHESP), and The Nature Conservancy's Massachusetts Program developed *BioMap2* to protect the state's biodiversity in the context of climate change.

BioMap2 combines NHESP's 30 years of rigorously documented rare species and natural community data with spatial data identifying wildlife species and habitats that were the focus of the Division of Fisheries and Wildlife's 2005 State Wildlife Action Plan (SWAP). *BioMap2* also integrates The Nature Conservancy's assessment of large, well-connected, and intact ecosystems and landscapes across the Commonwealth, incorporating concepts of ecosystem resilience to address anticipated climate change impacts.

Protection and stewardship of *BioMap2* Core Habitat and Critical Natural Landscape is essential to safeguard the diversity of species and their habitats, intact ecosystems, and resilient natural landscapes across Massachusetts.

What Does Status Mean?

The Division of Fisheries and Wildlife determines a status category for each rare species listed under the Massachusetts Endangered Species Act (MESA), M.G.L. c.131A, and its implementing regulations 321 CMR 10.00. Rare species are categorized as Endangered, Threatened or of Special Concern according to the following:

• Endangered species are in danger of extinction throughout all or a significant portion of their range or are in danger of extirpation from Massachusetts.



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BioMap2



Get your copy of the *BioMap2* report! Download from <u>www.mass.gov/nhesp</u> or contact Natural Heritage at 508-389-6360 or <u>natural.heritage@state.ma.us</u>.

- Threatened species are likely to become Endangered in Massachusetts in the foreseeable future throughout all or a significant portion of their range.
- Special Concern species have suffered a decline that could threaten the species if allowed to continue unchecked or occur in such small numbers or with such restricted distribution or specialized habitat requirements that they could easily become Threatened in Massachusetts.

In addition NHESP maintains an unofficial watch list of plants that are tracked due to potential conservation interest or concern, but are <u>not</u> regulated under the Massachusetts Endangered Species Act or other laws or regulations. Likewise, described natural communities are <u>not</u> regulated by any law or regulations, but they can help to identify ecologically important areas that are worthy of

Massachusetts Division of Fisheries and Wildlife 1 Rabbit Hill Road, Westborough, MA 01581 phone: 508-389-6360 fax: 508-389-7890 protection. The status of natural communities reflects the documented number and acreages of each community type in the state:

- Critically Imperiled communities typically have 5 or fewer documented good sites or have very few remaining acres in the state.
- Imperiled communities typically have 6-20 good sites or few remaining acres in the state.
- Vulnerable communities typically have 21-100 good sites or limited acreage across the state.
- Secure communities typically have over 100 sites or abundant acreage across the state; however, excellent examples are identified as Core Habit to ensure continued protection.

In 2005 the Massachusetts Division of Fisheries and Wildlife completed a comprehensive State Wildlife Action Plan (SWAP) documenting the status of Massachusetts wildlife and providing recommendations to help guide wildlife conservation decision-making. SWAP includes all the wildlife species listed under the Massachusetts Endangered Species Act (MESA), as well as more than 80 species that need conservation attention but do not meet the requirements for inclusion under MESA. The SWAP document is organized around habitat types in need of conservation within the Commonwealth. While the original BioMap focused primarily on rare species protected under MESA, BioMap2 also addresses other Species of Conservation Concern, their habitats, and the ecosystems that support them to create a spatial representation of most of the elements of SWAP.

BioMap2: One Plan, Two Components

BioMap2 identifies two complementary spatial layers, Core Habitat and Critical Natural Landscape.

Core Habitat identifies key areas that are critical for the long-term persistence of rare species and other Species of Conservation Concern, as well as a wide diversity of natural communities and intact ecosystems across the Commonwealth. Protection of Core Habitats will contribute to the conservation of specific elements of biodiversity.

Critical Natural Landscape identifies large natural Landscape Blocks that are minimally impacted by development. If protected, these areas will provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience to natural and anthropogenic disturbances in a rapidly changing world. Areas delineated as Critical Natural Landscape also include buffering upland around wetland, coastal, and aquatic Core Habitats to help ensure their longterm integrity.

The long-term persistence of Massachusetts biological resources requires a determined commitment to land and water conservation. Protection and stewardship of both Critical Natural Landscapes and Core Habitats are needed to realize the biodiversity conservation vision of *BioMap2*.

Components of Core Habitat

Core Habitat identifies specific areas necessary to promote the long-term persistence of rare species, other Species of Conservation Concern, exemplary natural communities, and intact ecosystems.

Rare Species

There are 432 native plant and animal species listed as Endangered, Threatened or Special Concern under the Massachusetts Endangered Species Act (MESA) based on their rarity, population trends, and threats to survival. For

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For more information on rare species and natural communities, please see our fact sheets online at <u>www.mass.gov/nhesp</u>.
Table 1. Species of Conservation Concern described in the State Wildlife Action Plan and/or included on the MESA List and for which habitat was mapped in *BioMap2*. Note that plants are not included in SWAP, and that marine species such as whales and sea turtles are not included in *BioMap2*.

	Non-instea Species
listed	of Conservation
Species	Concern
4	5
27	23
10	5
4	3
10	17
102	9
256	0
413	62
	listed Species 4 27 10 4 10 102 256 413

BioMap2, NHESP staff identified the highest quality habitat sites for each non-marine species based on size, condition, and landscape context.

Other Species of Conservation Concern

In addition to species on the MESA List described previously, the State Wildlife Action Plan (SWAP) identifies 257 wildlife species and 22 natural habitats most in need of conservation within the Commonwealth. *BioMap2* includes species-specific habitat areas for 45 of these species and habitat for 17 additional species which was mapped with other coarse-filter and fine-filter approaches.

Priority Natural Communities

Natural communities are assemblages of plant and animal species that share a common environment and occur together repeatedly on the landscape. *BioMap2* gives conservation



priority to natural communities with limited distribution and to the best examples of more common types.

Vernal Pools

Vernal pools are small, seasonal wetlands that provide important wildlife habitat, especially for amphibians and invertebrate animals that use them to breed. *BioMap2* identifies the top 5 percent most interconnected clusters of Potential Vernal Pools in the state.

Forest Cores

In *BioMap2*, Core Habitat includes the best examples of large, intact forests that are least impacted by roads and development, providing critical habitat for numerous woodland species. For example, the interior forest habitat defined by Forest Cores supports many bird species sensitive to the impacts of roads and development, such as the Black-throated Green Warbler, and helps maintain ecological processes found only in unfragmented forest patches.

Wetland Cores

BioMap2 used an assessment of Ecological Integrity to identify the least disturbed wetlands in the state within undeveloped landscapes those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Aquatic Cores

To delineate integrated and functional ecosystems for fish species and other aquatic

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Species of Conservation Concern, beyond the species and exemplary habitats described above, *BioMap2* identifies intact river corridors within which important physical and ecological processes of the river or stream occur.

Components of Critical Natural Landscape

Critical Natural Landscape identifies intact landscapes in Massachusetts that are better able to support ecological processes and disturbance regimes, and a wide array of species and habitats over long time frames.

Landscape Blocks

BioMap2 identifies the most intact large areas of predominately natural vegetation, consisting of contiguous forests, wetlands, rivers, lakes, and ponds, as well as coastal habitats such as barrier beaches and salt marshes.

Upland Buffers of Wetland and Aquatic Cores

A variety of analyses were used to identify protective upland buffers around wetlands and rivers.

Upland Habitat to Support Coastal Adaptation

BioMap2 identifies undeveloped lands adjacent to and up to one and a half meters above existing salt marshes as Critical Natural Landscapes with high potential to support inland migration of salt marsh and other coastal habitats over the coming century.

The conservation areas identified by *BioMap2* are based on breadth and depth of data, scientific expertise, and understanding of Massachusetts' biodiversity. The numerous sources of information and analyses used to

Legal Protection of Biodiversity

BioMap2 presents a powerful vision of what Massachusetts would look like with full protection of the land most important for supporting the Commonwealth's biodiversity. While BioMap2 is a planning tool with no regulatory function, all state-listed species enjoy legal protection under the Massachusetts Endangered Species Act (M.G.L. c.131A) and its implementing regulations (321 CMR 10.00). Wetland habitat of state-listed wildlife is also protected under the Wetlands Protection Act Regulations (310 CMR 10.00). The Natural Heritage Atlas contains maps of Priority Habitats and Estimated Habitats, which are used, respectively, for regulation under the Massachusetts Endangered Species Act and the Wetlands Protection Act. For more information on rare species regulations, and to view Priority and Estimated Habitat maps, please see the **Regulatory Review** page at http://www.mass.gov/eea/agencies/dfg/dfw/natur

<u>al-heritage/regulatory-review/</u>.

BioMap2 is a conservation planning tool that does not, in any way, supplant the Estimated and Priority Habitat Maps which have regulatory significance. Unless and until the *BioMap2* vision is fully realized, we must continue to protect our most imperiled species and their habitats.

create Core Habitat and Critical Natural Landscape are complementary, and outline a comprehensive conservation vision for Massachusetts, from rare species to intact landscapes. In total, these robust analyses define a suite of priority lands and waters that, if permanently protected, will support Massachusetts' natural systems for generations to come.

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Understanding Core Habitat Summaries

Following the Town Overview, there is a descriptive summary of each Core Habitat and Critical Natural Landscape that occurs in your city or town. These summaries highlight some of the outstanding characteristics of each Core Habitat and Critical Natural Landscape, and will help you learn more about your city or town's biodiversity. You can find out more information about many of these species and natural communities by looking at specific fact sheets at <u>www.mass.gov/nhesp</u>.

Additional Information

For copies of the full *BioMap2* report, the Technical Report, and an <u>interactive mapping</u> <u>tool</u>, visit the *BioMap2*<u>website</u> via the Land Protection and Planning tab at <u>www.mass.gov/nhesp</u>. If you have any questions about this report, or if you need help protecting land for biodiversity in your community, the Natural Heritage & Endangered Species Program staff looks forward to working with you.

Contact the Natural Heritage & Endangered Species Program

By phone	508-389-6360
By fax	508-389-7890
By email	natural.heritage@state.ma.us
By Mail	100 Hartwell Street, Suite 230
	West Boylston, MA 01583

The GIS datalayers of *BioMap2* are available for download from MassGIS at <u>www.mass.gov/mgis</u>.



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Town Overview

New Marlborough lies on the border of the Lower Berkshire Hills and the Western New England Marble Valleys/Berkshire Valley/Housatonic and Hoosic Valley Ecoregions. The Lower Berkshire Hills Ecoregion is similar to the Berkshire Highlands Ecoregion, with its common northern hardwoods, but lacks spruce-fir and harbors transition hardwoods. Lakes and ponds are relatively abundant. The Western New England Marble Valleys Ecoregion is an area drained by the Hoosic and Housatonic Rivers. This ecoregion harbors farms, evergreen forests, transition and northern hardwood forests, and calcareous fens. The limestone-rich bedrock in the area creates alkaline lakes and streams.



New Marlborough at a Glance

- Total Area: 30,654 acres (47.9 square miles)
- Human Population in 2010: 1,509
- Open space protected in perpetuity: 8,475 acres, or 27.6% percent of total area*
- BioMap2 Core Habitat: 6,088 acres
- *BioMap2* Core Habitat Protected: 2,805 acres or 46.1%
- *BioMap2* Critical Natural Landscape: 20,649 acres
- *BioMap2* Critical Natural Landscape Protected: 6,578 acres or 31.9%.

BioMap2 Components

<u>Core Habitat</u>

- 3 Exemplary or Priority Natural Community Cores
- 2 Forest Cores
- 33 Wetland Cores
- 8 Aquatic Cores
- 2 Vernal Pool Cores
- 19 Species of Conservation Concern Cores**

 1 mammal, 1 bird, 2 reptiles, 2 amphibians, 2 fishes, 4 insects, 1 crustacean, 13 plants

Critical Natural Landscape

- 4 Landscape Blocks
- 21 Wetland Core Buffers
- 8 Aquatic Core Buffers

* Calculated using MassGIS data layer "Protected and Recreational Open Space—March, 2012".

** See next pages for complete list of species, natural communities and other biodiversity elements.



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BioMap2 Core Habitat and Critical Natural Landscape in New Marlborough







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Species of Conservation Concern, Priority and Exemplary Natural Communities, and Other Elements of Biodiversity in New Marlborough

Crustaceans

Piedmont Groundwater Amphipod, (Stygobromus tenuis tenuis), SC

Insects

Dragonflies

<u>Ocellated Darner</u>, (Boyeria grafiana), SC <u>Brook Snaketail</u>, (Ophiogomphus aspersus), SC <u>Riffle Snaketail</u>, (Ophiogomphus carolus), T <u>Zebra Clubtail</u>, (Stylurus scudderi), Non-listed SWAP species

Amphibians

<u>Jefferson Salamander</u>, (*Ambystoma jeffersonianum*), SC Northern Leopard Frog, (*Rana pipiens*), Non-listed SWAP

Fishes

Longnose Sucker, (Catostomus catostomus), SC Bridle Shiner, (Notropis bifrenatus), SC

Reptiles

<u>Wood Turtle</u>, (*Glyptemys insculpta*), SC Eastern Ribbon Snake, (*Thamnophis sauritus*), Non-listed SWAP

Birds

American Bittern, (Botaurus lentiginosus), E

Mammals

Rock Shrew, (Sorex dispar), SC

Plants

Climbing Fumitory, (Adlumia fungosa), SC Hairy Agrimony, (Agrimonia pubescens), T Dwarf Mistletoe, (Arceuthobium pusillum), SC Smooth Rock-cress, (Boechera laevigata), SC Tuckerman's Sedge, (Carex tuckermanii), E Hemlock Parsley, (Conioselinum chinense), SC Large-bracted Tick-trefoil, (Desmodium cuspidatum), T Intermediate Spike-sedge, (Eleocharis intermedia), T Dwarf Scouring-rush, (Equisetum scirpoides), SC Frank's Lovegrass, (Eragrostis frankii), SC Small Dropseed, (Sporobolus neglectus), E Appalachian Bristle-fern, (Trichomanes intricatum), E Black Maple, (Acer nigrum), recently de-listed

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Priority Natural Communities

<u>Calcareous Seepage Marsh</u>, S2 <u>Spruce-Fir Swamp</u>, S3 <u>Spruce-Tamarack Bog</u>, S2

Other BioMap2 Components

- Forest Core Aquatic Core Wetland Core Vernal Pool Core Landscape Block Aquatic Core Buffer Wetland Core Buffer
- E = Endangered
- T = Threatened
- SC = Special Concern
- S1 = Critically Imperiled communities, typically 5 or fewer documented sites or very few remaining acres in the state.
- S2 = Imperiled communities, typically 6-20 sites or few remaining acres in the state.
- S3 = Vulnerable communities, typically have 21-100 sites or limited acreage across the state.



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BioMap2 Core Habitat in New Marlborough

Core IDs correspond with the following element lists and summaries.









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Elements of BioMap2 Cores

This section lists all elements of *BioMap2* Cores that fall *entirely or partially* within New Marlborough. The elements listed here may not occur within the bounds of New Marlborough.

Core 951

Species of Conservation Concern Appalachian Bristle-fern	Trichomanes intricatum	Е
Core 999		
Wetland Core		
Aquatic Core		
Priority & Exemplary Natural Communi	ties	62
Calcareous Seepage Marsh		S2
Species of Conservation Concern		66
Northern Leonard Free	Contosettnum chinense	SC Non listed SIMAD
Fastern Bibbon Spake	Kunu pipiens Thammonkia cauritus	Non-listed SWAP
American Bittern	Botaurus Initioinosus	F
American Ditterit	Doluurus lentiginosus	Ľ
Core 1007		
Wetland Core		
Core 1012		
Aquatic Core		
Species of Conservation Concern		
Tuckerman's Sedge	Carex tuckermanii	E
Core 1018		
Aquatic Core		
Species of Conservation Concern		
Piedmont Groundwater Amphipod	Stygobromus tenuis tenuis	SC
Core 1023		
Wetland Core		
Core 1029		
Species of Conservation Concern		
Hairy Agrimony	Agrimonia pubescens	Т
	o	-

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	& Endangered	1 Rabbit Hill Road, Westborough, MA 01581		
	Natural Heritage	Massachusetts Divisio	n of Fisheries and Wil	ldlife
	Species of Conservation Concern Smooth Rock-cress	Boechera laevigata	SC	
Core 1	108			
	Wetland Core			
Core 1	101			
	Wetland Core			
Core 1	085			
	Wetland Core			
Core 1	.076			
Core 1 Core 1	.060 Wetland Core .068 Forest Core Wetland Core Aquatic Core Priority & Exemplary Natural Commu Spruce-Fir Swamp Spruce-Tamarack Bog Species of Conservation Concern Dwarf Mistletoe	unities Arceuthobium pusillum	S3 S2 SC	
	Vernal Pool Core			
Coro 1	Large-bracted Tick-trefoil	Desmodium cuspidatum	Т	
	Vernal Pool Core Species of Conservation Concern Climbing Fumitory	Adlumia fungosa	SC	
Core 1	.044			
	Wetland Core			
Core 1	.033			
	Species of Conservation Concern Hemlock Parsley	Conioselinum chinense	SC	

For more information on rare species and natural communities, please see our fact sheets online at <u>www.mass.gov/nhesp</u>.

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	Wetland Core		
Core 1	236		
	Wetland Core		
Core 1	235		
Core 1	Wetland Core		
Corro 1	776		
Core 1	225 Wetland Core		
	Aquatic Core Species of Conservation Concern American Bittern	Botaurus lentiginosus	E
Core 1	201		
Core I	Wetland Core		
Care 1	wetiand Core		
Core 1	185		
	Species of Conservation Concern Dwarf Scouring-rush	Equisetum scirpoides	SC
Core 1	158		
	Wetland Core		
Core 1	145		
Core I	Wetland Core		
Core 1	137	Amoysioniu jejjersoniunum	30
Core 1	135 Species of Conservation Concern	Ambustong iaffarsonignum	50
	Species of Conservation Concern Rock Shrew	Sorex dispar	SC

Forest Core

Core 1269

Wetland Core

Core 1273

Wetland Core

Core 1275

Wetland Core

Core 1283

Species of Conservation Concern		F
Small Dropseed	Sporobolus neglectus	E
Core 1301		
Species of Conservation Concern Jefferson Salamander	Ambystoma jeffersonianum	SC
Core 1308		
Wetland Core Aquatic Core Species of Conservation Concern		
Dwarf Scouring-rush	Equisetum scirpoides	SC
Frank's Lovegrass	Eragrostis frankii	SC
Intermediate Spike-sedge	Eleocharis intermedia	Т
Tuckerman's Sedge	Carex tuckermanii	E
Brook Snaketail	Ophiogomphus aspersus	SC
Riffle Snaketail	Ophiogomphus carolus	Т
Zebra Clubtail	Stylurus scudderi	Non-listed SWAP
Wood Turtle	Glyptemys insculpta	SC
Bridle Shiner	Notropis bifrenatus	SC
Longnose Sucker	Catostomus catostomus	SC
Core 1331		
Species of Conservation Concern		
Jefferson Salamander	Ambystoma jeffersonianum	SC
Core 1381		

Wetland Core



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Aquatic Core		
Species of Conservation Concern		
Ocellated Darner	Boyeria grafiana	SC
Wood Turtle	Glyptemys insculpta	SC
American Bittern	Botaurus lentiginosus	Е

Core 1558C

Forest Core		
Wetland Core		
Aquatic Core		
Priority & Exemplary Natural Con	mmunities	
Calcareous Pondshore/Lakesh	nore	S2
Hemlock-Hardwood Swamp		
Northern Hardwoods - Heml	ock - White Pine Forest	
Species of Conservation Concern		
Bristly Buttercup	Ranunculus pensylvanicus	SC
Jefferson Salamander	Ambystoma jeffersonianum	SC
Spring Salamander	Gyrinophilus porphyriticus	Non-listed SWAP



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Core Habitat Summaries

Core 951

A 4-acre Core Habitat featuring a Species of Conservation Concern.

Appalachian Bristle-fern exists only in the gametophyte phase of the fern life cycle, never producing a sporophyte, the leafy spore-producing phase that is most familiar to us. Consequently, it is small and made of dense entangled filaments that resemble steel wool. It grows in moist, deeply-shaded crevices in many kinds of rocky substrates.

Core 999

A 568-acre Core Habitat featuring Wetland Core, Aquatic Core, a Priority Natural Community, and Species of Conservation Concern.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

Calcareous Seepage Marshes are marshy wetlands enriched by calcareous groundwater seepage. Of the three types of calcareous fen communities described in Massachusetts, they are intermediate in richness and in botanical rarities. This example of Calcareous Seepage Marsh is the largest and best example of this uncommon community type described in the state.

In Massachusetts, Hemlock Parsley is usually found in swamps, wet meadows, bogs or fens, and marshy forests. It can tolerate shady environments and wet, acidic soils, although it is usually found in less acidic (circumneutral to limy) wetlands.

Adult Northern Leopard Frogs are found in marshes, wet meadows, and peatlands in the narrow transition zone between open water and uplands; they retreat to the water of ponds and small streams when threatened. The herbivorous tadpoles require open water of sufficient permanence for their development.

Eastern Ribbon Snakes are a medium-sized, very thin snake ranging from 7 to 34 inches long at maturity. They are active during the day and live in wetlands and edges of open water being comfortable in water and on land, eating amphibians, insects, and occasional fish. This species hibernates in ant mounds, rodent burrows, crayfish burrows, and bank burrows.

American Bitterns are heron-like birds that nest primarily in large cattail, tussock or shrub marshes and are very sensitive to disturbance.



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A 25-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

The Wetland Core occurs on mid elevation Mafic bedrock (rich in minerals like iron and magnesium), one of the least common ecological settings for Wetland Cores in the state.

Core 1012

A 4-acre Core Habitat featuring Aquatic Core and a Species of Conservation Concern.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

In Massachusetts, Tuckerman's Sedge inhabits the rich soils of lowland river floodplain habitats such as oxbows, low depressions, forests, meadows, swales, and vernal pools.

Core 1018

A 13-acre Core Habitat featuring Aquatic Core and a Species of Conservation Concern.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

The Piedmont Groundwater Amphipod is found in springs in upland limestone areas.

Core 1023

A 36-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

The Wetland Core occurs on mid elevation Mafic bedrock (rich in minerals like iron and magnesium), one of the least common ecological settings for Wetland Cores in the state.

Core 1029

A 46-acre Core Habitat featuring a Species of Conservation Concern.

Hairy Agrimony inhabits edges and openings within rich, rocky woodlands on steep slopes or ledges, often over circumneutral or calcareous bedrock. Interestingly, populations are present not only in the marble and traprock regions of the state, but also on Martha's Vineyard and Nantucket, indicating that

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this plant is not a strict calciphile. Its affinity for openings suggests that habitat conditions are most favorable when there is periodic disturbance.

Core 1032

An 8-acre Core Habitat featuring a Species of Conservation Concern.

In Massachusetts, Hemlock Parsley is usually found in swamps, wet meadows, bogs or fens, and marshy forests. It can tolerate shady environments and wet, acidic soils, although it is usually found in less acidic (circumneutral to limy) wetlands.

Core 1033

A 11-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

The Wetland Core occurs on mid-elevation mafic bedrock (rich in minerals like iron and magnesium), one of the least common ecological settings for Wetland Cores in the state.

Core 1044

A 289-acre Core Habitat featuring Vernal Pool Core and Species of Conservation Concern.

Vernal pools are small, seasonal wetlands that provide important wildlife habitat, especially for amphibians and invertebrate animals that use them to breed. *BioMap2* identifies the top 5 percent most interconnected clusters of Potential Vernal Pools in the state.

Climbing Fumitory is an herbaceous biennial vine that can reach lengths of 10 feet. It is usually found in the shade climbing over talus at the base of cliffs.

Large-bracted Tick-trefoil generally inhabits dry, rocky, open areas such as forest edges, rocky ridges, and embankments. It is often found in scrubby, shrub-dominated landscapes with circumneutral or alkaline bedrock.

Core 1056

A 65-acre Core Habitat featuring Vernal Pool Core.

Vernal pools are small, seasonal wetlands that provide important wildlife habitat, especially for amphibians and invertebrate animals that use them to breed. *BioMap2* identifies the top 5 percent most interconnected clusters of Potential Vernal Pools in the state.

Core 1060

A 105-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are



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most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

The 105-acre Wetland Core is among the largest 20% of Wetland Cores statewide and in this ecoregion. It occurs on mid-elevation mafic bedrock (rich in minerals like iron and magnesium), one of the least common ecological settings for Wetland Cores in th*

Core 1068

A 3,942-acre Core Habitat featuring Forest Core, Wetland Core, Aquatic Core, Priority Natural Communities, and a Species of Conservation Concern.

Forest Cores are the best examples of large, intact forests that are least impacted by roads and development. Forest Cores support many bird species sensitive to the impacts of roads and development and help maintain ecological processes found only in unfragmented forest patches.

This 3,424-acre Forest Core is among the largest 20% of Forest Cores in the state and provides important forest interior habitat. It is partially protected, primarily through Cookson State Forest.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

Spruce-Fir Boreal Swamps are forested wetlands dominated by red spruce and balsam fir. These swamps are typically found at stream headwaters or in poorly drained basins in the higher, western and north-central parts of the state. This exemplary Spruce-Fir Swamp is part of an extensive wetland complex, in a wooded landscape with little evidence of human disturbance.

Spruce-Tamarack Bog communities are acidic forested peatlands with an overstory of black spruce and tamarack and an understory of heath shrubs on sphagnum moss. They occur in kettlehole depressions, watershed divides, and along pond margins. This large Spruce-Tamarack Bog Forest occurs along a stream and is underlain by sphagnum moss. The tree canopy is open, shrubs dense, and an herb layer that exhibits high cover and diversity. Beaver occasionally flood parts of the community.

A member of the Christmas Mistletoe family, Dwarf Mistletoe is a very small fleshy shrub, usually no more than 0.8 inch tall, that parasitizes conifer trees. In Massachusetts, Dwarf Mistletoe occurs in peatlands varying from kettlehole peat bogs to spruce-fir-birch headwater swamps, generally on the branches of black spruce (*Picea mariana*).

Core 1076

A 15-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are

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most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 1085

A 14-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

The Wetland Core occurs on mid-elevation mafic bedrock (rich in minerals like iron and magnesium), one of the least common ecological settings for Wetland Cores in the state.

Core 1101

A 17-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

The Wetland Core occurs on mid-elevation slate, one of the least common ecological settings for Wetland Cores in the state.

Core 1108

A 6-acre Core Habitat featuring a Species of Conservation Concern.

In Massachusetts, Smooth Rock-cress, a biennial mustard, inhabits rich, rocky deciduous woods, rich rocky hillsides, ledges, talus slopes, and floodplain thickets and woodlands. It occupies open to shaded sites on dry to mesic soils.

Core 1112

A 35-acre Core Habitat featuring a Species of Conservation Concern.

The Rock Shrew inhabits crevices of large mossy rock piles such as talus just beneath low, shaded cliffs, in cold, deep, damp coniferous forests.

Core 1135

A 262-acre Core Habitat featuring a Species of Conservation Concern.

Adult and juvenile Jefferson Salamanders inhabit upland forests during most of the year, where they reside in small-mammal burrows and other subsurface retreats. Adults migrate during late winter or early spring to breed in vernal pools and fish-free areas of swamps, marshes, or similar wetlands. Larvae metamorphose in late summer or early fall, whereupon they disperse into upland forest.

Core 1137

A 27-acre Core Habitat featuring Wetland Core.

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Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 1145

A 44-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 1158

A 5-acre Core Habitat featuring a Species of Conservation Concern.

Dwarf Scouring-rush, a member of the Horsetail family, is 4-8 inches tall, evergreen, and grows as a dark green tuft of wiry stems. Dwarf Scouring-rush is found on moist banks and seepy wooded slopes and hillsides with springs and streams, often in ecotones between upland and wetland sites.

Core 1185

A 30-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 1190

A 24-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 1201

A 36-acre Core Habitat featuring Aquatic Core and a Species of Conservation Concern.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

American Bitterns are heron-like birds that nest primarily in large cattail, tussock or shrub marshes and are very sensitive to disturbance.



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A 19-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 1226

A 19-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

The Wetland Core occurs on mid-elevation slate, one of the least common ecological settings for Wetland Cores in the state.

Core 1235

A 10-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 1236

An 18-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 1252

A 687-acre Core Habitat featuring Forest Core.

Forest Cores are the best examples of large, intact forests that are least impacted by roads and development. Forest Cores support many bird species sensitive to the impacts of roads and development and help maintain ecological processes found only in unfragmented forest patches.

Though small from a statewide perspective, this almost completely unprotected 687-acre Forest Core provides important habitat in the otherwise fragmented Berkshire Valleys ecoregion.

Core 1269

A 58-acre Core Habitat featuring Wetland Core.

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Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 1273

A <1-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 1275

A 21-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 1283

A <1-acre Core Habitat featuring a Species of Conservation Concern.

Small Dropseed is an annual grass that grows in calcareous seeps, flat rocks, riverside outcrops, and river shores. It is also found occasionally along roadsides and other disturbed open sites.

Core 1301

A 112-acre Core Habitat featuring a Species of Conservation Concern.

Adult and juvenile Jefferson Salamanders inhabit upland forests during most of the year, where they reside in small-mammal burrows and other subsurface retreats. Adults migrate during late winter or early spring to breed in vernal pools and fish-free areas of swamps, marshes, or similar wetlands. Larvae metamorphose in late summer or early fall, whereupon they disperse into upland forest.

Core 1308

A 931-acre Core Habitat featuring Wetland Core, Aquatic Core, and Species of Conservation Concern.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.



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Dwarf Scouring-rush, a member of the Horsetail family, is 4-8 inches tall, evergreen, and grows as a dark green tuft of wiry stems. Dwarf Scouring-rush is found on moist banks and seepy wooded slopes and hillsides with springs and streams, often in ecotones between upland and wetland sites.

An annual, Frank's Lovegrass inhabits sandy riverbanks and sandbars.

In Massachusetts, Intermediate Spike-sedge, a small, densely tufted annual, is found on muddy, alkaline river banks and pond shores, usually during periods of low water when mud is exposed.

In Massachusetts, Tuckerman's Sedge inhabits the rich soils of lowland river floodplain habitats such as oxbows, low depressions, forests, meadows, swales, and vernal pools.

Brook Snaketails are dragonflies whose nymphs can be found in clear, sand-bottomed streams with intermittent rapids, often flowing through dense woodland.

Riffle Snaketails are dragonflies whose larvae inhabit clear, cold, and rocky streams that are fast-flowing with relatively few pools.

The Zebra Clubtail dragonfly inhabits sand-bottomed streams and small rivers with riffles as larvae. Adults feed over the same streams. Surrounding upland forests provide protection while adults reach sexual maturity.

Wood Turtle habitat is streams and rivers, preferably with long corridors of undeveloped, connected uplands. They also use fields and early successional habitat extending up to 500 meters on both sides of the waterways. Mowing and roads are the primary causes of mortality. Collection is also a conservation concern.

Bridle Shiners are small (<5 cm) minnows that are found in clear water in slack areas of streams and rivers and are also found in lakes and ponds.

In Massachusetts, the torpedo-shaped Longnose Sucker is found mainly in cool upper sections of streams and rivers with rocky to gravel substrates. These fish may swim miles to deposit their eggs on clean and well oxygenated gravel substrates.

Core 1331

A 46-acre Core Habitat featuring a Species of Conservation Concern.

Adult and juvenile Jefferson Salamanders inhabit upland forests during most of the year, where they reside in small-mammal burrows and other subsurface retreats. Adults migrate during late winter or early spring to breed in vernal pools and fish-free areas of swamps, marshes, or similar wetlands. Larvae metamorphose in late summer or early fall, whereupon they disperse into upland forest.

Core 1381

A 1,197-acre Core Habitat featuring Wetland Core, Aquatic Core, and Species of Conservation Concern.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

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The 98-acre Wetland Core is among the largest 20% of Wetland Cores statewide.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

Ocellated Darners are dragonflies whose nymphs inhabit clear, shallow, rocky, swift-flowing streams and large, rocky, poorly vegetated lakes. Adults also inhabit nearby uplands, often forests with mixed coniferous and deciduous trees.

Wood Turtle habitat is streams and rivers, preferably with long corridors of undeveloped, connected uplands. They also use fields and early successional habitat extending up to 500 meters on both sides of the waterways. Mowing and roads are the primary causes of mortality. Collection is also a conservation concern.

American Bitterns are heron-like birds that nest primarily in large cattail, tussock or shrub marshes and are very sensitive to disturbance.

Core 1558C

A 3,346-acre section of a larger 35,802-acre Core Habitat featuring Forest Core, Wetland Core, Aquatic Core, Priority Natural Communities, and Species of Conservation Concern.

East Mountain and nearby areas are part of a very large and complicated Core Habitat in southwestern Massachusetts. This part of the Core is mostly a Forest Core, but there are two rare species known from this area, including a population of the vernal pool obligate, Jefferson Salamander, that covers a large area within this part of the Core.

Calcareous Pondshore/Lakeshores are sparsely vegetated communities found on exposed shores of calcareous inland ponds. These areas are saturated for a significant part of the year. Plants of the community emerge during low water periods. This is the largest example of Calcareous Pondshore/Lakeshore in Massachusetts, and despite the presence of an exotic invasive species, it is in relatively good condition.

Hemlock-Hardwood Swamps are acidic forested swamps that have hemlock as the dominant canopy species. These forested wetlands occur on saturated soils in poorly drained basins throughout the state. This example of Hemlock-Hardwood Swamp is moderate sized, but in good condition and within a very large naturally vegetated landscape.

Northern Hardwoods-Hemlock-White Pine Forests have a mix of evergreen and deciduous trees, with a closed, full canopy, and sparse shrub and herbaceous layers. It commonly occurs on north facing slopes and ravines with moderately acidic soils. This example of Northern Hardwoods-Hemlock-White Pine Forest is very large and in excellent condition. It has good species and habitat diversity and is embedded within a large, roadless, naturally vegetated area.

Forest Cores are the best examples of large, intact forests that are least impacted by roads and development. Forest Cores support many bird species sensitive to the impacts of roads and development and help maintain ecological processes found only in unfragmented forest patches.



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Wetlands Cores are the least disturbed wetlands in the state within undeveloped landscapes — those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.



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BioMap2 Critical Natural Landscape in New Marlborough

Critical Natural Landscape IDs correspond with the following element lists and summaries.







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Elements of BioMap2 Critical Natural Landscapes

This section lists all elements of *BioMap2* Critical Natural Landscapes that fall *entirely or partially* within New Marlborough. The elements listed here may not occur within the bounds of New Marlborough.

CNL 543

Aquatic Core Buffer

CNL 605

Wetland Core Buffer

CNL 622

Wetland Core Buffer

CNL 883

Aquatic Core Buffer Landscape Block Wetland Core Buffer



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Critical Natural Landscape Summaries

CNL 543

A 4-acre Critical Natural Landscape featuring Aquatic Core Buffer.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

CNL 605

A 48-acre Critical Natural Landscape featuring Wetland Core Buffer.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

CNL 622

A 59-acre Critical Natural Landscape featuring Wetland Core Buffer.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

CNL 883

A 179,293-acre Critical Natural Landscape featuring Aquatic Core Buffer, Wetland Core Buffer and Landscape Block.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

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Landscape Blocks, the primary component of Critical Natural Landscapes, are large areas of intact predominately natural vegetation, consisting of contiguous forests, wetlands, rivers, lakes, and ponds, as well as coastal habitats such as barrier beaches and salt marshes. Pastures and power-line rights-of-way, which are less intensively altered than most developed areas, were also included since they provide habitat and connectivity for many species. Collectively, these natural cover types total 3.6 million acres across the state. An Ecological Integrity assessment was used to identify the most intact and least fragmented areas. These large Landscape Blocks are most likely to maintain dynamic ecological processes such as buffering, connectivity, natural disturbance, and hydrological regimes, all of which help to support wide-ranging wildlife species and many other elements of biodiversity.

In order to identify critical Landscape Blocks in each ecoregion, different Ecological Integrity thresholds were used to select the largest intact landscape patches in each ecoregion while avoiding altered habitat as much as possible. This ecoregional representation accomplishes a key goal of *BioMap2* to protect the ecological stages that support a broad suite of biodiversity in the context of climate change. Blocks were defined by major roads, and minimum size thresholds differed among ecoregions to ensure that *BioMap2* includes the best of the best in each ecoregion.



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Natural Heritage & Endangered Species Fund

To learn more about the Natural Heritage & Endangered Species Program and the Commonwealth's rare species, visit our web site at <u>www.mass.gov/nhesp</u>.



New Marlborough Open Space and Recreation Plan Update

NEW MARLBOROUGH OPEN SPACE AND RECREATION SURVEY

New Marlborough is a rural community. Open space is undeveloped land that provides public benefits by providing natural resource conservation, water quality protection and/or outdoor recreational value. Often, open spaces lands serve as scenic corridors, wildlife habitat, parks and farmland. The New Marlborough Planning Board is updating the New Marlborough Open Space and Recreation Plan, which was last updated in 2004. An updated plan will provide town officials with a blueprint for allowing the future benefits of development without losing valued environmental and recreational assets.

The New Marlborough Planning Board asks your assistance in evaluating the need to protect open and natural spaces and the needs of its residents for outdoor recreational opportunities. The survey should take no more than 10 minutes. All your responses will be anonymous unless you choose otherwise. Your answers in this survey will help town officials understand what is most important to you and your family. We ask that a member of the family that is over 18 fill out this survey.

Thank you for participating in this survey. Your input is invaluable to us.

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Answer Choices	Responses	
Clayton (1)	2.5%	3
Hartsville (2)	10.0%	12
Mill River (3)	33.3%	40
New Marlborough (4)	25.8%	31
Southfield (5)	26.7%	32
Do not live in New Marlborough – only a landowner (6)	1.7%	2
Total		120
Basic Statistics		

Minimum	Maximum	Median	Mean	Standard Deviation
1.00	6.00	4.00	3.69	1.09

Q2 Including yourself, please check the number of people within each age group that live in your household.



	1 (1)	2 (2)	3 (3)	4 (4)	5+ (5)	Total
0 - 5	35.7%	57.1%	7.1%	0.0%	0.0%	
	5	8	1	0	0	14
6 - 12	57.1%	21.4%	14.3%	0.0%	7.1%	
	8	3	2	0	1	14
13 - 17	60.0%	40.0%	0.0%	0.0%	0.0%	
	6	4	0	0	0	10
18 - 25	70.0%	30.0%	0.0%	0.0%	0.0%	
	7	3	0	0	0	10
26 - 35	100.0%	0.0%	0.0%	0.0%	0.0%	
	6	0	0	0	0	6
36 - 49	34.8%	65.2%	0.0%	0.0%	0.0%	
	8	15	0	0	0	23
50 - 62	30.4%	67.4%	0.0%	2.2%	0.0%	
	14	31	0	1	0	46
63 - 75	53.1%	46.9%	0.0%	0.0%	0.0%	
	26	23	0	0	0	49
75+	65.2%	34.8%	0.0%	0.0%	0.0%	
	15	8	0	0	0	23

Basic Statistics					
	Minimum	Maximum	Median	Mean	Standard Deviation
0 - 5					
	1.00	3.00	2.00	1.71	0.59
6 - 12					
	1.00	5.00	1.00	1.79	1.15
13 - 17					
	1.00	2.00	1.00	1.40	0.49
18 - 25					
	1.00	2.00	1.00	1.30	0.46
26 - 35					
	1.00	1.00	1.00	1.00	0.00
36 - 49					
	1.00	2.00	2.00	1.65	0.48
50 - 62					
	1.00	4.00	2.00	1.74	0.57
63 - 75					
	1.00	2.00	1.00	1.47	0.50
75+					
	1.00	2.00	1.00	1.35	0.48

Q3 Are you a year-round resident or seasonal resident / second homeowner?



Answer Choices	Responses									
Year-round (1)	68.9%	84								
Seasonal resident or second home	31.1%	38								
Total			122							
Basic Statistics										
Minimum 1.00	Inimum D0Maximum 2.00Median 1.00Mean 									

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Q4 Are you a business owner, farmer, selfemployed, employee of a New Marlborough business, or other?



Answer Choices	Responses	Responses							
Business Owner (1)	14.0%	16							
Farmer (2)	3.5%	4							
Self-employed (3)	31.6%	36							
Employee of a New M	Employee of a New Marlborough Business (4)								
Other (5)	47.4%	54							
Total					114				
Basic Statistics									
Minimum	Maximum	Median 4.00	Mean 3.67	Standard Deviation	dard Deviation				

Q5 What do you like most about living in New Marlborough? Please choose the top five reasons, with 1 being the most important reason.



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total	Score
My Life is History Here	35.7% 5	7.1% 1	14.3% 2	7.1% 1	14.3% 2	0.0% 0	0.0% 0	0.0% 0	7.1% 1	0.0% 0	0.0% 0	0.0% 0	0.0% 0	7.1% 1	0.0% 0	0.0% 0	0.0% 0	7.1% 1	14	14.14
Rural Setting	41.7% 35	20.2% 17	16.7% 14	10.7% 9	6.0% 5	0.0% 0	2.4% 2	1.2% 1	0.0% 0	0.0% 0	0.0% 0	1.2%	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	84	16.55
Peaceful/Quiet	26.1%	26.1% 24	19.6% 18	12.0% 11	14.1% 13	1.1%	1.1%	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	92	16.30
Beauty	14.1% 11	34.6% 27	23.1% 18	15.4% 12	9.0% 7	3.8% 3	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	78	16.18
People	22.2% 12	22.2% 12	22.2% 12	14.8% 8	13.0% 7	3.7% 2	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	1.9%	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	54	15.96
Nature/Wildlife	10.6% 10	19.1% 18	30.9% 29	24.5% 23	12.8% 12	1.1%	0.0% 0	1.1%	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	94	15.82
Activities	0.0% 0	6.1% 2	6.1%	36.4% 12	27.3% 9	0.0% 0	12.1%	3.0% 1	3.0% 1	3.0% 1	3.0% 1	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	33	13.88
Privacy	5.9%	8.8% 3	23.5% 8	11.8%	32.4% 11	0.0% 0	0.0% 0	8.8% 3	2.9% 1	2.9% 1	0.0% 0	2.9% 1	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	34	14.35
Place to Escape	13.6% 3	9.1%	18.2%	13.6% 3	13.6% 3	4.5%	4.5% 1	0.0% 0	9.1%	0.0% 0	9.1%	0.0% 0	0.0% 0	0.0% 0	0.0% 0	4.5%	0.0% 0	0.0% 0	22	13.77
Government/Taxes	0.0% 0	14.3% 3	14.3% 3	19.0%	23.8% 5	0.0% 0	0.0% 0	4.8% 1	0.0% 0	9.5%	4.8% 1	0.0% 0	4.8%	0.0% 0	4.8%	0.0% 0	0.0% 0	0.0% 0	21	13.14
Clean Environment	2.7%	16.2% 6	13.5% 5	37.8% 14	21.6% 8	2.7% 1	0.0% 0	0.0% 0	2.7% 1	0.0% 0	2.7% 1	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	37	14.95
Everything	42.3% 11	3.8% 1	3.8% 1	7.7%	26.9% 7	0.0% 0	0.0% 0	3.8% 1	0.0% 0	0.0% 0	0.0% 0	11.5% 3	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	26	15.04
Proximity to Services	0.0% 0	0.0% 0	7.1%	14.3% 2	35.7% 5	0.0% 0	0.0% 0	7.1%	0.0% 0	0.0% 0	0.0% 0	0.0% 0	21.4% 3	0.0% 0	0.0% 0	7.1%	0.0% 0	7.1% 1	14	10.64
Safety	14.3% 3	9.5% 2	0.0% 0	19.0%	23.8% 5	4.8% 1	4.8% 1	0.0% 0	4.8% 1	4.8% 1	0.0% 0	0.0% 0	0.0% 0	14.3% 3	0.0% 0	0.0% 0	0.0% 0	0.0% 0	21	13.19
History	0.0% 0	0.0% 0	0.0% 0	0.0% 0	45.5% 5	0.0% 0	9.1% 1	0.0% 0	45.5% 5	0.0% 0	0.0% 0	0.0% 0	11	8.73						
Climate	0.0% 0	5.6%	16.7% 3	22.2%	22.2%	0.0% 0	0.0% 0	0.0% 0	0.0% 0	11.1%	0.0% 0	0.0% 0	0.0% 0	5.6%	0.0% 0	16.7% 3	0.0% 0	0.0% 0	18	11.83
Affordable	11.1% 2	5.6% 1	0.0% 0	11.1% 2	38.9% 7	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	33.3% 6	0.0% 0	18	10.72						
My work is here in New Marlborough	11.1%	0.0% 0	0.0% 0	11.1%	11.1%	0.0% 0	0.0% 0	0.0% 0	0.0% 0	11.1%	0.0% 0	55.6%	9	6.11						

Minimum Maximum Median Mean Standard Deviation

Basic Statistics

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My Life is History Here	1.00	40.00	0.00	4.00	5.40
 	1.00	18.00	3.00	4.00	5.10
Rural Setting	1.00	12.00	2.00	2.45	1.89
 Peaceful/Quiet					
	1.00	7.00	2.00	2.70	1.47
Beauty	1.00	6.00	3.00	2.82	1 32
 Deeple	1.00	0.00	5.00	2.02	1.02
Реоріе	1.00	13.00	3.00	3.04	1.99
 Nature/Wildlife					
 	1.00	8.00	3.00	3.18	1.30
Activities	2 00	11.00	5.00	5 12	2.06
 Privacy	2.00		0.00	0.12	2.00
T TVACy	1.00	12.00	4.50	4.65	2.47
 Place to Escape					
 	1.00	16.00	4.00	5.23	3.78
Government/Taxes	2 00	15.00	5.00	5.86	3 69
 Clean Environment					
	1.00	11.00	4.00	4.05	1.83
Everything					
	1.00	12.00	3.50	3.96	3.50
Proximity to Services	3.00	18.00	5.00	8.36	4.92
 Safety					
	1.00	14.00	5.00	5.81	4.05
History					
	5.00	15.00	13.00	10.27	4.84
Climate	2.00	16.00	5.00	7.17	4.91
 Affordable					
	1.00	17.00	5.00	8.28	6.30
My work is here in New Marlborough		10	10	10.55	
	1.00	18.00	18.00	12.89	6.85
Q6 Which one of the following statements best describes how you feel about development in the town of New Marlborough?



Answer Choices								
There is too much development occurring in the town and we should discourage it. (1)								
The town is being developed at an appropriate rate. (2)								
The town is growing at a good rate, but we need to do a better job at managing its development. (3)								
There is not enough development occurring inthe town and we should encourage more of it. (4)								
I am unsure about the rate of development in the town. (5)								
Total						119		
Basic Statistics								
Minimum 1.00	Maximum 5.00	Median 3.00	Mean 3.34	Standard Deviation 1.20				

Q7 New Marlborough is rich in scenic and natural resources. Please rank which resources are most important to you and in need of protection, beginning with 1 being the most important of all the choices.

Answered: 118 Skipped: 5



	1	2	3	4	5	6	7	Total	Score
Ridgelines	18.6%	10.5%	12.8%	10.5%	19.8%	11.6%	16.3%		
	16	9	11	9	17	10	14	86	3.98
Open meadows / farmland	29.5%	22.9%	13.3%	18.1%	8.6%	6.7%	1.0%		
	31	24	14	19	9	7	1	105	5.23
River / stream / lake frontage	19.2%	25.3%	18.2%	17.2%	6.1%	8.1%	6.1%		
	19	25	18	17	6	8	6	99	4.86
Forested parcels	15.8%	21.1%	30.5%	11.6%	12.6%	5.3%	3.2%		
	15	20	29	11	12	5	3	95	4.87
Water Resources	20.6%	18.6%	10.3%	12.4%	21.6%	13.4%	3.1%		
	20	18	10	12	21	13	3	97	4.52
Wildlife habitat	16.8%	9.9%	23.8%	19.8%	18.8%	7.9%	3.0%		
	17	10	24	20	19	8	3	101	4.50
Historic buildings	0.0%	10.7%	7.1%	16.7%	11.9%	15.5%	38.1%		
	0	9	6	14	10	13	32	84	2.71

Dasic Statistics					
	Minimum	Maximum	Median	Mean	Standard Deviation
Ridgelines					
	1.00	7.00	4.00	4.02	2.09
Open meadows / farmland					
	1.00	7.00	2.00	2.77	1.62
River / stream / lake frontage					
	1.00	7.00	3.00	3.14	1.76
Forested parcels					
	1.00	7.00	3.00	3.13	1.56
Water Resources					
	1.00	7.00	4.00	3.48	1.86
Wildlife habitat					
	1.00	7.00	3.00	3.50	1.63
Historic buildings					
	2.00	7.00	6.00	5.29	1.74

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Q8 How often do you orfamily members engage in these outdoor recreation activities in New Marlborough?



	Daily or weekly (1)	Once or twice a month (2)	Rarely (3)	Never (4)	Total
Walking	79.2% 95	18.3% 22	1.7% 2	0.8% 1	120
Running / jogging	25.3% 24	9.5% 9	17.9% 17	47.4% 45	95
Hiking	33.9% 40	49.2% 58	12.7% 15	4.2% 5	118
Swimming	32.5% 37	26.3% 30	23.7% 27	17.5% 20	114
Fishing	2.0%	14.9% 15	23.8% 24	59.4% 60	101
Hunting / Shooting	1.0%	7.0% 7	9.0% 9	83.0% 83	100
Boating / Canoeing	5.8% 6	30.1% 31	31.1% 32	33.0% 34	103
Bicycling	21.2%	22.1% 23	25.0% 26	31.7% 33	104
Picnicking	7.9% 8	22.8% 23	49.5% 50	19.8% 20	101
Snowshoeing	6.5% 7	29.9% 32	29.9% 32	33.6% 36	107
X-C Skiing	7.5% 8	20.8% 22	30.2% 32	41.5% 44	106
Ice Skating	2.0%	12.9% 13	18.8% 19	66.3% 67	101
Sledding	7.0%	11.0% 11	27.0% 27	55.0%	100
Snowmobiling	1.0%	0.0% 0	7.0%	92.0% 92	100
	2.0%	3.0%	4.0%	91.0%	

	Minimum	Maximum	Median	Mean	Standard Deviation
Walking					
	1.00	4.00	1.00	1.24	0.52
Running / jogging					
	1.00	4.00	3.00	2.87	1.25
Hiking					
	1.00	4.00	2.00	1.87	0.79
Swimming					
	1.00	4.00	2.00	2.26	1.09
Fishing					
	1.00	4.00	4.00	3.41	0.81

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Hunting / Shooting	1.00	1.00	4.00	0.74	0.00
	1.00	4.00	4.00	3.74	0.63
Boating / Canoeing					
	1.00	4.00	3.00	2.91	0.93
Bicycling					
	1.00	4.00	3.00	2.67	1.13
Picnicking					
	1.00	4.00	3.00	2.81	0.84
Snowshoeing					
	1.00	4.00	3.00	2.91	0.94
X-C Skiing					
	1.00	4.00	3.00	3.06	0.96
Ice Skating					
	1.00	4.00	4.00	3.50	0.79
Sledding					
	1.00	4.00	4.00	3.30	0.92
Snowmobiling					
	1.00	4.00	4.00	3.90	0.39
Off road vehicles					
	1.00	4.00	4.00	3.84	0.56

Q9 Rank up to five outdoor activities that you would like to see improved in New Marlborough, beginning with 1 as being your highest priority.

Answered: 116 Skipped: 7



	1	2	3	4	5	6	7	8	9	10	11	12	Total	Score
Walking / hiking	61.8%	11.8%	15.7%	8.8%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
trails	63	12	16	9	2	0	0	0	0	0	0	0	102	11.23
Running / jogging	18.8%	15.6%	25.0%	9.4%	12.5%	6.3%	3.1%	3.1%	3.1%	3.1%	0.0%	0.0%		
areas	6	5	8	3	4	2	1	1	1	1	0	0	32	9.31
Swimming areas	17.3%	39.5%	19.8%	16.0%	6.2%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%		
	14	32	16	13	5	0	0	0	1	0	0	0	81	10.38
Fishing access	3.4%	10.3%	17.2%	27.6%	24.1%	3.4%	6.9%	6.9%	0.0%	0.0%	0.0%	0.0%		
	1	3	5	8	7	1	2	2	0	0	0	0	29	8.69
Hunting / Shooting	25.0%	6.3%	12.5%	6.3%	6.3%	12.5%	0.0%	0.0%	6.3%	6.3%	6.3%	12.5%		
	4	1	2	1	1	2	0	0	1	1	1	2	16	7.56
Boating / Canoeing	3.4%	19.0%	19.0%	27.6%	22.4%	5.2%	1.7%	1.7%	0.0%	0.0%	0.0%	0.0%		
areas	2	11	11	16	13	3	1	1	0	0	0	0	58	9.22
Bicycle trails	20.9%	23.9%	23.9%	10.4%	14.9%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
	14	16	16	7	10	2	2	0	0	0	0	0	67	10.04
Picnic areas	4.2%	16.7%	18.8%	20.8%	18.8%	4.2%	4.2%	6.3%	4.2%	0.0%	2.1%	0.0%		
	2	8	9	10	9	2	2	3	2	0	1	0	48	8.65
Snowshoeing/X-C	7.9%	20.6%	15.9%	27.0%	15.9%	1.6%	1.6%	3.2%	4.8%	1.6%	0.0%	0.0%		
Ski trails	5	13	10	17	10	1	1	2	3	1	0	0	63	9.11
Ice Skating area	13.9%	8.3%	8.3%	13.9%	27.8%	8.3%	5.6%	0.0%	2.8%	11.1%	0.0%	0.0%		
	5	3	3	5	10	3	2	0	1	4	0	0	36	8.25
Snowmobiling trails	0.0%	9.1%	9.1%	0.0%	18.2%	0.0%	0.0%	0.0%	0.0%	9.1%	36.4%	18.2%		
	0	1	1	0	2	0	0	0	0	1	4	2	11	4.55
Off road vehicles	0.0%	20.0%	10.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	20.0%	40.0%		
rails	0	2	1	0	0	0	0	1	0	0	2	4	10	4.50

Basic Statistics					
	Minimum	Maximum	Median	Mean	Standard Deviation
Walking / hiking trails					
	1.00	5.00	1.00	1.77	1.12
Running / jogging areas					
	1.00	10.00	3.00	3.69	2.35
Swimming areas					
	1.00	9.00	2.00	2.62	1.34
Fishing access					
	1.00	8.00	4.00	4.31	1.70
Hunting / Shooting					
	1.00	12.00	4.50	5.44	4.00
Boating / Canoeing areas					
	1.00	8.00	4.00	3.78	1.44
Bicycle trails					
	1.00	7.00	3.00	2.96	1.59

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4.00	11.00	4.00	1.05	
1.00	11.00	4.00	4.35	2.21
1.00	10.00	4.00	3.89	2.08
1.00	10.00	5.00	4.75	2.63
2.00	12.00	11.00	8.45	3.68
2.00	12.00	11.00	8.50	4.20
	1.00 1.00 1.00 2.00 2.00	1.00 11.00 1.00 10.00 1.00 10.00 2.00 12.00 2.00 12.00	1.00 11.00 4.00 1.00 10.00 4.00 1.00 10.00 5.00 2.00 12.00 11.00 2.00 12.00 11.00	1.00 11.00 4.00 4.35 1.00 10.00 4.00 3.89 1.00 10.00 5.00 4.75 2.00 12.00 11.00 8.45 2.00 12.00 11.00 8.50

Q10 What outdoor activity would you like to do in New Marlborough that you are unable to do. Please tell us why you are unable to do that activity.

Answered: 59 Skipped: 64

#	Responses	Date
1	Can't think of one	9/30/2016 12:37 PM
2	Would like to use the Land trust land for hunting. If it comes off the tax role we should be able to use it.	9/30/2016 7:15 AM
3	Working and not enough leisure time	9/28/2016 11:09 PM
4	no thoughts on this	9/28/2016 1:08 PM
5	Be nice to see ballfields for the children in town to compete at	9/28/2016 11:44 AM
6	Difficult to answer, Both my husband and I have walking problems but in the past used the hiking trails , snow shoed, x couuntry skiled etc. We can't do any of this, but our kids do when they come up and even if they didn't these are important for the town.	9/28/2016 10:44 AM
7	Cross-country skiing and snowshoeing. We currently drive to Becket or Dalton for this activity.	8/30/2016 1:02 PM
8	Completely flat hiking. Bad knee and troublesome hip replacement.	8/18/2016 12:51 AM
9	safely bike and walk on the roads with my little kids	8/12/2016 6:57 AM
10	Biking. The roads are too narrow, and windy, so we see it as unsafe at this time.	8/11/2016 10:46 PM
11	Able to do all activities I enjoy.	8/11/2016 11:01 AM
12	Ice skating; Monterey and Sheffield are quite far to go	8/11/2016 10:51 AM
13	Tennisno public courts	8/11/2016 10:38 AM
14	Nothing that I can think of.	8/11/2016 10:18 AM
15	None	8/11/2016 10:05 AM
16	we have all we need here	8/11/2016 9:53 AM
17	ATV Riding	8/1/2016 4:24 PM
18	Ice skating. No access to a place where there are sufficient assurance of help in the case of injury. I ice skate at Hotchkiss and Salisbury Schools.	7/27/2016 4:09 PM
19	Tennis - no courts	7/26/2016 8:58 AM
20	Walking along Route 57. Cannot do it because vehicles speed above the speed limit and there is no shoulder.	7/26/2016 8:14 AM
21	n/a	7/14/2016 11:33 AM
22	Safe walking along route 57, it's not pedestrian friendly	7/14/2016 11:21 AM
23	Local ice skating	7/14/2016 10:30 AM
24	walking along roads but too dangerous not wide enough shoulder cars won't slow down when passing pedestrians	7/14/2016 9:59 AM
25	Swimming for enjoyment and exercise is limited. York lake is good, but maybe expand the roped off swimming area to make it better for lap swims? I think Lake Buel is private, so no town beach would be allowed? A large roped off area to swim would be great. York lake is good,	7/14/2016 8:39 AM
26	Walking - need smooth and level space. Age and legs	7/13/2016 2:04 PM
27	I'd like to be able to rent a canoe or kayak so I don't have to try to load one onto the top of my car by myself.	7/13/2016 1:54 PM
28	Croquet- the nearest croquet club is in Lenox	7/13/2016 1:36 PM
29	We would bike more if there was a trail that was safe my kids to ride on.	7/13/2016 12:48 PM
30	Kayaking : no where to rent one	7/13/2016 9:29 AM
31	We're about to move to NM and not sure yet what we "can't" do!	7/10/2016 11:28 PM
32	Easy walking. Too hilly or terrain rough, so risk of falling.	7/10/2016 11:02 PM
33	I wish there as a better place to swim for true exercise rather than 'just a dip' like Umpachene Falls.	7/10/2016 11:07 AM
34	Bike from my house because the road is in terrible condition	7/10/2016 8:27 AM
35	Safe Walking. Now need to drive to a safe area to walk my dogs	7/9/2016 9:26 AM
36	X country skiing, old man's knees	7/8/2016 6:50 PM
37	Guided tours for identifying trees.	7/8/2016 4:12 PM
38	Not exactly in response to this question, but I would like to see more accessibility for kayaking at the various small ponds. Maybe they already exist - I don't get out of my routine much! 1000 Acre is a tough reach, right?	7/8/2016 1:28 PM
39	Walk a track/flat area with measured footage.	7/8/2016 1:12 PM
40	There is no activity we can not do.	7/8/2016 12:40 PM
41	horseback riding trails. I do a lot of horseback riding and have to trailer my horses to decent trails.	7/7/2016 4:46 PM

New Marlborough Open Space and Recreation Plan Update

42	I am a frequent walker and notice that there are many others who do the same. My children frequently ride their bicycles. It is most enjoyable to be able to walk or bike to a destination, like a village, but the roadways are not always safe for this. It would be wonderful to have alternate pathways, maybe via right-of-way foot paths through private properties. They could be shared as foot, bicycle and bridle paths. In the winter, I believe they would be used by people with cleats, snowshoes or cross-country skis.	7/7/2016 8:27 AM
43	None	7/3/2016 7:41 AM
44	let the dog take a swim to cool off in a lake	7/1/2016 1:49 PM
45	More mountain biking Seems they certain trails are off limits esp the trustees trails	6/30/2016 7:16 PM
46	Swimming. Because lake Buel does not have a public beach.	6/30/2016 4:33 PM
47	n/a	6/30/2016 12:30 PM
48	Sledding. Not sure where there is a big enough hill that is on public property.	6/30/2016 11:41 AM
49	Dog Park	6/30/2016 8:19 AM
50	Hiking safely during hunting season. The Sunday shooting ban helps, but how about a second day given fewer hunters and more walkers & hikers?	6/30/2016 7:11 AM
51	Play tennis. No courts.	6/30/2016 6:09 AM
52	Walking trails in the winter.	6/30/2016 6:08 AM
53	Mountain Biking with kids - no trails that we know of	6/30/2016 12:47 AM
54	We would like to be able to walk from the school to the village of mill river. There is no shoulder on the road and if there could be a cantilevered or other engineered walking path there on the curb, it would make the other available walks feel much more accessible t the village center. Children could also walk from school to the store and library.	6/29/2016 11:35 PM
55	to walk safely along route 57. there are no provisions for pedestrians.	6/29/2016 10:54 PM
56	I could do any outdoor activity here that I might want to do.	6/29/2016 10:14 PM
57	No problems. So much to do here!	6/29/2016 8:55 PM
58	Dog run. I'd like the town to buy and maintain a fenced in, centralized dog with benches so that owners could socialize and their dogs could socialize.	6/29/2016 8:31 PM
59	none	6/29/2016 8:30 PM

Q11 If you or people in your household use these local outdoor recreational areas, please rank the condition of the ones you use.



Good condition Fair condition - could use improvement

Poor condition - needs a lot of improvement Do not use this site

Never heard of this site

	Good condition (1)	Fair condition - could use improvement (2)	Poor condition - needs a lot of improvement (3)	Do not use this site (4)	Never heard of this site (5)	Total
Umpachene Falls Park	45.5% 51	42.0% 47	0.9% 1	11.6% 13	0.0% 0	112
Central School playing field / playground	20.2% 19	11.7% 11	1.1% 1	61.7% 58	5.3% 5	94
York Lake	51.4% 57	27.9% 31	5.4% 6	15.3% 17	0.0% 0	111
Lake Buel Boat Ramp	22.6% 21	8.6% 8	1.1% 1	64.5% 60	3.2% 3	93
The Questing	55.7% 59	8.5% 9	0.9% 1	20.8% 22	14.2% 15	106
Dry Hill Reservation	53.0% 53	12.0% 12	0.0% 0	20.0% 20	15.0% 15	100
1000 Acre Reservation	53.9% 55	11.8% 12	2.9% 3	25.5% 26	5.9% 6	102
Steepletop Reserve	34.0% 32	3.2% 3	1.1% 1	31.9% 30	29.8% 28	94
Campbell Falls	36.9% 38	34.0% 35	2.9% 3	24.3% 25	1.9% 2	103
Fish Hatchery	23.6% 21	15.7% 14	10.1% 9	44.9% 40	5.6% 5	89

Basic Statistics					
	Minimum	Maximum	Median	Mean	Standard Deviation
Umpachene Falls Park					
	1.00	4.00	2.00	1.79	0.94
Central School playing field / playground					
	1.00	5.00	4.00	3.20	1.31
York Lake					
	1.00	4.00	1.00	1.85	1.08
Lake Buel Boat Ramp					
	1.00	5.00	4.00	3.17	1.32
The Questing					
	1.00	5.00	1.00	2.29	1.61
Dry Hill Reservation					
	1.00	5.00	1.00	2.32	1.61
1000 Acre Reservation					
	1.00	5.00	1.00	2.18	1.44

New Marlborough Open Space and Recreation Plan Update

Steepletop Reserve					
	1.00	5.00	4.00	3.20	1.69
Campbell Falls					
	1.00	5.00	2.00	2.20	1.23
Fish Hatchery					
	1.00	5.00	4.00	2.93	1.33

Q12 New Marlborough is responsible for maintaining Umpachene Falls Park and the Central School property. If you stated that either of these sites need improvement in the previous question, what improvement do you recommend? Please keep your answer short and concise

Answered: 43 Skipped: 80

#	Responses	Date
1	vibrant activities	10/3/2016 8:32 AM
2	Generally in good shape. Remove the invasives whenever possible. I do think that most people really love it enough to take care of it when they visit.	10/2/2016 10:14 PM
3	The town should create a true parks dept than includes both placed under on committee	9/30/2016 7:15 AM
4	NMC School - newer, more diverse aparatus for kids to play and exercise on Umpachene - general cleanliness and maintenance	9/28/2016 1:08 PM
5	Dugouts	9/28/2016 11:44 AM
6	Town residents and taxpayers only at Umpachenekeep buses of people out.	9/28/2016 10:47 AM
7	Access to the park is now somewhat difficult.	9/28/2016 10:44 AM
8	Access to parking at Umpachene Falls Park needs to be restored	8/30/2016 1:02 PM
9	Branch cleanup, need for trail work.	8/18/2016 12:51 AM
10	some cleanup of stuff left behind	8/11/2016 5:40 PM
11	fix the bridge to the falls, it is horrid to have to climb over the cement to get there.	8/11/2016 2:48 PM
12	Better cleanup at Umpachene Falls	8/11/2016 11:01 AM
13	access road	8/11/2016 10:38 AM
14	Easier Access	8/11/2016 10:05 AM
15	fix bridge	8/11/2016 9:45 AM
16	need to keep out of town people out. last I was there it needed a new grill and could use an additional picnic table or two, some seating at fails.	8/9/2016 12:42 PM
17	More directional signage so people can find park. Better parking on Clayton Mill River Road side. Organized volunteer days to remove invasives and prune trails. Make handicapped access to lower area of Falls.	7/27/2016 4:09 PM
18	NA	7/26/2016 8:58 AM
19	Umpachene - more seasonal parking; better garbage management; recycling option	7/19/2016 4:10 PM
20	Only recommendation would be to enforce resident requirements when it gets crowdedlots of cars from CT and people not from New Marlborough	7/14/2016 2:44 PM
21	restrooms	7/14/2016 11:33 AM
22	It would be great to have a hiking/cross-country trail going along the Konkapot from Umpachene Park to Carrol Mill site. It's mostly there already.	7/14/2016 10:47 AM
23	Toilets and running potable water at Umpachene	7/14/2016 10:30 AM
24	Repair the bridge to the falls and update the picnic area	7/14/2016 10:14 AM
25	better access to river to swim	7/14/2016 9:59 AM
26	Better picnicking	7/14/2016 9:40 AM
27	Bridge is out, cannot drive in to Umpachene Falls Park (How it was last year, have not been there yet this year)	7/13/2016 1:02 PM
28	Do something about that old creaky swing set at Umpachene - an accident waiting to happen. Provide a shaded area for gathering at both the school and Umpachene.	7/13/2016 12:48 PM
29	More frequent rubbish removal, patrol more	7/13/2016 12:22 PM
30	Better walking trails at Umpachene.	7/10/2016 11:02 PM
31	they need more TLC.They look shabby.	7/8/2016 4:53 PM
32	trees should be cut back providing more sunlight earlier in the day for the little play scape. It often takes significant time to dry	7/8/2016 12:40 PM
33	Better control of visitor behavior Playing loud music, actual football in the falls and smoking cigarettes I the water while other families are around isn't conducive to a peaceful nature experience.	6/30/2016 7:16 PM
34	More plantings at Umpachene	6/30/2016 8:19 AM
35	Both are adequately maintained. The falls never enforces the resident only rule so it can be crowded on weekends and holidays with people from elsewhere.	6/30/2016 7:40 AM
36	Fix the bridge.	6/30/2016 6:09 AM
37	The baseball field section always looks a little dilapidated - fencing etc. we don't use umpachene in summer because it is so crowded- people smoking, playing loud music etc.	6/29/2016 11:35 PM

New Marlborough Open Space and Recreation Plan Update

38	better parking at umpachene as road is currently closed	6/29/2016 10:54 PM
39	It he lower area feels unkempt.	6/29/2016 10:14 PM
40	Umpachene needs better trails along the banks with some control of the poison lvey.	6/29/2016 9:57 PM
41	Bridge repair at Umpachene Falls	6/29/2016 9:11 PM
42	Better, comfortable benches facing the river for reading. Adults need more spaces in town.	6/29/2016 8:31 PM
43	Falls-limit outsider use	6/29/2016 8:30 PM

Q13 List what you believe is the one single most important scenic or natural resource area in the town that should be protected. Please be specific.

Answered: 92 Skipped: 31

#	Responses	Date
1	open space and farmland	10/3/2016 8:32 AM
2	this is a very very hard question. I feel it is important to maintain the integrity of many of our parcels of land. I do wonder though about kolburne school land and buildings. I wish that the open space, the ability to view the horizon from new marlborough center , would be maintained. The mill river is also very beautiful and the edges need to be kept from any more development	10/2/2016 10:14 PM
3	Restrict new building or development - especially where open spaces exist, like along Lumbert Cross Rd, up Keyes Hill Rd, etc.	10/1/2016 8:39 AM
4	undeveloped land	9/30/2016 2:53 PM
5	York Lake	9/30/2016 12:37 PM
6	Umpachene Falls	9/30/2016 7:15 AM
7	Vistas, open space	9/28/2016 11:09 PM
8	Open spaces	9/28/2016 8:17 PM
9	don't have an opinion on this	9/28/2016 1:08 PM
10	Free space	9/28/2016 11:44 AM
11	Konkapot and Umpachene river areas	9/28/2016 11:07 AM
12	Umpachenewith crowds arriving from other towns and states, the town opens itself to liability and too many people can destroy the peace and natural beauty of this gem that was given to the town.	9/28/2016 10:47 AM
13	Thousand Acre Swamp	9/28/2016 10:46 AM
14	Open fields.	9/28/2016 10:44 AM
15	Konkapot and Umpachene Rivers	9/28/2016 10:26 AM
16	Umpachene Falls.	8/18/2016 12:51 AM
17	farming - we we can better support farming in our community the food resource we are creating is invaluable	8/12/2016 6:57 AM
18	Konkapot River	8/12/2016 2:21 AM
19	Umpachene Falls has become very popular and may need a bit more official oversight to keep loud music down and unsafe throwing of stones	8/11/2016 5:40 PM
20	Umpachene	8/11/2016 2:48 PM
21	Umpachene Falls	8/11/2016 1:23 PM
22	Waterfalls, rivers, streams, and lakes	8/11/2016 11:01 AM
23	Umpachene Falls	8/11/2016 10:51 AM
24	Umpachene	8/11/2016 10:38 AM
25	Umpachene Falls parking area	8/11/2016 10:18 AM
26	Umpachene Falls	8/11/2016 10:05 AM
27	Umpachenee Falis	8/11/2016 9:53 AM
28	Natural aquifers. Need to identify and protect fresh water sources. Develop village water sources and waste water treatment.	7/27/2016 4:09 PM
29	Dry Hill Reservation	7/26/2016 8:58 AM
30	The ridge line on Dry Hill	7/26/2016 8:14 AM
31	Umpachene but also the quiet rural aspect of the town. There are lots of crowded noisy places to go in this countryNew Marlborough area is a treasure and should be protected.	7/14/2016 2:44 PM
32	Umpachene	7/14/2016 11:33 AM
33	The new Marlborough-Monterey road	7/14/2016 11:21 AM
34	York Lake	7/14/2016 11:08 AM
35	Can't think of anything.	7/14/2016 10:47 AM
36	Umpachene falls	7/14/2016 10:30 AM
37	The Falls	7/14/2016 10:14 AM
38	many woodlands are being clear-cut and therefore animals are losing habitat. Then people complain about bears, deer coming into their yards	7/14/2016 9:59 AM
39	We use 1000 acre a lot and love it, but that is already protected. I can't think of anything specific.	7/14/2016 8:39 AM
40	Umpachene falls	7/13/2016 2:16 PM
41	Views of distance and Stonewalls	7/13/2016 2:04 PM

New Marlborough Open Space and Recreation Plan Update

42	York Lake	7/13/2016 1:54 PM
43	East Indies Pond	7/13/2016 1:36 PM
44	The overall natural beauty that comes from feeling like you live in the woods-clean water rich forests etc.	7/13/2016 12:48 PM
45	Nature trails near suspension bridge	7/13/2016 9:29 AM
46	Our rural character. For example, roadside cutting for utilities and roads is too aggressive.	7/12/2016 2:38 PM
47	All of it.	7/11/2016 10:51 AM
48	The river in town	7/10/2016 11:28 PM
49	All preserve lands, like Questing.	7/10/2016 11:02 PM
50	Preservation of open farming land.	7/10/2016 11:07 AM
51	The rural quality as experienced from the roads. I would like to see new homes either concealed in woods or clustered in the villages, preserving the open fields.	7/10/2016 8:27 AM
52	not sure	7/9/2016 9:26 AM
53	Umpachene Falls	7/8/2016 7:34 PM
54	Umpachene and York Lake	7/8/2016 6:50 PM
55	We should acquire Lake Buel frontage for swimming and boating.	7/8/2016 6:00 PM
56	Umpachene Falls	7/8/2016 4:53 PM
57	Vernal ponds along Hartsville Mill River Road!	7/8/2016 4:12 PM
58	Woodland and Views	7/8/2016 4:10 PM
59	Fields and Forests	7/8/2016 3:33 PM
60	Rivers	7/8/2016 2:38 PM
61	Clayton mile-long cornfield	7/8/2016 2:29 PM
62	fence rows, consistency of grass mowing along roads and fencing. Town roads and property should have a look that is consistent.	7/8/2016 1:50 PM
63	Umpachene Falls but I don't know enough about Campbell Falls!!! And probably not enough about many of the other sites listed. Sadly! I'll try to get out more!	7/8/2016 1:28 PM
64	1000 acres	7/8/2016 1:12 PM
65	water quality open space and wildlife habitat	7/8/2016 1:02 PM
66	Open Spaces preserving the rural landscape	7/8/2016 12:40 PM
67	Umpachene Falls Park	7/7/2016 4:46 PM
68	Water resources should be protected first. They serve multiple purposes with the most important being drinking water and fire safety. Additionally, they are scenic, necessary to wildlife and provide a great deal of recreation.	7/7/2016 8:27 AM
69	Umpachine Falls Park	7/5/2016 6:49 PM
70	Umpachene falls; close and easily accessible and very beautiful; great place to take the kids.	7/4/2016 11:41 AM
71	Former Kolbourne School property	7/3/2016 7:41 AM
72	Varied views with near, middle and far distant scenery.	7/2/2016 6:43 PM
73	umpachene falls	7/1/2016 1:49 PM
74	Thousand acre swamp trails Amazing place but it needs better trail markings Easy to get lost once you're in a few miles	6/30/2016 7:16 PM
75	it's rural feel	6/30/2016 12:30 PM
76	Can I say all the entire town??? Since that's probably not what you are looking for, one thing does come to mind. The historical buildings and cemeteries. It would be good to protect the historical elements of our town, in addition to all the natural beauty/nature. The historical beauty and nature are why people are attracted to this town.	6/30/2016 11:41 AM
77	York Lake and surrounding environment - too much logging has occurred nearby	6/30/2016 11:38 AM
78	Rivers	6/30/2016 8:19 AM
79	Get the bridge fixed so that the Falls are more easily accessed	6/30/2016 8:00 AM
80	We need a plan for wildlife conservation/preservation and contiguous undeveloped land to preserve habitats. If we do that it will also preserve our ability to have hunting in the future and guard our watersheds.	6/30/2016 7:40 AM
81	The New Marlborough village green	6/30/2016 7:11 AM
82	Umpachene fix the bridge.	6/30/2016 6:09 AM
83	Konkapot River is extraordinary but very overlooked and not easy to make use of	6/30/2016 12:47 AM
84	Hayfields. I really feel the meadowland is integral to the integrity of the rural landscape- but I don't mind seeing farming and other authentic and necessary business activities etc- it's new construction of oversized houses or subdivided lots that would be depressing. I also really value historic structures.	6/29/2016 11:35 PM
85	The north road (between NM and Monterey) every year there are more cars that drive way too fast as there are many blind spots on this road. Limiting automobiles here would be desirable to protect the road and the many people walking on it.	6/29/2016 10:54 PM
86	Umpachene Falls	6/29/2016 10:14 PM
87	The dark skies here must be protected. Light pollution is making the Milky Way harder to see at night. All street lights should have full cutoff fixtures, and all night security lights and uplighting should be banned, especially on public buildings! We could become an International Dark Sky community http://darksky.org/idsp/communities/.	6/29/2016 9:57 PM

New Marlborough Open Space and Recreation Plan Update

88	Umpachene Falls	6/29/2016 9:11 PM
89	1000 acre reserve.	6/29/2016 8:55 PM
90	York lake should be preserved as a swimming lake and maintained. It should not be allowed to deteriorate and fill with growth. Everyone can AFFORD it.	6/29/2016 8:31 PM
91	Umpachene Falls	6/29/2016 8:30 PM
92	The rivers/waterfalls	6/29/2016 8:27 PM

Q14 Thank you for answering our questions -- we appreciate your time and thoughtfulness. We look forward to hearing from you in the coming months as we move forward with gathering information, presenting our findings to the public and finalizing the updated New Marlborough **Open Space & Recreation Plan.All** responses to this survey are anonymous. However, you are welcome to provide your name, street address and / or email in the box below.Look for the results of this survey on the Planning Board web page of the Town of New Marlborough website. We anticipate publishing the results in early August.

Answered: 11 Skipped: 112

#	Responses	Date
1	I am very interested in knowing what people love about new marlborough over all.	10/2/2016 10:14 PM
2	wish I could be more specific	9/28/2016 10:44 AM
3	I thought bI was done and realized that wasn't true so combine this with my earlier sheet which began with 2 over 75	8/11/2016 5:40 PM
4	Abbe Stahl Steinglass	8/11/2016 1:23 PM
5	Mary white mary@barnbrookrealty.com	8/11/2016 10:05 AM
6	The Hobermans	7/8/2016 6:50 PM
7	In #8, "Rarely" has a negative connotation, but when I chose that, it is because I still like to do those things - just not often.	7/8/2016 1:28 PM
8	Michele Shalaby 1093 Clayton Mill River Rd Southfield, MA 01259 micheleshalaby@gmail.com	7/7/2016 8:27 AM
9	Ron Brecher ronfauvist77@gmail.com	6/30/2016 8:53 AM
10	Good luck with a worthwhile project.	6/30/2016 7:11 AM
11	Broc kerr Broc.kerr.au@gmail.com	6/30/2016 12:47 AM



PUBLIC MEETING: OPEN SPACE AND RECREATION

New Marlborough Residents: we want to hear from you!



NEEDED:

Your input and ideas about updates to the Open Space and Recreation Plan.

Tell us what's most important to you about the Town's great outdoor places.

Join us at Town Hall Sat., Nov. 19, 9:30 am



PROPERTY OF STREET

WELCOME

- *Premise*: Protection of open space and provision of outdoor recreation are key elements of the quality of life in New Marlborough.
- *Purpose*: Identify key features and update the current plan to protect rural character and provide recreational opportunities for residents.
- Open Space Plans: 1990, 2006, 2016.
- *Bonus*: The plan maintains the town's eligibility for grants.

TODAY'S AGENDA

Your Host: New Marlborough Planning Boar

• Today's Purpose: Hear your thoughts and suggestions about the town's open space and recreational needs

- Today's Agenda:
 - Overview of the Draft Plan
 - Summary of the public survey results
 - Your feedback and input on Draft Goals and Actions



Major Land Uses

- 77% Forest
- 10% Agricultural
- Agricultural lands and hilly terrain set a scenic stage
- 3% Residential

Development Trends

- 5 Historic Villages
- Scattered residential
 development
- Traditional farms converting to residential
- Forest fragmentation



A CONTRACTOR OF CONTRACTOR OF

III. CONSERVATION AND RECREATION LAND

- 30,641 total acres in town
- 3,770 acres State-owned
- 2,625 acres land trusts
- 6.5 acres Umpachene Falls





III. OPEN SPACE OWNERSHIP

87% of the town is in private ownership

- 28% of total has protected from development
 - 8% of total Chapter 61 Tax Program
 - Large blocks of land changing hands in next 10-20 years
 - Median age of working Berkshire farmer is 58
 - Approx. ½ of family forest landowners (10 ac. or more) across MA are 65 or older

IV. PUBLIC DESIRES AND NEEDS

- 123 respondents
- Rural character #1 reason for living here
 - Top choice for 31%
 - In top 5 for 88%
- Peaceful & Quiet 73% ranked it highly



"There are lots of crowded noisy place to go in this country ...N. M. area is a treasure and should be protected."

IV. YOUR VIEWS ON CONSERVATION AND RECREATION

- Great opportunities in state and land trusts lands
- Umpachene Falls single most important site
- York Lake, rivers and open fields also cited
- 79% walk on a daily or weekly basis
- Desire for safer walking routes within and linking villages
- Improve access to Umpachene Falls Park



V. VISION: DRAFT GOALS

- 1. Character of the Villages remain intact.
- 2. Diverse, accessible, and safe recreational opportunities are provided for residents of all ages without conflicting with the needs for protection of natural resources.
- **3.** N. M.'s healthy natural resources support both human and wildlife communities.
- 4. Historic integrity and scenic beauty are preserved.
- 5. State and town officials work with citizens to determine and implement the management of open space and recreational facilities.

NOW IT'S YOUR TURN

- Questions and Comments from you
- Review the draft goals by the Planning Board
- Feel free to revisit the maps for reference
- <u>VOTE</u> for the goals or actions that are most important to you
- The Planning Board will prioritize goals and actions after hearing what <u>YOU</u> think is most important

WE WANT TO HEAR FROM YOU

- View the draft plan on the town website at www.newmarlboroughma.gov
- Or read it at the library
- Comments welcome up to Dec. 12th
- Send comments to lgaherty@berkshireplanning.org
- Photos welcome!

Public Meeting, November 19, 2016. Individual public comments are recorded in call out balloons.

Goal #1 - Character of the villages remain intact.

Objective A: Coordinated long-term growth management planning and zoning achieves a healthy rural community.

 Review zoning bylaws every five years in view of new developments to see if desired results of the zoning are occurring and revise accordingly.

Objective B: Flexible building envelopes containing small business, light commerce, and residences in village centers.

Will this allow more walkable villages?

- Use the build-out map report from the Berkshire Regional Planning.
- Commission to assess the current zoning laws. Allow flexible zoning bylaw that allows smaller lot size and reduced road frontage near the village centers.
- Hold public meetings to explain different types of commercial zoning and obtain feedback from residents.
- Encourage new businesses and new land developments to provide access to open space trails where applicable.

Objective C: Well-planned growth in village centers is cohesive, attractive and welcoming.

 Encourage the development of "street walls," buildings and residences close to existing roads that limit encroachment into open spaces.



Goal #2 – Diverse, accessible, and safe recreational opportunities are provided for residents of all ages without conflicting with the needs for protection of natural resources.

Objective A: Accessible gathering areas exist for all town residents.

- Continue educational and recreational programs (nature walks and historical tours).
- Research state funds FOR development of town parks to encourage local fairs, festivals, cookouts, and concerts.
- Improve public access to swimming and fishing holes.
- Create walking paths in each village (some for dog walking) and a playground for children. These can be integrated into the green corridors.
- Continue to work with Department of Fisheries and Wildlife to stock native species of fish and on game management programs that meet the needs of local residents and visitors.
- Inform the public of existing local recreational opportunities.

Objective B: Outdoor recreation coexists with the preservation of natural resources.

- Continue work with private landowners to obtain trail easements to form connections between the large tracts of protected open spaces.
- Improve signs informing visitors of the importance of the town's unique areas and the penalty for abusing the resources.

Objective C: Children, teens, families, seniors, and people

with disabilities have access to recreational sites and activities.

- Research available state funds to improve parking, access and signage for Umpachene Falls Park and 1,000-Acre Swamp.
- Provide for better awareness of types of programs and facilities.
- Continue educational and recreational programs such as nature walks, canoe trips, and historic tours. Wherever possible address ADA standards and requirements for the disabled.

State closed the bridge for public safety reasons. Now hard to access Umpachene Park

Town plans new river trail in Umpachene Park. Need to work with conservation commission for permits.

Goal #3 - Healthy natural resources support both human and wildlife communities.

Objective A: New Marlborough's ground and surface water is of excellent quality.

- Coordinate with abutting Towns to identify and eliminate any sources of water pollution that could affect New Marlborough's water supply.
- Seek the expertise of county and state services to catalog and determine the health of habitats and species as indicators of water quality.
- Continue the "Adopt-A-Stream" program.
- Work with surrounding towns to conduct a detailed hydrologic study to identify aquifers and recharge areas.
- Encourage participation in best land use management practices to ensure protection of ground and surface water.
- Implement land-use strategies and water quality monitoring to protect aquifers and recharge zones identified in hydrologic study.
- Enforce Title V requirements for all new and existing septic systems.
- Sponsor informative sessions to educate landowners and Town to stabilize erosive steep slopes and stream banks with native vegetation to prevent sedimentation in streams and water bodies.
- Expedite the permitting process for work to stabilize erosive steep slopes and stream banks.

Objective B: Diverse flora and fauna habitats exist throughout town.

- Post trails in town park to identify sensitive flora and fauna habitats.
- Inform community about the Community Preservation Act and how the funds acquired could be used for acquisition of unprotected critical habitat open space.
- Encourage landowners to employ various land protection strategies such as Conservation Restrictions, Chapter 61 programs, and the Agricultural Preservation Act.
- Inventory invasive species populations within the town, partnering with conservation organizations to train volunteers to conduct the inventories.

Objective C: Wetlands resources remain as diverse habitats.

- Limit or restrict the use of salt on roads that traverse wetland areas.
- Work with private landowners through conservation restrictions or land acquisition by a land trust to protect wetlands.
- Work to verify potential vernal pools as identified by the state or through local knowledge.
- Safeguard local water bodies against aquatic invasive species, with a focus on preventing establishment of zebra mussels and educating lake users.

Goal #4 - New Marlborough's historic integrity and scenic beauty are preserved.

Objective A: Historic resources are maintained as cultural landmarks.

- Inventory abandoned historic sites for preservation or possible restoration, including heritage landscapes such as mill foundations.
- Form a volunteer organization to maintain and promote the significance of historical cemeteries.
- Consider adopting the Community Preservation Act to provide funds for land acquisition or maintenance of historical sites.
- Explore the development of a solar bylaw that is protective of the town's natural and agricultural resources.

Objective B: Scenic views and unique natural resources are cherished by residents and

visitors.

- Keep as many unpaved roads as possible and use minimal salt.
- Protect ridgelines but allow for recreational use.
- Create an action plan for protecting priority sites. Create a conservation fund through fundraising and solicitation to purchase important natural resource land and other priority sites.
- Conduct a heritage tree inventory and a strategy for proactively replacing those that are unhealthy and are likely to be lost through disease or purposely removed for public safety.

Investigate the option to become a "Dark Skies Community." Actions listed below

Objective C: Local agriculture thrives amidst sustainable land use.

- Create an agricultural commission.
- Create an outreach program to work with local landowners, such as farmers and loggers, on Best Land Use Practices.
- Encourage New Marlborough farmers to participate in the Agricultural Preservation Program to protect their land in perpetuity.

Dark Skies: The skies in town are less dark than 10-12 years ago. To protect nocturnal animals and prevent light trespass:

- Encourage motion lighting vs all-night lighting.
- Shield all outside lighting, using light covers, ban all uplighting.
- Visit <u>www.darksky.org</u> for guidelines.

Goal #5 - State and Town officials work with citizens to determine and implement the management of open space and recreational facilities.

Objective A: Residents are involved in the promotion and maintenance of areas within town and state-owned properties.

- Continue roadside cleanup programs.
- Work with state officials to develop management plans for both state forests.

Objective B: On-going dialogue occurs between state, town, and residents.

- Inform public about the importance of protecting open space and the financial and recreational return to the community.
- Post updates on state activities in the protected land.
- Insist access to high-speed internet service.
- Post state and community activities on town's website.

Additional notes recorded by James Mullen of the New Marlborough Planning Board. These record the comments of by audience members during and after the presentation:

- Each village has its own character, and should have its own plans for their futures. Plans shouldn't be town-wide. It was suggested that each village have representatives for town-wide initiatives.
- The state closed the bridge to Umpachene Falls Park unilaterally. The town doesn't have a say when it comes to bridges. The town doesn't have the funding to fix the bridge, but this bridge is probably a low priority for state funds.
- The town would like to plan new trails along the river in Umpachene Falls Park, but it was noted that it will require wetlands and other possible permitting authorities. Conservation Commission is definite; unsure if any state permits required.
- Interest in becoming a "Dark Sky" community.

THE VIEW FROM THE BOARD

This year, the Planning Board will be updating our Open Space and Recreation Plan (OSRP). This has not been done since 2004, and our OSRP must be updated for the town to be eligible for planning grants. While grants are one reason for the timing of the update, there are other meaningful reasons to update. If the plan is to provide meaningful direction to our Planning Board, the residents of New Marlborough must play an active role in its update. To do your part, complete the Planning Board's survey, artend meetings, and consider becoming a member of the Planning Board.

Please take time to look at the current plan and note that New Marlborough was addressing a growing population in 2004. Today, population projections are very different. Additionally, please take a look at the 2004 survey comments, and you'll see that some interests and concerns remain applicable while others do not, and we likely have some new ones to add.

The OSRP addresses protected land for purposes that are of concern to everyone. The frequent conversations in town about how much land should be protected versus how much our tax revenue is decreased by land protection can be addressed. In addition to open space and recreation, we have an opportunity to discuss land purposes like household and fire-safety water, cemeteries, and agriculture.

Here are some details so you can get engaged: First, if you're interested in joining the Planning Board, please contact a Planning Board member or a selectman. Two seats are available and we'd like to fill them as soon as possible to get new members quickly involved in this important task. Second, if you have not yet completed the anonymous survey, please do so on line. (Find the link in the Planning Board's section of the Town web site.) Third, attend the public hearings that the Board will be holding or speak/email directly with members of the Planning Board of Board of Selectmen.

This is an opportunity we may not have again for many years. Please do your part to make it meaningful.

8

THE PLANNING BOARD SURVEY Townspeople Want to Preserve the Rural Character of New Marlborough

"ive me land, lots of land under starry skies above...." JOkay, so "Don't Fence Me In" was written for a never-produced 1934 movie (by Cole Porter, with lyrics by Robert Fletcher), but its sentiments are being echoed in 2016 by New Marlborough residents. In the justcompleted Open Space and Recreation Survey, the New Marlborough Planning Board asked: "Which [natural]

to a gap between what townspeople say they want and what current zoning provisions allow: "New scattered large-lot residential development has been occurring along New Marlborough roads, partially due to demand. for second homes," says the summary. "Although the economic recession that began in 2008 has slowed second-home demand for the past several years, it

rebounds.

With the recent retirement of two



resources are most important to you and in need of protection?" Respondents named "open meadows and farmland" as their number one choice.

The survey, answered by 123 New Marlborough residents, represents the Planning Board's most recent

attempt to elicit town opinion on where to focus its efforts in formulating an Open Space and Recreation Plan. On Saturday, November 19, it will follow up. with a public meeting, starting 9:30 a.m. at the Town Hall, to delve further into such questions as: "What do you value most about New Marlborough? What do you believe should be protected for future generations? Small town setting? Peace and quiet? Abundant wildlife?" The purpose of the plan, says Patricia Hardyman, Chair of the Planning Board, "is to set a course for protecting natural and scenic areas and improving access to outdoor recreation throughout New Marlhorough."

A summary of survey findings points

Board Secretary Kathy Chretien, Meanwhile, mark your calendars for Saturday morning, November 19, to join. the discussion.

Joe Poindexter

Development



8

UPCOMING: Events Calendar for November and December

November 4: Early voting ends, the last day on which registered voters may cast an early ballot by visiting Town Hall during regular office hours and requesting a ballot from Town Clerk Kathy Chretien

November 8: Election Day, 7:00 a.m. to 8:00 p.m. at the Town Hall; no computers, no hanging chads, voting the old-fashioned way with paper hallors and a real ballot box

November 12: Book Group, Join Elizabeth Gilbert fans to discuss her novel. The Signature of All Things, 10:00 a.m. at the New Marlhorough Town Library

November 19: The Planning Board's Open Space public meeting, 9:30 a.m., Town Hall, an opportunity to express your views on the future of recreational space in New Marlborough

November 19: The Annual Pre-Thanksgiving Pie Sale, 10:00 a.m. to 2:00 p.m. at the New Marlborough Town Library— then stick around for the Holiday Raffle at 2:00 p.m., pies can be ordered in advance before November 5 at 229-6668

December 3: The Southfield Church will host its Holiday Market from 10:00 s.m. to 3:00 p.m. in the Church Hall

December 10: New Marlborough Central School Holiday Fair, a great opportunity to buy your holiday tree, plus cakes, used books, and maple syrup — plus the annual silent auction, all proceeds going to the Parent Teacher Association, 10:00 a.m. to 3:00 p.m. at the school

ANNUAL TOWN ELECTIONS: STATEMENTS BY OUR CANDIDATES

Thirty voters turned out for the annual town caucus on March 29, which established the ballot for the Town election on May 9. All candidates were invited to submit statements for publication. The statements of those who responded appear below. The polls will be open at Town Hall in Mill-River from noon to 7:00 p.m. on Monday, May 9.

Moderator, one year: BARRY SHAPIRO

It has been my honor to have served as town moderator since my election last year. I have taken my new responsibilities very seriously. I joined the Massachusetts Moderators Association and have attended numerous meetings and training seminars of the Association, meeting with moderators from many other rowns in Massachusetts from as far away as Martha's Vineyard, and learning the craft of being an effective moderator. I am excited to be standing now for reelection to this important. position in our rown. Having practiced corporate law forover four decades, having been trained as a mediator, and having served as the chair of many meetings and organizations, I believe that I can achieve an important balance at our Town Meetings. My objective is for everyone to feel comfortable speaking at Town Meeting and to encourage an open discussion of the important: issues that we face in a collegial and friendly atmosphere. where we can disagree without being disagreeable. I'd like to achieve this through dialogue while still having the proceedings move along briskly so that we can get our work done efficiently. I hope that I will have your vote and I would be happy to speak with anyone about my qualifications. Just call me at 229 3993. Thank you.

Board of Selectmen, three years: MICHELE SHALABY

I feel honored to have served as your selectman for the last three years, and I ask that you will elect me for another three. I've learned much and believe New Marlborough can benefit from my continued efforts and knowledge. During another term, I will continue to improve our financial operations, oversee further capital planning and fulfillment, advocate for broadband service, insist that we get long-term school planning, and explore service sharing and consolidation.

It is a serious task to manage the operations of our Town, set policy, and propose budgets – budgets that strike a desired and responsible balance between service and tax levels. It is necessary to accomplish these tasks while maintaining civility, professionalism, and an informed mind, accompanied by clear and timely communication. We are obliged to conduct ourselves in a manner that is legal, ethical, inclusive and transparent. Every day, at every meeting and encounter, I strive to fulfill all.

Like most of us, I simply love living in New Marlhorough and am grateful for my life here and the diversity of our residents. Thank you all for your contributions to our community fabric. I truly enjoy the work of a selectman, feel like I'm "hitting my stride," and would like to continue to contribute to our town in this way. As always, I'm happy to hear from you. You can call me at home (229-9050) or send an email (micheleshalaby@ gmail.com). See you at Town Meeting!

Assessor, three years: MARSHA PSHENISHNY

I am running for re-election for a three-year term on the Board of Assessors. I have been an assessor for thirty years. I really like being able to help the people of our town. I have had the opportunity to meet a lot of nice people over the years.

I love the town of New Marlhorough and would like to continue to serve the needs of the taxpayers. Thank you in advance for your support on Election Day.

Planning Board, five years: PATRICIA HARDYMAN

As a member of the New Marlborough Planning Board, I will continue to work diligerarly with the other members of the Board to fulfill to responsibilities to:

- Implement the Comprehensive Plan;
- · Serve as site plan review authority; and
- Update the Open Space and Recreation Plan.

While serving on the Planning Board during these last five years, I have worked with my colleagues to develop and implement a comprehensive plan that envisions the future of our rown and sets realistic goals and objectives that address the competing interests of residents. We have worked diligently to update our subdivision rules and regulations in accordance with the vision identified in the Comprehensive Plan, thus helping to:

- · Retain the small-town rural character;
- · Preserve its natural beauty and resources; and
- Develop a range of housing options.

Since 1988 when I first wandered into New Marlborough, whether I am running or hiking its hills, gatdening, or working in my home office, I am continuously reminded that New Marlborough is a gem. As a member of the Planning Board, I will continue to work with the Town's boards and commissions, local groups, and fellow residents of New Marlborough to plot a path for our gem that provides economic opportunities and homes, preserves our natural resources, and protects local wildlife and fish today and for the future generations.

Library Trustee, three years: BRIAN MIKESELL

My entire adult life has been devoted to librarles – as a professional librarian for fifteen years, and with work experience in libraries for another dozen years prior to that. I have been a library volunteer and an avid library user and reader my whole life, and I am currently the



COMMONWEALTH OF MASSACHUSETTS TOWN OF NEW MARLBOROUGH OFFICE OF BOARD OF SELECTMEN 807 Mill River Southfield Road, Mill River, MA 01244

> Phone: 413-229-8116 Fax: 413-229-8253 E-mail: nmbos@newmarlboroughma.gov

> > Nathaniel H. Yohalem Chair Tara B. White Michele Shalaby Board of Selectmen

March 7, 2017

Ms. Melissa Cryan, Grants Manager Executive Office of Energy and Environmental Affairs 100 Cambridge Street Boston, MA 02114

Dear Ms. Cryan:

The New Marlborough Board of Selectmen voted to approve the Town's revised Open Space and Recreation Plan at its March 6, 2017 meeting.

The Board of Selectmen view this plan as an important blueprint of the Town's long-term commitment to preserving and protecting open space and to supporting recreational activities for all of its residents The Plan provides a framework to guide the community over the next seven years as it works to execute the Plan's Action Plan.

The Plan reflects the strong sentiments among the Town's residents for preserving the rural character, natural beauty and resources of our community. The Board is pleased to submit this Plan for your approval.

Thank you for your consideration of the Town of New Marlborough's Open Space and Recreation Plan.

Respectfully submitted,

Nathaniel H. Yohalem, Chair Board of Selectmen

Cc: New Marlborough Planning Board



TOWN OF NEW MARLBOROUGH 807 Mill River Southfield Road, Mill River, MA 01244-0099

New Marlborough Planning Board

February 9, 2017

Melissa Cryan, Grants Manager Executive Office of Energy and Environmental Affairs 100 Cambridge Street Boston, Massachusetts 02114

Dear Ms. Cryan:

The New Marlborough Planning Board respectfully submits the updated New Marlborough "*Open Space and Recreation Plan – 2017 – 2023.*" The updates to the ADA transition plan will be submitted as soon as possible as we are waiting for the snow to melt to better show the terrain of the Umpachene Park.

At its meeting of February 8, 2017, the Planning Board voted to approve and endorse the updated Plan. We look forward to working with the Town's residents and Boards to complete the Action Plan.

We sincerely thank the Town and the Berkshire Regional Planning Commission for their generous support for this initiative.

hotadyman

Patricia L. Hardyman Chair, New Marlborough Planning Board

BERKSHIRE REGIONAL PLANNING COMMISSION

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KYLE HANLON, Chair SHEILA IRVIN, Vice-Chair MARIE RAFTERY, Clerk CHARLES P. OGDEN, Treasurer NATHANIEL W. KARNS, A.I.C.P. Executive Director

April 3, 2017

Melissa Cryan, Grants Manager Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, Massachusetts 02114

Dear Ms. Cryan:

The Berkshire Regional Planning Commission (BRPC) has reviewed the draft *Town of New Marlborough Open Space and Recreation Plan (OSRP).* There are several aspects of the plan that are consistent with the *Sustainable Plan for the Berkshires*, the region-wide plan for Berkshire County. A few of the highlights are listed hereafter.

- Residents have reconfirmed that maintaining the town's rural setting is the highest priority
 when considering open space and recreational protection, with open meadows and farmland
 receiving the highest scores. These undeveloped breaks in the forested landscape provide the
 scenic qualities and quiet beauty that are so important to residents. The voiced desire to
 maintain the rural quality of the town has recently been echoed by other Berkshire County
 towns, including neighboring Great Barrington and Sandisfield.
- It is clear that residents cherish Umpachene Park. As the town's only publicly owned and managed park, improving public access and enjoyment of the park should continue to be a high priority for the Town of New Marlborough.
- The plan notes the importance of protecting Lake Buel, a cold water lake, for wildlife habitat
 and outdoor recreation. As this lake spans across town boundaries, it will be important for the
 towns of New Marlborough and Monterey to work together with the Lake Buel
 Restoration/Preservation District to conduct lake management activities, particularly control of
 invasive aquatic plant species.

We note that the OSRP utilized natural resource GIS data from Natural Heritage and Endangered Species Program (NHESP) and BioMap2. These have resulted in very informative maps that display where future protection efforts would be most beneficial for state Species of Concern. We note the inclusion of NHESP's companion planning documents, *Conserving the Biodiversity of Massachusetts in a Changing World* and *Guiding Land Conservation for Biodiversity*, in the plan. Attaching these reports are a convenient way to publicize these documents and ensure their use in future OSRPs.
The BRPC commends the Town of New Marlborough for its planning efforts and encourages the town to continue to pursue opportunities to protect the region's scenic character, natural resources and quality of life.

Sincerely,

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Nathaniel Karns, AICP Executive Director