OPEN SPACE AND RECREATION PLAN 2016-2022

Town of Richmond, Massachusetts

> Prepared by: Berkshire Regional Planning Commission and the Richmond Open Space Advisory Committee

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## ACKNOWLEDGEMENTS

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#### Thanks to Those Who Provided Review, Comments, and Assistance Along the Way!

Richmond Land Trust Richmond Pond Association Richmond Historical Commission Camp Marion White Working Group

**Citizens of Richmond** 

**Survey Respondents** 

**Public Forum Participants** 

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# **SECTION 1: PLAN SUMMARY**

The 2016 Richmond Open Space and Recreation Plan (OSRP) was developed to comprehensively examine the town's open space and recreation needs and identify goals and objectives related to these topics to guide future decision making and investment.

In addition to a need for holistic and town wide open space and recreation planning within Richmond, this OSRP was spurred by the decision of the Girl Scouts of Central and Western Massachusetts to sell Camp Marion White, a summer camp property located along the eastern shore of Richmond Pond. Both town officials and community organizations including the Richmond Land Trust and Richmond Pond Association view the Camp Marion White property as a valuable recreation and open space asset that should be publicly accessible for all to enjoy.

As of the time of this writing, the town is examining possible ways to purchase or preserve the property. However, the camp has not yet been officially listed for sale. This plan lists the purchase or preservation of Camp Marion White as a top priority for the town. The seven-year action plan found on page 65 identifies a number of action items related to Camp Marion White and its possible development as a town recreation area.

Among the other highlights of the plan are a commitment by the town to protect its water and natural resources as well as sensitive environments and wildlife habitats. The plan also lays out several possible actions for the town to utilize and promote roadways as important recreation areas. Moreover, the plan makes recommendations for outreach to landowners to pursue greater protection of natural resources and expand recreation opportunities within the town.



# RICHMOND OPEN SPACE AND RECREATION PLAN AT A GLANCE

#### <u>Vision</u>

The Town of Richmond is a rural, tranquil, and family-friendly hamlet in the Central Berkshire Region of Massachusetts that carefully stewards its treasured open spaces and maintains rich cultural, recreational, and scenic resources that collectively foster a strong sense of place and community vitality that benefits its residents and visitors.

#### <u>Goals</u>

- 1. Water resources in Richmond are protected.
- 2. Natural resources in Richmond are protected.
- Residents and visitors are aware of Richmond's open space and cultural resources and recreational opportunities.
- 4. The town's recreation opportunities meet community needs.
- Funding for conservation and recreation projects meets community needs.
- 6. Ensure Implementation of the Richmond Open Space and Recreation Plan.



Overall, this Open Space and Recreation Plan helps to answer three questions related to open space and recreation within the town:

- 1. What do we have?
- 2. What do we want?
- 3. How do we get there?

#### What do we have? Section 3: Community Setting (Page 12)

Richmond is a primarily residential community located within a valley between the Taconic Mountains and the Yokun Ridge in the central Berkshire region of Massachusetts. Richmond's population is projected to decline by about 300 residents over the next 15 years. Moreover, the population of Richmond is growing older. As of 2013, Richmond was the 6th oldest community in Berkshire County based on the median age (54.2) of its residents. While in the past the pace of development was rapid, it has slowed in recent years.

# Section 4: Environmental Inventory and Analysis (Page 23)

The town has an abundance of natural resources including extensive forest, wetlands, and vernal pool locations. Richmond's location with the Western New England Marble Valleys Ecoregion has produced some unique environments due to its calcium rich bedrock. These unique environments include the town's priority natural communities, which may be home to rare and endangered species.

Beyond the town's natural resources, there are many cultural resources including historic buildings and cemeteries, unique geological features such as the Richmond Boulder Train, and local landmarks like Shark Rock.

#### Section 5: Inventory of Lands of Conservation and Recreation Interest (Page 43)

Land in Richmond is protected in a variety of ways. The town has two state-owned Natural Heritage Areas (NHAs) and a small section of State Forest which is located along Dean Hill Road. Some residents have also chosen to protect their properties with conservation restrictions, and several land trusts own land within the town. Additionally, many Richmond landowners have chosen to enroll in Chapter 61, a state program that reduces property taxes in exchange for land conservation through forestry, agriculture or recreation.

Moreover, the town has many existing recreation opportunities, including hiking trails on the Yokun Ridge, water-based recreation on Richmond Pond, and cross-country skiing at Hilltop Orchards to name a few places.

# What do we want?

#### Section 6: Community Vision (Page 55)

This section details the components of the public process that were used to draft the OSRP and states the town's vision for Open Space and Recreation. Section six also broadly defines the six overarching goals of the plan derived from the public process:

- 1. Water resources in Richmond are protected.
- 2. Natural resources in Richmond are protected.
- 3. Residents and visitors are aware of Richmond's open space and cultural resources and recreational opportunities.
- 4. The town's recreation opportunities meet community needs.
- 5. Funding for conservation and recreation projects meets community needs.
- 6. Ensure Implementation of the Richmond Open Space and Recreation Plan.

#### Section 7: Analysis of Needs (Page 58)

Section 7 provides an analysis of the town's natural resource, recreation, and management needs including the need to protect the town's water resources and the ongoing management of Richmond Pond. Moreover, it makes recommendations for recreation including the possible purchase of Camp Marion White by the town, and the need to promote the town's existing recreation areas.

#### Section 8: Goals and Objectives (Page 63)

This section reiterates the goals defined in Section 6 and provides more detailed objectives that will be completed to achieve those goals. An example of this is promoting the town's recreation areas and historic resources through the town website as a way to increase awareness of open space and cultural opportunities (Goal 3).

#### How do we get there?

#### Section 9: 7-Year Action Plan (Page 65)

This section outlines the specific actions that will need to be addressed to meet each goal and associated objective. The action plan suggests leadership roles that town departments, boards and committees, and other local groups can take to help complete each action and provides a timetable for completion of each action.



# **SECTION 2: INTRODUCTION**

## **2A STATEMENT OF PURPOSE**

This Open Space and Recreation Plan (OSRP) is the Town of Richmond's blueprint for implementing its vision for open space and recreation. The 7year action plan (found in Section 9), provides a framework and timetable for implementing the Town of Richmond's open space and recreation goals and objectives. This OSRP is the Town of Richmond's first, and will help to fulfill a need for long range comprehensive planning within the town. Open space and recreation are two important components of the town that impact not only town character, but also quality of life, health, and the well-being of residents and visitors.

In late 2014, the Berkshire Regional Planning Commission (BRPC) was approached by the Town of Richmond regarding development of its first OSRP. Development of this OSRP was spurred by concerns about the sale of Camp Marion White on Richmond Pond by the Girl Scouts of Central & Western Massachusetts. Seeing the potential of this property for both recreation and conservation, and with the desire to have this piece of Richmond remain as protected open space, a working group was formed to examine possible purchase and conservation of Camp Marion White for public access and benefit.

The Camp Marion White Working Group (CMWWG) consisted of officials from Richmond and Pittsfield town government, the Berkshire Natural Resources Council (BNRC), and local conservation organizations including the Richmond Land Trust (RLT), the Richmond Pond Association (RPA), and Massachusetts Audubon. This working group sought to develop a plan for the purchase of the property as a local conservation and recreation asset. All parties realized that without an approved Open Space and Recreation Plan, access to state funds to help



## **INTRODUCTION AT A GLANCE**

#### <u>Richmond Open Space Advisory</u> <u>Committee (OSAC) Members</u>

Ryan Aylesworth—Committee Chair and **Richmond Conservation Commission** Agent, Camp Marion White Working Group John Keenum—Richmond Land Trust Jeff Konowitch—Chair of Richmond **Recreation Committee** Kitty Levitan—Vice President Richmond Pond Association Paula Patterson—Richmond Planning Board, Richmond Long Range Planning Committee, Richmond delegate to BRPC Holly Stover-Richmond Pond Association, Former Chair of Richmond Conservation Commission, Camp Marion White Working Group Ronald Veillette-Richmond **Conservation Commission** 

facilitate the conservation of Camp Marion White would be limited. Moreover, the OSRP process would allow the town to comprehensively examine its conservation and recreation assets and create a long term plan for implementation of goals and objectives to positively impact the entire town, not only Camp Marion White.

In early 2015, Richmond proposed the formation of an Open Space Advisory Committee (OSAC) that would help guide development of the town's Open Space and Recreation Plan in partnership with the Berkshire Regional Planning Commission (BRPC) who would help to facilitate public meetings and draft the OSRP. The OSAC is comprised of members of the Camp Marion White Working Group, town staff, board members, and RLT and RPA members. While the work of the CMWWG was narrowly focused on the town's acquisition or preservation of this property, the Richmond OSAC was tasked with a broader, more long range, and more holistic view of open space and recreation planning within the town as would be required for the OSRP.

This document is a summary of the work of the Richmond OSAC and the robust public process that guided and informed the development of the OSRP. This OSRP evaluates the town's existing community, natural and recreation resources, provides analysis and recommendations and lays out specific goals, objectives and actions that the town can implement and work towards. At its most basic, this document is a resource that summarizes and catalogues the town's open space and recreation assets. However, it is more importantly intended for use as a guiding document to inform decision making and investment by the town regarding future open space and recreation projects.

#### The OSRP and Public Health

BRPC has recently worked on several projects to integrate aspects of public health into the municipal planning process. Given that the

environment we live in plays a greater role in determining our health than individual genetic predispositions, open space and recreation opportunities have a potentially huge impact on public health. Moreover, there is increasing evidence that in addition to physical health, natural areas and open space can impact mental health by lowering levels of stress and anxiety (Coleman 2015).

Public health is a concern in Richmond due to the town's changing demographics (for more information please refer to Section 3: Community Setting). As of the 2009-2013 U.S. Census American Community Survey, Richmond ranked 6th out of the 32 municipalities in Berkshire County for highest median age of its year-round residents (54.2 years of age). The ability for Richmond residents, particularly those who are older or disabled, to access areas for recreation not only affects these resident's quality of life, but health and longevity as well.

This plan acknowledges that access to open space and recreation are integral to the physical and mental health of Richmond residents. These areas do not have to be gymnasiums or fitness centers. Elements as simple as the town's unpaved roadways, which are well used by walkers and runners, create a space for exercise and relaxation. Richmond's recreation areas are components of a public health infrastructure that can help to promote healthy and active lifestyles for both residents and visitors.

#### The OSRP and the Richmond Economy

The Town of Richmond, like much of the Berkshires, has a economy that benefits from tourism, as well as seasonal influxes of temporary residents and second homeowners. Regionally, the Berkshires is known for its abundant recreation opportunities as well as cultural activities. The Town of Richmond acknowledges that careful management and sound investment in its open space, recreation, and cultural



amenities could help to create a draw for seasonal residents and tourists, in addition to the quality of life and health benefits enjoyed by its year-round residents. In this way, the OSRP could be an important tool for economic development.

# Grant Eligibility and Financial Purposes of this Plan

This OSRP, once fully adopted by the town and approved by the Commonwealth of Massachusetts, will make the Town of Richmond eligible to compete in two state grant programs: the LAND (Local Acquisitions for Natural Diversity) and the PARC (Parkland Acquisitions and Renovations for Communities) grant program. The LAND grant program provides communities with up to \$400,000 a year in matching grant funds for the acquisition of land for the purposes of passive recreation. The PARC grant program provides up to \$50,000 a year in matching grant funds for land acquisition or recreation improvements for towns with populations below 35,000, and is designed mostly for projects related to parks and other active recreation areas. These two grant programs could help with the implementation of the many of the recommended items found in the 7-year action plan. These two grant programs should be distinguished from other possible conservation and recreation funding mechanisms, such as the Community Preservation Act (CPA). While an exploration of the possible adoption of the CPA is a recommendation of this plan, the goals, objectives, and action items of this plan are not dependent on the CPA for funding. However, if adopted by the town, the CPA can provide both a funding pool generated by a 1-3% surcharge on local property taxes and access to matching funds from the state of Massachusetts.

# 2B PLANNING PROCESS AND PUBLIC PARTICIPATION

#### **Richmond Open Space Advisory Committee** (OSAC) Members

Ryan Aylesworth—Committee Chair and Richmond Conservation Commission Agent, Camp Marion White Working Group John Keenum—Richmond Land Trust Jeff Konowitch—Chair of Richmond Recreation Committee Kitty Levitan—Vice President Richmond Pond Association Paula Patterson—Richmond Planning Board, Richmond Long Range Planning Committee, Richmond delegate to BRPC Holly Stover—Richmond Pond Association, Former Chair of Richmond Conservation Commission, Camp Marion White Working Group Ronald Veillette—Richmond Conservation Commission

# Berkshire Regional Planning Commission (BRPC) Staff

Thomas Matuszko, Assistant Director Eammon Coughlin, Planner

# Public Participation Components of the OSRP

#### **Public Meetings**

The Richmond Open Space Advisory Committee met 6 times from March to August, 2015. Meeting notifications were posted at the Richmond Town Hall, on the town's website (www.richmondma.org), and in the town's weekly email newsletter.

#### Stakeholder Interviews

To help develop the plan, BRPC conducted interviews with stakeholder groups including members of the Richmond Pond Association and Richmond Recreation Committee. Additionally, BPRC attended several meetings of the Camp Marion White working Group.

#### **Public Survey**

The committee created a public survey early in the development of the OSRP. The public survey was available online, through the website Survey Monkey, and as printed copies at Richmond Town Hall. Notification about the public survey was listed on the town's official website, in the Richmond Record, in flyers posted around town, and in the town's weekly email newsletter. The Richmond Land Trust and Richmond Pond Association also agreed to post notifications about the survey on their website.

The public survey was available from April 24th to June 15th, 2015. In total, there were 113 responses to the survey, with about 5% of year round residents responding. The results of the public survey are available as Appendix E of this document. The public survey was advertised in the Richmond Record (the town's locally distributed newspaper), in the town's weekly email newsletter, on the main page of the town website and in flyer postings on local bulletin boards.

#### **OSRP** Comment and Review Period

The OSRP was available in hardcopy format at Town Hall and online through the town website from late August until the September 17th, 2015 public forum. Reviewers were asked to forward comments to BRPC or the OSAC committee chair.

#### **Public Forums**

A public forum was held on June 16, 2015 at the town hall and was attended by roughly 20 participants including town residents and other interested individuals representing local conservation organizations. The public forum presented the results of the public survey and general information about the OSRP and its requirements to forum participants. The public forum included an open and structured discussion about the town's open space and recreation needs. The public forum was advertised in the town email newsletter, on the town website, in flyer postings on local bulletin boards, at town hall, in the community events calendar of the Berkshire Eagle newspaper, and in the Richmond Record.

A second public forum was held on September 17, 2015. This public forum involved a prioritization activity in which participants marked the goals, objectives and action items of the plan they felt were most important. Participants were also encouraged to leave comments and leave contact information for future volunteer efforts. The second public forum was advertised on the town website, in flyer postings around town, and in the Richmond Record.



# **SECTION 3: COMMUNITY SETTING**

## **3A REGIONAL CONTEXT**

Please refer to Map 1– Regional Context in Appendix A-Maps.

Richmond is located in Berkshire County, the western-most county of Massachusetts. The town is approximately 19 square miles in size. Richmond is bordered to the north by Pittsfield and Hancock, to the east by Lenox, and to the south by Stockbridge and West Stockbridge (See Map 1—Regional Context). To the west, Richmond is bordered by Canaan, New York. The town's eastern and western boundaries are readily distinguished in the landscape. The eastern boundary between the Towns of Lenox and Richmond is the Yokun Ridge, a well defined ridgeline that consists of West Stockbridge and Lenox Mountains. The western boundary with the state of New York is comprised of a ridgeline of the Taconic Mountain range. This western ridgeline extends north to reach Mount Greylock, the commonwealth's highest peak. Richmond is primarily a rural and residential community. Two commercial orchards (with associated retail) and a few farms are located within the town.

Richmond shares a border with Pittsfield, the county's largest city and a major regional employer. Additionally, Richmond has long been known as a summer, seasonal, and second home destination. These two factors have combined to create a primarily residential community with a higher income than the vast majority of other towns in the county.

In addition to a municipal border, Richmond and Pittsfield share Richmond Pond, a spectacular 233 acre "great pond" located in the northeast corner of the town. Approximately 1/3 of the pond lies in Pittsfield. Both Pittsfield and Richmond aid in management of the pond, including reviewing



## COMMUNITY SETTING AT A GLANCE

#### **Regional Context**

Richmond is a rural Berkshire town located at the western-most edge of Massachusetts and just south of the county's largest municipality.

#### History of the Community

Richmond's former industry included iron production and farming. The town has also been a destination for summer and seasonal residents since the 1920's.

#### **Population**

The town's population was 1475 residents as of the 2010 census. The median age of a Richmond resident is 54.2 years old.

#### Growth and Development Patterns

While historic industrial uses in Richmond have all but disappeared, some agriculture remains. Today, Richmond is mostly forested, with extensive residential land use. and approving the yearly drawdown.

Additionally, a non-profit group, the Richmond Pond Association (RPA), works to "preserve, protect, maintain, and enhance the rural, environmental, recreational, esthetic and economic values of Richmond Pond".

The supply of easily developable and former agricultural land in the town's central valley, as well as its scenic beauty, have made the town attractive to residential development. The majority of the town is divided into large parcels that support single family homes. While these homes help to retain some of the rural character of the town, they have made the need for open space protection more critical.

The majority of Richmond is located within the Housatonic River Watershed. A small portion of Richmond's northwest corner is part of the Hudson River Watershed. The Housatonic Valley Association, with local offices located in Lee, is a non-profit entity working to help protect the Housatonic River as a resource. The Hudson River Watershed Alliance has similar goals, but works to achieve them for the Hudson River.

Ecologically, Richmond is located on the border of two ecoregions, the Taconic Mountains and Western New England Marble Valleys. Vegetation within the Taconic Mountains Ecoregion is generally comprised of northern hardwoods. Within the Marble Valleys Ecoregion, both northern hardwoods and coniferous forest types are found. Additionally, the shift to a limestonerich bedrock in the Marble Valleys allows for unique habitats such as calcareous fens and alkaline streams and lakes. This unique ecoregion supports a diversity of species not found in other parts of the state. For additional discussion of vegetation in Richmond, see Section 4: Environmental Inventory and Analysis.

### **3B HISTORY OF THE COMMUNITY**

Richmond was originally settled as part of an area known as Mt. Ephraim and Yokuntown. The first European settlers came to the area in 1759, but were preceded by the Native American Mahican tribe, which lived in the region. Richmond was originally chartered as Richmont in 1765 and included what is now the Town of Lenox. Lenox was chartered separately in 1767 and Richmont petitioned for its name to be changed a few years later. The towns of Richmond and Lenox are said to be named for Charles Lennox, the Duke of Richmond, a British lord and ardent supporter of the American colonies in the debates in England's parliament just prior to the American Revolution (Richmond Town Plan, 1995). Iron ore was discovered in the town early in its history, which led to the development of the Richmond Iron Works in the early 1800's. The Iron Works was in operation until 1923. Iron from Richmond is believed to have been used in the guns of the battleship Monitor, the first ironclad warship of the United States Navy. Iron production created a number of associated industries including charcoal production, wagon construction, and blacksmithing. Today, the former iron production

Table 3.1 - To	own of Richmon	d - Projected Y	ear-Round Po	pulation 2010-	2030	
Source: Dong	nhue Institute - U	MASS Amherst	t, 2015			
Year	2010 Census (actual)	Projected 2015	Projected 2020	Projected 2025	Projected 2030	Projected Change 2010-2030
Population	1475	1402	1308	1210	1104	-371



#### Table 3.2 - Richmond Population Characteristics 2000-2013

Source: 2000 and 2010 US Census, 2005-2009, 2006-2010 and 2009-2013 US Census American Community

Survey			
Year	2000	2010	2013
Total Population (Year-round residents only)	1604	1475	1489 (estimate)
Age (% of total population)			
Under 5 years	66 (4.1%)	32 (2.2%)	42 (2.8%)
5 to 9 years	86 (5.4%)	57 (3.9%)	43 (2.9%)
10 to 14 years	123 (7.7%)	86 (5.8%)	79 (5.3%)
15 to 19 years	103 (6.4%)	92(6.2%)	87 (5.8%)
20 to 24 years	45 (2.8%)	38 (2.6%)	67 (4.5%)
25 to 34 years	104 (6.5%)	83 (5.6%)	103 (6.9%)
35 to 44 years	264 (16.5%)	143 (9.7%)	91(6.1%)
45 to 54 years	308 (19.2%)	291 (19.8%)	298 (20%)
55 to 59 years	150 (9.4%)	174 (11.8%)	140 (9.4%)
60 to 64 years	103 (6.4%)	141 (9.6%)	144(9.7%)
65 to 74 years	148 (9.2%)	211 (14.3%)	230 (15.4%)
75 to 84 years	81 (5%)	102 (6.9%)	129(8.7%)
85 years and over	23 (1.4%)	25 (1.7%)	36(2.4%)
Median Age	45.3	52.4	54.2
Households	643.0	657	646
Average Household Size	2.49	2.24	2.29
Minority Population (%)	2.4	2.4	1.9
Median Household Income	\$60,917	\$87,682	\$85,588
Families below poverty level (%)	1.9	2.1	1.3
Mean travel time to work (Minutes)	_	25.4	24.2
Population Density (Residents/square mile) (Based on town area of 19.03 sq. miles)	84.28	77.5	78.24

site is known as the Richmond Furnace Historical and Archeological District. The ruins of the former industrial area are listed on the National Register of Historic Places.

Additionally, Richmond was known for the production of lime due to its ready supply of calcium-rich bedrock. Lime quarrying was historically a component of the Richmond Furnace, as lime was used as a source of flux in iron production to purify raw iron and allow it to be more easily worked.

Additionally, a separate lime industry begin in Richmond, and large lime kilns for the production of industrial and agricultural lime were constructed in town.

Sheep farming was another major component of Richmond's economy until the late 1880's. After this, dairy farming became more prominent. At this time, over 100 farms operated within the town. The town also hosted several large orchards. In the mid-1800's, Richmond began to be a destination for summer and seasonal residents from larger cities (Gloria Morse Personal Communication 2015). Many built cottages and camps along the shores of Richmond Pond. A large General Electric (GE) manufacturing plant was located just north of Richmond in Pittsfield, which brought many families to the area. The GE plant remained in operation from the early 1900's until the 1980's.

## **3C POPULATION CHARACTERISTICS**

**Current and Projected Population** 

Richmond experienced population growth throughout most of the 20<sup>th</sup> century. From 1920 until 1990, Richmond grew in population. Growth between 1960 and 1970 was the greatest. During this decade, Richmond grew from 890 to 1461 residents. Growth reached a peak in 1990 at 1677 residents. Since 1990, the population in Richmond has declined. The 2010 US Census counted 1475 total residents in Richmond. a decline of 12% since 1990. As of 2014, the Town's local census counted 1465 residents in 2014, with 4 births and 17 deaths in that year (Richmond Town Report, 2014). Please note that Census figures and population projections discussed in this section refer to year-round residents only.

Population projections for the next 20 years by the Donahue Institute at UMass Amherst anticipate that the number of year-round residents will decline by 371 individuals by 2030, or around 25% (See Table 3.1). However, it is important to note that these are only estimates. Regionally, population for the whole of Berkshire County is projected to decline over the next 20 years, with population growth expected in the county's largest city (Pittsfield), as well as a handful of other rural towns.

Census data also indicates that Richmond's

population is aging. The median age of a Richmond resident has increased from 45.3 in 2000 to 54.2 in 2013. This is greater than the median age for Berkshire County (45.1) in 2013, and represents an increase of almost 9 years of age since 2000. Moreover, the percentage of residents older than 60 has increased, while the percentage of residents younger than 19 has decreased since 2000.

The Town of Richmond Long Range Planning Study notes that "the middle-age, retired and elder population of Richmond has experienced notable growth, whereas residents for family-bearing age, and school-aged children, have experienced a decline in population" (Richmond Long Range Planning Study, 2012, Page 38). Additionally, the study notes that "spatial location, place character and increasing housing costs make it unlikely that its population will diversify in terms of age in the next ten to fifteen years".

#### **Population Density**

As of 2013, Richmond had a population density of just over 78 residents/square mile. This is a slight decrease since 2000, when density was around 84 residents/square mile. Population and housing density is highest in the Richmond Shores neighborhood, as well as in neighborhood areas that share a common loop road, such as those located on Jolindy, Gristmill Road, or in the Whitewood subdivision.

#### Seasonal Residents and Second Homeowners

Richmond is home to many seasonal and summer residents. The 2010 U.S. Census notes that of 902 total housing units within Richmond, 196 are listed for "seasonal, recreational or occasional use." This amounts of 21.7% of all housing units within the town.

#### Income

According to the 2009-2013 US Census American



Community Survey, median household income for Richmond was estimated at \$85,588, greater than any other municipality in Berkshire County. In comparison to the larger region, median household income for Berkshire County in 2013 (including Richmond) was estimated at \$48,450 (See Table 3.2).

#### **Employment**

Richmond is located just south of the city of Pittsfield, the largest municipality in Berkshire County and a major regional employer. Some of the larger businesses in Pittsfield include Berkshire Health Systems, Berkshire Bank, General Dynamics Advanced Information Systems, Interprint, Sabic-Innovative Plastics, and Lenco Armored Vehicles. The town is also close to other employment areas, such as the towns of Lenox and Great Barrington. As mentioned previously, the town has some small retail establishments, including two commercial orchards with associated retail. Mean travel time to work for Richmond residents in 2010 was just over 25 minutes.

"Journey to work" available from the 2006-2010 **U.S Census American Community Survey** indicates that 39.1% of employed Richmond Residents travel to the City of Pittsfield for employment, while 15.3% remain within the town of Richmond for employment. This figure includes those that commute within the town, as well as self-employed workers and those that work from home. Another 28.6% travel to work within the municipalities of Great Barrington, Lenox, North Adams, Lee, and Dalton. The remaining 17% travel to a variety of places in Massachusetts and New York (including the upstate counties of Westchester, Albany, Columbia and Rensselaer), with some workers traveling to New Jersey and Oklahoma for employment (see Table 3.3).

#### Table 3.3 - Employment Destinations of Richmond Residents

Source: 2006-2010 U.S. C	ensus ACS Jou	rney to Work
	Estimated Number of	Percent of Employees
Employment Destination		Employees
Pittsfield, MA	309	39.1%
Richmond, MA	121	15.3%
Great Barrington, MA	114	14.4%
Lenox, MA	61	7.7%
North Adams, MA	18	2.3%
Lee, MA	17	2.2%
Dalton, MA	16	2.0%
Columbia County, NY	14	1.8%
Hancock, MA	11	1.4%
Williamstown, MA	10	1.3%
Rensselaer County, NY	10	1.3%
Becket, MA	9	1.1%
Springfield, MA	9	1.1%
Stockbridge, MA	8	1.0%
Lanesborough, MA	7	0.9%
Hadley, MA	5	0.6%
North Canaan, CT	4	0.5%
New Marlborough, MA	4	0.5%
West Stockbridge, MA	4	0.5%
East Longmeadow, MA	4	0.5%
Northborough, MA	4	0.5%
Westchester County, NY	4	0.5%
Waterbury, CT	3	0.4%
Ludlow, MA	3	0.4%
West Springfield, Ma	3	0.4%
Cambridge, MA	3	0.4%
Boston, MA	3	0.4%
Hudson County, NJ	3	0.4%
Albany County, NY	3	0.4%
Dutchess County, NY	3	0.4%
Oklahoma County, OK	3	0.4%
Total	790	100%

#### Context and Demographics of Environmental Justice Populations

Environmental justice is "based on the principle that all people have a right to be protected from environmental pollution, and to live in and enjoy a clean and healthful environment " (Mass. **Executive Office of Energy and Environmental** Affairs, 2015). Conceptually, environmental justice recognizes that some of the most highly polluted and undesirable areas to live have tended to contain populations of low-income, minority, foreign-born, and non-English speaking residents. Additionally, these populations have tended to have reduced or limited access to open space. In Massachusetts, these populations have been mapped in each municipality based on census information. Because these populations have historically been underserved in terms of open space and recreation access and opportunities, they should be a crucial factor in future decision-making regarding these issues.

There are currently no environmental justice populations located within the Town of Richmond. However, there are populations located within neighboring communities. Within Lenox, there is an environmental justice population based on income. Additionally, there are two environmental justice populations in nearby Pittsfield based on income and a combination of minority population and income.

## **3D GROWTH AND DEVELOPMENT PATTERNS**

#### **Patterns and Trends**

While still a rural town, Richmond has seen a shift away from farms and agriculture toward residential living. Former industries such as iron production have long subsided. Today, the major land uses are forest, agriculture and wetlands. Residential land is also a major use, totally almost 1000 acres in the community. Richmond's housing stock is comprised mainly of 1-unit

#### Table 3.4- Public Drinking Water Wells in Richmond, MA

Source: Mass (	GIS Public Water Supplies 20	14
Source_ID	Site Name	Туре
1249008-01G	WELL 1	GW
1249012-01G	CAMP RUSSELL	TNC
1249010-01G	BRANCH FARM CONDO ASSN	TNC
1249005-01G	CAMP MARION WHITE	TNC
	RICHMOND CONSOLIDATED	
1249004-02G	SCHOOL	NTNC
1249006-01G	PEIRSON PLACE	TNC
1249009-01G	SOMA CATERING	TNC
1249000-01G	RICHMOND TOWN HALL	TNC
1249012-02G	CAMP RUSSELL	TNC
1249011-01G	BARTLETTS ORCHARD LLC	TNC
	HILLTOP ORCHARD AND FUR-	
1249013-01G	NACE BROOK WINERY	TNC
GW = Communit	y Groundwater Well, serves m	ultiple
homeowners (qı	•	
	Non-Community Well, serve fe	
	aily, such as at a camp or resta	
	insient Non-community Well, r	
	n 25 people daily for more than	n 6
months of the ye		
	ll data is from 2014. Some bus	iness
names may have	e changed.	

homes, with less than 10% of housing available as rental units (Richmond Long Range Planning Study, 2012). Recently, the town has formed an affordable housing committee with the goal of meeting the state's 10% percent affordable housing standard while maintaining the rural character of the town.

The housing stock reveals two distinct periods of construction. Most homes were either constructed prior to 1939 or were built during the development boom of between 1970-1989 (Richmond Long Range Planning Study, 2012).

Between 1987 and 2010, the number of home sales per year decreased. The number of



Table 3.5 - Land Use C	hange in Ri	chmond 1971	L-1999				
Source: Mass. GIS Land	d Use 1951-	1999					
							% Change in
	1971	<b>1971</b> (% of	1985	<b>1985</b> (% of	1999	<b>1999</b> (% of	acreage
	(acres)	Total Land)	(acres)	Total Land)	(acres)	Total Land)	1971-1999
Agriculture	2752.59	22.60%	2647.75	21.74%	2647.75	21.74%	-3.96%
Commercial	4.63	0.04%	4.63	0.04%	4.63	0.04%	-0.01%
Forest	7856.61	64.51%	7753.37	63.66%	7753.37	63.66%	-1.33%
Industrial	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00%
Institutional	4.08	0.03%	7.50	0.06%	7.50	0.06%	45.55%
Mining / Waste Dis-							
posal	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00%
Recreation	20.54	0.17%	20.54	0.17%	20.54	0.17%	0.00%
Residential	712.76	5.85%	929.68	7.63%	929.68	7.63%	23.33%
Transportation*	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00%
Vacant**	241.67	1.98%	229.42	1.88%	229.42	1.88%	-5.34%
Water	178.20	1.46%	178.20	1.46%	178.20	1.46%	0.00%
Wetland	408.40	3.35%	408.40	3.35%	408.40	3.35%	0.00%
Total	12179.49	100%	12179.49	100%	12179.49	100%	
*Transportation categor	y includes la	rge divided hig	hways or are	as like airports	and docks.	Smaller roadw	vays have not

\*Transportation category includes large divided highways or areas like airports and docks. Smaller roadways have not been calculated.

\*\*Vacant land category includes abandoned agriculture, areas like power lines, or areas of no vegetation.

residential, commercial, and industrial parcels has not increased substantially in recent years. Additionally, the number of building permits issued has experienced a sharp decline. These trends indicate that overall development has slowed.

#### Infrastructure Roads

Richmond is served by Route 41, a major regional north-south roadway that begins in Connecticut and terminates in Pittsfield. A short section of Route 295 extends from New York Route 295 and intersects with Route 41. This section of roadway is a major route for commuters from New York who travel from their homes to places of employment in Pittsfield.

While not a state highway, Swamp Road also runs

north-south through the entire town of Richmond, east of and parallel to Route 41. Both Swamp Road and Route 41 connect to Rte. 20 in Pittsfield.

#### Pedestrian Facilities

There are limited pedestrian facilities in Richmond, beyond existing roadways. A short section of sidewalk exists along Route 41, and runs a few hundred yards from the U.S. Post Office south to the intersection of Lenox Road. Other pedestrian facilities are provided on existing trails in Town. These facts notwithstanding, walking was identified as one of the top recreation activities of survey respondents, with 66% reporting walking as one of the top activities they participate in. The survey and work of the Richmond OSAC also determined that many quiet and unpaved town roads are used extensively by walkers. For additional information, please see Section 5. This led to the development of objectives and actions to support walking in Richmond, such as the creation of walking loops (see Section 9).

#### **Bicycle Facilities**

As with pedestrian facilities, there are limited bicycle facilities in Richmond beyond those provided by existing roadways. Richmond's roads currently have no bicycle lanes, or shared lane markings; however, some bicycle warning signage exists in the town. Strava is a mobile application used by runners and cyclists that allows them to track exercise time and engage in challenges with other Strava users. Strava maintains a "heat map" which shows physical locations where the application is used (Strava 2015). The map gives a relative indication of which areas are popular for exercise and which are not, and can provide a snapshot of the places most frequented by Strava users. Based on the heat map for Richmond, Route 41, Swamp Road, and Lenox Road are the most popular areas where Strava users choose to bicycle.

#### Rail

A rail line owned by CSX runs north –south through Richmond. This rail line carries freight as well as Amtrak passenger trains. At the southern end of town, the line runs immediately west of Route 41, crossing beneath an overpass near the intersection of Route 41 and Lenox Road. North of this point, the rail bed travels between Route 41 and Swamp Road. Moving north, the line runs just west of the shoreline of Richmond Pond, where it crosses into Pittsfield.

#### **Other Transportation**

Richmond is not served by any local public transportation routes. The nearest bus service is located in Lenox, and a larger intermodal station in Pittsfield provides both bus and train service. A

Table 3.6 - Richmond La		
Source: Mass. GIS Land L	<i>Ise 2005</i>	-
		Percent of
Land Use Category	Acres	Total Land
Agriculture	1860.92	15.29%
Commercial	6.71	0.06%
Forest	7655.63	62.89%
Industrial	2.74	0.02%
Institutional*	9.90	0.08%
Mining / Waste Disposal	0	0.00%
Recreation	55.64	0.46%
Residential	922.86	7.58%
Transportation	27.37	0.22%
Vacant**	232.26	1.91%
Water	197.58	1.62%
Wetland***	1200.80	9.86%
Total	12172.42	100%

\*Institutional category Includes town owned facilities as well as cemeteries.

\*\*Vacant category includes abandoned agriculture, areas like powerlines and areas of no vegetation, as well as brushland and successional environments not dense enough to be classified as forest.

\*\*\*Wetland category includes both forested and nonforested wetlands.

large international airport is located in Albany, NY, roughly an hour away.

#### **Drinking Water**

All areas of Richmond are serviced by individual drinking water wells, with no centralized public water supply system. However, Massachusetts Geographic Information Systems (GIS) public water supply data indicates 11 public water supply wells located in Richmond. These include wells at Town Hall (which also serves the Congregational Church), the Richmond Consolidated School (the town's Kindergarten through eighth grade elementary and middle



school), to name a few. For additional information on drinking water supply wells in the Town of Richmond, refer to Section 4C-Water Resources and Table 3.4—Public Drinking Water Wells.

#### Wastewater Treatment

Currently, the only areas in Richmond served by public centralized sewer are the communities along the shoreline of Richmond Pond (see Map D—Infrastructure). Camp Russell, the summer camp along the southern shore of Richmond Pond is also connected to this sewer system. However, Camp Marion White is not. The communities and neighborhoods around Richmond Pond are some of the most dense in the entire town. Sewer service connects these communities to wastewater treatment facilities in nearby Pittsfield, and was implemented to address issues related to water quality and public health. Additionally, the proximity of these areas to Richmond Pond made the need to address issues of water quality more important. While sewer in this neighborhood helps to reduce the impact of development along Richmond Pond, the remainder of the town is serviced by on-site septic systems.

#### Natural Gas Pipelines

Three existing natural gas pipelines traverse west to east across the Town of Richmond following easements on private land. Recently, Tennessee Gas Pipeline Company and its parent company Kinder Morgan have announced plans to add an additional natural gas pipeline through Berkshire County. Currently, plans for the pipeline bypass the town of Richmond altogether. However, previously identified routes have shown the pipeline passing along the existing pipeline right of way in Richmond and over an AT&T cable right of way over Lenox Mountain. The potential impact to Richmond's natural resources and recreation areas is currently unknown. However, the previous pipeline route has been shown crossing through both the Fairfield Brook NHA and several privately owned parcels with conservation restrictions. These areas could be impacted by pipeline construction.

However, these plans are far from being finalized, and the final pipeline route could potentially pass through the town. This pipeline project is part of the company's Northeast Energy Direct project, which would carry gas from a hub in Wright, NY to Dracut, MA (Kinder Morgan 2015). The proposed pipeline would distribute natural gas derived from hydraulic fracturing (also known as fracking) fields in Pennsylvania to distribution centers along the coast. There has been strong opposition to the pipeline in Richmond. In July of 2014, the Town of Richmond held a special town meeting in which residents approved a non-binding resolution that called on the Select Board to oppose the project.

As of the time of this writing in August 2015, the Federal Energy Regulatory Commission (FERC) has issued a notice of intent to prepare an environmental impact statement related to the proposed pipeline project.

#### Long Term Development Patterns

Land use data available from the state is able to provide considerable insight into long term development patterns in Richmond. Data for Richmond is available for four years (1971, 1985, 1999 and 2005) and allows for an analysis of shifting land use patterns within the town.

However, it is important to note that there was a change in methodology in Massachusetts state land use classification between 1999 and 2005 that included the addition of automated and computerized processes previously done manually. This makes comparison of 2005 data with 1971-1999 data statistically impossible.

Land use data reveals some significant changes in Richmond since the earliest available records of 1971 (see Table 3.5). According to state GIS data, residential land use saw the largest growth between 1971 and 1999. Residential acreage increased by 23% (219.92 acres) between 1971 and 1999.

Institutional uses also increased in Richmond (by just over 45%) between 1971 and 1999. This use includes town owned buildings and facilities, as well as schools and cemeteries. On a percentage basis, this increase is large. However, the change in actual acreage was minimal, totaling only 3.42 additional acres over the 28 year period.

The uses that declined in Richmond between 1971 and 1999 include agriculture, forest and vacant land. Vacant land includes abandoned agriculture, areas like power lines, or areas of no vegetation.

Land use data available from 2005 reveals no major differences in overall uses from the 1999 data that cannot be attributed to the change in classification methodology. As of 2005, forest is still the predominant land use, at 62.89% (7655.63 acres) of all land, while residential land uses cover 7.5% (922.86) of the town. The most notable differences between the 1999 and 2005 data are derived from the methods in which the land use data was collected and classified. A comparison between the two years shows an apparent decline of roughly 800 acres of agriculture, with a similar increase in the amount of wetland in town. This is due to the fact that in 1999, land use was determined manually from interpretation of aerial photography. In 2005, data from on the ground field measurements was used to determine wetland extents, accounting

for the apparent steep increase in their acreage (see Table 3.6).

Please note that only the portion of Richmond Pond within the town of Richmond, and other water bodies such as Crystal Lake and Bourne Pond have been assessed as the open water portion of these land use estimates. As roughly 1/3 of Richmond Pond's 233 acres is located in Pittsfield, this acreage is not counted as part of the town's total. For additional information on the Richmond's water resources, please refer to Section 4C-Water Resources.

Current development trends have been focused on large high-end homes on large parcels of land along existing road frontage. The 2003 community development plan notes that subdivision has not been a major component of development, and that the town has extensive subdivision controls within its local ordinances. As noted previously, the decline of home sales, and issued building permits, has pointed to a slow down in residential development in recent years.

While, the development of residential land within the Town of Richmond may seem insignificant, it can have profound ecological and recreational consequences. Residential development can contribute to landscape and habitat fragmentation, which breaks up contiguous habitats and limits the potential size of recreation areas. Additionally, it may affect downstream hydrology or water quality as land is made more impermeable by buildings and paved areas.

#### **Zoning and Regulation**

For a current zoning map, please refer to Map 3-Zoning in Appendix A—Maps.

The majority of Richmond is zoned for residential use in its RA -C zoning district. This district has a



minimum lot size of 2 1/2 acres and frontage of 250 feet.

A smaller portion of residential zoning (District RA -A) allows for much smaller min. lots sizes (1/4 acre) and reduced frontage of 100 feet minimum. This district is located in one area along Rte. 41 / West Stockbridge Road near the Richmond/West Stockbridge town line (See Map 3 – Zoning). Richmond also has two small areas zoned for commercial use (COMM Zoning District). The first portion is located immediately adjacent to the RA-A district described above. The second portion is located farther north along Rte. 41 / West Stockbridge Road near the intersection of Rte. 41 with Firehouse Lane. The greater density of housing and neighborhoods allowed in these areas was designed to match historical settlement patterns.

Around Richmond Pond, a Shore Residence district governs land use. This district contains a 1/4 acre minimum lot size and minimum 50 feet of road frontage. Currently, this district only extends around the Richmond Shores community. The town has been exploring other possible zoning changes around Richmond Pond, including possible recreation overlay districts around the summer camp properties (Camp Marion White, and Camp Russell). Additionally, the town has been exploring extension of the shoreline residence district, or similar zoning, to other areas around the pond, such as the Whitewood and Branch Farm communities. However, these potential changes have only been discussed preliminarily.

The town also has an extensive floodplain overlay district which helps to protect flood-prone and wetland areas within the Richmond valley. This overlay district is critical towards maintaining the ecosystem services these wetland areas provide as well as their function as habitat for wildlife and plant species.

In addition to its zoning regulation, Richmond has several strong local controls which help to ensure environmental protection. Town bylaws have been amended to specifically include open space protection as a "purpose" of the bylaw. Moreover, the town has adopted the Scenic Mountains Act and Scenic Roads Act. The Scenic Mountains Act helps to regulate development on high elevations and steep slopes and includes provisions to limit clear-cutting to areas of a 1/4 acre or less without plans for replanting. The act is intended to limit soil erosion and runoff which can help to improve water quality. Additionally, the act is intended to help preserve the town's natural scenic qualities, which are in part created by the ridgelines which form the Richmond valley. Similarly, the Scenic Roads Act helps to limit tree and stone wall removal in the right-of-way along designated roads within the Town of Richmond and is an important tool in maintaining the town's scenic and rural character.

The town also has a strong local wetland bylaw which includes a 200 foot buffer zone around the town's portion of Richmond Pond, as well as expanded wetland protections that include the town's vernal pools. Under state law, vernal pools are only protected by the Wetland Protection Act (WPA) if they are certified and located within the 100' buffer around other jurisdictional wetland areas. These bylaws help to maintain the rural and scenic character of the town, reduce the ecological impacts of development, and preserve natural resources and sensitive ecologies.

#### Remaining Buildable Land

For a map of remaining buildable land, please refer to Map E-Buildable Land in Appendix A—

# **SECTION 4: ENVIRONMENTAL INVENTORY AND ANALYSIS**

## 4A GEOLOGY, SOILS AND TOPOGRAPHY

For a map of soil conditions, please refer to Map 4 -Soils and Geologic Features in Appendix A— Maps.

The town of Richmond is located within a unique regional topography. The majority of the town is located within a valley bordered to the east by Lenox Mountain and to the west by the Taconic Range. The steep hills at the east and west edges of town contain excessively drained soils (See Map 4—Soils and Geologic Features), while the valleys contain a range of both poorly drained and prime agricultural soils. Prime agricultural soils are those with physical and chemical characteristics best suited to growing agricultural crops. These soils are able to produce higher crop yields with fewer additions of fertilizer and other soil amendments. Prime agricultural soils in Richmond total 1,659 acres. Predominant soils are Amenia silt loam, Stockbridge gravely loam and Kendaia silt loam, with smaller areas of Hoosic, Farmington, Taconic, Lyman-Tunbridge and Winooski associations among others.

Additionally, the topography has created a network of wetlands and water resources at the lowest points of the central valley, with Richmond Pond located at the northern end of town. Moreover, Richmond is located at the edge of two ecoregions. The Taconic mountains at the west of town are located in the Taconic Mountain ecoregion, while the eastern portion of the town is located within the Western New England Marble Valleys ecoregion. The BioMap2 report from the state's Natural Heritage and Endangered Species Program notes that the New England Marble Valleys are "highly regarded for their native biodiversity". The calcium rich soils may also help to negate some of the harmful effects of acid rain dep-



## ENVIRONMENTAL INVENTORY AND ANALYSIS AT A GLANCE

#### **Ecoregions**

Richmond is part of the Western New England Marble Valleys Ecoregion. The calcium containing bedrock of this ecoregion creates unique environments and supports rare plant and animal populations.

#### **Priority Natural Communities**

Richmond is home to several rare priority natural communities listed as "imperiled" by the state. These include the Black Ash – Red Maple– Tamarack Calcareous Seepage Swamp, Calcareous Sloping Fen, Calcareous Seepage Marsh, and Calcareous Rocky Summit.

#### **Vernal Pools**

Richmond is home to 11 certified and 28 potential vernal pool locations.

#### **Unique Features**

Richmond has many unique features including historic buildings, scenic views, and the Richmond Boulder Train, a remnant of glacial activity.



osition within the town.

The steep slopes at the edges of the Richmond valley, as well as the extensive wetland areas towards the valley center have constrained development within Richmond. Additionally, undeveloped ridgelines have helped to provide recreation opportunities for Richmond residents and others. Hiking trails extend across the Yokun Ridge and Lenox Mountain along the eastern side of town and through the ridgeline of the Taconic range along the western side.

As mentioned previously, Richmond Pond attracted seasonal housing development beginning in the 1920's. The neighborhoods surrounding it remain the densest in town. However, the ample supply of former agricultural land in the valley has made residential development easy and has limited the amount of land available for conservation and recreation.

### **4B LANDSCAPE CHARACTER**

Richmond's town character is created by the surrounding landscape and local development patterns. As stated previously, the town is located within a valley bordered by the Taconic Range and Lenox Mountain. The average elevation of the valley areas are around 1050 feet above sea level, while peaks average 1400 feet (Richmond Town Plan, 1995). The highest points in town are Perry's Peak (2070 feet) located in the northwest corner of the town and portions of Lenox Mountain and the Yokun Seat, which straddle the border between Lenox and Richmond.

These mountain borders which frame the town also create opportunity for recreation. There are well established hiking trails, particularly around Lenox Mountain and the Yokun Seat, as well as along Perry's Peak. They also allow for beautiful views of the valley and Richmond Pond. Within the valley, two wetland areas have been designated as state protected Natural Heritage Areas.

mond, MA	GIS Public Water Supplies 20	1Л
Source_ID	Site Name	Туре
1249008-01G	WELL 1	GW
1249012-01G	CAMP RUSSELL	TNC
1249010-01G	BRANCH FARM CONDO ASSN	TNC
1249005-01G	CAMP MARION WHITE	TNC
	RICHMOND CONSOLIDATED	
1249004-02G	SCHOOL	NTNC
1249006-01G	PEIRSON PLACE	TNC
1249009-01G	SOMA CATERING	TNC
1249000-01G	RICHMOND TOWN HALL	TNC
1249012-02G	CAMP RUSSELL	TNC
1249011-01G	BARTLETTS ORCHARD LLC	TNC
	HILLTOP ORCHARD AND FUR-	
1249013-01G	NACE BROOK WINERY	TNC
GW = Commun	ity Groundwater Well, serves m	ultiple
homeowners (c	Juasi-public)	
TNC = Transient	t Non-Community Well, serve fe	ewer
	daily, such as at a camp or resta	
	ansient Non-community Well, r	• •
serves more tha	an 25 people daily for more tha	n 6
months of the y		
Note: Public w	ell data is from 2014. Some bus	iness

Moreover, the town's historic buildings and residential areas contribute towards the rural and small town feel that residents and visitors enjoy.

Additionally, much of the town is located within a Department of Conservation and Recreation designated "Scenic Landscape" (See Map 5-Unique Features), which attests to its rural and scenic beauty.

### **4C WATER RESOURCES**

For mapping related to water resources in Richmond, please refer to Map 6– Water Resources).

The Clean Water Act of 1972 requires that individual states assess the quality of their water bodies

Source: Mass GIS MassDEP List of	<sup>-</sup> Integrated Waters	
Water Bodies		Impaired Status and Cause
Name	Size (Acres)	
Sherrill's Pond (also known as		
Bourne Pond or Miller's Pond)	5.98	No
Crystal Lake (Cheever Ore Bed)	2.22	No
Fairfield Pond	2.47	No
Furnace Road Pond (Cone Ore	6.8	Νο
Richmond Pond	233.38	Yes, Eurasian Water Milfoil (Myriophyllum spicatum)
Streams		Impaired Status and Cause
Name	Length (Miles)	
Scace Brook	2.33	No
Mt Lebanon Brook	0.26	No
Inlet to Richmond Pond from		
south	4.56	No
Tracy Brook	1.05	No
Sleepy Hollow Brook	2.68	No
Fairfield Brook	2.38	No
Cone Brook	3.41	No
Outlet of Fairfield Pond	0.91	No
Lenox Mountain Brook	1.73	No
	10.70	No, Listed as a Category 2 water (Attaining some uses, other uses not assessed). Fish, other Aquatic Life and
Furnace Brook	10.76	Wildlife were assessed. Recreational uses not assessed
Unnamed (close to Dean Hill		

No

1.11

and work to restore waters to be fishable and swimmable. Water bodies that are considered impaired by pollution are listed in each state's 303(D) list. The 303(D) list for Massachusetts was last updated in 2012. Nominations for additional listings of new impaired waters are awaiting state approval.

Richmond Pond is listed as being impaired due to the presence of non-native macrophytes, specifically Eurasian Watermilfoil (Myriophyllum spicatum) (See Table 4.2—Richmond Water Resources), and is shown as the town's only impaired water body. Brittle Naidad (*Najas minor*), and Curly-leaf Pondweed (*Potamogeton crispus*) have also been noted as potentially harmful invasive species within the pond (Mass EOEEA, 2002). These invasive species can crowd out native aquatic plant species and create a nuisance for boaters and anglers. It should also be noted that Richmond Pond does not have Zebra Mussels (Dreissena polymorpha), which have negatively impacted other local water bodies. The town funds a boat ramp monitor program to help keep Zebra Mussels and other invasive species out of the pond.

#### Watersheds

Road)



Table 4.3 - Richmon	d Wetlands B	Ву Туре	
Source: Mass. GIS Wetlands			
Wetland Type	Acres	% of all Wetlands	
Bog	5.73	0.4%	
Deep Marsh	67.41	4.8%	
Open Water	197.14	14.1%	
Shallow Marsh			
Meadow or Fen	119.63	8.6%	
Shrub Swamp	299.80	21.5%	
Wooded Swamp Coniferous	98.39	7.0%	
Wooded Swamp Deciduous	466.51	33.4%	
Wooded Swamp			
Mixed Trees	142.63	10.2%	
Total	1397.24	100%	

The town of Richmond is located in two watersheds, the Housatonic and the Hudson, though the majority of the town falls within the Housatonic River Watershed. Only a small portion of the northwest corner of the town is located within the Hudson River Watershed. Both of these rivers have active watershed organizations working to protect them. The Housatonic River is part of ongoing remediation efforts to remove contamination by polychlorinated biphenyls (PCBs) from the former General Electric (GE) Company plant in Pittsfield, MA. Richmond is located at the headwaters of the Williams River, which joins with the Housatonic River in Great Barrington. As such, the majority of the PCB contamination in the river is found within sections of the Housatonic in the towns of Pittsfield, Lenox, Lee, and Great Barrington. While much of the contamination adjacent to the GE plant and in non-river areas has been removed or is part of ongoing cleanup, extensive contamination within the Housatonic River still remains. This cleanup program is still being defined, and is known as the "Rest of River".

#### Surface Water

#### Richmond Open Space and Recreation Plan Environmental Inventory and Analysis



Figure 4.1—A wetland area just east of Richmond Pond is home to a Great Blue Heron (Ardea herodias) Rookery. Photograph credit Ken Kelly.

#### Stream and Brooks

Richmond has three main waterways; Lenox Mountain Brook, Furnace Brook, and Cone Brook. These waterways merge south of Richmond in Stockbridge to form the Williams River, which connects to the Housatonic River in Great Barrington.

Furnace Brook is noted on the state's 303(D) list as being a category 2 waterway (see Table 4.2). This designation means that certain uses were assessed for this waterway, while others were not. In the case of Furnace Brook, aquatic and wildlife were assessed and recreational uses were not.

#### **Richmond Pond**

Richmond pond is the town's largest body of water and a state listed raised "Great Pond". Great Ponds are a state water body designation related to Massachusetts General Law Chapter 91 "The Massachusetts Public Waterfront Act". A Great Pond is defined as "any pond or lake that contained more than 10 acres in its natural state" (Mass DEP, 2015). Ponds which at one point in time were larger than 10 acres, but are now smaller are still considered to be Great Ponds. The public waterfront act provides public access to Great Ponds.

Moreover, Richmond residents noted that historically, a walking trail used by Native Americans ran along the circumference of the Richmond Pond shoreline. During OSAC meetings, it was noted that walking the length of this historic path was now difficult or impossible due to development along the shoreline, although large sections of the original trail still remain and are passable. The OSAC determined to make reestablishment of this historic trail an action item of this plan by working with private landowners to allow for public access. For more goals and objectives specific to Richmond Pond, please refer to Section 9—7-Year Action Plan.

Richmond pond is around 233 acres in size, with approximately 2/3 located in the Town of Richmond and 1/3 in Pittsfield. Richmond Pond flows north into the southwest branch of the Housatonic River, located just north of Richmond within the City of Pittsfield. The shoreline of Richmond Pond is listed as a NHESP priority habitat for rare species as well as BioMap2 core habitat (see Map F -Fisheries, Vegetation, and Wildlife). Richmond Pond is known to contain the Bridle Shiner (Notropis bifrenatus) (See Figure 4.2). This small fish is listed as a species of special concern in Massachusetts. The Bridle Shiner is known to live in clear water bodies and is a visual predator, relying on sight to hunt for food like insects and other invertebrates. This fish also requires both open water and aquatic vegetation to provide its foraging and breeding habitat. Thus, changes in water quality, particularly turbidity and invasive aquatic vegetation, can have profound impacts on this species (NHESP Bridle Shiner Fact Sheet 2008).

The Pond's location within two municipalities



Figure 4.2—The Bridle Shiner (Notropis bifrenatus) is a state listed special concern species found in Richmond Pond.

makes coordination on management issues more challenging. However, a local non-profit group, The Richmond Pond Association (RPA), helps to alleviate some of these difficulties by acting as the primary advocate for issues regarding the pond and the communities that surround it.

The RPA was formed in 2000 and is comprised of members from the five communities around the pond, including Whitewood, Branch Farm, South Pond Farm (located in Pittsfield), Richmond Shores, and the independent cottages located between these areas. Members also include representatives from the Town of Richmond and City of Pittsfield. Additionally, there are representatives from the three summer camps that surround the pond, Camp Russell (owned by the Boys' and Girls Club of the Berkshires), Lakeside Christian Camp (located in Pittsfield) and Camp Marion White, a summer camp currently owned by the Girl Scouts of Central and Western Massachusetts. Camp Marion White has not been actively used by the Girl Scouts since 2010, and in late 2014, the Girl



Scouts voted to divest the property. This decision was one of the primary reasons for the Town of Richmond's decision to pursue creation of this Open Space and Recreation Plan (See Section 5B for a more in-depth discussion of Camp Marion White).

A dam was constructed at the pond's northern outlet in 1865. This dam is currently owned by Lakeside Christian Camp on its property in Pittsfield. Construction of the dam increased Richmond Pond's size by roughly 90 acres and created much of the southern and western shoreline seen today. Without the dam, the shoreline near the Richmond Shores community, as well as at the Richmond Town Beach and state boat launch would disappear, eliminating water access from those areas.

The dam is used yearly to control water levels within the pond. In the Fall, the water level is decreased by about two feet as part of an annual drawdown. The drawdown is thought to help control the spread of invasive aquatic plant species such as Eurasian Milfoil (Myriophyllum spi*catum*) near the pond's shoreline by exposing these species to freezing conditions during the winter. Moreover, the yearly drawdown is thought to help reduce flooding along the west branch of the Housatonic River in Pittsfield during the spring (Baystate Environmental Consultants, 1990). The additional water capacity created by the drawdown allows the pond to store spring runoff that would otherwise contribute to flooding in West Pittsfield. Permission for the drawdown of Richmond Pond is granted under an order of conditions approved by the Conservation Commissions of both Richmond and Pittsfield.

The RPA works to help address management issues that come up around the pond in coordination with the Town of Richmond and the City of Pittsfield. Additionally, it is able to help address issues that the municipalities are fiscally unable to, such as dam maintenance. As the dam is located on property owned by a religious organization, Richmond and Pittsfield cannot contribute money directly to Lakeside Christian Camp to aid in management of the dam. The RPA earmarks some of its yearly funds, collected as part of membership dues, to assist Lakeside Christian Camp with dam maintenance.

The pond association has also taken the lead in examining and studying Richmond Pond to promote better management. Recently the RPA funded a bathymetry study for the pond and is working to update a management plan for the water body. Moreover, it works as an advocate for the communities surrounding the pond and has recently worked to address issues related to light and noise pollution around the pond.

The Town of Richmond funds monitors who work to check boats at the public boat ramp for invasive species and direct boat owners to a washing station. The town has also funded a 5-year aquatic management plan for the pond, with a focus on managing and eradicating the invasive Eurasian Milfoil and Curly-Leaf Pondweed (*Potamogeton crispus*) found within the pond. Implementation of the plan began in 2013 with application of aquatic herbicide to 74 acres of Eurasian Milfoil around the pond.

#### **Aquifer Recharge Areas**

Public drinking water supply data shows 11 public water supply wells in the Town of Richmond, including locations at the Richmond Consolidated School, Town Hall, and Camp Russell among others. These wells fall into three categories including Community Groundwater wells (GW), Transient Non-Community water systems (TNC), and Non-Transient Non-Community (NTNC) water systems. TNC systems serve fewer than 25 people daily and are generally located at sites such as restaurants and campgrounds. The town's only NTNC system is located at the Richmond Consolidated School (see Table 5.1—Public Drinking Water Wells in Richmond, MA). NTNC systems serve 25 or more people daily for 6 months or more out of the year. The well serving Richmond Town Hall is also classified as a TNC water system.

State GIS data indicate interim wellhead protection areas (IWPA) around 10 of the 11 public water supply wells located in town. The largest protection area is located around the well that serves the Richmond Consolidated School (See Map 6— Water Resources).

In the past, there have been challenges with salt (Sodium Chloride or NaCl) contamination in private wells found along Route 41 (Gloria Morse Personal Communication, 2015).

#### **Flood Hazard Areas**

Flooding occurs when the volume of water within a given stream or river exceeds the channel's capacity. The flood plain is considered the land area adjacent to a water body that is subject to recurring inundation. Flooding often occurs in the spring, due to snow melt and during large storm events. Floods often occur at predictable intervals.

The Federal Emergency Management Agency (FEMA) has identified many floodplain areas that extend throughout the central valley of Richmond. A large area of the 100-year floodplain (and wetland area) is located immediately south of Richmond Pond. The majority of floodplain areas are located between Route 41 and Swamp Road (the valley center), with some located north and south of Route 41, just west of Sherril's and Furnace Road Ponds (See Map 4—Water Resources).

An analysis of the Flood Insurance Rate Maps (FIRM) indicates that there is a total of 859.5 acres of 100-year floodplain within the town. This amounts to 7.1% of the total town. Based on additional analysis, 10.1 acres (1.2%) of the floodplain are developed. The town currently has a floodplain bylaw and overlay district as mentioned in Section 3– Community Setting. Currently, there are 19 residential buildings located within the floodplain.

#### Wetlands

For a map of wetlands, please refer to Map G-Wetlands in Appendix A—Maps.

The Richmond valley has an abundant supply of wetlands, mostly in the town's . In total, wetland areas cover 1,397 acres of Richmond, or around 10% of all land within the town (including areas of open water) (see Table 4.3—Richmond Wetlands by Type). Additionally, three of the four rare priority natural communities found in Richmond are wetlands (See Section 4D for further discussion).

Wetlands perform important functions for both humans and wildlife. Wetlands are the most productive ecosystems on the planet when measured by the amount of biomass or living biological tissue they help to produce. Wetlands serve as habitat for a wide variety of plant and animal species and often function as critical nursery and breeding areas. Wetlands also provide functions for humans. The benefits to humans provided by wetlands and other natural environments are sometimes referred to as "ecosystem services." Valuable ecosystem services provided by wetlands include water purification, flood storage and control, and shoreline stabilization. Water speed and flow is greatly reduced in a wetland compared to the open water of a stream or river. This causes suspended sediments to fall out of the water column, thus enhancing downstream water quality. Wetlands also help to remove harmful pollutants as well as nutrient pollution from water resources. During flooding, wetlands act as a "sponge" that helps to absorb excess flood water. Wetlands also help to reduce erosion by acting as a buffer that helps to protect the shorelines of rivers, lakes and other bodies of water.



Eight types of wetland exist in Richmond. Data included in Table 4.3 of this section are derived from the interpretation of aerial photography which is then field checked by the Massachusetts Department of Environmental Protection (DEP). These data come from the most recent wetlands assessment which was performed in 2009.

The greatest wetland acreage is within wooded deciduous swamps, which total 466.51 acres within the town and comprise 33.4% of the town's total wetland acreage. The least common wetland type in Richmond are bogs, which cover just 5.73 acres, or .4% of all wetlands within the town.

Bogs are a type of wetland characterized by acidic waters, peat deposits and sphagnum moss. Due to the extreme acidic nature of bog environments, bogs are often home to many unique plant species such as pitcher plants (Sarracenia purpurea) which obtain nutrients from insects that become trapped inside them.

### **4D VEGETATION**

As stated previously, Richmond lies on the border between two ecoregions, the Taconic and the Western New England Marble Valleys. The Marble Valleys especially support a range of biodiversity not found in other areas of the state. This is primarily due to the calcium-rich bedrock which creates alkaline environments that enable a rich variety of plant life. Some of these alkaline environments include the four priority natural communities which are found within the town.

#### **Forests**

According to the 2005 land use inventory for Richmond, forests cover 7655 acres, or 62.89%, of all land within the town. According to the Massachusetts Natural Heritage and Endangered Species Program (NHESP), forests in Richmond are primarily the Northern Hardwoods type which consists of Sugar Maple (Acer saccharum), Beech (Fagus grandifolia), and Yellow Birch (Betula alleghaniensis), in mixed proportions, along with some Hemlock (Tsuga Canadensis) and White Pine (Pinus strobus). Additionally, as Richmond is on the border of two ecoregions, some of the transitional hardwood species may be encountered, which includes species such as Red Oak (Quercus rubra) and Black Birch (Betula lenta). Historically, American Chestnut (Castanea dentata) was likely a major component of Richmond's forests before it was eliminated by Chestnut blight. Chestnut timbers have been found as beams in some of the older homes in Richmond.

# **Typical Plant Species Found in Richmond (as noted in the 1995 Richmond Town Plan)** Typical Upland Plant Species

#### Woody:

white pine, shad bush, black locust, red maple, sugar maple, striped maple, flowering dogwood, black birch, wintergreen, chestnut, white oak, black oak, red oak, red pine, black cherry, spruce, hemlock, balsam fir, basswood, pink azalea, mountain laurel, beech, blueberries, white ash, blackberried elder

#### Herbaceous:

ground cedar, shining clubmoss, common woodfern, wild ginger, goldthread, wild geranium, twisted stalk, lichens, tree clubmoss, Christmas fern, jack-in-the-pulpit, fratility, wild oats, violets, mosses

#### Typical Forested Wetland Plants

larch, sycamore, red maple, ladyfern, marsh marigold, white cedar, silver maple, swamp white oak, skunk cabbage

#### Typical Wetland Plants:

Algae, cattails, burr reed, rice cutgrass, waterlillies, watermilfoils, grasses, reeds, cardinal flower, horsetails, sedges, pondweeds, bulrushes, coontail, blue flag, marsh fern, skunk cabbage, purple loosestrife (invasive)

Source: Mass DFG - I	own Species Viewer, 2015			
Taxonomic Group	Scientific Name	Common Name	Status	Last Sighting
Amphibian	Ambystoma jeffersonianum	Jefferson Salamander	SC	2009
Bird	Cistothorus platensis	Sedge Wren	E	1988
Bird	Gallinula chloropus	Common Moorhen	SC	1991
Bird	Botaurus lentiginosus	American Bittern	E	2008
Butterfly/Moth	Euphyes dion	Dion Skipper	Т	2008
Fish	Notropis bifrenatus	Bridle Shiner	SC	2012
Reptile	Glyptemys insculpta	Wood Turtle	SC	2010
Vascular Plant	Poa saltuensis ssp. languida	Drooping Speargrass	E	1901
Vascular Plant	Carex hitchcockiana	Hitchcock's Sedge	SC	1988
Vascular Plant	Carex tetanica	Fen Sedge	SC	1988
		Intermediate Spike-		
Vascular Plant	Eleocharis intermedia	sedge	Т	1988
Vascular Plant	Eragrostis frankii	Frank's Lovegrass	SC	1990
Vascular Plant	Carex alopecoidea	Foxtail Sedge	т	1997
Vascular Plant	Carex chordorrhiza	Creeping Sedge	E	1999
Vascular Plant	Milium effusum	Woodland Millet	т	1999
Vascular Plant	Conioselinum chinense	Hemlock Parsley	SC	2001
Vascular Plant	Potamogeton hillii	Hill's Pondweed	SC	2002
Vascular Plant	Sisyrinchium mucronatum	Slender Blue-eyed Grass	E	2005
Vascular Plant	Eriophorum gracile	Slender Cottongrass	Т	2010
Vascular Plant	Galium labradoricum	Labrador Bedstraw	Т	2010
Vascular Plant	Geum fragarioides	Barren Strawberry	SC	2010
Vascular Plant	Thuja occidentalis	Arborvitae	E	2010
Vascular Plant	Rhododendron maximum	Great Laurel	т	2013

#### Other Plants:

Ground juniper, aspen, chokeberries, smooth sumac, bittersweet, blueberries, crabgrass, knotweed, clovers, morning glory, goldenrod, thistle, dandelion, greenbriers, alder, choke cherry, poison ivy, grapes, meadowsweet, rye grasses, panic grass, wild strawberries, wild carrot, milkweed, asters, ragweed

#### Public shade trees are defined as trees located within the public right of way, and are regulated by Massachusetts General Law Chapter 87. Chapter 87 outlines the authorities of the town's Tree Warden, establishes procedures for cutting or removing public shade trees, and sets penalties for violations. The Tree Warden is responsible for the cutting and maintenance of trees along townowned roads, and in general, cannot do so with-

#### **Public Shade Trees**





Figure 4.3—The Jefferson Salamander (Ambystoma jeffersonianum) is an amphibian species of special concern found in some of Richmond's priority natural communities.

out first holding a public hearing, or gaining approval from the Town's Select Board, or in the case of designated Scenic Roads, the town's Planning Board. Trees located along state highways are the jurisdiction of MassDOT, and do not require a public hearing to be cut.

Public shade trees are important in Richmond, particularly in defining the town's rural and scenic character. Members of the Richmond OSAC identified an area of overhanging trees along Swamp Road as one of Richmond's unique features (see Section 4F). Additionally, the town has many beautiful tree lined roadways, such as along East Road, West Road, and other town roadways.

#### **Priority Natural Communities**

Four priority natural communities exist in the Town of Richmond. 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 can be classified and described by their dominant physical and biological features" (NHESP Natural Communities, 2015). Globally rare natural communities, or those with limited local distribution, are considered priority natural communities. Of the 4 priority natural communities found in Richmond, all are classified by NHESP as "S2" meaning they are imperiled communities with typically 6-20 sites or few remaining acres in the state. All of Richmond's priority natural communities are found in two areas in town. These areas are described by the BioMap2 project as "Core Habitat". For more information on BioMap2 and wildlife habitat, refer to Section 4E—Fisheries and Wildlife.

#### Black Ash– Red Maple– Tamarack Calcareous Seepage Swamp

This priority natural community is found in only two locations in Richmond (as are the other 3 priority natural community types). The first is within a core habitat area just west of Swamp Road around Crystal Lake and extending to the southwest between Lenox and Dublin Roads (Core Habitat Area 1912). The second is within a core habitat area located just east of Swamp Road between the intersections of Swamp Road with March Hare and Sleepy Hollow Road. This area extends east to encompass some of the west facing slope of Lenox Mountain (Core Habitat Area 1937). Much of this second area is contained within Fairfield Brook Natural Heritage Area, a protected stateowned open space.

Black Ash– Red Maple– Tamarack Calcareous Seepage Swamps are found primarily in the western portions of Massachusetts in areas with extensive limestone and other calcareous, or calcium containing, bedrock. The calcium raises the pH of surrounding groundwater and helps to support calcium loving (calciphilic) species. Dominant tree species include Black Ash (Fraxinus nigra), Tamarack (Larix laricina) and Red Maple (Acer rubrum). Other common species often include Yellow Birch (Betula allegheniensis), White Pine (Pinus stobus) and Hemlock (Tsuga Canadensis). Rare species that are known to occur in this type of natural community include Schweinitz's sedge (Carex schweinitzii) and Jefferson Salamander (Ambystoma jeffersonianum) (see Figure 4.3) among others (NHESP 2010).

Soils are usually high in organic material, and the surface usually has a hummocky topography. As the term seepage indicates, these areas are often fed by groundwater as opposed to being part of openly flowing streams or rivers.

#### Calcareous Seepage Marsh

Calcareous seepage marshes also occur on calcareous bedrock and are fed primarily by groundwater. These marsh areas are dominated by shrub species such as Swamp Birch (Betula pumila), Hoary Willow (Salix candida), and Meadowsweet (Spiraea latifolia). Swamp Birch and Hoary Willow are considered calciphilic species. Other common wetland species, such as sedges (Carex sp.) and cat-tail (Typha sp.) are found within the herbacecous layer of these marsh areas (NHESP Calcareous Seepage Marsh Fact Sheet, 1999). This marsh area is also found within Fairfield Brook Natural Heritage Area, located east and west of Swamp Road.

#### **Calcareous Sloping Fen**

These wetland environments occur on slightly sloping topography where there is calcareous groundwater seepage. These areas are open and dominated by sedge species. Calcareous sloping fens are considered the most nutrient and species rich of the fen communities found in Massachusetts and are often "hot-spots" for rare species (NHESP Calcareous Sloping Fen Fact Sheet 1999).

Rare plant species can include Carex sterilis, or Dioecious Sedge and Carex Tetanic, or Fen Sedge, among others. Rare animal species that are often associated with calcareous sloping fens include the Bog Turtle (Clemmys Muhlenbergii), amphipod species and the rare dragonfly species, the Ebony Boghaunter (Williamsonia Fletcheri). This fen area is located within the core habitat area found near Crystal Lake in the Town of Richmond.

### Calcareous Rocky Summit/Rock Outcrop Community

This priority natural community is found within the core habitat area found east of Swamp Road and along the west facing slope of Lenox Mountain (Core Habitat area 1937). This natural community is characterized by rocky calcareous outcrops and is often very dry due to topography and the shallow depth to bedrock (NHESP, 2000).

### **4E FISHERIES AND WILDLIFE**

For mapped habitat areas, vernal pools, and Bio-Map2 components, please refer to Map F-Fisheries, Vegetation, and Wildlife in Appendix A— Maps. For a list and map of parcels containing BioMap2 core habitat or Priority Conservation Areas, please refer to Appendix B.

Richmond's forests, brooks, wetlands, and other natural environments provide habitat for both common and rare wildlife species, including some endangered, threatened and special concern species. The Massachusetts Department of Fish and Game Natural Heritage program lists 24 endangered, threatened, or special concern species sighted within Richmond since 1901. Of these, 10 have been sighted since 2005 (See Table 4.4-Threatened, Endangered and Special Concern Species Sighted in Richmond, MA). In addition to the species sighted in this list, other rare species have been noted in Richmond, including Fringed Gentian (Gentiana crinita) along Sleepy Hollow Road. Additionally, Pitcher plants (Sarracenia purpurea) used to be found along East Road (Gloria Morse Personal Communication 2015).

BioMap2 is a statewide mapping project that com-



bines 30 years of rare species and natural community data from the NHESP with wildlife species and habitat assessments that were conducted as part of the Division of Fisheries and Wildlife's 2005 State Wildlife Action Plan (SWAP). Additionally, BioMap2 data integrates the Nature Conservancy's assessment of large, connected and intact ecosystems across the state. (NHESP, 2012).

BioMap2 has two primary components, Core Habitat and Critical Natural Landscape. Core Habitat includes "areas that are critical for the long term persistence of rare species and other species of conservation concern" (NHESP, 2012). According to BioMap2, Core Habitat is found on 1,830 acres in Richmond or around 15% of the land in town. As described in Section 4D—Vegetation, two of these core habitat areas contain the Town of Richmond's four priority natural communities.

Critical Natural Landscape identifies large contiguous landscape blocks that have been minimally impacted by development. The BioMap2 report for the Town of Richmond notes that "if protected, these areas will provide habitat for wideranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience to natural and anthropogenic disturbances in a rapidly changing world" (NHESP, 2012). Critical natural landscape comprises 3,759 acres or 30.8% of all land within the town.

Another layer added to the BioMap2 components are priority conservation areas (PCA) that have been identified in each town within the Housatonic River watershed by NHESP. In Richmond, there are four PCAs that have been identified as well as a portion of a regional PCA. These areas were selected as PCAs if they contained priority natural communities or large areas of intact habitat. Regional PCAs were chosen as areas that cross town borders and have a need for greater ecological

Table 4.5 - Unique Features of Richmond, MA	
Source: Richmond Open Space Committee 2015	
Please Refer to Map 5—Unique Features	
#	Name
1	Lenox Mountain overlooking Richmond Pond
2	Richmond Furnace
3	Perry's Peak
4	Heron Rookery on Swamp Road
5	Steven's Glen
6	Overhanging Trees on Swamp Road, also known as "The Cathedral"
7	Malnati Farm
8	Shark Rock
9	Quarries
10	Northeast Richmond School Historic Building
11	Bartlett's Orchard
12	Hilltop Orchard
13	Berkshire Beagle Club
14	Richmond Pond
15	Olivia's Overlook
16	Richmond Boulder Train
17	Goodwood Historic Building
18	Historic Icehouse Foundations

connectivity. These areas can be seen in Map F: Fisheries, Vegetation, and Wildlife.

PCA 1 and Regional PCA 6 are located along the Yokun Ridge and also extends to surround the two priority natural communities located near Crystal Lake.

PCA 2 is located along Fairfield Brook in eastcentral Richmond, and includes much of the land contained within the Fairfield Brook NHA.

PCA 3 is located just south of Richmond Pond and includes the large block of wetlands found there. Much of this area is permanently protected by the Nordeen Marsh NHA.

PCA 4 is located along Cone Brook between Route 41 and the CSX rail line. PCA 4 is comprised primarily of a large wetland block.

#### **Vernal Pools**

Vernal pools are a unique type of wetland and wildlife habitat, and are sometimes known as autumnal or ephemeral pools or temporary woodland ponds. Vernal pools are shallow depressions that are seasonally flooded with water. They can vary greatly in size. During summer months, vernal pools are usually dry. However, spring snow melt and rain transform these areas into rich wildlife habitat. Vernal pools are protected by the Wetlands Protection Act. State law requires that vernal pools must be certified prior to gaining protected status and must be located within the resource (buffer) area of a documented wetland, meaning that isolated vernal pools, regardless of certification, have few protections. However, the Town of Richmond has a local wetland by-law which exceeds state requirements, and extends wetland protections to any vernal pool found within the town, not just those located in the resource area of existing wetlands.

Vernal pools are certified by the state Natural Heritage and Endangered Species Program (NHESP). Certification involves the documentation of the potential vernal pool's physical characteristics, including the lack of a permanently flowing outlet for water and evidence that the pool dries out during the year. Additionally, certification involves the documentation of wildlife species that commonly use vernal pools. While the NHESP uses aerial photography to help identify vernal pools, they also rely extensively on reporting of potential vernal pools from citizens and landowners.

Due to the fact that vernal pools dry partially or completely during the summer months, fish are prevented from permanently establishing themselves. This makes vernal pools important breeding habitat for amphibian and invertebrate species that would otherwise face extensive predation from fish species. Species that rely on vernal pools for breeding habitat include amphibians (frogs, salamanders and toads), reptiles (turtles and snakes), as well as some invertebrate species like dragonflies or fairy shrimp (NHESP, 2015).

Within Richmond, there are 11 certified vernal pools, and another 28 areas that have been identified as potential vernal pools, but have not been certified as such (See Map F, Vegetation, Fisheries and Wildlife). A list of parcels containing potential vernal pool locations is included in Appendix B. and locations can be found on Map J. This map can assist the town in locating these potential vernal pools for future certification.

#### Wildlife Corridors and Connectivity

The 2016 Berkshire County Regional Transportation Plan (RTP), prepared by BRPC, outlines and identifies priority wildlife corridors and connectivity areas in Berkshire County. Information used to identify wildlife corridors and priority crossing areas is derived from the University of Massachusetts Amherst and Nature Conservancy "critical linkages" project. The goal of the critical linkages project was to comprehensively assess where connections should be protected or restored to support the Commonwealth's wildlife and biodiversity.




Figure 4.4—Shark Rock is a Richmond Landmark found along Lenox Road. According to the Berkshire Eagle, prior to the release of the movie "Jaws", Shark Rock was painted to resemble a snake. Photograph credit Virginia Larkin.

Based on information from the RTP, there are no priority wildlife crossing areas identified within the Town of Richmond. However, a section of Route 20, immediately north of the town within the City of Pittsfield, is considered a priority road segment to enhance wildlife connectivity.

# 4F SCENIC RESOURCES AND UNIQUE ENVIRONMENTS

For more information on this section, please refer to Map 5– Unique Features and Table 4.5— Unique Features of Richmond, Ma.

#### **Historic Resources**

Massachusetts Cultural Resource Information System (MACRIS) Database

The Massachusetts Cultural Information Resource System (MACRIS) is a database maintained by the Massachusetts Historical Commission (MHC) that lists historic structures, areas, objects, and burial grounds recognized at the local, state, and national level. Within Richmond, the MACRIS database lists 114 buildings and sites with historic significance. Of these, six are listed on the National Register of Historic Places and include the Kenmore estate and the Richmond Furnace Historical and Archaeological district (See Table 4.6-Historic Resources in Richmond, MA).

#### **Richmond Historical Commission**

The Richmond Historical Commission works to protect historic assets in town and has actively worked to add properties to the national historic register. The commission has also been working to update the town's inventory of historic buildings. For additional information about the town's historic resources, including buildings, cemeteries and monuments, please

#### **Other Unique Features**

Beyond its historic and cultural resources, the town has many other unique features. In 1981, the Commonwealth conducted an inventory of scenic landscapes within the state. These inventories were intended to help guide acquisition and conservation efforts. The extents of the scenic landscape identified in Richmond can be seen on Map 5: Unique Features, and include most of the eastern portion of the town from West Stockbridge to Pittsfield.



*Figure 4.5—Map of the Richmond boulder train from the Journal of Glaciology, Vol. 6, No. 45, 1966. The discovery and identification of the Richmond boulder train in the mid-1800's led to the theory of glaciation.* 

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Other unique features that were identified by the Richmond OSAC are also included on Map 5 and in Table 4.5. This list contains some of the town's more prominent historic buildings, scenic views, and agricultural landscapes. A short description of some of these areas is included below.

#### Swamp Road Heron Rookery

A Great Blue Heron Rookery is located in a wetland and small pond along Swamp Road that is part of the Camp Marion White summer camp property. The rookery is a nesting area for Great Blue Herons, and Osprey have been sighted there as well. The birds nest in the many dead trees throughout the wetland and can be seen from Swamp Road (See Figure 4.1).

# Overhanging Trees on Swamp Road, also known as "The Cathedral"

Along Swamp Road, between the intersections of Lenox Road and Summit Road, there is a section of the road where the tree canopy overhangs and envelopes the road. This area is sometimes locally referred to as "The Cathedral" and is a local landmark.

#### Shark Rock

Shark Rock is a landmark found on Lenox Road, and as its name implies, consists of a large roadside boulder that has been painted to resemble a shark (see Figure 4.4). If travelling from Richmond to Lenox, Shark Rock can be seen just before Olivia's Overlook. According to the Berkshire Eagle, Shark Rock is touched up with a fresh coat of paint every few years by a local artist. Moreover, the rock has been painted for the last 60 to 70 years. Prior to the release of the movie "Jaws", the rock was painted to look like a snake (Dobrowolski, 2009). It should be noted that Shark Rock is a glacial erratic boulder that is part of the Richmond Boulder Train (Gloria Morse Personal Communication 2015) (see additional discussion of the Richmond Boulder Train later in this section).

#### Berkshire Beagle Club

The Berkshire Beagle Club is located on Sleepy Hollow Road. The club contains a clubhouse and two fenced running grounds, each of approximately 30 acres. The club is used for Beagle training, field trials, and other competitions.

#### **Richmond Boulder Train**

The Richmond Boulder Train is a unique geologic feature that was identified in the mid-1800's by Dr. Stephen Reed, a local physician, schoolmaster, and farmer. Reed identified a line of boulders stretching through the Richmond landscape with geology that did not match the underlying bedrock. Reed noted that the rock found within the boulders closely resembled that found near "The Knob", a mountain in nearby New York State. Reed understood that the movement of these large boulders could only have occurred by some great force. Other scientists noted that similar boulder formations occurred near large glaciers in the Alps, and theorized that similar glacier action had created the Richmond boulder train. Eventually, Reed's work led to the development of the theory of continental glaciation, whereby much of New England and North America was covered by glaciers during the last ice age around 20,000 years ago (Holmes 1966). This glacial activity formed much of the landscape we see today, and Dr. Stephen Reed and the Richmond countryside were instrumental toward our understanding of this process. (See Figure 4.5 for a map of the Richmond boulder train).

### **4G ENVIRONMENTAL CHALLENGES**

The Town of Richmond faces several environmental challenges that can affect open space and recreation within the town. These challenges are listed in this section along with potential recommendations to address theses issues.

#### Water Quality and Management of Richmond Pond

A variety of factors indicate that there is a challenge to manage Richmond Pond both ecologically and recreationally. These include:

- Richmond Pond's status as an impaired waterbody named in the EPA's 303(D) list due to the presence of Eurasian Milfoil.
- 2. The Pond's shared location on the boundary of two municipalities.
- The pond and its associated shoreline's ecological value as habitat for the Bridle Shiner and as mapped NHESP and BioMap2 priority and core habitat.
- 4. The pond and dam's value as a piece of both man-made and "green infrastructure" which helps to control downstream flooding in Pitts-field and manage invasive species.
- The variety of communities (year-round residents, seasonal residents and summer camps) that surround the pond and value it both aesthetically and recreationally.

The Town of Richmond has been actively working to help manage the pond along with the Richmond Pond Association, which acts as the primary advocate for issues regarding the pond and the communities that surround it. Both organizations have taken proactive measures to study Richmond Pond and its needs and address issues including invasive species among others. However, given the shared jurisdiction of the pond, its management needs, and its importance to the town, the town should work with both the City of Pittsfield and the Commonwealth of Massachusetts to secure funding, technical assistance or other aid to help manage the pond.

#### **Residential Development**

Residential development has historically exceeded industrial and commercial development in Richmond; however, as indicated in the Richmond Long Range Planning Study, development has slowed in recent years. Residential development is regulated through several strong mechanisms in town including the Berkshire Scenic Mountain Act, zoning, the Wetlands Protection Act, and subdivision controls. However, residential development can still have an impact on open space, natural areas and sensitive ecological areas. Residential development can contribute to habitat and landscape fragmentation as well as be a source of sediment run-off and other non-point source pollution. Most development in Richmond is in the form of single family residential homes, and development through subdivision creation has been limited over the years. However, the town might explore the adoption of an Open Space Residential Development (OSRD) by-law which could help to preserve additional open space in future development. OSRD by-laws, also known as cluster development by-laws, provide incentives to developers to preserve existing open space, particularly on development of larger parcels. OSRD by-laws can have many benefits including preserving agricultural lands and rural character, as well as providing for a diversified housing stock.

#### **Unpaved Roads**

Unpaved or dirt roads are a major source of nonpoint source pollution such as sediment, or soil particles that are suspended in water. Sediment from unpaved roads is a major contributor to water quality problems in Massachusetts. (BRPC 1997). Non-point source pollution is distinguished from point source pollution, which refers to pollution that has a particular entry site such as a factory's smokestack or effluent pipe. With the decline of point source pollution problems due to the Clean Water Act of 1972, nonpoint source pollution has become a growing concern. Nonpoint source (NPS) pollution, unlike pollution from sewage treatment plants and industrial discharge pipes, comes from many diffuse sources and is difficult to address due to its dispersed nature.

Sediment can cause water quality issues for both



humans and wildlife. Sediment can affect the aesthetic quality of recreation areas, as well as accumulate in drainage structures, causing them to fail. Moreover, sediment pollution and the related process of erosion can destroy critical infrastructure such as roads and culverts. Additionally, sedimentation can cause dams and reservoirs to fill in at an accelerated rate. In aquatic habitats, sediment can cause harm to fish gills and cause spawning areas to fill in. Small organisms that live in stream and lake beds may be suffocated as sediment accumulates over them. This can lead to a breakdown in the aquatic food chain (BRPC 2004).

Proper maintenance of unpaved roads can help to address issues of NPS pollution by sediment. Many of the possible maintenance actions include those that are already performed by the town as part of routine road maintenance to prevent road failure or to address issues such as dust. In general, communities wishing to address sediment pollution should work to fix existing drainage and erosion problems on their unpaved roads, such as managing ditches to ensure they have adequate gravel or vegetative cover or installing check dams to reduce water velocity. Road grading and shaping, which are generally performed annually by towns, can also help to maintain the road crown which can reduce erosion and therefore sediment pollution. While these routine maintenance activities can help to address sediment pollution, implementation of BMP's specific to sediment reduction can provide extra water quality protections particularly in ecologically sensitive areas or where sediment issues could degrade recreational water resources.

BRPC has been involved with several studies of unpaved roads and water quality. This led to the creation of a system of Best Management Practices (BMPs) for unpaved roads in 2001, and community level assessments of possible improvements to address sediment pollution from unpaved roads in 2004, primarily in the municipalities located within the Farmington River Watershed.

#### **Cone Road Landfill Site**

The Town of Richmond's former landfill is located along Cone Hill Road. The landfill has been closed for many years and was capped in the 1980's. The landfill is unlined. The town has been exploring options to reduce the environmental impact of this site for sometime, through partnership with state agencies.



Table 4.6	6 - Historic Resources in Richmond, MA				
Source: N	ЛНС MACRIS Database, 2015				
MACRIS Inv. No.	Property Name	Street	Year		National Register of Historic Places
RIC.A	Richmond Furnace Historical and Archaeological District			Y	Y
RIC.B	Richmond Iron Works Worker Housing				
RIC.36	Terrill - Hallock House	Canaan Rd	c 1775		
RIC.56	Center Schoolhouse, Old	Canaan Rd	1828		
RIC.802	Northeast Cemetery	Cemetary Rd	1771		
RIC.62	Richmond Town Hall, Old	Church Ln	1842		
RIC.803	Cone Hill Cemetery	Cone Hill Rd	1779	Y	
RIC.81		424 Cone Hill Rd	1984	Y	
RIC.82		426 Cone Hill Rd	1988	Y	
RIC.83		532 Cone Hill Rd	1971	Y	
RIC.31	North School	Dublin Rd	c 1845		
RIC.35	Shaker Farm	Dublin Rd	c 1795	Y	Y
RIC.50		Dublin Rd	c 1815		
RIC.51		Dublin Rd			
RIC.47	Elmwood	East Rd			
RIC.48		East Rd	c 1840		
RIC.49	Fairfield House	East Rd			
RIC.59	Stephens - Buchanan House	East Rd	c 1800		
RIC.17	Richmond Iron Works Ironmaster's House	20 Furnace Ln	c 1832		
RIC.84	Richmond Iron Works Worker Housing	30 Furnace Ln	c 1873		
RIC.85	Richmond Iron Works Worker Housing	42 Furnace Ln	c 1873		
RIC.86	Richmond Iron Works Office	65 Furnace Ln	1862		
RIC.87		87 Furnace Ln	1970		
RIC.905	Mill Stone #1	87 Furnace Ln	c 1777		
RIC.906	Mill Stone #2	87 Furnace Ln	c 1777		
RIC.91		Furnace Rd	c 1923		
RIC.907	Furnace Road Stone Wall	Furnace Rd	r 1780		
RIC.88	Richmond Iron Works Worker Housing	199 Furnace Rd	c 1873		
RIC.89		293 Furnace Rd	1973		
RIC.90		421 Furnace Rd	1971		
RIC.13		Lenox Rd	c 1830		
RIC.14	Blue Heaven Farm	Lenox Rd	c 1794		
RIC.44		Lenox Rd	c 1830		
RIC.12	Cook, Dea. House	March Hare Rd	c 1780		
RIC.1	October Hill	Pittsfield Rd			
RIC.2	Kimball House	Pittsfield Rd	c 1858		
RIC.20		Route 41			
RIC.21		Route 41	r 1840		
RIC.22		Route 41	c 1850		
RIC.23		Route 41	c 1805		
RIC.24	Mount Ephraim	Route 41	1809		
RIC.25	Fields, Old	Route 41	1812		
RIC.27	Peirson House	Route 41	r 1787		
RIC.28	Crittenden, L. House	Route 41			

Table 4.6	- Historic Resources in Richmond, MA—Co	ontinued			
Source: N	/HC MACRIS Database, 2015				
MACRIS Inv. No.	Property Name	Street	Year		National Register of Historic Places
RIC.28	Crittenden, L. House	Route 41			
RIC.29	Green Meads Farm	Route 41			
RIC.30	Chapin House	Route 41	1786		
RIC.32	Parmele, Silas House	Route 41	c 1763		
RIC.33		Route 41			
RIC.34	Hall - Clark House	Route 41	c 1830		
RIC.37	Bishop, Nathaniel House	Route 41	c 1775		
RIC.38		Route 41	c 1830		
RIC.42		Route 41	r 1840		
RIC.54		Route 41	1771		
RIC.801	North Cemetery	Route 41	1796		
RIC.9		Sleepy Hollow Rd	r 1850		
RIC.10	Nichols - Hunt House	Sleepy Hollow Rd	r 1840		
RIC.11	Ratcliff House	Sleepy Hollow Rd	c 1830		
RIC.57	Depot School	State Rd	c 1857		
RIC.63		State Rd	c 1770		
RIC.64		State Rd			
RIC.100		State Rd	1985	Y	
RIC.101	Furnace Pond Water Valve Shed	State Rd	c 1926	Y	
RIC.800	Richmond Center Cemetery	State Rd	1766		
RIC.900	Richmond Blast Furnace	State Rd	1829	Y	
RIC.901	Hand, Daniel Monument	State Rd			
RIC.908	Furnace Pond Main Dam	State Rd	r 1780	Y	
RIC.909	Furnace Pond Main Dam Spillway	State Rd	1906	Y	
RIC.910	Furnace Pond Main Dam Bridge	State Rd	1906	Y	
RIC.911	Furnace Brook Bridge	State Rd	c 1945	Y	
RIC.41	Cogswell Cottage	1226 State Rd	1762		
RIC.26	Kenmore	1385 State Rd	1792	Y	Y
RIC.19	Richmond Iron Works Worker Housing	2755 State Rd	c 1873	Y	
RIC.73	Richmond Iron Works Worker Housing	2771 State Rd	c 1873	Y	
RIC.69	Richmond Iron Works Worker Housing	2774 State Rd	c 1840	Y	
RIC.74	Richmond Furnace Works Worker Housing	2779 State Rd	c 1873	Y	
RIC.75	Richmond Furnace Works Worker Housing	2785 State Rd	c 1873	Y	
RIC.76	Richmond Furnace Works Worker Housing	2793 State Rd	c 1873	Y	
RIC.77	Richmond Furnace Works Worker Housing	2801 State Rd	c 1873	Y	
RIC.78	Richmond Furnace Works Worker Housing	2805 State Rd	c 1873	Y	
RIC.99		2806 State Rd	1950	Y	
RIC.80	Richmond Iron Works Worker Housing	2815 State Rd	c 1873	Y	
RIC.92		2821 State Rd	c 1923	Y	
RIC.93	Richmond Furnace Library	2821 State Rd	1930	Y	
RIC.94	Richmond Iron Works Worker Housing	2834 State Rd	c 1840	Y	
RIC.95	Richmond Iron Works Worker Housing	2836 State Rd	c 1840	Y	
RIC.96		2851 State Rd	1984	Y	



Table 4.6	6 - Historic Resources in Richmond, MA– 0	Continued			
Source: N	ЛНС MACRIS Database, 2015				
MACRIS Inv. No.	Property Name	Street	Year	State Register of Historic Places	National Regis- ter of Historic Places
RIC.96		2851 State Rd	1984	Y	
RIC.97		2867 State Rd	1946	Y	
RIC.98		2871 State Rd	1931	Y	
RIC.72	Richmond Iron Works Worker Housing	2900 State Rd	c 1840	Y	
RIC.70	Richmond Iron Works Worker Housing	2922 State Rd	c 1840	Y	
RIC.58	Richmond Furnace School	2953 State Rd	c 1890	Y	
RIC.45	South East School	Stevens Glen Rd	c 1858		
RIC.46	Little Farm	Stevens Glen Rd	r 1840		
RIC.5	General Store	Summit Rd	c 1830		
RIC.6	Dewey - Seymour - Eldridge House	Summit Rd	c 1820		
RIC.7	Goodwood	Summit Rd	c 1799	Y	Y
RIC.8	Salmon House	Summit Rd	r 1830		
RIC.39		Summit Rd	r 1800		
RIC.40	Parsonage, Old	Summit Rd	r 1800		
RIC.60		Summit Rd	c 1910		
RIC.61		Summit Rd			
RIC.902	Lime Kiln	Summit Rd	1880		
RIC.43	Northeast School	981 Summit Rd	c 1791	Y	Y
RIC.3	Nichols - Sterner House	Swamp Rd	c 1820	Y	Y
RIC.15		Swamp Rd	r 1840		
RIC.16	April Hill	Swamp Rd	r 1840		
RIC.71		Swamp Rd	c 1800		
RIC.65		West St			
RIC.66		West St			
RIC.67		West St			
RIC.68		West St			

# SECTION 5: INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST

Open space is defined as land that has not been developed for residential, commercial or industrial uses and includes publicly and privately owned land. Open space often has particular interest to conservation or recreation and includes:

1. Land which contributes to the public water supply

- 2. Forests, fields, and agricultural lands
- 3. Wetlands
- 4. Rivers, streams, and lakes
- 5. Parks and other recreation lands
- 6. Wildlife or animal habitats
- 7. Land which preserves scenic views or town character

As described in previous sections, Richmond has an abundance of forest and agricultural lands, as well as wetlands and water resources. Due to the underlying limestone bedrock that creates the alkaline environments of the Western Marble Valleys Ecoregion, Richmond has unique natural areas that support a diversity of plant and animal species. Conservation lands not only protect some of the natural resources in Richmond, but provide space for recreation and working agriculture. Moreover, they give Richmond the rural feel and small town character that residents value.

Land in Richmond is protected in a variety of ways and with varying degrees of protection. Conservation and recreation lands in the Town of Richmond are protected by four entities; the town, the Commonwealth of Massachusetts, local land trusts, and private landowners.

Land is considered under permanent protection if it is owned by the state or a local land trust. It may also be permanently protected if the land is subject to a conservation restriction. Within the Town of Richmond, many privately owned properties are considered to be under permanent pro-



## LANDS OF CONSERVATION AND RECREATION INTEREST AT A GLANCE

#### **Protected Lands**

Lands with limited or permanent protection total 1300 acres in Richmond, or around 11% of all land within the town.

#### Chapter 61 Properties

Chapter 61 properties total over 4800 acres, or roughly 40% of all land in town.

#### **Recreation Opportunities**

Richmond has several areas for recreation, including the town beach, elementary school, Steven's Glen, Hollow Fields Reserve and North Yokun Ridge to name a few.



Source: MASS GIS, 2015 and Richmond Land Trust,									
2015									
Protected	Acres	% of Protected	% of Total						
Land Cate-		Land	Land						
gory			(12,179.49						
			Acres)						
Municipal	77.74	1.26%	0.64%						
Land Trust	334.50	5.43%	2.75%						
Private	611.56	9.93%	5.02%						
State	288.49	4.69%	2.37%						
Subtotal	1312.29	21.32%	10.77%						
Chapter 61 Lands	4843.77	78.68%	39.77%						
Total	6156.05	100.00%	50.54%						

tection due to conservation restrictions held by local land trusts. The town of Richmond also owns a parcel in the northwest corner of town considered under permanent protection due to a conservation restriction (see Map 7—Lands of Conservation and Recreation Interest).

Areas under limited protection include other town-owned parcels such as the Richmond Consolidated school and its associated playground areas, as well as the town beach on Richmond Pond.

Areas under Chapter 61 (A, or B) tax reduction programs are considered to have temporary protections, as they are privately owned.

All privately owned lands without conservation restrictions or not enrolled in Chapter 61 are considered to be unprotected.

#### **5A PRIVATE PARCELS**

Privately owned conservation lands in Richmond comprise just over 611 acres or 5.4% of all land within the town (See Table 5.1—Protected Lands in Richmond, MA). These parcels have conservation easements held by two local land trusts, the Richmond Land Trust (RLT) and Berkshire Natural Resources Council (BNRC). It should be noted, that unless otherwise stated, private parcels should be considered off limits to public access.

#### **Notable Privately Owned Recreation Areas** Steven's Glen

Steven's Glen is a privately owned parcel with a permanent conservation restriction held by BNRC. The property straddles the town's southern boundary with West Stockbridge. This parcel contains a few miles of hiking trails, which are accessed from a trailhead on Lenox Road in West Stockbridge. The glen itself is a narrow gorge and several waterfalls that have been carved out of the bedrock by Lenox Mountain Brook.

The recreation potential of the property was recognized by the original owners, the Stevens family, who constructed bridges and paths throughout the property beginning in the late 1800's. The family also constructed a dance pavilion and charged admission to the property. In 1918, 900 party-goers from New York gathered at the property for dancing and revelry (RLT website, 2015). Today, the property no longer hosts such large gatherings. However, visitors can still hike trails along the edge of the gorge and enjoy its waterfalls.

#### Hilltop Orchards

Hilltop Orchards is located in the northwest corner of town off of Route 295 / Canaan Road. In addition to being a commercial apple orchard, this property is home to a network of trails that can be used for hiking or cross-country skiing. Additionally, the orchard hosts a popular full moon hike held year round.

#### Chapter 61, 61A, and 61B Lands

Chapter 61 is a state program that allows private landowners to manage their properties for forest-



*Figure 5.1—Richmond Pond is the town's largest body of water and a popular recreation area. The Town Beach is located at the northwest corner of the Pond. Photograph credit Paul Rocheleau .* 

ry (Chapter 61), agricultural (Chapter 61A), or recreational purposes (Chapter 61B) in exchange for reduced taxes. Parcels in the program for the purposes of forestry must be at least 10 acres in size and must have an approved 10-year management plan in place. Once enrolled in Chapter 61, the town where the property is located acquires a right of first refusal should the land be put up for sale. This right of first refusal can also be assigned by the town to a land trust or state agency. Chapter 61 lands are not considered permanently protected, as landowners can remove their property from the program at any time. However, there are monetary penalties associated with sale of properties enrolled in Chapter 61 for the purposes other than forestry, agriculture or recreation, as well as any changes in land use while enrolled. For more information on Chapter 61 programs, consult a local forester or the town assessor. Chapter 61 properties are privately owned and

should be considered off limits to public access without the landowner's permission. There are a total of 188 Chapter 61 properties in Richmond which cover 4,843.77 acres, or 39.77% of all land in the town (see Table 5.1 in this section). While these properties certainly contribute to the town's rural character and scenic beauty, they currently offer no public access or recreation opportunities.

# 5B PUBLIC AND NON-PROFIT PARCELS

Public and non-profit conservation and recreation lands total just over 700 acres within the town of Richmond, or around 6% of all land (See Table 5.1 and Table 5.2). Land trusts own over 334 acres within town, followed closely by the state's three large holdings (Nordeen Swamp and Fairfield Brook Natural Heritage Area, as well as a small portion of Pittsfield State Forest in the southwest corner of town), which total 288 acres. The town NC INS SEAL

#### Richmond Open Space and Recreation Plan

Inventory of Lands of Conservation and Recreation Interest



Figure 5.2—The Richmond Recreation Committee organizes recreation programs and events in town, including the popular "Reach the Beach" 5K run/walk held in the spring.

of Richmond owns three parcels in this category, totaling just over 77 acres (See Table 5.4 for a list of town owned conservation and recreation land). This includes the Richmond Consolidated School and its playground areas, the town beach, and a parcel with conservation restrictions in the northwest corner of town.

# Notable Public and Non-Profit Recreation Areas

#### Olivia's Overlook and North Yokun Ridge

Close to Steven's glen is a notable overlook with a spectacular view to Stockbridge Bowl, a nearby Great Pond located within the town of Stockbridge. The overlook is located at the extreme southeastern corner of the town of Richmond along Lenox Road. The overlook contains a small parking lot and stone wall. The overlook area also serves as a trailhead for hiking along North Yokun Ridge on Lenox Mountain. Trails extend from Richmond into the nearby town of Lenox. The property is owned by BNRC.

#### Hollow Fields Reserve

Hollow Fields Reserve is a conservation and recreation property owned by BNRC and located along Perry's Peak Road. The reserve abuts the 45-acre town-owned conservation property. Trails throughout the parcel cross through forest and extensive meadows. Hollow Fields Reserve provides excellent habitat for the Bobolink (*Dolichonyx oryzivorus*), a small bird which nests only on the ground in open grassy fields and is noted for its unique call. Hollow Fields Reserve hosts BNRC's annual spring Bobo-thon, in which birdwatchers and outdoor enthusiasts gather to watch the Bobolinks and celebrate the outdoors.

#### East Road, West Road, and Boys' Club / Richmond Shores Road

Several roads in Richmond are popular destinations for walking, running as well as dog walking and horseback riding. These roads are all relatively quiet and flat, unpaved, tree lined, and with low volumes of traffic which make them ideal for recreation use. East Road in particular was identified by the Richmond OSAC and the public survey as a popular road for recreational walking. East Road begins relatively flat near its intersection with Swamp Road. As it moves south towards Lenox Mountain, the road becomes steeper. The road is lined with fields and forests and has spectacular views on either side. Boys' Club and Richmond Shores Road are also utilized by walkers and runners. These roadways are also used to host the yearly "Reach the Beach" 5K walk/run event hosted by the Richmond Recreation Committee (see Figure 5.2). Both roads also contain informal parking pull-off areas, and are used by people who drive to these areas for recreation, in addition to being used by the residents that live along them.

It should also be noted that other unpaved roads in Richmond are frequently used for recreation. These include Sleepy Hollow Road and Dublin Road.

#### **Richmond Town Beach**

The Richmond town beach is located at the northwest corner of Richmond Pond. Only a small portion of the acreage of this parcel is located within Richmond. The beach and water access is primarily located within the City of Pittsfield but is owned by the Town of Richmond. The area is open to town residents and contains a small sandy beach and picnic location. As of the time of this writing in 2015, the Town of Richmond is working to implement many improvements to the town beach through a state funded grant. These improvements include the addition of picnic tables and barbecue grills, as well as the enhancement of seasonal sanitary facilities. Additionally, the town is working to improve access to the beach area through the installation of rubber mats that will allow wheelchair access. Finally, a gravel infiltration trench near the beach parking area will help to capture stormwater runoff generated by the parking area before it reaches Richmond Pond.

On a historical note, the access road to the boat ramp and town beach was once a narrow gauge railroad bed. This rail line was used to support the iron works industry as well as ice harvesting on Richmond Pond and nearby quarrying operations. The foundations of the ice houses that were used to store ice harvested from Richmond Pond can be found near the town beach.

#### State Boat Launch

The state boat launch is located just south of the Richmond Town Beach along the western shore of Richmond Pond. The state boat launch provides the only publicly accessible launching location for small draft boats that require a trailer.

#### Richmond Consolidated School/Town Tennis Court

The Richmond Consolidated School is located on Route 41 just south of Town Hall. The school's playground area, baseball field, and soccer field and are open to the public when the school is not in use. Additionally, the school gymnasium is used to host local basketball and volleyball leagues, and the Richmond Recreation Committee's annual Ping Pong tournament. Directly north of the school is the town owned tennis court. The court is paved and fenced and available for public use.

#### Non-Profit Parcels of Conservation and Recreation Interest Camp Marion White

#### As briefly mentioned in Section 4C, Camp Marion White is a summer camp owned by the Girl Scouts of Central and Western Massachusetts located along the southeastern shore of Richmond Pond. The camp has not been actively used by the Girl Scouts since 2010 and in late 2014, the organiza-



tion voted to divest the property. This decision spurred the town of Richmond to pursue development of this OSRP. The Camp Marion White property is comprised of three parcels totaling roughly 50 acres. Two of these parcels are located along the shore line of Richmond Pond and include the original Girl Scouts summer camp property and the former Camp Bluebird, a property that was once owned by the Women's Club of Pittsfield. East of these two areas is a third parcel that contains a large wetland area with a Great Blue Heron (Ardea herodius) rookery, or nesting site (See Figure 4.1).

Questions related to the purchase or preservation of Camp Marion White were included as part of the public survey that helped to inform the creation of this OSRP. Over 90% of survey respondents supported the purchase or preservation of the Camp.

A working group was convened by the town administrator in early 2015 to help address the possible purchase of the camp and coordinate actions. The Camp Marion White Working Group (CMWWG) included town staff, members of the Richmond Land Trust and Richmond Pond Association as well as other regional conservation organizations like the Berkshire Natural Resources Council (BNRC) and the Massachusetts Audubon Society. The working group developed vision and mission statements specific to the property, and has examined potential uses of the property by the Town of Richmond.

If used as a future recreation and natural area by the town, Camp Marion White would offer a range of potential recreation options for town residents. Camp Marion White has over 1000 feet of shoreline along Richmond Pond, with an area to launch kayaks and canoes and otherwise provide water access. Additionally, a small boathouse is available that could be utilized for boat storage or other purposes. The large Koerber Lodge building at Camp Marion White could also be used for hosting town events or by providing a rentable space for weddings or family reunions. Camp Marion White also offers a chance to increase the number of trails in Richmond. There is an existing interpretive trail that has fallen into disuse and runs adjacent to the wetland found east of Swamp Road. This trail could be reconstructed, with additional interpretive elements installed. Moreover, there is a potential to create a looping trail throughout the two parcels adjacent to Richmond Pond. This trail could also have some winter use by cross-country skiers or snowshoers.

#### **Camp Marion White Planning**

The following vision and mission statements were developed by the CMWWG to guide future use of the property if acquired by the town.

#### **Vision Statement:**

The former Camp Marion White property is effectively-stewarded, safe, family-friendly open space that enriches the lives of Richmond residents and nonresidents while simultaneously sustaining the aesthetic qualities and ecological integrity of Richmond Pond and its surrounding watershed in perpetuity.

#### **Mission Statement:**

To cultivate a stronger sense of community and convey significant value to the Town of Richmond by: (1) offering facilities and open spaces that enable resident and nonresident visitors to take part in a wide range of passive and active forms of outdoor recreation, environmental interpretation, and special events in a setting that is accessible and inviting to all, and; (2) engaging in natural resource management practices that effectively conserve and/or enhance habitat for populations of native wildlife, provide for long-term protection of environmentally sensitive areas, and ultimately facilitate levels of environmental quality that reflect the high standards that the community sets for itself

Table 5.2 - Per	Table 5.2 - Permanently Protected Open Space Parcels in Richmond, MA											
Source: Mass	Source: Mass. GIS Open Space, 2015 and Richmond Land Trust, 2015											
			Primary Pur-		Level of Pro-							
Site Name	Owner	Owner Type	pose	Public Access	tection	Interest	Acres					
Pleasant Val-												
ley Wildlife	Massachusetts Audu-											
Sanctuary	bon Society	Land Trust	Conservation	Limited	Permanent		28.78					
Unknown	Private	Private	Conservation	Limited	Permanent	BNRC	102.17					
Unknown	Private	Private	Conservation	None	Permanent	RLT	13.02					
Unknown	Private	Private	Conservation	None	Permanent	RLT	195.78					
Unknown	Private	Private	Conservation	None	Permanent	RLT	1.05					
Unknown	Private	Private	Conservation	None	Permanent	BNRC	51.46					
Unknown	Private	Private	Conservation	None	Permanent	RLT	4.31					
Unknown	Private	Private	Conservation	None	Permanent	BNRC	72.68					
Unknown	Private	Private	Conservation	None	Permanent	BNRC	57.45					
Unknown	Private	Private	Conservation	None	Permanent	RLT	18.49					
Unknown	Private	Private	Conservation	None	Permanent	RLT	9.98					
Unknown	Private	Private	Conservation	None	Permanent	RLT	85.15					
	Berkshire Natural Re-											
Unknown	sources Council	Land Trust	Conservation	Unknown	Permanent		6.11					
	Berkshire Natural Re-											
Unknown	sources Council	Land Trust	Conservation	Unknown	Permanent		73.96					
	Berkshire Natural Re-											
Unknown	sources Council	Land Trust	Conservation	Unknown	Permanent		12.77					
	Berkshire Natural Re-											
Unknown	sources Council	Land Trust	Conservation	Unknown	Permanent		6.92					
Osceola Notch												
Road Conser-												
-	Richmond Land Trust	Land Trust	Conservation	None	Permanent		2.67					
Swamp Road												
Conservation					D		20.25					
Area	Richmond Land Trust	Land Trust	Conservation	None	Permanent		28.25					
Swamp Road Conservation												
Area	Richmond Land Trust	land Trust	Conservation	None	Permanent		8.96					
Yokun Road			conservation	None	rennanent		8.50					
Conservation												
	Richmond Land Trust	Land Trust	Conservation	None	Permanent		2.70					
Dean Hill												
Road Conser-												
	Richmond Land Trust	Land Trust	Conservation	None	Permanent		7.88					
Dublin Road												
Conservation												
Area	Richmond Land Trust	Land Trust	Conservation	None	Permanent		13.76					
Dublin Road												
Conservation												
Area	Richmond Land Trust	Land Trust	Conservation	None	Permanent		2.89					



**Richmond Open Space and Recreation Plan** Inventory of Lands of Conservation and Recreation Interest

			Primary Pur-		Level of Pro-		
Site Name	Owner	Owner Type	pose	Public Access	tection	Interest	Acres
Colonial Acres							
Conservation	Richmond Land						
Area	Trust	Land Trust	Conservation	None	Permanent		10.42
Canaan Road							
	Richmond Land						
Area CR	Trust	Land Trust	Conservation	None	Permanent	BNRC	9.81
Canaan Road							
	Richmond Land						
Area CR	Trust	Land Trust	Conservation	None	Permanent	BNRC	20.41
Canaan Road							
	Richmond Land						
Area CR	Trust	Land Trust	Conservation	None	Permanent	BNRC	53.33
Canaan Road							
	Richmond Land						
Area CR	Trust	Land Trust	Conservation	None	Permanent	BNRC	6.70
Additional	Richmond Land						
Parcels	Trust	Land Trust	Conservation	None	Permanent		32.92
Nordeen							
Swamp Natu-							
ral Heritage	Department of Fish						
Area	and Game	State	Conservation	Yes	Permanent		24.27
	DCR - Division of		Conservation				
Pittsfield State	State Parks and		and Recrea-				
Forest	Recreation	State	tion	Yes	Permanent		0.46
	DCR - Division of		Conservation				
Pittsfield State	State Parks and		and Recrea-				
Forest	Recreation	State	tion	Yes	Permanent		99.89
	Richmond Land						
Area	Trust	Land Trust	Conservation	None	Permanent		2.54
Conservation	Richmond Land						
Area	Trust	Land Trust	Conservation	None	Permanent		2.72
	Department of Fish						
Natural Herit-	and Game	State	Conservation	Yes	Permanent		21.80
	Department of Fish						
Natural Herit-	and Game	State	Conservation	Yes	Permanent		51.33
	Department of Fish						
Natural Herit-	and Game	State	Conservation	Yes	Permanent		52.35
Fairfield Brook	Department of Fish						
Natural Herit-	and Game	State	Conservation	Yes	Permanent		38.39

#### Table 5.3 - Inventory of Private Lands with Chapter 61 Designation in Richmond, MA

Mass. GIS Open Space, 2015										
Location	Owner	Owner Type	Primary Purpose	Public Access	Level of Protection	Acres				
PERRYS PEAK ROAD	Private	Private	Forestry	None	Chapter 61	66.52				
PERRYS PEAK ROAD	Private	Private	Forestry	None	Chapter 61	23.08				
YOKUN ROAD	Private	Private	Forestry	None	Chapter 61	2.95				
OSCEOLA ROAD	Private	Private	Forestry	None	Chapter 61	8.07				
STATE ROAD	Private	Private	Forestry	None	Chapter 61	23.53				
STATE ROAD	Private	Private	Forestry	None	Chapter 61	20.80				
STATE ROAD	Private	Private	Forestry	None	Chapter 61	20.80				
CUNNINGHAM HILL	Private	Private	Forestry	None	Chapter 61	118.84				
DEAN HILL ROAD	Private	Private	Forestry	None	Chapter 61	16.55				
BIRCH LANE	Private	Private	Forestry	None	Chapter 61	63.32				
WEST ROAD	Private	Private	Forestry	None	Chapter 61	62.52				
SWAMP ROAD	Private	Private	Forestry	None	Chapter 61	16.18				
CONE HILL ROAD	Private	Private	Forestry	None	Chapter 61	104.09				
CONE HILL ROAD	Private	Private	Forestry	None	Chapter 61	104.09				
STEVENS GLEN ROAD	Private	Private	Forestry	None	Chapter 61	94.88				
STEVENS GLEN ROAD	Private	Private	Forestry	None	Chapter 61	94.88				
SWAMP ROAD	Private	Private	Forestry	None	Chapter 61	34.70				
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	37.04				
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	37.04				
DUBLIN ROAD	Private	Private	Agriculture	None	Chapter 61A	89.64				
DUBLIN ROAD	Private	Private	Agriculture	None	Chapter 61A	48.96				
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	23.88				
SWAMP ROAD	Private	Private	Agriculture	None	Chapter 61A	10.32				
SWAMP ROAD	Private	Private	Agriculture	None	Chapter 61A	10.32				
SWAMP ROAD	Private	Private	Agriculture	None	Chapter 61A	4.80				
CEMETERY ROAD &	Private	Private	Agriculture	None	Chapter 61A	23.34				
SWAMP ROAD REAR	Private	Private	Agriculture	None	Chapter 61A	17.77				
EAST ROAD	Private	Private	Agriculture	None	Chapter 61A	43.37				
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	27.06				
DUBLIN ROAD	Private	Private	Agriculture	None	Chapter 61A	11.86				
SUMMIT ROAD	Private	Private	Agriculture	None	Chapter 61A	117.60				
DUBLIN ROAD	Private	Private	Agriculture	None	Chapter 61A	33.59				
SLEEPY HOLLOW	Private	Private	Agriculture	None	Chapter 61A	42.64				
SLEEPY HOLLOW	Private	Private	Agriculture	None	Chapter 61A	9.06				
	Drivata	Drivata	Agriculture	None	Chapter 61A	25.25				
	Private Private	Private	Agriculture	None	Chapter 61A	35.35				
MARCH HARE ROAD	Private	Private	Agriculture	None	Chapter 61A	26.16				
CANAAN ROAD	Private	Private	Agriculture	None	Chapter 61A	77.11				



Table 5.3 - Inventory of Priva	r	1				
1	0	0	Primary Pur-	Dublis Asses	Level of Pro-	
	Owner	Owner Type	pose	Public Access		Acres
	Private	Private	Agriculture	None	Chapter 61A	76.50
	Private	Private	Agriculture	None	Chapter 61A	76.50
ROSSITER ROAD	Private	Private	Agriculture	None	Chapter 61A	76.50
ROSSITER ROAD	Private	Private	Agriculture	None	Chapter 61A	76.50
ROSSITER ROAD	Private	Private	Agriculture	None	Chapter 61A	76.50
WEST ROAD	Private	Private	Agriculture	None	Chapter 61A	4.37
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	83.39
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	22.62
SWAMP ROAD	Private	Private	Agriculture	None	Chapter 61A	98.37
EAST ROAD	Private	Private	Agriculture	None	Chapter 61A	119.66
EAST ROAD	Private	Private	Agriculture	None	Chapter 61A	119.66
LENOX ROAD	Private	Private	Agriculture	None	Chapter 61A	23.16
CONE HILL ROAD	Private	Private	Agriculture	None	Chapter 61A	5.43
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	7.36
SWAMP ROAD	Private	Private	Agriculture	None	Chapter 61A	9.78
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	18.58
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	18.58
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	18.58
CANAAN ROAD	Private	Private	Agriculture	None	Chapter 61A	51.10
SWAMP ROAD	Private	Private	Forestry	None	Chapter 61	42.23
SWAMP ROAD	Private	Private	Forestry	None	Chapter 61	42.23
SWAMP ROAD	Private	Private	Agriculture	None	Chapter 61A	51.00
SWAMP ROAD	Private	Private	Agriculture	None	Chapter 61A	51.00
SUMMIT ROAD	Private	Private	Agriculture	None	Chapter 61A	77.61
MARCH HARE ROAD	Private	Private	Agriculture	None	Chapter 61A	80.98
PERRYS PEAK ROAD	Private	Private	Forestry	None	Chapter 61	52.57
PERRYS PEAK ROAD	Private	Private	Forestry	None	Chapter 61	16.83
PERRYS PEAK ROAD	Private	Private	Forestry	None	Chapter 61	54.59
PERRYS PEAK ROAD	Private	Private	Forestry	None	Chapter 61	59.82
PERRYS PEAK ROAD	Private	Private	Forestry	None	Chapter 61	78.77
PERRYS PEAK ROAD	Private	Private	Forestry	None	Chapter 61	166.63
PERRYS PEAK ROAD	Private	Private	Forestry	None	Chapter 61	17.24
EAST SLOPE ROAD	Private	Private	Forestry	None	Chapter 61	37.07
CEMETERY ROAD	Private	Private	Forestry	None	Chapter 61	72.65
OSCEOLA ROAD	Private	Private	Forestry	None	Chapter 61	16.28
STATE ROAD	Private	Private	Forestry	None	Chapter 61	23.42
STATE ROAD	Private	Private	Forestry	None	Chapter 61	50.38
STATE ROAD	Private	Private	Forestry	None	Chapter 61	28.29

Location	Owner	Owner Type	Primary Purpose	Public Access	Level of Protection	Acres
STATE ROAD	Private	Private	Forestry	None	Chapter 61	67.71
STATE ROAD	Private	Private	Forestry	None	Chapter 61	32.24
STATE ROAD	Private	Private	Forestry	None	Chapter 61	2.46
SWAMP ROAD	Private	Private	Forestry	None	Chapter 61	10.66
DEAN HILL ROAD	Private	Private	Forestry	None	Chapter 61	48.46
DEAN HILL ROAD	Private	Private	Forestry	None	Chapter 61	50.90
ROSSITER ROAD	Private	Private	Forestry	None	Chapter 61	2.83
ROSSITER ROAD	Private	Private	Forestry	None	Chapter 61	6.55
ROSSITER ROAD	Private	Private	Forestry	None	Chapter 61	5.29
DUBLIN ROAD	Private	Private	Forestry	None	Chapter 61	17.81
LENOX ROAD	Private	Private	Forestry	None	Chapter 61	4.76
STEVENS GLEN ROAD	Private	Private	Forestry	None	Chapter 61	2.52
STEVENS GLEN ROAD	Private	Private	Forestry	None	Chapter 61	14.41
STEVENS GLEN ROAD	Private	Private	Forestry	None	Chapter 61	12.48
DEAN HILL ROAD	Private	Private	Forestry	None	Chapter 61	64.03
DEAN HILL ROAD	Private	Private	Forestry	None	Chapter 61	10.07
DEAN HILL ROAD	Private	Private	Forestry	None	Chapter 61	14.31
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	35.21
SUMMIT ROAD	Private	Private	Agriculture	None	Chapter 61A	77.57
SLEEPY HOLLOW ROAD	Private	Private	Agriculture	None	Chapter 61A	53.67
SLEEPY HOLLOW ROAD	Private	Private	Agriculture	None	Chapter 61A	69.13
SWAMP ROAD	Private	Private	Agriculture	None	Chapter 61A	13.53
EAST ROAD	Private	Private	Agriculture	None	Chapter 61A	17.20
LENOX ROAD	Private	Private	Agriculture	None	Chapter 61A	7.82
SWAMP ROAD	Private	Private	Agriculture	None	Chapter 61A	32.91
YOKUN ROAD	Private	Private	Agriculture	None	Chapter 61A	10.23
YOKUN ROAD	Private	Private	Agriculture	None	Chapter 61A	41.55
FURNACE ROAD	Private	Private	Agriculture	None	Chapter 61A	89.71
CANAAN ROAD	Private	Private	Agriculture	None	Chapter 61A	6.70
SLEEPY HOLLOW ROAD	Private	Private	Agriculture	None	Chapter 61A	38.15
ROSSITER ROAD	Private	Private	Agriculture	None	Chapter 61A	106.80
WEST ROAD	Private	Private	Agriculture	None	Chapter 61A	4.43
WEST ROAD	Private	Private	Agriculture	None	Chapter 61A	8.96
EAST ROAD	Private	Private	Agriculture	None	Chapter 61A	49.87
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	67.34
CEMETERY ROAD	Private	Private	Agriculture	None	Chapter 61A	17.97
DUBLIN ROAD	Private	Private	Agriculture	None	Chapter 61A	35.73
WEST ROAD	Private	Private	Agriculture	None	Chapter 61A	4.85
SWAMP ROAD	Private	Private	Agriculture	None	Chapter 61A	22.34
SUMMIT ROAD	Private	Private	Agriculture	None	Chapter 61A	15.50
SUMMIT ROAD	Private	Private	Agriculture	None	Chapter 61A	15.40
SWAMP ROAD	Private	Private	Agriculture	None	Chapter 61A	12.98
STATE ROAD	Private	Private	Agriculture	None	Chapter 61A	15.28



Inventory of Lands of Conservation and Recreation Interest

Table 5.4 -	able 5.4 - Conservation and Recreation Lands Owned by the Town of Richmond, MA											
Source: M	ass. GIS O	pen Space,	2015									
Site Name	Owner	Manager	Current Use	Condition	Public Access	Universal Access	Level of Pro- tection	Recreation Po- tential	Zoning	Acres		
Richmond Consolidated School	Town of Richmond	School	Education	Good	of school hours	Yes (See ADA Self Evaluation in Appen-	Limited	Existing School Playground, Athletic Fields and Tennis court	Residen- tial (RA-A)	29.59		
Richmond Town Beach	Town of Richmond	Highway Department	Recreation	Good	Yes	Yes (See ADA Self Evaluation in Appen-	Limited	Swimming and Canoe/Kayak Access	Residen- tial (RA-A)	3.30		
Conservation Area	Town of Richmond	None	Conservation and Recreation	Good	Yes	None (hiking trail)	Permanent		Residen- tial (RA-A)	44.85		

# **SECTION 6: COMMUNITY VISION**

#### **6A DESCRIPTION OF PROCESS**

In order to determine the town of Richmond's Open Space and Recreation values and develop goals and objectives, a robust public process was utilized. This process began with meetings of the **Richmond Open Space Advisory Committee** (OSAC). Early in the committee meetings, a public survey was developed. The public survey was available online, through the website Surveymonkey.com, and as hardcopies available in Town Hall. The public survey asked broad questions related to open space, recreation, the possible purchase or preservation of Camp Marion White and also gathered basic demographic information about respondents. The survey was available from April 24th to June 15th, 2015. Overall, there were 113 total responses to the survey, with about 5% of year-round residents (79 out of 1,475) responding. Second homeowners, seasonal residents and non-residents comprised 22 out of the 113 responses. The remaining 12 respondents could not be identified as they did not answer questions related to demographics. Overall, the survey revealed support for open space protection within the town, as well as support for the purchase or preservation of Camp Marion White. Additionally, to help draft the OSRP, BRPC conducted stakeholder interviews with several groups including the Richmond Pond Association and Richmond Recreation Committee, and attended several meetings of the Camp Marion White Working Group.

The first Open Space public forum was held on June 16th, 2015 at Town Hall. This public forum was an open discussion about the town's needs for open space and recreation. The public forum was attended by approximately 20 residents and other interested individuals. Basic information about OSRP development and its requirements, as well as results from the public survey were pre-



## COMMUNITY VISION AT A GLANCE

#### Public Process

Development of this Open Space and Recreation Plan included a rich public process. A public survey was available from April 24th to June 15th, 2015. Overall, there were 113 total responses to the survey, with about 5% of year-round residents responding. Two public forums were also held to gain public input on the OSRP. The Richmond Open Space Advisory Committee met six times from April to August, 2015. Finally, a number of stakeholder interviews were conducted.

#### **Open Space and Recreation Vision**

The Town of Richmond is a rural, tranquil, and family-friendly hamlet in the Central Berkshire Region of Massachusetts that carefully stewards its treasured open spaces and maintains rich cultural, recreational, and scenic resources that collectively foster a strong sense of place and community vitality that benefits its residents and visitors.



sented to forum attendees and participants. After this presentation, participants were asked to describe the town's needs for open space and recreation and how these two aspects of the town could be improved. The overall goal of the public forum was to expand upon the data gathered as part of basic research for the OSRP and the information obtained from the public survey. Richmond residents and other forum participants shared their ideas and opinions at the forum and these were incorporated into the final goals, objectives, and actions for the creation of this OSRP. The forum identified several needs and possible OSRP goals within the town, including the possibility of contacting private landowners to see if public access would be allowed or considered. Forum participants also discussed the possibility of better utilizing town roads for recreation. Additionally, forum participants noted the importance of preserving the town's ridgelines and agricultural lands and the need for enhanced outreach and communication about land protection options and Richmond's existing recreation opportunities. Each one of these elements mentioned was integrated into the goals, objectives and action items for the OSRP See Figure 6.1 for notes taken during the first public forum.

A second and final public forum was held on September 17th, 2015. The intention of this public forum was to review the draft plan and its goals and objectives with the public. A short presentation summarizing the draft plan and the work of the Richmond OSAC was followed by a prioritization activity in which forum participants were given three blue sticker "dots" to indicate the goals and objectives of the action plan they felt were most important. Participants were also asked to leave general comments about the draft plan and provide contact information if they wished to participate in future open space and recreation projects.

Based on the prioritization activity, several

"clusters" of stickers around aspects of the plan emerged. Thirteen stickers were placed on objectives and action items related to the possible purchase of Camp Marion White, more than any other selected by forum participants. Eleven stickers were placed on the objective and action items under protecting and managing Richmond Pond, with five of the eleven stickers indicating the importance of action item related to reestablishing the historic "Indian trail" around the shoreline of the pond. Eight stickers were placed on the objective and action items related to protecting an additional 1000 acres of land in Richmond. Additionally, eight stickers were placed on the objective and action items relating to the possible adoption of the Community Preservation Act (see Figure 6.2).

### 6A STATEMENT OF OPEN SPACE AND RECREATION GOALS

The following vision statement was developed by the Richmond Open Space Advisory Committee:

The Town of Richmond is a rural, tranquil, and family-friendly hamlet in the Central Berkshire Region of Massachusetts that carefully stewards its treasured open spaces and maintains rich cultural, recreational, and scenic resources that collectively foster a strong sense of place and community vitality that benefits its residents and visitors.

#### **Open Space and Recreation Goals:**

- 1. Water resources in Richmond are protected.
- 2. Natural resources in Richmond are protected
- 3. Residents and visitors are aware of Richmond's open space and cultural resources and recreational opportunities.
- 4. The town's recreation opportunities meet community needs.
- 5. Funding for conservation and recreation projects meets community needs.
- 6. Ensure implementation of the Richmond Open Space and Recreation Plan.

Tishing Pier (HA) on Richmond Pond Make gravel roads More Walkable Pedestrian-Friendly Pullic use of \* Finer grain grave ang Russell A Gravel over Coarse Stare in Sp Formal trailhead w/ parking @ top of Osceola Rop Parking improvements @CMW to accommoder greater public use (if purchased by town) - Trail head access for PP @ Center Centerny - Installing "Pullouts" for areas that lend thenselves to painting / Photo Comitar to what Richmond - West Stock Rec' trail potential on land being hayed by famers on East Rd (I.R. Michael Lysich) Cont'd /expanded aquatic weed rgt. @ Pand

10013 To Protect - Enhanced education / training Pertaining to land protection options \$ chapter 61 A/B \$ Cons. Restrictions speed / Motorcraft controls on Richmond Pange Maintenance / repair of the day tigd by Laterie Town should push state to take marking Tools to Pronote tec. Repairibility for mainte Tools to Pronote tec. - Enhanced outreach (contrunication to Make residents/hostars more aware of rec programs and opportunities (i.e. rec programs @ school) Town website Newsfetter

Keeping ag lan tively in ag ridgeling habitet and recreation 11 11

*Figure 6.1—Images of notes taken during the first public forum.* 



Figure 6.2—Images of the draft 7-year action plan that was used in a prioritization activity during the second public forum. Forum participants were asked to mark with a blue dot the most important goals, objectives, and action items for the town to complete.

# **SECTION 7: ANALYSIS OF NEEDS**

### 7A SUMMARY OF RESOURCE PROTECTION NEEDS

Richmond residents place significant value on the rural character of the town and its natural resources, particularly its water resources and wildlife habitat. Based on the 2015 Richmond Open Space and Recreation Survey, the top five types of open space that were most important to protect include:

Lakes, Ponds, and Rivers (92%) Wildlife Habitat (90%) Forests (89%) Waterfont areas with public access (89%) Open Space for Recreation (88%)

Additionally, 88% of survey respondents felt that there was a need to preserve additional open space areas within the town.

When asked what the biggest threat to open space protection within the town was, 66% of survey respondents answered with a response that included some form of "development" or specifically "residential development". As discussed in Section 3: Community Setting, residential development can fragment habitat and contiguous natural areas as well as be a source of sediment and pollutant run off. While development within Richmond has slowed in recent years, future development levels are unknown. Any significant resource protection efforts in Richmond will need to be developed and implemented through strong cooperation with and outreach to local residential landowners, as the majority of the town is comprised of privately owned residential land.

Richmond has extensive wildlife habitat areas, priority natural communities, priority



ANALYSIS OF CONSERVATION AND RECREATION NEEDS AT A GLANCE

#### **Resource Protection Needs**

Richmond residents value the town's rural character and its natural resources. The town can take addition steps to help protect these attributes.

#### **Richmond Pond**

Richmond Pond is an important recreation and natural resource in the town. There is an ongoing need to continue management of this resource.

#### Community Needs

There is a comprehensive need to promote the town's existing recreation resources, particularly underutilized areas.



conservation areas, water resources, and potential vernal pool locations. The Nordeen Marsh and Fairfield Brook NHAs help to permanently protect many of these sensitive environmental areas. However, much is held privately. If the town wishes to help protect these areas further, it should continue its ongoing work supporting local and regional land trusts in their conservation efforts. Additionally, the town could pursue outreach and education efforts with landowners to inform them of the ecological significance of their land. This could take the form of a mailing, a public forum, or an information session. For reference, a list of parcels containing endangered species habitat, priority conservation area land, and BioMap2 core habitat has been included in Appendix B.

Additionally, the town could help to educate landowners on best management practices for their properties. A significant amount of land within Richmond is currently enrolled in Chapter 61. This tax reduction program requires that landowners adopt a forest management plan for their property. The town could work with landowners enrolled in Chapter 61 to help them integrate wildlife habitat preservation, riparian buffers, wetland protection, and other similar goals into these forest management plans. This could help interested Richmond property owners to steward their lands ecologically while meeting their own timber harvest goals.

Other Berkshire communities have taken steps to certify potential vernal pools located within their towns, giving added protections to these ecologically important areas. The Berkshire Environmental Action Team is a non-profit group located in Pittsfield that has been involved in this work. The town could partner with this group to help train volunteers and conduct vernal pools assessments as part of an event held in the spring, when vernal pools are likely to be full of water as well as animal life. The town should also contact landowners with potential vernal pools on their properties to see if they would be interested in having them evaluated. A list of parcels within Richmond with potential vernal pool locations can be found in Appendix B.

# Need for Comprehensive Management of Richmond Pond

Richmond pond is a critical natural and recreational resource for the town of Richmond. Richmond Pond is the town's largest body of water, and home to the Richmond town beach. The pond is publicly accessible to canoes, kayaks, and motor boats through the nearby state boat launch. Richmond Pond has also attracted significant residential development since the town first became a seasonal and summer destination beginning in the early part of the 20th century. Beyond the pond's recreational use and the development pressure that has been placed on it, it is home to special concern species such as the Bridle Shiner.

Richmond Pond's split jurisdiction between two municipalities makes coordination on management issues difficult. The fact that the pond's water level is controlled by a dam adds another layer of complication. Without this dam, there would be no access to the water from the town beach, boat launch and Richmond Shores neighborhood, only a mud flat would remain. The dam is also owned by the Lakeside Christian Camp, a religious organization that both Richmond and Pittsfield cannot directly donate to. The Richmond Pond association, a non-profit group, has helped to address many issues along the pond, and act as an advocate for and forum for many issues including noise, light pollution and water quality. Additionally, the Town of Richmond has contributed significantly toward management of the pond through the funding of

boat ramp monitors and the development and implementation of an aquatic vegetation management plan.

It is recommended that the town continue its work to manage Richmond Pond, including its funding and implementation of the Aquatic Vegetation Management Plan and the boat ramp monitor program. Additionally, the town should continue and strengthen its partnership with the Richmond Pond Association and continue to invest in this natural resource and important town recreation area. In addition to its other efforts. the Richmond Pond Association can continue to take the lead on other issues regarding the pond, including promoting a greater sense of community, safety, and mutual respect between user groups and residents around the pond as a commonly held resource. Moreover, both the town and the Richmond Pond Association should work to seek additional funding, technical assistance or other aid from state agencies and to continue ongoing cooperation with the City of Pittsfield.

# 7B SUMMARY OF COMMUNITY'S NEEDS

Need for Greater Promotion and Utilization of Existing Open Space and Recreational Resources

Richmond contains three state-owned properties which total several hundred acres of land within the town. The public survey and public forum identified that these areas are seldom used by Richmond residents, if at all.

Two of these properties, Nordeen Marsh NHA and Fairfield Brook NHA are conserved primarily for their ecological and habitat value. Additionally, these areas are mostly wetland, making access difficult and limited.

However, the area of Pittsfield State Forest located within Richmond is an upland site and managed primarily as a woodlot by the State. The need for additional hiking and walking trails within Richmond was identified in the public survey and was supported by 90% of survey respondents (more than any other potential improvement listed in the survey). This area of Pittsfield State Forest could possibly be used for recreation, particularly trail creation. As this area is owned and managed by the commonwealth, a considerable effort would be needed to secure this area as a piece of publicly accessible recreational infrastructure. However, given the fact that the vast majority of Richmond's land is privately owned, this parcel does represent a "low hanging fruit" which could add a potentially valuable trail to the town's existing recreation areas. It is recommended that the town work with the state to begin examining the possibility of developing a recreational trail on this site. This process could be lengthy, and depending on the Commonwealth's goals for the property, might not be feasible. However, it should be explored nonetheless.

Furthermore, as hiking and walking trails were the most supported potential recreation improvement in the survey (90% of respondents), and the town contains trails along Yokun Ridge, Hollow Fields Reserve, Steven's Glen and at other locations, the town could take steps to better promote these existing resources. Over 20% of survey respondents indicated that they had never used Hollow Fields Reserve or North and South Yokun Ridge for recreation. Additionally, 10% of survey respondents reported that they had never heard of these areas.

Moreover, the public survey and forum identified that the many existing recreation areas,



particularly the Richmond Consolidated School's gymnasium, athletic fields and playground were some of the least used recreation areas within the town. Perhaps this is due to the fact the Richmond residents are increasingly older, and no longer have a reason to visit areas like the playground (as they most likely do not have young children). Perhaps this is due to a lack of knowledge that these areas are publicly accessible (outside of school operating hours).

The town could become its own recreation advocate by actively promoting its recreational resources through the town website or through its weekly email newsletter. Additionally, the town could organize and host an annual event to help promote its existing recreation areas. Such an event might include a tour of existing recreation areas with a "stamp book" or "passport" that is checked off at each area and qualifies participants for a prize. Other municipalities have organized geocaching events with hidden items or logbooks used in a "treasure hunt" type event that could promote various areas around town.

#### Need for Greater Management of Roads as Recreation Areas

Town roadways, particularly low traffic, unpaved roadways were identified early in the OSRP development process as popular recreation areas. The results of the public survey found that 67% of survey respondents used East Road for recreation at least once a year. Additionally, 55% of survey respondents reported using Richmond Shores Road / Boys' Club Road at least once a year for recreation. Both of these roads have informal vehicle pull-off areas where people park to use these roads for recreation, indicating that these areas are used by more than just the residents that live along them. There are a number of actions the town could take to promote and better utilize its roads for recreation. However, care must be taken to not disturb the scenic and rural character of these roadways and to achieve consensus for any recreation activities with residents who live in these areas.

Walking loops are simple recreational features that are currently being examined by several Berkshire County communities and have already been implemented by North Adams and Pittsfield. Walking loops consist of measured and marked walking paths along quiet and relatively flat areas of roadway. It should be noted that the term "walking loops" is used as a catchall phrase for identified walking paths and areas on public roadways or in public parks. These may be true "loops" where the walking path returns to a starting point without ever crossing back on itself, or individual roads and other areas identified in town that are ideal for walking. Walking loops are intended to be accessible to people of a wide range of ages and abilities, and make an ideal walking location for senior citizens and disabled residents who may not be able to access local hiking trails. In the public survey, walking loops on public roads were supported by 79% of respondents.

Walking loops could be an important part of the town's recreation infrastructure. The town's unpaved roadways are a recreation area accessible from the front door of most town residents', and provide a space for walking, running, or even horseback riding. Additionally, mountain bikers sometimes use these unpaved roadways instead of local trails.

Due to the fact that they are already widely used for recreation, East Road and Richmond Shores Road / Boys' Club Road would make ideal locations for walking loops. Walking loops along these roads should ideally include a few simple and minimal signs identifying the start and end of the walking loop, and intermediate signs noting significant distances. Signs should ideally note distance along the loop moving in both directions. Additionally, these walking loops should be promoted through the town website and other communications. BRPC was involved in two healthy community design related projects during the spring and summer of 2015. BRPC was able to provide initial conceptual mapping of walking loops along the roads mentioned above. These maps have been included in Appendix E.

#### Need for Greater Advocacy for Seniors and Older Richmond Residents

During the second public forum, a participant asked if an advocate for recreation by senior citizens was included on the town committee that developed the OSRP. While no specific advocate was included on committee, the recreation needs of senior citizens and the changing demographics of the town were discussed. This led to the development of specific action items to improve universal accessibility at existing and future recreation areas and where possible, to integrate recreation options for older residents into town recreation areas. Another action item of the plan (under goal 6) recommends that the town establish a committee to help with the implementation of this OSRP. If and when a committee is established, the town should ensure that at least one committee member be a member of the Richmond Council on Aging, or a strong advocate for the recreation needs of the town's older residents.

#### The Richmond OSRP and the Statewide Comprehensive Outdoor Recreation Plan (SCORP)

The Massachusetts SCORP is a broad and farreaching examination of recreation needs across the state of Massachusetts. There are many similarities between the

#### 7C MANAGEMENT NEEDS, POTENTIAL CHANGE OF USE Camp Marion White

The pending sale of Camp Marion White is an enormous opportunity to create a multi-use publicly accessible recreation area on Richmond Pond. While the Richmond Town Beach provides and opportunity to the public for swimming, fishing, or picnicking, the purchase or preservation of the camp property would greatly expand the range and potential recreation options for town residents and surrounding communities. Additionally, preservation of the camp as a recreation area would protect over 1300 feet of shoreline and 50 acres of land within the town from future development. The purchase or preservation of Camp Marion White was supported by over 90% of survey respondents, and was also selected as an important item for the town to pursue during the 2nd open space public forum in September 2015.

If the town is able to purchase or preserve the camp, it should establish a committee focused on this area. The nearby Town of Lenox has a similar committee focused on Kennedy Park, one of its largest and most popular recreation areas. This committee could be composed of members of the existing CMWWG or other interested individuals. Moreover, if purchased, the town should create a master plan and management plan for the property.

# Funding for Conservation and Recreation Projects

While the completion of this OSRP will allow the town to compete in grant programs through the state, additional funding for conservation and

Richmond Open Space and Recreation Plan Goals and Objectives



recreation projects could come through the adoption of the Community Preservation Act (CPA). Adoption of the CPA was supported by 65% of public survey respondents, and was selected as a important item for the town to pursue by participants of the 2nd open space public forum in September 2015. If adopted, the CPA is a surcharge of 1-3% on existing property taxes that can be used to fund projects related to open space and recreation, community housing and historic preservation. Towns must establish a Community Preservation Committee (CPC), which evaluates potential projects for eligibility. To date, roughly 45% of Massachusetts towns have adopted the CPA. Adoption of the CPA could also help the town to meet other goals it has identified, including its recent work with housing, and its efforts to meet the state's 10% housing affordability standards. Moreover, the CPA would provide funding for historic preservation related projects which could help to maintain the town's rural and scenic character.

If the town wishes to pursue the CPA, the issue should be discussed by the town's planning board, and the town should hold a public forum or information session about the CPA before bringing it to vote at town meeting.

# **SECTION 8: GOALS AND OBJECTIVES**

These Open Space and Recreation goals, objectives, and actions items were compiled from the work of the Richmond Open Space Advisory Committee, the 2015 Open Space and Recreation Survey, the June 16th, 2015 public forum, and the analysis of the data contained in earlier sections of this OSRP.

### GOAL 1: WATER RESOURCES IN RICHMOND ARE PROTECTED

- Maintain drinking water quality and work to reduce non-point source pollution.
- Protect and manage Richmond Pond as an important natural and recreation resource.

### GOAL 2: NATURAL RESOURCES IN RICHMOND ARE PROTECTED

- Protect an additional 1000 acres of unprotected land (roughly doubling protected land in the town).
- Certify or evaluate at least 50% of the town's uncertified vernal pools.
- Protect Ridgelines.

### GOAL 3: RESIDENTS AND VISITORS ARE AWARE OF RICHMOND'S OPEN SPACE AND CULTURAL RESOURCES AND RECREATIONAL OPPORTUNITIES

- Promote existing open space and recreation opportunities.
- Promote the town's historic resources.

## GOAL 4: THE TOWN'S RECREATION OPPORTUNITIES MEET COMMUNITY NEEDS

• Improve existing recreational opportunities.



## RICHMOND OPEN SPACE GOALS AND OBJECTIVES AT A GLANCE

<u>Goal 1: Water Resources in Richmond are</u> <u>Protected</u>

<u>Goal 2: Natural Resources in Richmond</u> <u>are Protected</u>

<u>Goal 3: Residents and Visitors are Aware</u> of Richmond's Open Space and Cultural Resources and Recreational Opportunities

<u>Goal 4: The Town's Recreation Opportu-</u> <u>nities Meet Community Needs</u>

<u>Goal 5: Funding for Conservation and</u> <u>Recreation Projects Meets Community</u> <u>Needs</u>

Goal 6: Ensure Implementation of the Richmond Open space and Recreation Plan



- Maintain high quality recreation programming and events.
- Permanently protect all town owned recreation lands from future development.
- Work with public and private landowners to expand public recreation access.
- Enhance use of roadways as important recreation spaces.
- Purchase or preserve Camp Marion White for use as a publicly accessible recreation area and ecologically valuable natural area.

## GOAL 5: FUNDING FOR CONSERVA-TION AND RECREATION PROJECTS MEETS COMMUNITY NEEDS

- Apply for grant opportunities to assist in town conservation and recreation projects.
- Investigate adoption of the Community Preservation Act (CPA).
- Raise visibility and support for local organizations dedicated to Open Space and Recreation.

## GOAL 6: ENSURE IMPLEMENTATION OF THE RICHMOND OPEN SPACE AND RECREATION PLAN

# **SECTION 9: 7-YEAR ACTION PLAN**

The 7-year action plan lists the specific actions that are needed to implement the goals and objectives described in sections 6 and 8. For a visualization of the 7-year action plan, please refer to Map 8: Action Plan Map.

GOAL 1: WATER RESOURCES IN RICHMOND ARE PROTECTED									
Maintain drinking water quality and work to reduce non-point source pollution	Suggested Leadership	Anticipated Funding	Anticipated Schedule (2016-2022)						
Continue to enforce regulations to protect Richmond's drink- ing water resources as well as those of surrounding towns.	BOH, Con. Com.		Ongoing						
Work with and educate upland landowners and farmers to adopt best management practices (i.e. vegetative buffers) to reduce non-point source pollutants.	Con. Com.		2018-2019						
Continue to use alternative de-icing chemicals and methods.	DPW		Ongoing						
Continue to notify residents about local hazardous waste collection events and locations.	Town Ad- ministrator		Ongoing						
Provide the text of the wetland bylaw on the town website.	Town Ad- ministrator , Con. Com		2016-2017						
Review the wetland bylaw for potential updates and work to implement changes if identified.	Con. Com.		Ongoing						
Collaborate with surrounding towns on water resource related projects and issues.	Con. Com, Select Board		Ongoing						

Protect and manage Richmond Pond as an important recreation and natural resource	Suggested Leadership	Anticipated Funding	Anticipated Schedule (2016-2022)
Continue to fund studies and regular testing related to the ecology, water quality, and management of Richmond pond.	Con. Com, Select Board, RPA		Ongoing
Continue to implement the aquatic vegetation management plan to address Eurasian Milfoil and other invasive species on Richmond Pond.	Con. Con., Select Board, Town Admin.		Ongoing
Continue to fund the boat ramp monitor program on Rich- mond Pond.	Select Board		Ongoing
Continue the yearly drawdown of Richmond Pond as a tool to manage invasive species and assist with downstream flood control.	Con. Com.		Ongoing
Work with the City of Pittsfield and the Commonwealth of Massachusetts to secure funding, technical assistance, or other resources to help manage the Richmond Pond Dam.	Select Board, RPA, Town Ad- min.		2018-2019



Continue to collaborate with the Richmond Pond Association and other organizations, residents, and landowners to ad- dress management and safety issues related to Richmond Pond.	Select Board, Con. Com., Town Admin.				
Work with private landowners to reestablish the historic Indi- an trail and walking path around the shoreline of Richmond Pond.	CMWWG, Select Board, RPA				
Investigate development of a no-wake zone on Richmond Pond.	RPA				
Investigate development of a motor-boat size restriction on Richmond Pond.	RPA				
Investigate a ban on Jet-skis or other motorized personal watercraft on Richmond Pond.	RPA				
Continue to educate visitors and residents around Richmond Pond about safe boating practices and work to build a culture of respect and safety for all Richmond Pond residents and					
users.	RPA				

# **GOAL 2: NATURAL RESOURCES IN RICHMOND ARE PROTECTED**

			1						
Protect an additional 1000 acres of unpro- tected land (roughly doubling protected land in the town)	Suggested Leadership	Antici- pated Funding	2016	2017	2018	2019	2020	2021	2022
Continue to enforce regulations to protect the town's sensi- tive ecosystems and wildlife habitats.	Con. Com.								
Continue to collaborate with local land trusts, landowners, and surrounding towns on potential land acquisition and oth- er projects related to conservation or recreation.	RLT, BNRC, Town Ad- min., Se- lect Board,								
Prioritize conservation and recreation projects related to endangered species habitats and state listed priority conser- vation areas as well as agricultural lands and early succession- al forests.	Select Board, Con. Com.								
Contact landowners with unprotected land containing priority conservation areas, priority natural communities or core habitat with a letter outlining the significance of their property.	Con. Com., Assessor								
Hold a public forum or open house to educate residents about available land conservation programs and incentives.	Con. Com., RLT, BNRC								
Hold a public forum or open house to educate residents (particularly Chapter 61 landowners) about integrating ecolog- ical goals into their forest management plans.	Con. Com.								

		Antici-							
	Suggested	pated							
town's uncertified vernal pools	Leadership	Funding	2016	2017	2018	2019	2020	2021	2022
Develop a list of landowners with uncertified vernal pools on	Con. Com.,								
their property, and contact them about certifying vernal	Rec. Com.,								
pools on their property.	Assessor								
Recruit and educate volunteers to hold a vernal pool certifi-	Con. Com.,								
cation event.	Rec. Com-								
Work with the Berkshire Environmental Action Team (BEAT),	Con. Com.,								
volunteers, and willing landowners to certify uncertified ver-	Rec. Com-								
nal pools.	mittee								71

Minimize environmental impacts from existing	Suggested								
Minimize environmental impacts from existing		pated	2046	2017	2010	2010		2024	
and future development	ship	Funding	2016	2017	2018	2019	2020	2021	2022
Adopt Best Management Practices (BMPs) for the maintenance of unpaved roadways to minimize non-point source pollution	DPW, Con.								
from these areas.	Com.								
	Affordable								
Examine development of an Open Space Residential Design	Housing								
(Cluster Development) by-law and hold a public forum on possi-	Com-								
ble adoption thereof.	mittee								
	Affordable								
	Housing								
	Com-								
	mittee,								
Vote to adopt an Open Space Residential Design by-law at town	Town								
meeting.	Meeting		<u> </u>						
		Antic:							
		Antici- pated							
Protect ridgelines	Leadership	-	2016	2017	2018	2019	2020	2021	2022
	Con. Com.,	runu	2010	2017	2010	2015	2020	2021	LULL
Mountain Act to protect lands along the Yokun Ridge and the	Select								
Taconic Ridgeline.	Board								
¥									
Work with conservation groups to support conservation and	Con.								
recreation projects related to Yokun Ridge and the Taconic	Com., Se-								
Ridgeline.	lect Board,					0.05			
	AWARE						N S	PACE	
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE	AWARE	AL OF					N S	PACE	
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE	AWARE ATION	AL OF					N S	PACE	
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation	AWARE ATION/ Suggested	AL OF Antici- pated	POR			S			
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE	AWARE ATION	AL OF Antici- pated	POR			S		PACE 2021	
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities	AWARE ATION Suggested Leadership	AL OF Antici- pated	POR			S			2022
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated	AWARE ATION Suggested Leadership Select	AL OF Antici- pated	POR			S			
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic	AWARE ATION Suggested Leadership Select Board,	AL OF Antici- pated	POR			S			
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources.	AWARE ATION/ Suggested Leadership Select Board, Town Ad-	AL OP Antici- pated Fundin	POR			S			
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to	AWARE ATION/ Suggested Leadership Select Board, Town Ad-	AL OP Antici- pated Fundin	POR			S			
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources.	AWARE ATION/ Suggested Leadership Select Board, Town Ad- D Recreation	AL OP Antici- pated Fundin	POR			S			
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this	AWARE ATION/ Suggested Leadership Select Board, Town Ad- Recreation Com-	AL OP Antici- pated Fundin	POR			S			
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this event with relevant landowners, land trusts, or other conserva-	AWARE ATION/ Suggested Leadership Select Board, Town Ad- Recreation Com- mittee,	AL OP Antici- pated Fundin	POR			S			
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this event with relevant landowners, land trusts, or other conserva-	AWARE ATION/ Suggested Leadership Select Board, Town Ad- Recreation Com- mittee,	AL OP Antici- pated Fundin	POR			S			
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this event with relevant landowners, land trusts, or other conserva- tion groups.	AWARE ATION/ Suggested Leadership Select Board, Town Ad- Recreation Com- mittee, Con. Com.	AL OP Antici- pated Fundin	g 2016	2017	<b>JITIE</b> 2018	S 2019	2020	2021	2022
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this event with relevant landowners, land trusts, or other conserva- tion groups.	AWARE ATION/ Suggested Leadership Select Board, Town Ad- Recreation Com- mittee, Con. Com.	AL OP Antici- pated Fundin	POR			S 2019		2021	2022
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this event with relevant landowners, land trusts, or other conserva- tion groups. Promote the town's historic resources	AWARE ATION/ Suggested Leadership Select Board, Town Ad- D Recreation Com- mittee, Con. Com. Suggested Leadership	AL OP Antici- pated Fundin	g 2016	2017	<b>JITIE</b> 2018	S 2019	2020	2021	2022
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this event with relevant landowners, land trusts, or other conserva- tion groups. Promote the town's historic resources Create a section of the town website and newsletter dedicated	AWARE ATION/ Suggested Leadership Select Board, Town Ad- D Recreation Com- mittee, Con. Com. Suggested Leadership	AL OP Antici- pated Fundin	g 2016	2017	<b>JITIE</b> 2018	S 2019	2020	2021	2022
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Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this event with relevant landowners, land trusts, or other conserva- tion groups. Promote the town's historic resources Create a section of the town website and newsletter dedicated to promoting the town's historic resources.	AWARE ATION/ Suggested Leadership Select Board, Town Ad- D Recreation Com- mittee, Con. Com. Suggested Leadership Select Board, Town Historical	AL OP Antici- pated Fundin Antici- pated Fund- ing	g 2016	2017	<b>JITIE</b> 2018	S 2019	2020	2021	2022
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRI Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this event with relevant landowners, land trusts, or other conserva- tion groups. Promote the town's historic resources Create a section of the town website and newsletter dedicated to promoting the town's historic resources. Organize a tour of the town's historic buildings and areas.	AWARE ATION/ Suggested Leadership Select Board, Town Ad- D Recreation Com- mittee, Con. Com. Suggested Leadership Select Board, Town	AL OP Antici- pated Fundin Antici- pated Fund- ing	g 2016	2017	<b>JITIE</b> 2018	S 2019	2020	2021	
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRI Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this event with relevant landowners, land trusts, or other conserva- tion groups. Promote the town's historic resources Create a section of the town website and newsletter dedicated to promoting the town's historic resources. Organize a tour of the town's historic buildings and areas. Install signage to mark the boundaries of the Richmond Fur-	AWARE ATION/ Suggested Leadership Select Board, Town Ad- D Recreation Com- mittee, Con. Com. Suggested Leadership Select Board, Town Historical	AL OP Antici- pated Fundin Antici- pated Fund- ing	g 2016	2017	<b>JITIE</b> 2018	S 2019	2020	2021	2022
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this event with relevant landowners, land trusts, or other conserva- tion groups. Promote the town's historic resources Create a section of the town website and newsletter dedicated to promoting the town's historic resources. Organize a tour of the town's historic buildings and areas. Install signage to mark the boundaries of the Richmond Fur- nace Historical and Archaeological District and at other historic	AWARE ATION/ Suggested Leadership Select Board, Town Ad- D Recreation Com- mittee, Con. Com. Suggested Leadership Select Board, Town Historical Commission	AL OP Antici- pated Fundin Antici- pated Fund- ing	g 2016	2017	<b>JITIE</b> 2018	S 2019	2020	2021	2022
Ridgeline. GOAL 3: RESIDENTS AND VISITORS ARE AND CULTURAL RESOURCES AND RECRE Promote existing open space and recreation opportunities Create a section of the town website and newsletter dedicated to promoting the town's recreation areas and events, scenic areas, and natural resources. Organize a geocaching event, "passport tour", or similar event to promote the town's existing recreation areas. Coordinate this event with relevant landowners, land trusts, or other conserva- tion groups. Promote the town's historic resources Create a section of the town website and newsletter dedicated to promoting the town's historic resources. Organize a tour of the town's historic buildings and areas. Install signage to mark the boundaries of the Richmond Fur- nace Historical and Archaeological District and at other historic	AWARE ATION/ Suggested Leadership Select Board, Town Ad- D Recreation Com- mittee, Con. Com. Suggested Leadership Select Board, Town Historical	AL OP Antici- pated Fundin Antici- pated Fund- ing	g 2016	2017	<b>JITIE</b> 2018	S 2019	2020	2021	2022


GOAL 4: RICHMOND'S RECREATION OPPORTUNITIES MEET COMMUNITY NEEDS										
		Antici-								
		pated								
	Suggested	Fund-								
Improve existing recreational opportunities	Leadership	ing	2016	2017	2018	2019	2020	2021	2022	
Implement improvements to the town beach as necessary to	Con. Com.,									
support swimming, fishing, picnicking, and universal accessibil-	Select									
ity.	Board									
	School									
Upgrade and improve existing playground equipment and ath-	Committee,									
letic fields at the Richmond Consolidated School to meet town	Select									
needs, improve access, and improve safety.	Board									
Upgrade and improve the existing town tennis courts to meet	Rec. Com-									
town needs and improve accessibility.	mittee									
Where possible, expand recreation opportunities for the town's	Rec. Com-									
children and families.	mittee									
Where possible, expand recreation opportunities for the town's	COA, Rec.									
older residents and senior citizens.	Committee									
Improve ADA and handicap accessibility to existing town recrea-										
tion areas. Make ADA accessibility a priority in future recrea-	COA, Rec.									
tion projects. Promote town ADA improvements.	Committee									
	Agricultural									
Identify a possible location for a community garden on public or	Commis-									
private land and form a community garden club.	sion									

Work with public and private landowners to expand public recreation access	Suggested Leadership	2016	2017	2018	2019	2020	2021	2022
	Con, Com.,		-				-	
Locate existing informal trails and trailheads and work with	Rec.							
landowners to secure public access through easements,	Committee,							
agreements, memoranda of understanding, etc.	RLT							
Work to educate landowners currently enrolled in Chapter 61	Rec. Comm.,							
programs about Chapter 61B outdoor recreation incentives.	Assessor							
Contact landowners enrolled in Chapter 61 about possible trail	Rec. Comm.,							
creation.	Assessor							
	Select Board,							
Contact Camp Russell and Lakeside Christian Camp about	Rec.							
formalizing or enabling public access.	Committee							
Contact DCR about possible recreation access on the portion of Pittsfield State forest along Dean Hill Road in the southwest corner								
of town. If feasible, work to identify and implement projects in	Select Board,							
this area.	Con. Com.							
Collaborate with surrounding communities to improve public	Con. Com,							
access to lakes, ponds, and reservoirs.	Town Admin.							

Enhance use of roadways as important recreation	Suggested							
spaces	Leadership	2016	2017	2018	2019	2020	2021	2022
	Recreation Committee, DPW							
Promote walking loops through town communications and the website.	Town Admin.							
Examine the need and feasibility of pull-off parking along roads used for recreation.	DPW							

Communicate with MassDOT to ensure that pedestrian and cycling improvements are included in future projects along state-owned roadways such as Routes 41 and 295.	Select Board, DPW				
Collaborate with the Richmond/ West Stockbridge Artist's Guild to create areas near scenic views for photography and painting.	Town Admin- istrator, Con. Com.				

	1	1						
Purchase or preserve Camp Marion White for use								
as a publicly accessible recreation area and	Suggested							
ecologically valuable natural area	Leadership	2016	2017	2018	2019	2020	2021	2022
Hold a public forum about the possible use of the property as a	Town Admin.							
Raise funds for the possible purchase or preservation of the Camp.	CMWWG,							
Raise funds for future recreation or conservation projects should	Select Board,							
the camp be purchased by the town.	RLT							
	Select Board,							
Vote to fund the purchase or preservation of all or a portion of	Town							
Camp Marion White.	Meeting							
If the property is to be purchased or preserved for use as a public								
recreation area, form a public committee to guide its use as a com-								
munity asset.	Select Board							
Develop a master plan and management plan for the property.	Rec. Comm.,							
Ensure the master plan assesses the potential future uses of ex-	Select Board,							
isting buildings.	CMWWG							
Implement projects to ensure universal access for people of all								
ages and abilities to the Camp Marion White property and its facili-	Rec. Comm.,							
ties. Invest in other basic infrastructure such as signage and way-	Select Board,							
finding.	CMWWG							
	Rec. Comm.,							
	Select Board,							
Create multi-use fields.	CMWWG							
	Rec. Comm.,							
Restore the interpretive trail near the wetland east of Swamp	Select Board,							
Road.	CMWWG							
	Rec. Comm.,							
Create a Canoe and Kayak launch. Develop storage for canoes and	Select Board,							
kayaks.	CMWWG							
	Rec. Comm.,							
Create hiking and walking trails. Connect trails on the site to ex-	Select Board,							
isting trail networks.	CMMWG							
	Rec. Comm.,							
Repair existing buildings and structures. Remove damaged and	Select Board,							
hazardous structures.	CMWWG							
	Rec. Comm.,							
	Select Board,							
Develop areas for parking.	CMWWG							
	Rec. Comm.,							
Bury existing overhead utility lines on the property to meet state	Select Board,							
PARC Grant eligibility requirements.	CMWWG							



	Suggested							
and events	Leadership	2016	2017	2018	2019	2020	2021	2022
Continue to offer recreational programming and events through	Rec. Com-							
the work of the Richmond Recreation Committee.	mitee							
Work to expand or improve recreation programs offered through								
the Richmond Recreation Committee by recruiting volunteers and	Rec. Com-							
replacing or purchasing equipment as necessary.	mitee							

Permanently protect all town owned recreation lands from future development	Suggested Leadership	2016	2017	2018	2019	2020	2021	2022
Permanently protect existing recreation areas such as the town beach, Tennis Courts, and Richmond Consolidated School playground under Mass. General Law Chapter 45.	Select Board							
Ensure future town owned recreation areas are protected through conservation restrictions or MGL Chapter 45.	Select Board							

## GOAL 5: FUNDING FOR CONSERVATION AND RECREATION PROJECTS MEETS COMMUNITY NEEDS

Apply for grant opportunities to assist in town conservation and recreation projects.	Suggested Leadership	2016	2017	2018	2019	2020	2021	2022
Research additional grant opportunities to help fund open space								
and recreation projects in town, such as the Urban and Community	Town Admin.,							
Forestry Challenge grants and Massachusetts Recreational Trails	Con. Com.,							
Program.	Select Board							
	Town Admin.,							
Apply to the DCS PARC, LAND, and other grant programs to help	Con. Com.,							
fund town open space and recreation projects.	Select Board							

	Suggested Leadership	2016	2017	2018	2019	2020	2021	2022
Hold a public forum about the potential adoption of the Communi- ty Preservation Act.	Planning Board							
Vote to adopt the Community Preservation Act at town meeting.	Town Meeting							

	Suggested Leadership	2016	2017	2018	2019	2020	2021	2022
Investigate development of a sustaining conservation fund through donations and other sources.	Select Board, Town Admin.							

Raise visibility and support for local organizations dedicated to open space and recreation, historic preservation, and related ac- tivities	Suggested Leadership	2016	2017	2018	2019	2020	2021	2022
Promote local organizations and their activities through town communications and the town website.	Town Admin.							
Support and encourage local organizations related to open space and recreation to host and be a part of events in Richmond.	Town Admin, Select Board							

# GOAL 6: ENSURE IMPLEMENTATION OF THE RICHMOND OPEN SPACE AND RECREATION PLAN

	•							
	Suggested							
	Leadership	2016	2017	2018	2019	2020	2021	2022
Establish an OSRP implementation committee or advocate that will								
regularly review the OSRP and ongoing work to meet its goals.								
Ensure that the needs of Richmond's older residents are represent-								
ed during implementation.	Select Board							
Ensure manpower and resources are dedicated to meeting the	Select Board,							
goals of this plan.	Town Admin.							
Create a section of the town website dedicated to the OSRP and	Select Board,							
that tracks progress on its goals and objectives.	Town Admin.							
	Implementa-							
	tion Com-							
Develop a list of potential volunteers to help implement the	mittee/							
projects to meet the goals of this plan.	Advocate							
	Implementa-							
	tion Com-							
	mittee/							
Review accomplishments and begin OSRP update	Advocate							

#### List of Abbreviations:

Town Admin.—Town Administrator BOH—Board of Health BNRC—Berkshire Natural Resources Council Con. Com.—Conservation Commission COA—Council on Aging CMWWG—Camp Marion White Working Group DPW—Department of Public Works Rec. Comm.—Recreation Committee RLT—Richmond Land Trust



## **SECTION 10: PUBLIC COMMENTS**



### TOWN OF RICHMOND

Main Office: (413) 698-3355 Fax: (413) 698-3272

Town Hall 1529 State Road Richmond, Massachusetts 01254

October 19, 2015

Ms. Melissa Cryan PARC Administrator Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114

Dear Ms. Cryan:

This letter is to inform you that on Wednesday, October 14, 2015 the Richmond Board of Selectmen voted to approve the town's initial Open Space and Recreation Plan.

The Board of Selectmen view this plan as formalization of the town's long term commitment to preserving and protecting open space and its support for recreational activities for all its residents. The plan provides a framework in which to guide community leaders over the next years as they work to execute the Plan's Action Plan.

As you are well aware the development of this plan was collaborative effort with extensive public input. This input makes this a true community plan representing the broad spectrum of the community's priorities for land conservation and outdoor recreation. This organic nature of the plan's development was critical in ensuring its future success and the Board of Selectmen is pleased to submit the plan for your approval.

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

Sincerely, Marguente

Marguerite "Jackie" Rawson, Chairman Richmond Board of Selectmen



Commonwealth of Massachusetts



Jack Buckley, Director

June 23, 2015

Eammon Coughlin, Planner Berkshire Regional Planning Commission 1 Fenn Street, Suite 201 Pittsfield, MA 01201

Re: Open Space Plan; 15-34371, Town of Richmond

Dear Mr. Coughlin:

Thank you for contacting the Natural Heritage and Endangered Species Program regarding the Open Space and Recreation Plan for the Town of Richmond. Enclosed is information on the rare species, priority natural communities, vernal pools, coldwater fisheries resources, and other aspects of biodiversity that we have documented in Richmond. The town is encouraged to include this letter, species list, appropriate maps, and the BioMap2 Town Report in the Open Space and Recreation Plan.

From a biodiversity conservation perspective, based on the BioMap2 analysis and 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 Richmond.

The list of uncommon aspects of biodiversity included with this letter and the list in BioMap2 differ because this list and discussion include all of the uncommon aspects of biodiversity in Richmond that NHESP has documented and BioMap2 focused on occurrences with state-wide significance and includes non-MESA listed species of conservation interest from the 2005 State Wildlife Action Plan. In addition, the NHESP database is constantly updated and the enclosed list may include species and natural communities of conservation interest identified in town since the data analysis for BioMap2 in 2010.

In early 2013 we sent each town copies of its *BioMap2* Town Report that 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: the town report is available from <a href="http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/land-protection-and-">http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/land-protection-and-</a>

management/biomap2/biomap2-town-reports.html The BioMap2 components relevant to Richmond are BioMap2 Core Habitats for Species of Conservation Concern and Exemplary or Priority Natural Communities, and Aquatic, and Wetland Cores, and, in Critical Natural Landscape (CNL), Landscape Blocks and Upland Buffers of Aquatic and Wetland Cores. The components are described in full in the BioMap2 summary report and each description is available as a fact sheet, all available from our website at: 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 changed last year; web addresses in publications from before June 2013, including inside the BioMap2 report, will not work properly.

I encourage you to download species and natural community fact sheets from our website to include in the OSRP with the species list and BioMap2 discussion: there are hot links for the fact sheets in list of species protected by the Massachusetts Endangered Species Act (MESA) http://www.mass.gov/eea/agencies/dfg/dfw/natural-beritage/species-information-and-conservation/mesa-

list/list-of-rare-species-in-massachusetts.html and for some of the delisted species, watch-list, and species of conservation concern that are not listed in MESA but will be included in the 2015 SWAP: http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/species-information-and-conservation/mesalist/non-listed-species-of-conservation-interest.html



Natural Heritage & Endangered Species Program 1 Rabbit Hill Rd, Westborough, MA 01581 Tel: (508) 389-6360 Fax: (508) 389-7890 An Agency of the Department of Fish and Game http://www.mass.gov/nhesp



#### NHESP letter re: Richmond Open Space & Recreation Plan

June 23, 2015

Natural community fact sheets are available from: <u>http://www.mass.gov/eea/agencies/dfg/dfw/natural-</u> heritage/natural-communities/natural-community-fact-sheets.html:

Richmond is one of the towns with town wide maps showing areas forested in the 1830s, which are areas of possible Primary Forest, most of which were untilled woodlots and wooded pastures (areas shown in transparent gray blue on the attached map). Such lands have greater biodiversity than areas that have been tilled. These are not Old Growth as they have been harvested and pastured, but the ground may not have been disturbed. Harvard Forest digitized maps from the 1830s that the Massachusetts legislature mandated that the Towns make. Richmond's map exists and shows areas that were forested in the 1830s, mostly in the western portion of town. NHESP GIS staff took those data and combined them with information from MassGIS' landcover datalayer made from 1999 aerial photos. Although a great deal will have gone on in those areas in the time between the map dates, some areas that were forested in both times won't ever have been tilled. Surveys of the soil structure in the individual sites are necessary to determine whether those sites are Primary Forest. The importance of primary forest is that such sites retain more native biodiversity than sites that have been tilled: soil fauna and flora, microorganisms and plants that reproduce primarily vegetatively contribute to the higher biodiversity. In addition, a variety of species of wildflowers are more common in untilled forests than previously tilled lands. The areas of 1830s forest on private land would be good targets for conservation acquisition to maintain the biodiversity of the town and region. The Harvard Forest website contains information on the 1830s forest datalayer and copies of papers with discussion of the information. (See Harvard Forest. 2002. 1830 Map Project. Harvard Forest Archives, Petersham, MA and B. Hall, G. Motzkin, D. R. Foster, M. Syfert, and J. Burk. 2002. Three hundred years of forest and land-use change in Massachusetts, USA. Journal of Biogeography 129: 1319-1135.)

The uncommon birds in Richmond are all associated with the wetlands, streams and ponds in town: both the American Bittern (E) and the Common Moorhen (SC) typically nest in dense cattail beds. The Sedge Wren (E) next in large wet meadows and are sensitive to changes in hydrology and seral succession.

Wood Turtles (SC) spend most of their time in streams and associated uplands: in Richmond they occur along Cone Brook, in areas also identified for other listed species and as a Cold Water Fisheries Resource (CFR) stream (discussed below).

Jefferson Salamanders (SC) breed in vernal pools, but live in the forest floor leaf litter in surrounding uplands for most of their adult lives. They are known in several places in Richmond.

Although there are several CFR streams and rivers in Richmond, only 1 rare fish species has been observed. Bridle Shiners (SC) are small (<2 inches) 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.

NHESP has data from Richmond for one uncommon invertebrate, the Dion Skipper Butterfly. Dion Skippers (SC) larvae inhabit sedge wetlands. Adult butterflies nectar in nearby upland fields.

In Richmond, many of the thirty-six uncommon plant species are associated with wetlands, specifically, open wet meadows, with grasses, sedges, and other herbaceous species and few shrubs. Foxtail Sedge (T), Creeping Sedge (E), Prairie Sedge (WL), Variegated Horsetail (WL), Slender Cottongrass (T), Labrador Bedstraw (T), Stiff Gentian (WL), Hoary Willow (WL), Autumn Willow (WL), Pendulous Bulrush (WL), Shining Ladies'-tresses (WL) and Arborvitae (E) may be found in open wet meadows with the slightly sweeter soils associated with Richmond's underlying carbonate bedrock. Other uncommon plants are found along the shores of rivers, streams and ponds: the two Spike-sedges (T and WL), Frank's Lovegrass (SC), Water Star-grass (WL), and Knotted Rush (WL). The two pondweeds prefer open, slowly moving water. Mesic rich forests provide habitat to additional uncommon plant species; Hitchcock's Sedge (SC), Glade Fern (WL), Goldie's Fern (WL), Stiff Gentian (WL), Barren Strawberry (SC), and Woodland Millet (T). Only a few uncommon plants are regularly found in upland forests, including Drooping Speargrass (E), Slender Blue-eyed Grass (E), Large-flowered Bellwort (WL) and Kidney-leaf Violet (WL).

Richmond has 11 Certified Vernal Pools (CVPs) and 39 Potential Vernal Pools (PVPs) (identified from aerial photographs, needing verification on the ground). In addition, areas of swamps will often provide habitat for vernal pool species. Visiting and evaluating PVPs for certification would provide more protection to these wetlands and the species that use them as Certified Vernal Pools have additional protection under the Massachusetts Wetlands Protection Act and are considered Outstanding Resource Waters under the Federal Clean Water Act.

The NHESP database has examples of both Priority (uncommon) and Exemplary (excellent examples of more common types) Natural Communities in Richmond. The calcium available from the underlying bedrock creates uncommon conditions in several communities: Calcareous Sloping Fens, Calcareous Seepage

#### NHESP letter re: Richmond Open Space & Recreation Plan

Marsh, Calcareous Rocky Summit/Rock Outcrop Community and Black Ash-Red Maple-Tamarack Calcareous Seepage Swamp.

Calcareous Sloping Fens are open, sedge-dominated wetlands occurring on slight to moderate slopes where there is calcareous groundwater seepage. They tend to be 'hot spots' for uncommon species often containing multiple state-listed species. 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 botanical rarities. Black Ash-Red Maple-Tamarack Calcareous Seepage Swamps are mixed deciduous-coniferous fairly open swamps occurring in areas where there is calcium-rich groundwater seepage. This nutrient enrichment supports many rare calcium-loving plant species. Finally, the one upland communities, usually on steep, mid-slope calcareous ledges in the marble regions of Berkshire County. All of these rare natural communities are considered "Imperiled" as there are so few left in the state.

Flow alteration and urbanization have been associated with stream-ecosystem degradation in flowing waters, as measured through changes in fish and macroinvertebrate communities. A study to determine relations between fish-assemblage characteristics and anthropogenic factors found more species of river fish in streams with little flow alteration or impervious cover than in altered streams, with very few river fish remaining in streams with high rates of water withdrawal or impervious cover. DFW has been sampling streams around the state to establish their degree of suitability for some of the more sensitive fish species, including brook trout. The best streams are called Cold Water Fisheries (CFRs). For streams, protecting existing forested buffers and promoting more where necessary to shade the stream, improving road crossings to restore connectivity and minimizing additional crossings, avoiding rip rap or other stream hardening, and maintaining natural flow regimes are all steps that maintain or improve habitat conditions. Maintaining forest cover around existing high ranked streams, limiting water withdrawal near them, and generally buffering them from the degradations of development protects not only populations of fish and other inhabitants of the streams, but also protects water quality for humans.

More information on locations of CFRs is available from <a href="http://www.mass.gov/eea/agencies/dfg/dfw/wildlife-habitat-conservation/coldwater-fish-resources-list.html">http://www.mass.gov/eea/agencies/dfg/dfw/wildlife-habitat-conservation/coldwater-fish-resources-list.html</a>

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. Culverts in the streams should be 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. Richmond has three identified CFRs shown on the enclosed map with vernal pools and natural communities:

aris/Palis	Waterbody Name	Watershed	Towns
104150	Lenox Mountain Brook	Housatonic	Richmond
2106200	Mount Lebanon Brook	Housatonic	Pittsfield, Richmond, Hancock
2106225	Seace Brook	Housatonic	Richmond

The BioMap2 Core areas and Contributing Natural Landscape are particularly valuable in ecological terms, and important to species conservation. 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 through the same links as above. 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.

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



#### NHESP letter re: Richmond Open Space & Recreation Plan

June 23, 2015

use, shown in the Natural Heritage Atlas (the 2008 Atlas, the 13<sup>th</sup> edition is the current version; a 14<sup>th</sup> edition is planned to be released sometime in 2015). Note that Estimated Habitat is a complete subset of Priority Habitat: that is, Estimated Habitat shows a subset of the species' habitats shown in Priority Habitat. These data layers are available from MassGIS at <a href="http://www.mass.gov/anf/research-and-tech/it-serv-and-support/application-serv/office-of-geographic-information-massgis/datalayers/layerlist.html#ConservationRecreation, requiring access to some form of GIS to view</a>

massgis/datalayers/layerlist.html#ConservationRecreation, requiring access to some form of GIS to view them.

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	ScientificName	CommonName	MESA Status	Federal Status	Most Recent Observation
Amphibian	Ambystoma jeffersonianum	Jefferson Salamander	SC		2009
Bird	Botaurus lentiginosus	American Bittern	E		2008
Bird	Cistothorus platensis	Sedge Wren	E		1988
Bird	Gallinula chloropus	Common Moorhen	SC		1991
Butterfly/Moth	Euphyes dion	Dion Skipper	т		2008
Fish	Notropis bifrenatus	Bridle Shiner	SC		2012
Reptile	Glyptemys insculpta	Wood Turtle	SC		2010
Vascular Plant	Carex alopecoidea	Foxtail Sedge	т		1997
ascular Plant	Carex chordorrhiza	Creeping Sedge	E		1999
Vascular Plant	Carex hitchcockiana	Hitchcock's Sedge	SC		1988
ascular Plant	Carex prairea	Prairie Sedge	WL		2007
Vascular Plant	Carex retrorsa	Retrorse Sedge	WL		2001
Vascular Plant	Carex tetanica	Fen Sedge	SC		1988
Vascular Plant	Conioselinum chinense	Hemlock Parsley	SC		2001
ascular Plant	Diplazium pycnocarpon	Glade Fern	WL		1988
ascular Plant	Dryopteris goldiana	Goldie's Fem	WL		1988
ascular Plant	Eleocharis erythropoda	Redfoot Spike-sedge	WL		1990
ascular Plant	Eleocharis intermedia Equisetum variegatum var.	Intermediate Spike-sedge	т		1988
ascular Plant	variegatum	Variegated Horsetail	WL		1988
ascular Plant	Eragrostis frankii	Frank's Lovegrass	SC		1990
ascular Plant	Eriophorum gracile	Slender Cottongrass	т		2010
ascular Plant	Galium labradoricum	Labrador Bedstraw	т		2010
ascular Plant	Gentianella quinquefolia	Stiff Gentian	WL		1990
ascular Plant	Geum fragarioides	Barren Strawberry	SC		2010
ascular Plant	Heteranthera dubia	Water Star-grass	WL		2001
ascular Plant	Juncus nodosus	Knotted Rush	WL		1990
/ascular Plant	Milium effusum	Woodland Millet	т		1999
/ascular Plant	Poa saltuensis ssp. languida Populus balsamifera ssp.	Drooping Speargrass	Е		1901
Vascular Plant	balsamifera	Balsam Popular	WL		1988
ascular Plant	Potamogeton alpinus	Northern Pondweed	н		1864
ascular Plant	Potamogeton hillii	Hill's Pondweed	SC		2002
ascular Plant	Rhododendron maximum	Great Laurel	т		2013
ascular Plant	Ribes triste	Swamp Red Currant	WL		2001
ascular Plant	Salix candida	Hoary Willow	WL		2001
ascular Plant	Salix serissima	Autumn Willow	WL		2001
ascular Plant	Scirpus pendulus	Pendulous Bulrush	WL		1990
ascular Plant	Sensitive Species		E		2013
ascular Plant	Sensitive Species		SC		2012
ascular Plant	Sisyrinchium mucronatum	Slender Blue-eyed Grass	E		2005
ascular Plant	Spiranthes lucida	Shining Ladies'-tresses	WL		2002
Vascular Plant	Thuja occidentalis	Arborvitae	E		2010
Vascular Plant	Uvularia grandiflora	Large-flowered Bellwort	WL		1988
Vascular Plant	Viola renifolia	Kidney-leaf Violet	WL		1988

### Town of Richmond Rare Species and Communities



Other/Ecological		11 Certified Vernal Pools	
Other/Ecological		39 Potential Vernal Pools	
		Black ash-red maple- tamarack calcareous seepage	
Natural Community	Freshwater Community	swamp	52
		Black ash-red maple-	
		tamarack calcareous seepage	
Natural Community	Freshwater Community	swamp	52
Natural Community	Freshwater Community	Calcareous seepage marsh	52
Natural Community	Freshwater Community	Calcareous sloping fen	52
Natural Community	Freshwater Community	Calcareous sloping fen	52
		Calcareous rocky summit/rock	
Natural Community	Terrestrial Community	outcrop community	<b>S2</b>



# Town of Richmond Open Space and Recreation Plan



# **SECTION 11: REFERENCES**

Baystate Environmental Consultants Inc. 1990. Diagnostic/Feasibility Study for the Management of Richmond Pond Richmond/Pittsfield, Massachusetts. East Longmeadow, Ma.

Berkshire Regional Planning Commission. 1997. Farmington River Watershed Action Plan – A Comprehensive Management Plan to Address Nonpoint Source Pollution. Prepared for the Massachusetts Department of Environmental Protection. Pittsfield, MA.

Berkshire Regional Planning Commission. 2001. Unpaved Roads BMP Manual. Prepared for the Massachusetts Department of Environmental Protection. Pittsfield, MA.

Berkshire Regional Planning Commission. 2003. Community Development Plan: Town of Richmond. Pittsfield, MA.

Berkshire Regional Planning Commission. 2004. Unpaved Roads Assessment in the Farmington River Watershed. Prepared for the Massachusetts Department of Environmental Protection. Pittsfield, MA.

Berkshire Regional Planning Commission. 2012. Town of Richmond Long Range Planning Study. Pittsfield, MA.

Coleman, Allison. 2015. Parks: Improving Health and Wellbeing. Available from: <u>http://</u> <u>www.parksandrecreation.org/2015/April/Parks-</u> <u>Improving-Mental-Health-and-Well-Being/</u>. Accessed June 9, 2015.

Dobrowlski, Tony. October 9, 2011. *Shark Tale Has Some Real Bite*. Berkshire Eagle. Available from www.berkshireeagle.com/local/ ci\_13538966. Accessed June 18, 2015.

Donahue Institute. University of Massachusetts -

Amherst. Massachusetts Population Projections. Available from <u>http://pep.donahue-institute.org/.</u> Accessed on February 21, 2015.

Holmes, G. William. 1966. Stephen Reed, M.D., and the Celebrated Richmond Boulder Train of Berkshire County, Massachusetts, U.S.A. Journal of Glaciology. Vol. 6, No. 45.

Kinder Morgan. 2015. Northeast Direct Energy Fact Sheet. Available from: <u>http://</u> <u>www.kindermorgan.com/content/docs/</u> <u>TGP Northeast Energy Direct Fact Sheet.pdf</u>. Accessed June 5, 2015.

Massachusetts Department of Fish and Game – Natural Heritage and Endangered Species Program. Town Species Viewer. Available from <u>http://www.mass.gov/eea/agencies/dfg/dfw/</u> <u>natural-heritage/species-information-and-</u> <u>conservation/town-species-viewer.html</u>. Accessed March 18, 2015.

Massachusetts Executive Office of Energy and Environmental Affairs. 2015. Environmental Justice Policy. Available from <u>http://www.mass.gov/eea/</u> grants-and-tech-assistance/environmental-justicepolicy.html. Accessed April 16, 2015.

Massachusetts Executive Office of Energy and Environmental Affairs. Chapter 91, The Public Waterfront Act. Available from: <u>http://www.mass.gov/</u> <u>eea/agencies/massdep/water/watersheds/</u> <u>chapter-91-the-massachusetts-public-waterfront-</u> <u>act.html</u>. Accessed May 12, 2015.

Massachusetts Executive Office of Energy and Environmental Affairs. 2002. Housatonic River Watershed 2002 Water Quality Assessment Report. Massachusetts Geographic Information System. 2014. Public Water Supplies. Available from: http://www.mass.gov/anf/research-and-tech/itserv-and-support/application-serv/office-of-

geographic-information-massgis/datalayers/ pws.html. Accessed on May 12, 2015.

Massachusetts Geographic Information System. Environmental Justice Viewer. Available from *maps.massgis.state.ma.us/map\_ol/ej.php* Accessed on February 20, 2015.

Massachusetts Geographic Information System. Land Use 1951-1999. Available from: <u>http://</u><u>www.mass.gov/anf/research-and-tech/it-serv-and</u>-<u>support/application-serv/office-of-geographic-information-massgis/datalayers/lus2005.html</u>. Accessed on April 13, 2015.

Massachusetts Geographic Information System. Land Use 2005. Available from: <u>http://</u><u>www.mass.gov/anf/research-and-tech/it-serv-and</u>-<u>support/application-serv/office-of-geographic-information-massgis/datalayers/lus.html</u>. Ac-cessed on April 13, 2015.

Massachusetts Geographic Information System. MassDEP Wetlands 1:12,000. Available from: <u>http://www.mass.gov/anf/research-and-tech/it-</u> <u>serv-and-support/application-serv/office-of-</u> <u>geographic-information-massgis/datalayers/</u> <u>depwetlands112000.html</u>. Accessed on April 13, 2015.

Massachusetts Geographic Information System. Public Water Supplies. Available from: <u>http://</u><u>www.mass.gov/anf/research-and-tech/it-serv-and</u>-<u>support/application-serv/office-of-geographic-information-massgis/datalayers/pws.html</u>. Ac-cessed on April 31, 2015.

Massachusetts Geographic Information System. 2012. MassDEP 2012 Integrated List of Waters, (305(b)/303(d)). Available from: http:// www.mass.gov/anf/research-and-tech/it-serv-and -support/application-serv/office-of-geographicinformation-massgis/datalayers/wbs2012.html. Accessed on May 12, 2015.

Massachusetts Geographic Information System. 2015. Protected and Recreational Open Space. Available from: http://www.mass.gov/anf/ research-and-tech/it-serv-and-support/application -serv/office-of-geographic-information-massgis/ datalayers/osp.html Accessed March 4, 2015. Massachusetts Historical Commission. 2015. Massachusetts Cultural Resource Information System (MACRIS) Database. Available from: http:// mhc-macris.net/Towns.aspx?Page=towns.asp. Accessed May 28, 2015.

Massachusetts Natural Heritage and Endangered Species Program (NHESP). 2012. Biomap2: Conserving the Biodiversity of Massachusetts in a Changing World. Town of Richmond Assessment. Boston. Executive Office of Environmental Affairs.

Massachusetts Natural Heritage and Endangered Species Program. 2015. Natural Communities. Available from: <u>http://www.mass.gov/eea/</u> <u>agencies/dfg/dfw/natural-heritage/natural-</u> <u>communities/</u>. Accessed May 28, 2015.

Massachusetts Natural Heritage and Endangered Species Program. 1999. Calcareous Seepage Marsh Fact Sheet. Available from <u>http://www.mass.gov/</u> <u>eea/docs/dfg/nhesp/natural-communities-facts/</u> <u>calcareous-seepage-marsh.pdf</u>. Accessed May 28, 2015.

Massachusetts Natural Heritage and Endangered Species Program. 1999. Calcareous Sloping Fen Fact Sheet. Available from <u>http://</u> <u>www.mass.gov/eea/docs/dfg/nhesp/natural-</u> <u>communities-facts/calcareous-sloping-fen.pdf</u>. Accessed May 28, 2015.

Massachusetts Natural Heritage and Endangered



Species Program. 2011. BioMap2, Guiding Land Conservation for Biodiversity in Massachusetts: Richmond. Westborough, MA. Available from: <u>http://www.mass.gov/dfwele/dfw/nhesp/</u> <u>conservation/housatonic.htm</u>. Accessed on April 15, 2015.

Massachusetts Natural Heritage and Endangered Species Program. 2008. Northern Hardwoods – Hemlock – White Pine Fact Sheet. Available from: <u>http://www.mass.gov/eea/docs/dfg/nhesp/</u> <u>natural-communities-facts/northern-hardwoodhemlock.pdf</u>. Accesses May 28, 2015.

Massachusetts Natural Heritage and Endangered Species Program. 2010. Black Ash-Red Maple-Tamarack Calcareous Seepage Swamps Fact Sheet. Available from: <u>http://www.mass.gov/eea/docs/</u> <u>dfg/nhesp/natural-communities-facts/black-ash-</u> <u>red-maple-tam-calc.pdf</u>. Accessed May 28, 2015.

Massachusetts Natural Heritage and Endangered Species Program. 2000. Calcareous Rocky Summit Fact Sheet. Available from <u>http://www.mass.gov/</u> <u>eea/docs/dfg/nhesp/natural-communities-facts/</u> <u>calcareous-rocky-summit-rock-outcrop.pdf</u>. Accessed May 28, 2015.

Massachusetts Natural Heritage and Endangered Species Program. 2008. Bridle Shiner Fact Sheet. Available from <u>http://www.mass.gov/eea/docs/</u> <u>dfg/nhesp/species-and-conservation/nhfacts/</u> <u>notropis-bifrenatus.pdf</u>. Accessed May 28, 2015.

Morse, Gloria. 2015. Personal Communication.

Richmond Land Trust. Available from <a href="http://www.richmondlandtrust.net/">http://www.richmondlandtrust.net/</a>. Accessed May 7, 2015.

Richmond Pond Association. Available from <u>http://www.richmondpondassociation.org/</u>. Accessed March 24, 2015.

Strava. 2015. Strava Labs Heat Map. Available from: http://labs.strava.com/heatmap. Accessed June 18, 2015.

Town Of Richmond, Massachusetts. 1995. Richmond Town Plan.

U.S Census Bureau. 2010 Census.

U.S. Census Bureau, 2005-2009 5-Year American Community Survey.

U.S. Census Bureau, 2009-2013 5-Year American Community Survey.

U.S. Census Bureau. 2000 Census.

U.S. Environmental Protection Agency. Waters Assessment Tracking and Environmental Results. Massachusetts Impaired Waters and TMDL Information. Available from <u>http://iaspub.epa.gov/</u> <u>tmdl/attains\_state.control?</u>

<u>p state=MA&p cycle=&p report type=T</u>. Accessed March 24, 2015.

US Environmental Protection Agency. Rest of River-Overview. Available from <u>http://www.epa.gov/</u> <u>housatonic/thesite/restofriver.html</u>. Accessed March 31, 2015.

# OPEN SPACE AND RECREATION PLAN 2016-2022

Town of Richmond, Massachusetts The following vision statement was developed by the Richmond Open Space Advisory Committee:

The Town of Richmond is a rural, tranquil, and family-friendly hamlet in the Central Berkshire Region of Massachusetts that carefully stewards its treasured open spaces and maintains rich cultural, recreational, and scenic resources that collectively foster a strong sense of place and community vitality that benefits its residents and visitors.