

# **Town of Pelham**

## **Open Space and Recreation Plan**



**2008**

**Town of Pelham  
Open Space and Recreation Plan**

**Prepared by**

**The Pelham Conservation Commission**

**And**

**The Pelham Open Space and Recreation Plan Committee**

**Mary Stuart Booth**

**Mary Carlson**

**Judith Eiseman**

**Gale Hubley**

**Tilman Lukas**

**Dana MacDonald**

**Caitlin Majocka**

**Cynthia Weigel**

**With mapping assistance from  
Charles S. Eiseman and the  
Technology Planning and Management Corporation**

**2008**

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# **Pelham Open Space and Recreation Plan 2008**

## **SECTION 1: PLAN SUMMARY**

The 2008 Open Space and Recreation Plan for the town of Pelham reflects both the wish to preserve the best parts of Pelham's rural legacy and to increase community awareness of the town's natural resources. Better awareness will lead to more community involvement in protecting those resources. The entire Pelham Conservation Commission, together with other Pelham residents, formed the Open Space and Recreation Plan Committee ("Committee") to review and update the town's previous plan. Major goals of the 2008 plan include stewardship of existing conservation areas, protection of water and natural resources in town, greater environmental awareness in the community, and increased regional environmental cooperation. From these general goals an action plan emerged. Many of the specific actions suggested further multiple goals simultaneously, which is an additional benefit in times of fiscal uncertainty and a decreasing volunteer base. Although the town has changed very little over the past five years, any of a number of factors such as new technology, especially concerning septic systems, economic uncertainty or downturns, unanticipated state legislation, changing regional employment and unemployment patterns, or a changing population profile could significantly affect Pelham. This plan will enable the town to better meet the challenges of the years to come.

To encourage better stewardship of Pelham's natural resources, the Committee hopes to establish groups of local volunteers to adopt particular conservation areas. The volunteers for each conservation area would be responsible for maintaining existing trails, creating new ones, posting signs, and removing debris. Working regularly with these volunteers, who will be called "The Friends of" followed by the name of the particular conservation area, the Committee hopes to develop a long-range maintenance program.

To better protect the town's water supply and other natural resources, the Committee hopes to work with a group of interested volunteers to continue to collect information of all kinds about each conservation area. Graduate students from the nearby colleges might be a part of this process. The legal means that permanently restrict the private and public open space in town will be reviewed to ensure that any necessary steps to continue to protect their status are taken. Work with the Forest Conservation Project and Community Preservation Act supporters also might lead to more protected land and funds to further the plan's stated goals.

To increase environmental awareness in town, the Committee hopes that "The Friends of" program will play an integral part. In addition, a brochure of the numerous conservation areas will be prepared and distributed to all residents and newcomers. As in many areas of the Commonwealth, invasive plants and insects threaten the town's resources. A future informational public program will discuss which plants and insects are of concern and ways to bring them under control.

To encourage increased regional environmental cooperation, groups such as The Kestrel Trust, a local land trust serving nine towns in the region, will be invited to attend Conservation Commission meetings twice a year. A Commission member also may attend

meetings of the North Quabbin Regional Landscape Partnership twice a year to help develop a regional strategy. Efforts to maintain connections with neighboring towns will be encouraged.

The goals of this ambitious plan are prioritized and the town boards with major responsibilities in each area are identified. The Committee which wrote the 2008 Open Space and Recreation Plan will remain in place and meet with the Pelham Conservation Commission twice a year to review progress. As the plan progresses, other volunteers may come forward to help and even more work can be done to safeguard Pelham's heritage.

## **SECTION 2: INTRODUCTION**

### **A. Statement of Purpose**

The purpose of reviewing and renewing the Open Space and Recreation Plan for Pelham is two-fold. First, completion of this plan fulfills an obligation implied in the Conservation Commission's enabling legislation and ensures the eligibility of the town for state and federal assistance for projects consistent with the plan.<sup>1</sup> Second, and of perhaps greater importance, this process alerts townspeople to the changes as well as the continuity of various characteristics of the town's resources and capacity. In developing this plan, the Commission has taken into account

- the limiting physical characteristics of the land;
- the realities of present and future land use and development pressures;
- the financial probabilities of funding for various types of projects; and
- the ability and number of citizens available to volunteer time to a wide range of needs and projects covering all aspects of town functions.

The plan emphasizes long-range planning that provides room for development but channels growth away from areas that are seen as vital to the preservation of the quality of life in Pelham. Most aspects of Pelham's environmental situation remain the same as they were in the 2002 Open Space and Recreation Plan. Therefore, much of the content in this plan remains the same, while the goals and action plan received more careful consideration. The Conservation Commission plans to establish a system of biennial reviews and updates of sub-committee activities to monitor progress on achieving the open space protection goals found in this plan.

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<sup>1</sup> The Pelham Conservation Commission was established by vote of the 1970 Town Meeting and is now a five-member board finding its authority under Chapter 40, Section 8C of the Massachusetts General Laws (the Conservation Commission Act.) The general purposes of the Commission include the promotion and development of the natural resources and the protection of the watershed resources of the town. By law, the Commission is granted at least seven specific functions that involve economic, water management, recreation, preservation, design, coordinating and regulatory elements.

## **B. Planning Process and Public Participation**

The entire Pelham Conservation Commission took a lead role in reviewing and updating the town's Open Space and Recreation Plan. All members of the Conservation Commission, together with other interested members of the community, formed the Pelham Open Space Committee. Because so little change and only limited development has occurred in Pelham for many years, the Committee relied heavily upon the excellent work done in previous plans. Although at this writing the town's fiscal viability is a major concern, there is still a strong sentiment among townspeople of the need to maintain the rural character and essentially undeveloped nature of the community. There appears to be widespread understanding of Pelham's unique role as a watershed for surrounding communities and as a haven and corridor for wildlife.

As a foundation, the Committee continued to rely upon two older resources, an excellent 1971 study entitled "Natural Resource Program of the Town of Pelham, Massachusetts" ("Natural Resource Program 1971") and a Preliminary Strategic Master Plan prepared for the town in 1987 ("Preliminary Strategic Master Plan 1987"). Both studies provide useful background information since little has changed with respect to Pelham's community setting or environmental inventory in the years since those studies were completed. The 1971 study was prepared by a Natural Resources Technical Team of Hampshire County with a Pelham Town Advisory Group in cooperation with the Hampshire Conservation District, state agencies and programs, especially those in the Department of Environmental Management (now DCR), and a variety of other local experts for information on natural and historical resources. The 1987 Preliminary Strategic Master Plan was prepared for the town by a University of Massachusetts Regional Planning Study headed by Professor John Mullin. That study included a projected build-out for the town, maps of natural and historical resources and recommendations for future planning objectives and methods of growth control.

The Committee also was informed by two more recent initiatives, the Growth Study Committee and the Pelham Hills Forest Conservation Project. Many townspeople have participated in gathering information and in drafting or commenting on town open space and recreation priorities over a several year period as a result of the Selectman's establishment of the Growth Study Committee in 2004. Throughout the process, that Committee, which included a member from the general public, Planning Board, Health Board, Select Board, Historical Commission and the town's representative to the Pioneer Valley Planning Commission, conducted open public meetings to receive comments and specific information on matters related to the town's current situation and future prospects for growth. The 2006 Growth Study report and survey results confirmed the views expressed in the first paragraph. [See Appendix A]

The Committee also relied on the ongoing work of the Pelham Hills Forest Conservation Project. Pelham, together with Wendell, received a Massachusetts Smart Growth Assistance Grant to help both towns conserve working landscapes and intact forest ecosystems; the grant also was intended to spur regional forest conservation efforts. The resulting 2007 Pelham Hills Forest Conservation Project has hosted community forums and open public meetings with town boards and commissions for input. The Project has proposed various regulatory

and policy measures to ensure the continued protection of Pelham's values and characteristics. [See Appendix B] The Project is still receiving input from Pelham residents and will formulate its final recommendations and work on implementing them.

In addition, the Committee has relied upon the technical assistance of the Pioneer Valley Planning Commission and information from the Natural Heritage and Endangered Species Program in drafting the current plan. Finally, as background for this document, the Commission examined the town's recent growth and development patterns, the effectiveness of the 1987 Wetlands Protection Bylaw and recent revisions to its regulations, and the susceptibility of the town's important natural and historical resources to loss through development.

The Pelham Conservation Commission initiated the process for updating the 2002 Open Space and Recreation Plan in the fall 2007. Through a series of public meetings a draft of the 2008 Open Space and Recreation Plan was prepared for comment at a public forum on February 28, 2008. Attempts to involve Pelham residents in the process included the creation of a flyer available in the town library and mailed to each Pelham resident, special notice of initial meetings in November and December 2007 in the elementary school news bulletin and notice of the February 2008 public forum in the local newspaper and in the Pelham Slate, a newsletter sent to all Pelham residents. Individuals who had expressed an interest in such issues were also notified by telephone or e-mail. Several residents gave input and indicated a willingness to work on implementing a specific goal although they did not want to be formal members of the Committee. The plan has been reviewed and endorsed by the Conservation Commission, the Board of Selectmen, the Planning Board, the Historical Commission and the Pioneer Valley Planning Commission.

## **SECTION 3: COMMUNITY SETTING**

### **A. Regional Context**

Pelham lies just west of the Quabbin Reservoir and is bounded by Amherst on the west, Shutesbury and New Salem to the north, and on the south by Belchertown. The town is almost entirely forested, with a significant network of streams and associated "headwater" and other wetlands resources. Of its total area of 16,896 acres approximately 15,000 are in woodland with development scattered along the major roads with some penetrating into areas farther from those via long driveways. The Pioneer Valley Planning Commission's map from Valley Vision 2: the New Regional Land Use Plan for the Pioneer Valley (2007) demonstrates that Pelham is expected to play a protective role for the region's environment. The general concurrence is that, given Pelham's soil resources, which are of limited value for intensive uses, Pelham is best left largely in an undeveloped and forested state in order to ensure protection of its significant natural resources and habitat.

The entire town has been designated through zoning as a Watershed Protection District due to its unique situation as vital watershed not only for its own townspeople's private wells, but also for public and private water supply – aquifers and watersheds – in Amherst, Shutesbury, Belchertown, Springfield and Metropolitan Boston. Thirty percent of Pelham's



total population receives water from the Amherst water supply system. That system includes Hawley, Hills and Intake Reservoirs, which are fed by streams originating in northern Pelham. Amherst owns some 1,550 acres of the watersheds of those reservoirs; the protected acreage represents about 40 percent of the total physical watershed. The remaining 70 percent of Pelham's residents depend upon individual on-site wells that are easily susceptible to ground water contamination and lack alternative sources of supply in case of contamination (Preliminary Strategic Master Plan 1987). All residents and municipal buildings, including the elementary school and the community center and library, have on-site sewage disposal (septic) systems. In recognition of the critical role Pelham plays in water supply and watershed protection, the Board of Health has enacted septic regulations that are more restrictive than the state's Title 5 Sanitary Code. By acknowledging the potential for human error in construction or operation, these regulations provide an extra margin of safety for groundwater and the public health given that Pelham's soils are highly variable on any given site.

The town is a part of both the Quabbin region of west-central Massachusetts and the Pioneer Valley area dominated by the Five Colleges—Amherst, Hampshire, Mt. Holyoke and Smith Colleges and the University of Massachusetts at Amherst. In terms of acreage of conservation land and its heavily wooded, undeveloped character, Pelham has much in common with other low population density towns surrounding the Quabbin Reservoir. However, the towns to the west—especially Amherst and Hadley—influence much of the Pelham's social and economic activity.

Pelham shares a sanitary transfer station and recycling center (located one half mile west of the Pelham line on Route 9) with the Town of Amherst. The landfill and transfer station is used by Pelham, Shutesbury and Amherst. Pelham also has co-sponsored, with Amherst and adjacent towns, hazardous waste collection days designed to safely handle domestic toxic substances.

Cultural and recreational resources shared by Pelham and Amherst include athletic facilities at the regional junior high and high schools, town libraries in Amherst and Pelham, libraries at Amherst and Hampshire Colleges and the University of Massachusetts, hiking trails that link the area towns, and several parks and elementary school ball fields in Amherst.

The Kestrel Trust, the regional land trust serving Amherst, Belchertown, Granby, Hadley, Leverett, Pelham, Shutesbury, South Hadley, and Sunderland, works cooperatively with these communities to help create a network of conservation lands and trails that link Pelham with its neighbors. Pelham residents make significant use of Amherst conservation lands, especially Puffer's Pond, Amethyst Brook, and portions of the 33 mile Robert Frost Trail. As one of the nine towns served by The Kestrel Trust, Pelham is therefore actively involved in regional open space protection efforts not only within its borders but also through the increasingly active efforts of the broader based land trust community. Several of its neighbors, including Amherst and Belchertown, have current Open Space and Recreation Plans supporting cooperation within the region served by the Kestrel Trust. Recent projects completed by the Trust in Belchertown, Pelham and Amherst help maintain the regional forest and trail connections both to the Quabbin and the Mount Holyoke Range.

The trails that run through Pelham and connect with neighboring towns are an important recreational feature in Pelham, used by hikers, horseback riders, mountain bikers and hunters. These trails are one of the primary ways in which people can enjoy Pelham's natural features and vistas from the Pelham Hills across the valley toward the Mount Holyoke and Mount Tom Ranges. In addition to the Robert Frost Trail, the Metacomet-Monadnock Trail runs through town as well as a network of smaller paths and woods roads. Unfortunately, much of the trail system is not under any form of formal protection.

## **B. History of the Community**

The land in Pelham has undergone many changes before reaching its current state. Before European colonization, Nipmuck Indians located in and around the former town of Enfield (now submerged in the Quabbin Reservoir) used the area that is now Pelham for hunting and fishing. When English settlers arrived in the seventeenth century, the area was a patchwork of forest and clearings, burned regularly by the Nipmucks to facilitate hunting and create browse for game. This practice was later continued by the English settlers in Hadley and Northampton, who subsequently used the Pelham area for grazing.

Pelham's first European settlers were Presbyterian Scots-Irish proprietors who drew lots in late 1739 and became residents in 1740. While the settlers lived dispersed on their farms instead of in a central village, company families received land divisions in several parts of the town, which originally included half of Prescott (now submerged). While the settlers originally attempted to maintain a closed community, yankees of English descent from southeastern Massachusetts and less strict Scots-Irish came to create a more diverse town. Throughout this period, agriculture, with some raising of cattle and sheep, was the dominant activity. By the late 19<sup>th</sup> century, about 85 percent of Pelham was in fields. Although the people of Pelham turned to pastoral pursuits during the eighteenth and nineteenth centuries, as many as 20 small sawmills and gristmills used water power sites. Industries included charcoal making; wagon and scythe shops; a potash shop (potash was an ingredient used for making soap); carding, spinning and related industries as well as the making of palm leaf hats. By the end of the nineteenth century a flourishing fishing rod industry in Pelham gave the town a national reputation.

The opening of the Midwest led to a steady out-migration and depopulation of Pelham for about 130 years. The population of Pelham reached a peak in 1820 and declined until after World War II. As the population declined further and further, many farms were abandoned. By 1910, many boarded-up farmhouses and roads could be seen. Forests took over fields and many old farms were bought by timber companies, including some that are still in existence today. The first third of the 20<sup>th</sup> century saw active logging in Pelham, and by 1930 the forests had once again been cut through. Thus, the thick forests that blanket Pelham today are only the most recent in a series of regenerations that stretch back to the burning activities of Native Americans.

In the 20<sup>th</sup> century, the land in Pelham has been used primarily for residences when it has not been used for forestry. With the abandonment of farming, people from Amherst and area towns began to buy old farmhouses for summer homes, then as permanent homes from which they commuted to work. Several other land uses flashed then faded. Among these

were a trolley line operating from 1902 to 1930 from Amherst to Orient Springs used by people from as far away as Holyoke who came to enjoy an afternoon in the Pelham woods and the "healthful" waters of Amethyst Brook. The trolley line was originally built to bring in workers from Amherst to a fishing rod factory in West Pelham on Amethyst Brook. However, the trolley and Pelham's popularity as a recreation spot declined with the increased mobility afforded by the automobile.

During the 1920s and 30s Boston's Metropolitan Water District was empowered to clear the eastern half of Pelham while constructing the Quabbin Reservoir. Villages at Pelham Hollow, which is now under water, and Packardville, the former site of which is within the protected lands of the reservation, were wiped out. With the growth of the University of Massachusetts in Amherst and economic expansion in the Pioneer Valley, Pelham's population began to rise again after World War II and increased even more dramatically after the mid-1960s. Pelham became and remains a "bedroom community."

The town has a rich assortment of historical sites, landscapes, and buildings that are in the process of being surveyed by the Pelham Historical Commission. This group hopes to protect some of the more significant places through public education, easements, and historic district designations. Among these places are several old cemeteries, old mill sites, a quarry, an old asbestos mine, and many old houses. Some of these places are mentioned in Section 4.

### **C. Population Characteristics**

Since 1970, Pelham has experienced increases in population, rising from 937 to 1,373 in 1990 and at the 2000 census 1,403. Town records indicate 1440 at this time. Pelham continues to have one of the smallest populations in the area. Nevertheless, the growth rate in the region has put increased pressure on open space in Pelham where the entire town is zoned residential and Pelham has become an "upscale" destination for many new home-buyers and where the excellent elementary school is an attraction for parents of young children. Generally, Pelham is a town of middle-aged people although the proportion of residents 65 years old or older has increased. It is generally a "family" town with the vast majority of people living in family households. The median age in Pelham is 42.4 years compared to 36.5 years in the state and the estimated median household income in 2005 was \$64,400 in Pelham compared to the state median of \$57,184.

Pelham residents have notably higher numbers of graduate, professional and bachelor's degrees and compare favorably to most of their neighbors in the highly educated populace in the Five College region. This high level of education is reflected in the amount of attention that has been devoted to the study of Pelham's natural resources by its citizens who continue to be a valuable resource themselves in understanding and protecting the environment. Not surprisingly, given Pelham's high level of education, many of those in Pelham's work force are in managerial or professional occupations. Over 80 percent of Pelham's workforce is in white collar occupations. According to the most recent figures available, Pelham is the wealthiest among its neighbors in terms of per capita income, median family income, and median household income and rates in the top quarter of towns in the Commonwealth. In recent years, however, concerns about property taxes and insufficient revenue to operate the town because of ever increasing expenses related to school, highway, police and fire

protection have resulted in decreases or the complete absence of town appropriations to the conservation fund. Some townspeople, however, make regular or specific project related donations to the local land trust.

Pelham and Amherst have multiple economic and social ties. Very few Pelham residents work in Pelham although internet and home occupations may be on the rise. The workforce is heavily linked to Amherst and other towns. Other aspects of economic life are also bound up with the Town of Amherst including the regional school system, the trails and conservation lands and watershed land – these and other links have encouraged and/or required these two towns to work together.

In summary, Pelham's population is generally well-educated and white collar. Townspeople are most likely to regard open space as an amenity of the community instead of a source of livelihood despite large land holdings by forestry operations. The population has greater than average proportions of middle-aged people, children and families with an increasing number reaching retirement age and with much of its economic and social life tied up with the region's educational institutions and businesses. An increasing number of residents work in internet related occupations.

#### **D. Growth and Development Patterns**

**1. Patterns and Trends.** Historically, Pelham has been slow to develop because it was somewhat off the beaten track. As it is zoned entirely for residential development, the town has no businesses to offset property taxes—a situation that is causing angst among some residents at this time. Pelham remains as described in the 1971 Natural Resources Program of the Town of Pelham: “virtually devoid of industry or commerce, by-passed by major highways, long since abandoned for commercial agriculture, occupied largely by watershed lands, the town of Pelham is basically and essentially a forest. Roads are relatively few and the population . . . is largely concentrated along Amherst Road and in the West Pelham section.”

However, the growth of the University of Massachusetts in the early 1970s resulted in development and change in Pelham. Throughout the 1980s Pelham attracted many new residents "wanting to live in a traditional, scenic New England community yet have access to jobs in the economically thriving Pioneer Valley" (Draft Growth Management Plan for the Town of Pelham 1988). Noting the years that houses in Pelham were built is useful to indicate the relatively peak periods of development in Pelham. Pelham's housing stock grew rapidly for a brief period in the 1980s and some in the 1990s putting development pressure on its open space. However, growth has slowed and the concern now is how to protect additional open space when the costs of maintaining basic town services is increasingly difficult.

Property values have steadily increased over the past thirty years throughout the region. Increases in property values in established centers like Amherst, where the overall price of property was higher, increased the attractiveness of less developed areas like Pelham, where the overall price of property was lower. This led to increased development and the increased demand also led to increases in property value in Pelham which now appear to again be retreating. The high cost of land in the most desirable areas put increased pressure to build on less expensive marginal lands. The Chapter 61 program has been important in shielding

owners of open space from the pressure to sell their land, however as landholders grow older some of these tracts are being sold or divided among the next generation.

## **2. Infrastructure.**

*Transportation Systems.* Pelham has just over twenty miles of roads which has meant that much of its backland open space has been protected from development due to inaccessibility and the cost of complying with town environmental and safety regulations. Despite the surge of growth in the 1980s, there have been no new subdivisions in over twenty-five years. Although Route 202 runs through the town, along much of its length development is precluded by the Quabbin Reservation on the eastern side of the road and many wetland areas on the western side. No public transportation system is available for most of the town. Although there is a bus line on Route 9, Route 9 crosses only the tip of the southwest corner of Pelham.

*Water Supply and Sewer Systems.* In the west Pelham area, 30 percent of Pelham's total population is served by the neighboring Amherst water supply system while the remaining 70 percent of Pelham's residents depend upon individual on site wells. Most of the town is served by septic systems (only a small number of homes are tied into the Amherst sewer system) and much of the undeveloped land presents limitations for adequate septic systems under the revised Title 5 Code. Some new changes in available septic systems or regulations may make currently unbuildable land available even though by present standards they are marginal due to ledge or high ground water. The entire town is designated as a Water Supply Protection District, underscoring the need to protect public and private watershed lands in Pelham and surrounding communities.

**3. Long-Term Development Patterns.** Since the 1980s the town has tended to take an active role in protecting the environment and many town bylaws are environmentally based. Since most areas without severe physical building constraints are already built upon, remaining potential new building sites are limited both by natural features as well as regulatory constraints. In 1989 the Town approved a stringent driveway slope limit, requiring at least 20 feet of level access from the main road, and it turned down a proposal to allow flag lots. In addition, the new zoning bylaw adopted in 1989 increased the minimum lot size and setbacks. Any major new round of development will require opening up new roads to gain access to back land although the Pelham Hills Forest Conservation Project is attempting to forestall major forest encroachment.

Although current zoning decreases frontage density and could slow development by increasing the cost of new residences, it cannot prevent a fundamental transformation from taking place in Pelham given a strong enough housing market. Pelham's zoning continues to treat the entire town as a single uniform residential district (see **Required Map 1: Zoning Map** in Appendix F) —a recipe for buildout which, if it occurs, is likely to be costly for the town to serve, producing more miles of road per household and more school age children. This increased number of houses will be even more difficult to serve with private wells and septic systems or even shared septic systems on superior soils. Therefore, despite a current slump in the housing market, with no plans for developing public water supply or sewer system, the town's stringent Health Board regulations are supported by

townspeople as being necessary to protect existing groundwater quality and watershed protection. Changes that could undercut these health regulations would be seen as a reduction of protection. Again, the Forest Conservation Project is attempting to look into the future to propose potential ways to maintain Pelham's back land forest ecosystems largely intact if those regulations change.

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

### **A. Geology, Soils, and Topography**

**1. Essential Structure.** The town slopes upward from the Amherst boundary at an approximately 300 foot elevation to a central ridge located along Route 202 (Daniel Shays Highway) at about a 1,000 foot elevation, and descends on the east to the Quabbin Reservoir at elevation 524 feet.

The Pelham landscape is veneered by a variety of glacial deposits. The surficial geologic history of the region began approximately 26,000 years ago when the Wisconsin Glaciation of the Pleistocene Epoch resulted in the flow of glacial ice across the region. This thick ice sheet advanced down the Connecticut River Valley and thickened until it eventually overtopped the entire Pelham Dome. The glacier scooped the previously existing soil from over the bedrock and polished the bedrock surface. This mixture of ground-up soils and bedrock was plastered over the bedrock surface and is referred to as glacial till.

The glacier moved southward until it reached its position of maximum advance at present-day Long Island, New York. As the ice thinned, the uplands were uncovered and great quantities of melt water transported loose sediment, depositing it between the wasting ice in the valley and the till-covered slopes of the ice-free uplands. As ice in the valleys melted, distinct terrace levels were formed consisting of stratified, well-sorted deposits of sand and gravel.

The soil resources of Pelham are almost entirely stony glacial tills of various types and varying drainage. Approximately 90 percent of the town is covered by glacial till of variable thickness. Generally, the northern slopes of the hills are covered by thicker deposits of till. The sand and gravel deposits are typically confined to smaller stream valleys and are limited in area. These soils are well-suited to forest, particularly hardwoods (Natural Resource Program 1971).

**2. Effects of natural features.** In general, the majority of the soils in Pelham are thin, stony, glacial soils that, while well-suited for forest cover, have limitations for more intensive land use (see **Required Map 2: Soils and Geologic Features Map** in Appendix F). Those soils are typically very stony, poorly drained, steeply sloping, or possess hardpan layers, have a shallow depth to bedrock, and/or support a high water table—all of which produce costly limitations for conventional septic systems (Preliminary Strategic Master Plan 1987).

### **B. Landscape Character**

The natural beauty of Pelham derives from the internal woodland landscapes and vistas overlooking forested hills and reservoirs as well as the outstanding views from the tops of the hills and ridges overlooking the Mt. Holyoke and Mt Tom Ranges in the distance. The

reservoirs, although not strictly natural, are features of special beauty. Each of the many brooks in the town has its own special quality. The brook valleys and waterfalls developed over thousands of years lend special interest to the environment as do stands of timber throughout the town. Agriculture has virtually disappeared from Pelham since soils and topography are generally not suitable for modern commercial farming. A few open fields do remain but the dominating feature of Pelham is the forest providing habitat for an abundance of wildlife.

Landscape points of special interest include the following (see also **Required Map 3: Unique Features Map** in Appendix F):

***Mt. Orient*** -- a major mountain mass north of Amherst Road through which the Robert Frost and M & M Trails connect with trails in Shutesbury and Amherst; excellent views of the Pioneer Valley from its ledges.

***Poverty Mountain*** -- situated South of Pratt's Corner, this wooded mountain is skirted by the Robert Frost and M & M Trails and is immediately adjacent to a 100 acre protected parcel at the juncture of the towns of Amherst, Shutesbury and Pelham.

***Mount Lincoln*** -- the highest point in Pelham with the University of Massachusetts Cadwell research forest near its summit, Amherst watershed land on its northern and western slopes, and long-distance views of Mt. Monadnock, the Holyoke and Mount Tom Ranges, the Connecticut River, Knight's Pond and part of the Quabbin Reservation.

***Orient Springs*** -- once the location of a hotel visited by those wanting to bathe in the mineral springs flowing out of the hillside. Currently a private residence with a conservation restriction preventing development of the area near the stream.

***Quabbin Lookout Point from Route 202*** -- this vantage point permits a sweeping view of the forested lands and waters of the Quabbin Reservation and is a favorite stop for "leaf peepers" in the fall and other travelers throughout the year.

***Other Sites and Vistas*** -- other sites affording particular views, fishing or hunting opportunities, or charming pastoral oases for hikers include Butter Hill, Hawley Reservoir, Hill Reservoir, Harris (Intake) Reservoir, Quabbin Reservoir roads and trails, Amethyst Brook, Dunlop Brook and cascades, Heatherstone Brook, Harris Brook, Buffam Brook and Buffam Falls cascades. Also of note are the vistas on Arnold Road and Gulf Road. Looking west from these roads the casual hiker or driver can witness spectacular sunsets and see the entire Connecticut Valley spread below and the Berkshire Hills rise on the horizon.

***Historic Landscapes*** -- historic landscapes consisting of surviving open agricultural fields provide a visual connection with an important time in Pelham history and contribute to the town's rural character. Such landscapes are found in several locations: at the end of Cook Road (24 Cook Road), at the end of Quarry Road (6 Quarry Road), on the Adriance farm on Amherst Road (339 Amherst Road), on several properties on the north side of the same upper part of Amherst Road with deeply extending rear fields (for example, 302 and 306 Amherst Road), on property at the corner of Amherst Road and South Valley Road (37 Amherst Road), on the Keyes property on South Valley Road (40 South Valley Road), on the property of the

late Mildred Webb on Shutesbury Road, on the Bray farm on Amherst Road (212 Amherst Road), and a field between North Valley Road and Buffam Brook west of Buffam Road (behind 101-103 and 105 North Valley Road).

The landscape of Pelham is very much influenced by the past and present human use of natural resources: water, forests, soils, and stone. Research by the Historical Commission and the Town Archivist indicates that Pelham has three historic landscapes that are closely linked to the natural resources of the town.

1. West Pelham, consisting of Amherst Road from the Thornton Hill power line crossing west to the Amherst line, and the immediately adjacent portions of Harkness Road, North and South Valley Road, Cadwell Street, and Jones Road, is a relatively intact 19<sup>th</sup> Century village. Many of the homes here are the original structures, on their original foundations. They were built when fly rod manufacturing, other water-powered mills, and quarry stone processing were natural resource-based activities important to Pelham's economy. The main structure, several accessory buildings, and extensive foundations of the fly rod factory still exist and are in adaptive re-use.
2. The remainder of Pelham's landscape, outside the Quabbin Reservation largely reflects the past agriculture, stone quarry, and forestry activities, including wood and grain processing mills along some streams.
3. The Quabbin Reservation landscape of the east side of Pelham needs more study, but the portion that is not under the Reservoir water is probably like 2 above.

Map 3A from Paul Bigelow's book, *Wrights and Privileges*, shows the concentration of mills in West Pelham and one now under the water of the Quabbin Reservoir.

**Quarries:** Bedrock reaches to the surface on the Pelham landscape, especially in the northern part of the town (See Map 3B from Paul Bigelow's book, *The Stone Industry* (1998)). This resource supported a number of quarries largely operated as locally owned family businesses. Two sites merit special note:

1. The old Massachusetts Agricultural College Quarry, now filled in, is on Buffam Road and owned today by the University of Massachusetts. Unlike most Pelham quarries it is known where much of the stone from this quarry went. Most notable is the Old Chapel building, iconic symbol of the University. When the tower steeple of the Chapel had to be re-built in 1998-99 broken stones were replaced using stone found on the surface of this quarry.
2. The "asbestos mine" on the east slope of the ridge east of and paralleling the end of Butter Hill Road (not shown on the Bigelow map) is a shallow excavation that has yielded several minerals. One of these is fibrous anthophyllite asbestos that was commercially mined in the early 1900's.

**Stone Walls:** Stone walls run through the woods of Pelham, reminders of once extensive farm fields. Some of Pelham's roads lack stone walls because the stones were broken up and used to make a firm base when the roads were first paved. One Pelham stone wall was sold to construct the attractive exterior facing of the Jones Library in Amherst.



## C. Water Resources

**1. Watersheds.** Pelham possesses valuable water resources including major watersheds that provide drinking water supply to metropolitan Boston, Springfield and Amherst. Approximately 3/4 of Pelham is forested watershed land that drains into a public water supply. In addition to providing a public water supply, the approximately 1100 acres of surface water in water supply reservoirs, streams and wetlands serve important recreational and aesthetic functions. (See **Required Map 4: Water Resources Map** in Appendix F.)

**2. Surface Water.** By far the most important water resource is the Quabbin Reservoir. Nearly 6,000 acres in Pelham are controlled and managed by the Department of Conservation Resources in conjunction with the Massachusetts Water Resources Authority (MWRA). The Quabbin watershed dominates the resource situation east of Route 202. In addition, the town of Amherst owns about 1500 acres of watershed land in Pelham including three reservoirs in the central plateau. The remainder of the town is watershed for private or public water supply in Shutesbury, Belchertown, Springfield and Pelham itself.

Streams in Pelham are also important elements of the town's water resources. The western two-thirds of the town drains to the west. Significant water courses include: Amethyst Brook and its tributaries Dunlop, Harris and Buffam Brooks, draining the large central portion of town, and Heatherstone Brook, draining land in the northwesterly corner of town into Adams Brook in Amherst. The eastern one third of the town drains from Route 202 east to the Quabbin Reservoir by way of several small streams – Briggs, Purgee, and Gulf Brooks and the larger Cadwell Creek. Jabish Brook drains a small section southward along Route 202 (Natural Resources Program 1971). Except along the few town-protected portions of streams, public access is either poor or informal.

Ponds are few and scattered with only limited potential for outdoor recreation, and the three Amherst Reservoirs—Hill, Hawley and Intake—in the Amethyst Brook and Harris Brook systems are off limits to public uses other than hiking and hunting because of the potential for contamination resulting from more intensive activities. The public has lost the access it once had to the private impoundment on Amethyst Brook in West Pelham, leaving the town without a permitted local swimming spot.

Pelham has approximately 50 documented vernal pools and more that remain undocumented. Among these vernal pools 36 are state-certified and an additional 15 pools await state certification. These are key ecological community types for a number of important common and rare species. Additionally, clusters of vernal pools are contained within the 1830 forest blocks suggesting a number of these wetlands are located within forested areas with moderate levels of agricultural disturbance and elevated levels of diversity. More detailed information obtained in 2007 from the Massachusetts Natural Heritage Program of the Division of Fisheries and Wildlife is included in Appendix C.

**3. Aquifer Recharge Areas.** The land in Pelham serves a vital regional and state-wide water supply function. Most of the land in Pelham either is an aquifer recharge area, or is a surface watershed draining to a water supply reservoir, or both. The remainder is a recharge area for private wells. Drinking water protection is one of the primary functions of open space in

Pelham. Pelham works with surrounding towns to implement local regulations consistent with the goal of regional water supply protection

**4. Flood Hazard Areas.** Pelham has little flood prone land, and flooding of residential cellars of homes built in or near wetland buffer zones has been the only type of flood problem known to have occurred in town. The Federal Insurance Administration zone "A" districts, listed in 1974, are shown in Map 7 found in Appendix F. They include: an area around the northernmost reaches of Amethyst Brook in Pelham; the area around Soule Swamp south of Knight's Corner; and the immediate areas around the three reservoirs in the Amherst watershed lands. One additional area, along the shore of the Quabbin in northeast Pelham, is not shown. All of these areas lie entirely or mostly within protected land.

**5. Wetlands.** Pelham wetlands include significant "upland" or "headwater" wetlands not protected by the state's Wetland Protection Act but which are subject to the jurisdiction of the Conservation Commission through the town's local Wetlands Bylaw.

#### **D. Vegetation**

Interrupted by residential development along roadsides and a handful of open fields, Pelham is predominately a forested landscape. Many residences in Pelham are set back from the roadside and are either partially or completely screened. This large amount of woodland provides habitat to a great variety of wildlife. Logging operations continue to have a significant impact.

The town's forests have many stands that originated early in the century following an era of heavy cutting; much of this is reaching or has reached merchantable size. Areas of old growth forest are few and are concentrated along stream ravines. Hardwoods consisting of red, white, chestnut, black and scarlet oaks on the drier sites intermix with red maple and paper birch in moister soil areas. Other miscellaneous hardwoods include black and yellow birch, hickory, sugar maple and striped maple. Hemlock and white pine intermix with hardwoods in much of the forest. Less common are scattered yellow and red pine. Since a good deal of forest land is under Chapter 61 protection, requiring owners to file management plans with the Commonwealth and the Conservation Commission, a significant check exists on forestry operations. Holdings of W.D. Cows, Inc., a forest-products company, are the largest single hold of private forest lands in the town. Other large forest blocks of interest for protection or connection to other protected land include areas off Buffam Road, in the hills between Mt. Orient and Poverty Mountain, in the tract threaded by Amethyst and Buffam Brooks bounded by Shutesbury, Boyden, Buffam, North Valley, and Amherst Roads and between Arnold Road and Butter Hill Road. The Conservation Commission monitors cutting operations carefully to see that they are in compliance with the required plans, but little is done to assure protection of old access ways, views or habitat other than in the context of these forest cutting plans.

Two plant species have been listed as being of special concern: the New England blazing star (*Liatris scariosa* var. *novae-angliae*) and the threadfoot (*Podostemum ceratophyllum*). The arethusa or bog-rose (*Arethusa bulbosa*) is listed as threatened. Pod-grass (*Scheuchzeria palustris*) is classified as endangered. An additional nine plants are watch-listed and one plant is listed as once known to the state, but now missing or undocumented. For more detailed

information obtained in 2007 from the Massachusetts Natural Heritage Program of the Division of Fisheries and Wildlife see Appendix C.

### **E. Fisheries and Wildlife**

Wildlife is abundant in Pelham and includes significant populations of game species such as deer, beaver, grouse, woodcock, gray squirrel, and raccoon; more recently, black bear and moose have been sighted along with turkey, eastern coyote, opossum, red squirrel, and flying squirrel. Migrant non-game birds, including many songbird species and raptors, use a flyway that parallels the spine of the town along Route 202. Bald eagles and golden eagles winter in the vicinity of the Quabbin Reservoir, usually on or near the Prescott Peninsula. The Quabbin Reservoir is commonly used as a migrant waterfowl resting place and the entire Quabbin area has been designated a core habitat in the state's bio map. In the portions of Pelham not in the Quabbin Reservation, significant acreage is also designated on the bio map as "supporting habitat."

Two areas of estimated habitat of state listed rare wetlands wildlife are generally located at Butter Hill and at Soule Swamp. Several rare animal species have been observed in Pelham since the 1920s and are listed by the Massachusetts Natural Heritage and Endangered Species Program. The common loon (*Gavia immer*) has been located within the protected area of the Quabbin reservation and is listed as of special concern. Additionally listed as of special concern are the wood turtle (*Glyptemus insculpta*) and eastern box turtle (*Terrapene carolina*). Listed as threatened is the marbled salamander (*Ambystoma opacum*). Listed as endangered are three birds: the sedge wren (*Cistoturos platensis*), peregrine falcon (*Falco peregrinus*), and bald eagle (*Haliaeetus leucocephalus*). The spring salamander (*Gyrinophilus porphyriticus*) once listed as of special concern is currently de-listed. Explanatory information from the Division of Fisheries and Wildlife about these species and about a kettlehole bog found in Pelham is included in Appendix C.

Although some of its watercourses and water bodies are suffering from the effects of acid rain, the fishing potential of the town is still good. Trout are stocked annually below the dam on Amethyst Brook and a limited native brook trout population is present in many of the town's smaller streams. The Quabbin Reservoir itself has some of the finest fishing in the state.

The large areas of protected open space in Pelham connecting with backland in private holdings offer wildlife large tracts of habitat essentially free from human interference. The magnitude of the ecological importance of these areas has not yet been intensively studied. However, in the Butter Hill Sanctuary alone over 100 species have been seen or deduced from tracks and other sign and catalogued by a resident naturalist who has routinely monitored these 150 acres for the past several years. (Please see Appendix D: Butter Hill Sanctuary Species Data.) Much of the protected open space is linked. For example, a parcel off the southeast corner of the Cadwell Forest is owned by the DCR and then linked to Amherst Watershed lands, and with some backland private holdings to the Butter Hill and Harkness Road sanctuaries, providing a nearly continual east/west corridor with few road crossings through the southern side of town. Seen in a regional context, this open land abuts a similar

situation in Belchertown. Another major wildlife corridor exists in northeast Pelham between the Quabbin and Buffam Road, where woodland, partly protected by the holdings of the Amherst Water Department, is continuous and little residential development along Shutesbury Road creates a barrier. Except for scattered houses along Buffam Road, this block lies in close proximity to another large block of woodland along the town's northwest border with Amherst. Over 100 acres is protected in this northwest corner with more targeted as an area needing further protection.

## **F. Scenic Resources and Unique Environments**

***Scenic Landscapes.*** The Department of Environmental Management's Massachusetts Landscape Inventory only listed as scenic the landscape along the Quabbin shoreline. This received a "Distinctive" rating. However, this Inventory only considered broad stretches of landscape and did not consider the scenic or aesthetic value to smaller sites. A more locally oriented scenic study would be necessary to uncover all the sites residents of Pelham consider noteworthy.

***Cultural, Archeological, and Historic Areas.*** The town's most important historic site is the Historical Complex on Pelham Hill. The Complex actually comprises a five element National Register Historic District. The five elements are the Town Hall, Pelham Hill Church/Museum, Pelham Hill Cemetery and the monuments to Daniel Shays and the Pelham World War I and II veterans. The Town Hall built in 1743 is the oldest Town Hall in continuous use in the country, and of an eighteenth century architectural type that is now rare. This designation has been maintained by having at least one town meeting in the building every year. The complex also houses a historical museum set in a former church. This museum houses artifacts, including the famous "oyster tombstone" and the entry step stone from Conkey's Tavern, a meeting place frequented by Pelham participants in Shays' Rebellion, including Daniel Shays himself.

A number of historic houses have been inventoried by the Historical Commission and a more complete survey is underway. Some historic houses were moved to their present locations from towns now lost under the Quabbin Reservoir though many built in Pelham from the mid-eighteenth century to the twentieth century remain in the town landscape. Of greatest concern in assessing the town's open space needs are those historic farmsteads associated with open fields. A number of these were noted above in Section 4B. The town also has old mill and other archaeological sites (see Section 4B) for which ongoing protection is seen as necessary by some townspeople.

***Geological Sites and Unique Environment.*** The town has several notable geological sites. One is a "balancing rock," a glacial erratic located off Shutesbury Road near Route 202 a few hundred feet east of the east end of the old Beaver Swamp road. The rock is something of a local irony now since it no longer balances: the state DPW moved the rock a short distance to its present site several years ago, apparently to remove it from the DCR reservation boundary lines. The late geologist and Pelham resident Thomas Rice also charted the location of several "ultrabasic" rock outcrops between the end of Butter Hill Road and the area appearing on the Belchertown USGS quadrangle as "Smith's Pasture." Near Hill 983 (south of Butter Hill Road) and also at elevation 820 northwest of Butter Hill between Butter Hill Road and Arnold Road are two significant quartz outcrops. Off Enfield Road and south of Butter Hill

is the site of an abandoned asbestos mine. Also of interest is a small underground rock-lined chamber of unknown origin called "Monk's Cave" located north of the cemetery on Packardville Road. Only a few farmsteads remain in Pelham; some of these are still open and should be protected for their historic as well economic and habitat values.

### **G. Environmental Challenges**

The Conservation Commission, the Board of Health and private citizens have identified scattered problems of environmental concern in town. No proven hazardous sites are known, but here and there roadside dumping and back woods debris disposal have become problems. Wherever old woods roads are not blocked off by gates, cables or other barriers, dumping of trash, furniture, abandoned vehicles, old appliances, and possibly hazardous household and automobile fluids has occurred. Shutesbury Road and old Brewer Swamp Road are examples of dumping locations, potentially representing a serious cleanup expense for the town.

Erosion and sedimentation are problems in many parts of town, primarily associated with road sand operations or heavy storm runoff into roadside ditches. According to the Conservation Commission, sand and debris from roads like Arnold Road, Boyden Road and Packardville Road have frequently entered nearby streams, possibly due to insufficient or untimely road maintenance. Meeting House Road, which descends steeply to Amethyst Brook between Hill Reservoir and Intake Reservoir, periodically washes out, releasing loads of sand into the water course. The current highway superintendent has remedied this situation to a degree in recent years despite insufficient budgets. Sand and salt from winter road maintenance also periodically enter Pelham brooks via roadside ditches. Several new road maintenance policies have been undertaken within the past few years to help reduce the contamination of water resources with sand and sediment. Several roads have been leveled to reduce water pooling, which concentrates salt. Road salt usage during winter months has been reduced, with salt being mixed with sand and sprayed with calcium chloride just prior to application. Unfortunately, this increases the amount of sand on the roads, which contributes to increased sediment. Road maintenance policies have been implemented which reduce the impact of road erosion in general. Street sweeping operations have been increased and road shoulders have been cut back to allow a more uniform escape of water from the road and to prevent concentrated streams of runoff.

Much of the Conservation Commission's work in recent years has been related to overseeing replacement of failed septic systems. Septic problems and failures are happening all over town; replacement is often difficult given that in many instances onsite systems were permitted on lots that are small or with soils not suitable for such systems. In general, development in town has been evenly spread out, partly because there is not much room for septic systems on the marginal sites that are so common within the town limits. Although there are odd areas of buildable sand and gravel scattered throughout the town, the longevity and proper functioning of septic systems will continue to be a concern for future development. The Board of Health has some regulations under Home Rule provisions that require more stringent requirements than the state's Title 5 Sanitary Code. The Board is currently discussing appropriate revisions to these regulations in order to assure that systems are located in suitable soils.

Pelham faces a number of challenges in regards to invasive species and global warming. Among the most important of the invasive species issues is the loss of a dominant overstory tree, the eastern hemlock (*Tsuga canadensis*), to the introduced scale insect, the hemlock wooly adelgid (*Adelges tsugae*). Significant reductions in hemlock stands, potential changes in water quality, and loss of significant habitats are some of the many interrelated problems identified with hemlock wooly adelgid infestation. As with many surrounding towns, Pelham also has a number of additional invasive species whose impacts are multifaceted. These are primarily common garden/landscape plants that are considered invasive, including but certainly not limited to: oriental bittersweet (*Celastrus orbiculatus*), Japanese barberry (*Berberis thunbergii*), mutliflora rose (*Rosa multiflora*), Japanese knotweed (*Polygonum cuspidatum*), smooth buckthorn (*Rhamnus frangula*) and winged burning bush (*Euonymus alatus*). Recently, the Conservation Commission has been contacted by landowners to review and monitor ongoing efforts to eradicate invasive plants on land with conservation easements. Potentially compounding problems with invasive species as well as a host of additional ecosystem impacts is the apparent trend in climate warming known as global warming. Rapid landscape change, loss of ecological community types, migration/extirpation of organisms, and changes in water quality and availability are only some of the potential changes suspected under various climate modeling scenarios in the Northeast.

## **SECTION 5: INVENTORY OF LANDS OF CONSERVATION & RECREATION INTEREST**

What is open space? Misconceptions about just what constitutes protected open space occasionally occur. When, for example, might a parking lot be considered open space and how does legally protected open space differ from any other type? *The Environmental Handbook for Massachusetts Conservation Commissioners* says open space has been defined as "land which does not contain substantial buildings, other structures, roads or other impervious surfaces." General Laws Ch. 61B defines open land as land that is: "maintained in a substantially natural, wild or open condition or must be maintained in a landscaped condition permitting the preservation of wildlife and natural resources."

This broad public definition of open space reflects the state of the Massachusetts landscape - one that has been altered by natural events and human activity so that very little of it qualifies as "wild" or "pristine." Much open space, whether it is portions of a golf course, wetlands, farmland or forest, is not permanently protected because it is in private ownership without necessary restrictions that go with land if and when it changes hands. Despite the intentions of current owners, some open space that seems protected may in fact be lost when that land changes hands or when the current owners' heirs decide upon a new plan for the property.

The function of this open space plan is to help the town determine ways to *permanently* protect what it has determined is important to Pelham's future. By itself, the plan does nothing. It is not zoning law or other legal regulation. The function of this plan is to point the way toward protection by mechanisms such as:

- purchase by the town or some other non-profit conservation organization;
- deed restrictions or easements;
- acquisition of development rights; and,

- tax or other incentives to landowners to protect all or portions of critical properties.

There are many land protection strategies. The Conservation Commission and local land trusts such as The Kestrel Trust are prepared to discuss various options with landowners who are interested in permanent legal protection of their open space. By identifying the extent of current protections and ensuring that future efforts to protect are legally structured to be lasting Pelham will be able to protect the water and land resources most critical to the future quality of life for all Pelham's inhabitants.

Protected open space in Pelham falls into several categories: public watershed land owned by the town of Amherst, public land owned by the University of Massachusetts or the Department of Conservation and Recreation (for the protection of the public water supply under the jurisdiction of the Metropolitan Water Resources Authority), lands listed under Chapter 61, lands owned by the town as Conservation areas and some private holdings upon which deed restrictions have been placed protecting them in some way but not always available for public use. Lands in Chapter 61 are of some concern since these parcels may be taken out of the program at the owner's discretion and are therefore only temporarily protected.

#### **A. Private Parcels**

Deed restrictions for private parcels are shown in the first matrix in Section 5C and have been recorded for properties including:

- the Lamdin (formerly Romer) holdings off Cook Road along the Amethyst and Dunlop Brooks which allow an easement for the public to walk along the cascades and trail and which is intended to retain land and water areas affected by the easement predominately in their natural scenic open condition or in agriculture, farming or forest use;
- Orient Springs (now owned by James Casagrande) restricted to protect the natural resources from degradation or development;
- the Banfield Farm restricted by an Agricultural Preservation Restriction;
- a right of way through the Bartlett land on North Valley Road to the Buffam Falls Conservation Area.
- a right of way from Arnold Road into the Butter Hill Sanctuary
- the Hepler property on Quarry Road restricted to protect a historic field and largely undisturbed woodland.

A list of land currently under Chapter 61 protection also can be found in Section 5C (see page 24). Much of this land is considered supporting habitat and is of interest for acquisition or other protections. **Required Map 5: Open Space Inventory** in Appendix F includes areas already acquired or protected. **Required Map 6: Action Plan Map** includes areas to be evaluated for acquisition or protection when they become available. In keeping with the apparent desire of townspeople to maintain the rural, woodland character of the town, protection and acquisition plans remain oriented toward wildlife habitat protection and passive recreation.

The Conservation Commission is collaborating with The Kestrel Trust to protect priority historic farm and woodlands in west and northwest Pelham, as well as along Route 202. Priorities for land protection in Pelham include the maintenance of wildlife habitat and connections to the Quabbin; the large roadless Mt. Orient area in northwest Pelham; wetland/water resources and buffers surrounding water resources, including vernal pools; historic agricultural land; and other historic landscapes. It is imperative that current deed restrictions be updated and re-recorded so that they are not lost to memory over time when new owners take possession of these properties. Although permanent, some vigilance is required to maintain the public's right of access where it has been granted.

## **B. Public and Nonprofit Parcels**

Permanently protected public and non-profit parcels are shown in the matrix tables in Section 5C. Of the conservation or recreation areas that fall under Recreation Commission, Town or Conservation Commission management, three, in addition to the Pelham School playground, are accessible to varying degrees for those with disabilities. These are the Buffam Falls Conservation Area, Partridge Meadow, and portions of the Harkness Road Conservation Area. The Partridge Meadow is regularly mowed, allowing for limited access. Some of the trails in the Buffam Falls Conservation Area are fairly wide and free from rocks; better access to the trailheads from the roads needs to be explored. In some areas trails may need to be leveled, bridged or relocated to make them more accessible, but portions of the Buffam Falls Conservation Area are amenable to upgrading. The Harkness Road Conservation Area presents similar problems at the entrance but even if the lower trails were upgraded, only a small section of these 150 acres could reasonably be brought up to Americans with Disabilities Act (ADA) standards. Neither the upper portions of the Harkness Road Conservation Area nor any portions of the Butter Hill Wildlife Sanctuary are suitable or feasible for trail upgrades to make them handicapped accessible. The relatively recently acquired Moose Trail Conservation Area (formerly the Weeks Property) has no parking at all, and lacks developed trails. Appendix E contains an evaluation of municipally owned conservation and recreation areas for accessibility to people with disabilities.

## **C. Inventories of Private, Public and Nonprofit, and Chapter 61 Lands**

### **Key to abbreviations used in the following matrix tables:**

- CR Conservation Restriction
- APR Agricultural Preservation Restriction
- ROW Right of Way
- CC Conservation Commission



**Permanently Protected Private Open Space**

<b>Private Lands</b>	<b>Owner</b>	<b>Restriction</b>	<b>Degree of Protection</b>	<b>Location</b>	<b>Manager/Holder of Restriction</b>	<b>Acres</b>	<b>Use</b>	<b>Recreation Potential</b>	<b>Public Access</b>	<b>Map &amp; Lot # Book/page</b>	<b>Notes</b>
Dunlop & Amethyst Brook	Lamdin	CR	Perpetuity	N Valley & Cook	CC	N/A	Conservation, river access	Cascades, hiking	Yes	(8-21,21A) 100 ft brook buffer	Parking on Cook Rd a problem
Orient Springs	Casa-grande	CR	Perpetuity	N Valley & Amherst Rd	CC	30	Conservation no build	Historic	Yes, w/ permission	(3-22,230) North portion of parcels	Natural
Banfield	Cynthia Banfield-Weir	APR	Perpetuity	NW Pelham Corner	CC	117	Woods, Trails, Fields	Unofficial trails	Yes, w/ permission	5-2,3,4	Hay farm, wood lot
Bartlett Field ROW to Buffam Falls	Bartlett family	ROW	Perpetuity	N Valley Rd	CC	N/A	Emergency use only	N/A	Yes	8-16-7	Bridge out
Hepler farm	Hepler	CR	Perpetuity	Quarry Rd	Kestrel Trust	37	Conservation	N/A	N/A	Hamp Cty Reg of Deeds Book 1989, p 34	Historic farm, woodland, streams
Arnold Rd. Right of Way to Butterfield Sanc.	Pemberton	ROW	Perpetuity	Arnold Rd.	Deeded ROW to Town of Pelham	N/A	Conservation	Hiking	Yes	NA	Trail to Butterhill Sanctuary

**Permanently Protected Public Open Space**

<b>Public Lands</b>	<b>Owner</b>	<b>Restriction</b>	<b>Degree of Protection</b>	<b>Location</b>	<b>Manager/Holder of Restriction</b>	<b>Acres</b>	<b>Use</b>	<b>Recreation Potential</b>	<b>Public Access</b>	<b>Map &amp; Lot # Book/page</b>	<b>Notes</b>
Quabbin	DCR	Owned	Perpetuity	Rte 202	DCR	5426	Water supply, forestry, wildlife	Hunting, fishing, hiking	Yes		Eagles, moose
Town of Amherst Watershed land	Town of Amherst	Owned	Perpetuity	Various	Town of Amherst	1558	Water supply, forestry, wildlife	Hiking where permitted	Limited	3-18,7-53,54, 57,58; 8-2,4,5,6,12, 14,15,27;9-9, 33,34;15-1,7, 8,9;16-39,40, 41,42,43;2, 12,13,14,15,	
Cadwell Forest	Umass	Owned	Perpetuity	Packardville Rd.	DCR/UMASS	1195	Forestry	Hiking, x-country skiing	Yes	14-2.15-2	
Municipal Complex	Town	Owned	Perpetuity	351 Amherst Rd.	Selectmen	2.3	Town Offices, Highway, Assessors	Civic organizations	Yes	15-20	Board records and files
Historic Complex	Town	Owned	Perpetuity	Amherst Road	Historical Commission	1	Historical Museum, Town Hall, Cemetary	Meetings	Yes	16-25	handicap access
Cemeteries	Town	Owned	Perpetuity	Various	Cemetery Committee	9.6	Obvious	Bird watching	Yes	2-71,6-35,8-61,8-7,8-11,8-22,13-8,14-1a, 15-10	

Permanently Protected Public Open Space page 2

Public Lands	Owner	Restriction	Degree of Protection	Location	Manager/Holder of Restriction	Acres	Use	Recreation Potential	Public Access	Map & Lot # Book/page	Notes
Library, Municipal Complex and Elementary School	Town	Owned	Perpetuity	41 & 45 Amherst Road, 2 S Valley Rd.	School Committee Selectmen Library Trustees	5	Elementary School, Fire & Police Depts, Library	Softball, soccer, basketball, playground	Yes	3-9,2-54B	
Unclassified	Town	Owned	Perpetuity	Various	Selectmen	5.6	Meetinghouse	Limited	Yes	2-53A,3-27	
Buffam Falls Conservation Area	Town	Owned	Perpetuity	N Valley & Meeting-house Rd	CC	65	Hunting, passive recreation	Trails, dip in brook, mt. bikes, hunting	Yes	8-16	Hunting policy needs discussion
Buffam parking area	Town	Owned	Perpetuity	N Valley Rd (north of bridge entrances)	CC	0.03	Open field, filling in forest	Little	Yes	3-47,48,49	Hope to trade or add adjacent
Hearthstone Brook Conservation Area	Town	Owned	Perpetuity	West of Mt Orient	CC	13.2	Woodland	Little	Yes but difficult	4-3,4	Trail connector needed
Partridge Meadow	Town	Owned	Perpetuity	Meetinghouse Rd part of Buffam Falls Cons Area	CC	3.4	Passive recreation	Trails	Yes	8-17D	

Permanently Protected Public Open Space page 3

Public Lands	Owner	Restriction	Degree of Protection	Location	Manager/Holder of Restriction	Acres	Use	Recreation Potential	Public Access	Map & Lot # Book/page	Notes
Whitney Cons Area	Town	Owned	Perpetuity	NW Pel/Amh border btwn Hearthstone & Amethyst Brooks	CC	21.3	Conservation, Robert Frost Trail	Trails	Yes	3-38,39	
Butter Hill Wildlife Sanctuary	Town	Owned/ Kestrel Trust <u>Rstrctn</u>	Perpetuity	East of Harkness Rd & off Arnold Rd via ROW	CC	147	Hiking,wildlife study,horseback riding	Trails, vista	Yes	1-13,6-6	Deed restrictions prohibit hunting and forest mgmt
Butter Hill Extension	Town	Owned	Perpetuity	South and adjacent to main sanctuary	CC	7.14	Hiking, wildlife habitat	No trails	Yes	6-5	
Harkness Conservation Area	Town	Owned	Perpetuity	Harkness Rd	Con Comm	145.2	Conservation	Hiking, x-country ski trails	Yes	1-11	Trail maint & development needed
Moose Trail Conservation Area	Town	Owned	Perpetuity	Robertson Rd	Con Comm	57	Water supply, forestry, wildlife	No trails	Yes	10-13.A	Moose, wetlands, recovering forestry plot

**Pelham's Chapter 61 Lands**

<b><u>OWNER</u></b>	<b><u>LOCATION</u></b>	<b><u>MAP</u></b>	<b><u>BLOCK</u></b>	<b><u>LOT</u></b>	<b><u>ACRES</u></b>
<b><u>FORESTRY</u></b>					
AARON JAMES S	SHUTESBURY RD	16	0	35	54.10
ARONS NANCY	365 AMHERST RD	16	22	23	16.50
BANFIELD-WEIR CYNTHIA & WEIR KEVIN	NORTH VALLEY RD	5	2	3.4	117.00
BENNETT GLENN E & JOAN M	BUFFAM RD	10	5	6	42.02
BIXBY MARK W & JENNIFER S	HARKNESS RD	1	3	1	40.64
CALLAHAM DALE	GULF RD	6	0	3	15.50
CHEREWATTI J ROGER & ILONA M	NORTH VALLEY RD	4	0	1	83.00
COWLS W D INC	NORTH VALLEY RD	4	0	5	1163.46
COWLS W D INC	NORTH VALLEY RD	4	0	16	0.13
COWLS W D INC	NORTH VALLEY RD	5	0	6	9.80
COWLS W D INC	TOWER RD	14	0	1	63.40
COWLS W D INC	SHUTESBURY RD	17	0	9	111.00
COWLS W D INC	SHUTESBURY RD	17	0	17.A	0.86
FLETCHER PAMELA	KING ST	14	0	3	40.00
FLEURY EDWARD B & JACALYN A	DANIEL SHAYS HWY	15	4	6	25.84
FRANZMAN BURTON W & EPSTEIN JOAN	135 SHUTESBURY RD	17	0	17.E	13.58
GRAVES, ROBERT J & VIRGINIA B	179 NORTH VALLEY RD	8	0	20.F	43.60
GULLIVER REGINA H	BUFFAM RD	9	21	23.A	96.00
HART JOAN M	BUFFAM RD	9	19	20	51.00
HEPLER PETER K & MARGARET H	6 QUARRY ST	8	0	25	40.00
HUBBE RAYMOND E & BURN VIRGINIA E	85 BUFFAM RD	9	0	15	20.40
JACKSON CHARLES W & ELIZABETH	PACKARDVILLE RD	13	0	2	24.60
KEYES JACQUELINE D	123 PACKARDVILLE RD	6	0	34	40.00
LAMDIN PETER & KATE	24 COOK RD	8	0	21	28.59
LAPOINTE LESLIE D & NANCY F	41 GULF RD	6	0	4	75.78
LAPOINTE LESLIE D & NANCY FROMMER	GULF RD	6	0	31	25.50
LARSON JOSEPH S & WENDY N	BUTTERHILL RD	6	6	7	24.03
MACCONNELL WILLIAM	NORTH VALLEY RD	9	0	11	22.00
MCCLUNG ROBERT M & GALE S	BUFFAM RD	9	0	14	40.66
OLVER JOHN W & ROSE R	NORTH VALLEY RD	9	0	10	35.80
OLVER JOHN W & ROSE R	BUFFAM RD	9	0	28	31.21
QUINN, KATHERYN M & JAMES A	280 DANIEL SHAYS HWY	15	4	2	30.00
RICE THOMAS E & MARIAN C	40 BUTTERHILL RD	6	0	16	53.72
ROMER ROBERT H	AMHERST RD	8	0	21.A	141.41
STEWART JAMES H & MAURIEL W	NORTH VALLEY RD	8	0	26	4.00
STEWART ROBERT S	151 NORTH VALLEY RD	8	0	19	43.10
STOCKWELL CHARLES & BARBARA	363 AMHERST RD	16	0	21	52.00
THOMPSON CHARLES & BOY SARAH	7 OLD PRATTS CORNER RD	10	0	4	96.42
LAWLER KRISTEN K & TAI CHEE CHONG	86 NORTH VALLEY RD	3	0	52	20.00
WEILERSTEIN PHILIP J	43 BOYDEN RD	10	0	17	29.18
WESTHEAD, EDWARD	NORTH VALLEY RD	9	0	8	38.34
ZAHRADNIK PAUL A	72 HARKNESS RD	2	0	1.M	24.49
<b><u>AGRICULTURAL</u></b>					
QUINN, KATHERYN M & JAMES A	280 DANIEL SHAYS HWY	15	4	2	30.00
<b><u>RECREATIONAL</u></b>					
DZENOLET KAREN	50 ARNOLD RD	7	0	2	11.42
GURVITCH, MARC	BOYDEN RD	10	0	16	50.00

## **SECTION 6: COMMUNITY VISION**

### **A. Description of Process**

As a result of a request to have the town explore expansion of water and sewer facilities along the lower end of Amherst Road, the Board of Selectmen created an *ad hoc* Growth Study Committee in 2004. The Committee's charge was to develop recommendations for managing future growth in the town and to fully explore the request for infrastructure changes since such changes can have major, and sometimes unintended, consequences for growth and town character. The subsequent Pelham Hills Forest Conservation Project grew out of the growth study effort and was undertaken after receipt of a state planning grant. It has resulted in proposals to ensure that the vision townspeople have for the future is realized.

Neither the Growth Study Committee's efforts nor the Pelham Hills Forest Conservation Project started "from scratch." The growth study group undertook a major review of the series of studies and reports on town growth, zoning, and land use done over the years since 1971 by the Selectmen, Conservation and Recreation Commissions, Planning Board, regional, state, and federal agencies. These various reports have dealt with maintenance of the rural character of the town. All have expressed appreciation for the need to accommodate reasonable growth while protecting water and other natural resources. They have acknowledged the need or desire for a "town center," for affordable housing for young families and senior citizens, for changes in zoning to accomplish a variety of goals, and discussed other related issues. Over the years the recommendations contained in these documents have resulted in adoption by Town Meeting of a number of local ordinances and zoning by-laws as well as some major town expenditures to realize the townspeople's goals.

The Growth Study Committee and Forest Conservation Project followed up on earlier recommendations that seemed to merit more consideration given new information and current conditions in the town and state. In addition, both examined the various potential impacts on the town of the state's "Smart Growth" and affordable housing initiatives while also assessing the potential consequences of sprawling development on lifestyle and the environment.

Town boards were interviewed during the efforts of the Growth Study Committee and the Forest Conservation Project. The Growth Study Committee developed a short survey to assess townspeople's interest in addressing issues relating to affordable housing, the Community Preservation Act, and particular zoning changes to assess whether to proceed with further efforts in those directions based upon residents' desires. (See survey results in Appendix A.) This work as well as the work done to study the feasibility of forest conservation zoning and other means to plan for the future and channel growth appropriately have informed this Open Space Plan update. (See Appendix B for the Pelham Hills Forest Conservation Project Summary.) In addition to these major efforts over the past several years, the Conservation Commission has held public meetings to get input from citizens specifically related to this current update of the Open Space and Recreation Plan. See also Section 2B with respect to public involvement.

## **B. Statement of Open Space and Recreation Goals**

Pelham prefers to prevent environmental damage rather than try to fix mistakes later. Pelham is, and the general consensus is that it should remain, a largely unspoiled landscape and rural setting with abundant wildlife. It is a place where clean water, protected habitat and large tracts of unbroken forest will continue to make it a desirable place to live and in which residents and visitors can enjoy the peaceful natural setting and many trails and vistas. Appropriate land uses and protection of habitat and drinking water supplies are paramount given Pelham's unique soil characteristics and place in the regional framework for watershed protection and core as well as supporting habitat for biological conservation. This overarching goal requires close coordination of land use boards: the Board of Health, Planning Board, Conservation Commission and Zoning Board, in particular. Most citizens understand the long term financial implications of over-development and even in trying fiscal times residents are seeking ways to maintain the integrity of natural systems.

## **SECTION 7: ANALYSIS OF NEEDS**

### **A. Summary of Resource Protection Needs**

**1. Protection of Drinking Water Resources.** To prevent the contamination of public and private drinking water, Pelham makes use of many tools. The town is designated a Water Supply Protection District in recognition of the fact that it is a watershed recharge area for the public water supply of several surrounding towns, metropolitan Boston, and private wells of its residents. The Town of Pelham Wetlands Protection Bylaw and Regulations further protect the aquifer as does public ownership of key parcels important for a safe water supply. In recognition of soil limitations, bedrock, and a high water table in some parts of Pelham, the Board of Health has also adopted regulations that provide more protection than the Commonwealth's sanitary code (Title 5). Several town boards are studying forest conservation zoning to be ready for the newer septic system technology that may lead to development of previously undevelopable land.

**2. Protection of Scenic Resources and Historic Landscapes.** The town adopted a Scenic Roads Bylaw at the annual town meeting in 2002 (Article 26). Integral aspects of the rural and historic legacy of the town are the many stone walls along town roads and in the woods and fields, mature trees, historic buildings, old cemeteries, archaeological sites including old mills and quarries, and the few remaining open fields. Efforts to protect these assets include continued identification and documentation, endeavors to gain National Register designation, the possible creation of a historic district, and passage of protective bylaws. Preservation of scenic views is also being considered by the Forest Conservation Project.

**3. Protection of Wildlife Habitat and Corridors.** Local and migratory wildlife benefit from both the open fields and large forest tracts in town. Observational data on sightings of birds and mammals in Butter Hill Sanctuary and other locations document the diversity of this wildlife. Through a vernal pool identification project of the Conservation Commission many vernal pools have been certified by the Natural Heritage Endangered Species Program. Some of these wildlife habitats and corridors may be vulnerable when new houses and roads

are inevitably built. Even limited housing construction along established town roads and especially on backlands behind existing houses may have a negative effect. Many residents support the ongoing work of The Kestrel Trust in Pelham and surrounding towns to permanently protect land through purchase or conservation restrictions. The Forest Conservation Project is also studying these concerns.

**4. Protection of Wetlands and Forest Areas.** Although mature forests along stream courses are largely protected by the state Wetlands Protection Act and the Rivers Protection Act, forest cutting operations are still a permitted use in these important ecological resource areas. Timber harvesting does not necessarily cause significant long-term damage and, in some instances can even enhance the habitat for certain species. However, a thorough review of forest cutting plans and their implementation in the field is essential to assure good forestry practices and protection of plant and wildlife habitat. The forests of Pelham are predominantly midsuccessional moving toward late successional stages. Forest management which maintains early stage succession as a component of the forest will increase wildlife diversity. The hiring of a consultant to investigate this issue and to make recommendations for the town's conservation areas would be informative to the extent funds are available.

## **B. Summary of Community Needs**

**1. Development of Local Recreational Opportunities.** To foster greater community identity and involvement, the further development of local recreational opportunities is desirable. The Pelham Elementary School playground serves the community as the main outdoor playing field, but is used most often by the school. One of the most important recreational amenities in the town is the abundance of hiking trails and the possibility of developing even more. With the recognized health benefits of at least thirty minutes of daily exercise, greater use of hiking trails on Pelham conservation land should be encouraged. Major trails such as the Robert Frost Trail and the Metacomet-Monadnock Trail, as well as abandoned roads and less well known trails are abundant. Efforts to publicize these trails, to mark and upgrade existing trails, to develop new trails and extensions of old ones should all be undertaken. Information on difficulty, distance, and walking times for some trails and their suitability for horseback riding, cross-country skiing, cross-country running and mountain biking would likely increase their appropriate use. Use of all terrain vehicles is not permitted on conservation land. Sufficient off-street parking is also necessary at several sites. The development of a series of bike trails on roads in town would be difficult due to the steep grades of some major roads, heavy traffic, road width, and narrow shoulders. Some biking does take place on paved and unpaved back roads. Stronger efforts must be made to make more recreational opportunities for people with disabilities available.

Because these trails are a local and regional resource, efforts must be undertaken to protect them. Some are minimally protected and others unprotected so that they could be eliminated by development or forestry cutting. By encouraging greater use and enjoyment of the out-of-doors, a group of people interested in the protection and increase of this kind of recreation might gradually develop.



**2. Creation of a Swimming Area.** Unfortunately at this time, there is no possibility of developing a local swimming facility to replace the informal access residents had to the private impoundment on Amethyst Brook off Amherst Road, which was closed for safety reasons many years ago.

**3. Preserving Scenic Roads and Vistas. Pelham adopted a Scenic Roads Bylaw in 2002.** Although no major road work has occurred in recent years, the bylaw should not be forgotten by the town boards as an important part of the efforts to preserve Pelham's character. Whether certain roads should be closed and the best approach to preserving scenic vistas should again be reviewed. The review should determine whether a regulatory, policy or other approach would best assist the town in maintaining its historic legacy and natural beauty. Preserving the rural character of Western Massachusetts is of concern to all area towns, not just Pelham.

### **C. Management Needs, Potential Change of Use**

**1. A Recreation Commission.** The Town needs an active Recreation Commission. Currently, there is only one member of the commission. For a long time, this commission has not met regularly and without their assistance, it has been difficult to assess recreational needs or undertake programs.

**2. Current Natural Resources Data.** Current studies of natural resources are needed. Although relatively little has changed in Pelham over the past thirty years, more recent studies than the 1971 Natural Resource Program and the 1987 Preliminary Strategic Master Plan would make the task of preserving, protecting, and planning for the Town's assets easier and more accurate. Information on the species, abundance, health, and age of trees in the many large forest tracts, animal populations, possible affects of climate change, future housing needs, future educational needs, and the condition of historic and archaeological sites is necessary for effective planning. With the current fiscal difficulties and lack of volunteers, smaller studies rather than large comprehensive ones will be easier for the town to undertake.

**3. The Community Preservation Act.** A committee of residents has been studying the benefits of a Community Preservation Act for the town and hopes to bring this to the ballot for a vote in 2008. The Historic Commission and Conservation Commission support their efforts.

## **SECTION 8: GOALS AND OBJECTIVES**

Pelham's 2002 Open Space and Recreation Plan had numerous goals and anticipated actions to achieve those goals. Unfortunately, because of financial and time constraints many of the actions have not been completed. Volunteer efforts have focused on related initiatives such as the Growth Study Committee, Pelham Hills Forest Conservation Project and efforts to promote passage of the Community Preservation Act. While these initiatives further the goals identified in the 2002 Plan, they were not listed as actions in that Plan. The

Committee decided to emphasize four main goals. Those goals reflect the Committee's priorities over the next five years.

**Goal 1: Conservation Area Stewardship.** Two related needs are to take better care of the conservation areas already under the Conservation Commission's jurisdiction and to increase public environmental awareness. These needs can be addressed by better informing residents of the resources administered by the town and by engaging residents in the protection of conservation areas through creation of "Friends" groups to monitor and maintain each area. Not only can this goal be achieved within the next few years, but it could contribute significantly to Pelham residents' sense of responsibility for protecting their resources. An investigation of the need for forest management of town conservation areas would be useful to the extent funds exist.

**Goal 2: Water and Other Resource Protection.** The goal of protecting Pelham's water and natural resources encompasses the need to:

- update natural resource studies, maps and inventories for Pelham so that more informed decisions can be made;
- identify those areas important to protect through conservation restrictions or purchase; and
- revisit earlier zoning or policy initiatives.

Updated studies, maps and inventories would be helpful aids in identifying additional open space priorities. Such information also would be useful in determining and implementing the most appropriate policy and/or regulatory changes. Policy and regulatory initiatives to protect Pelham's natural resources and to maintain its rural character are currently being discussed at public meetings held by the Forest Conservation Project. The Open Space and Recreation Plan Committee supports the efforts of the Forest Conservation Project. The Committee also supports passage of the Community Preservation Act and determining the best means of preserving Pelham's scenic vistas as well as whether closure of certain roads in Pelham would help protect Pelham's water and natural resources.

**Goal 3: Increased Public Environmental Awareness.** Members of the public who attended Open Space and Recreation Plan meetings expressed a strong interest in monitoring the challenges to Pelham's resources, namely, the spread of invasive plants, the infestation of hemlock wooly adelgid and any impacts of climate change. Those members were interested in developing a strategy to address these problems. First, invasive plants in high risk areas and conservation areas need to be inventoried and mapped. Then, an appropriate plan can be developed. This information should be shared with the public to further the goal of increasing public environmental awareness. The inventories, maps and plan could form the basis for public programs and presentations which hopefully would generate additional public interest and involvement.

**Goal 4: Regional Cooperation and Collaboration.** While not a new concept, the Committee identified the need to ensure that regional understanding and cooperation in meeting environmental goals is ongoing. Pelham is part of watersheds that provide drinking water supplies to metropolitan Boston, Springfield and Amherst as well as Shutesbury,

Belchertown and its own residents' private supplies. As a regional watershed of some importance, Pelham's large roadless areas also provide uninterrupted wildlife corridors between Pelham and its neighbors. The town is acutely aware of the need to work with its neighbors in the region on matters of watershed, natural resources and wildlife habitat protection. Pelham has for many years worked on regional goals with The Kestrel Trust and has begun to work in recent years with the North Quabbin Regional Landscape Partnership as well. The Committee recommends that Pelham continue all of these conservation partnerships and maintain a regional perspective as it pursues Pelham's open space plan goals.

### CHART OF GOALS AND OBJECTIVES

<b>GOALS</b>	<b>OBJECTIVES</b>
<b>1. Conservation Area Stewardship</b>	<ul style="list-style-type: none"> <li>a. Maintain existing trails/scenic vistas.</li> <li>b. Create new trails/scenic vistas.</li> <li>c. Post signs.</li> <li>d. Develop "Friends of" each conservation area to help achieve objectives.</li> <li>e. Determine to what extent forest management is appropriate.</li> <li>f. Create better access for those with disabilities where feasible.</li> </ul>
<b>2. Water and Other Resource Protection</b>	<ul style="list-style-type: none"> <li>a. Update natural resource studies, maps and inventories for Pelham.</li> <li>b. Inventory and map invasive plants in Pelham high risk and conservation areas, develop a strategy; create public awareness and involvement through workshops and pamphlet.</li> <li>c. Continue to identify areas the town should prioritize in obtaining conservation restrictions or acquiring.</li> <li>d. Protect Pelham's existing farms.</li> <li>e. Consider bylaw and other regulatory changes as well as policy initiatives.</li> </ul>
<b>3. Increase Public Environmental Awareness</b>	<ul style="list-style-type: none"> <li>a. Create and distribute maps and flyers of conservation areas and other public trails.</li> </ul>
<b>4. Regional Cooperation and Collaboration</b>	<ul style="list-style-type: none"> <li>a. Work with adjacent towns and Kestrel Trust to protect conservation areas and wildlife corridor connections from a broader regional perspective.</li> <li>b. Work with North Quabbin Regional Landscape Partnership to develop a strategy for the region.</li> </ul>

## SECTION 9: FIVE-YEAR ACTION PLAN

This Five-Year Action Plan provides a proposed timetable for each of the goals and objectives. The Committee established its priorities in part by what was achievable given time and budgetary constraints as well as what is most urgently needed. The Action Plan recognizes that many of the objectives listed in Section 8 are also actions and that actions listed under one goal often further the other goals identified by the Committee; for simplicity and readability each action is only listed once rather than under each goal. The Action Plan identifies the Town Boards with major responsibility for the action proposed. The Conservation Commission will review the Action Plan twice per year to monitor and as necessary, revise it. Members of the public who were interested in working on a specific aspect of the Plan can report to the Conservation Commission at those meetings. **Required Map 6: Action Plan Map** can be found in Appendix F.

### Actions Related to Goal 1: Conservation Area Stewardship

ACTION	WHO RESPONSIBLE	SCHEDULE
1. Hold public forum for interested volunteers for each conservation area; develop guidelines.	Conservation Commission	2008
2. Create a “Friends of” group for each conservation area with responsibility for reporting to the Conservation Commission at least once per year.	Conservation Commission	2008
3. Develop a maintenance plan Have signs made and posted in each conservation area.	Conservation Commission; Friends Groups	2009
4 Determine whether at least the foundation of the barn on Partridge Meadow can be preserved. Contact the Barn Taskforce of Preservation MA regarding salvaging barn. Document structure with floor plans and photos for archives prior to any removal. If necessary, put out for bid barn removal..	Conservation Commission; Historical Commission	2009
5. Hire a consultant to investigate and make recommendations regarding the need for forest management of each conservation area, including whether pine forest farm in Buffam Falls conservation area should be managed. Develop a management plan.	Conservation Commission	2010
6. Determine where improved access to conservation areas for those with disabilities is feasible. Implement plan.	Conservation Commission; ADACoordinator Friends Groups	Ongoing

## Actions Related to Goal 2: Water and Other Resource Protection

ACTION	WHO RESPONSIBLE	SCHEDULE
1. Collect existing data regarding Pelham (natural resource studies, maps and inventories) and determine what needs to be updated and/or remains to be done; prioritize.	Conservation Commission	ONGOING
2. Seek college graduate students and/or professional volunteers affiliated with Pelham to update that data; if funds are available, put out to bid.	Conservation Commission	2009
3. Form group of residents to inventory, map and devise a strategy for invasive plants in Pelham.	Conservation Commission	2009
4. Update list of permanently protected private and public open space including landowners currently under Chapter 61 protection. Determine which properties need to be re-recorded or other action taken to remain protected.	Conservation Commission; Kestrel Trust Assistance	ONGOING
5. Prepare and continually update a priority list of areas to be acquired or otherwise protected.	Conservation Commission; Kestrel Trust	ONGOING
6. Review recommendations of Forest Conservation Project and implement as appropriate.	Conservation Commission; Planning Board; Board of Health	ONGOING
7. Assist Community Preservation Act organizers in passage of Act; create a list of projects which the Act could fund.	Conservation Commission; Historic Commission	ONGOING
8. Ensure compliance with Scenic Roads Bylaw.	Planning Board; Tree Warden; Highway Superintendent	ONGOING
9. Determine whether closure of certain town roads would further goals and the best means of preserving scenic vistas.	Conservation Commission; Planning Board	2009
10. Continue to certify vernal pools and review 1830s forest blocks for outstanding/unidentified vernal pools.	Conservation Commission	ONGOING
11. Identify and map the rare ecological community types and species of threatened, endangered or special concern listed in the 2007 Massachusetts Heritage biomap report.	Conservation Commission	2010
12. Submit a community description to Massachusetts Heritage to map and rank kettle hole bog occurrence.	Conservation Commission	2010
13. Develop planning exercise to target large robust wildlife populations (for example, Pelham's A-ranked box turtle population).	Conservation Commission	2010

### **Actions Related to Goal 3: Increase Public Environmental Awareness**

<b>Action</b>	<b>Who Responsible</b>	<b>Schedule</b>
1. Encourage Friends of each conservation area and local resident experts to create maps of conservation areas and other public trails; if funds available, hire individual.	Conservation Commission	2009
2. Develop and distribute flyer of Pelham conservation areas and other public trails.	Conservation Commission	2009
3. Reactivate the Recreation Commission by appointing additional members. Collaborate with the Recreation Commission on projects.	Select Board; Conservation Commission; Recreation Commission	2008

### **Actions Related to Goal 4: Regional Cooperation and Collaboration**

<b>Action</b>	<b>Who Responsible</b>	<b>Schedule</b>
1. Invite Kestrel Trust at least twice per year to Conservation Commission meetings to discuss collaborating on ongoing projects to protect land.	Conservation Commission	Begin Spring 2008
2. Improve communications with adjacent towns by offering to schedule a joint meeting	Conservation Commission	Ongoing
3. Attend North Quabbin Regional Partnership Meetings at least twice yearly to develop a strategy for the region. Consider appointing a member of the Conservation Commission to be the point person.	Conservation Commission	Ongoing

## **SECTION 10: PUBLIC COMMENTS**

The public was invited to meetings early in the process to develop and revise the Open Space and Recreation Plan. All meetings of the Committee have been open public meetings. Public comment helped refocus the Committee on the issue of protecting existing conservation areas and better informing town residents of such areas. Public comment also indicated a strong interest among at least a subgroup to pursue the issue of invasive plants.

Following completion of the final draft of the plan in February of 2008, the plan was distributed to the Planning Board, Select Board, Conservation Commission, and Regional Planning Agency. The plan also was distributed to the Board of Health, Historical Commission and the Recreation Commission. The final draft was placed in the town library and Rhodes Building for review and a public forum was held on February 28, 2008 for further input. Copies of announcements to involve the public follow this section. Letters received from the Planning Board, Board of Selectmen, Conservation Commission, Historical Commission and the Pioneer Valley Planning Commission also follow this section. The plan has been revised to incorporate input received from all of these sources including responses of the public and the various boards and commissions. The plan will be submitted in April, 2008 to the Division of Conservation Services for final approval as well.

ANNOUNCEMENTS PLACED IN THE ELEMENTARY SCHOOL NEWSPAPER, THE  
PELHAM PRESS

NOVEMBER ANNOUNCEMENT:

OPEN SPACE PLAN MEETING

The Pelham Conservation Commission is in the process of revising the Town's Open Space and Recreation Plan; the plan was last revised in 2002. The plan can be a great vehicle to discuss our town's open space priorities and to discuss the potential for and advisability of more recreational and educational uses of already existing town conservation lands. If you are interested in working on the plan or otherwise providing input, please contact Pelham Conservation Commission member Cynthia Weigel at 256-4606. An initial informational meeting to discuss the plan is scheduled for November 13, 2007 at 7:00 pm at the Pelham library. We look forward to seeing you there.

DECEMBER ANNOUNCEMENT:

OPEN SPACE PLAN MEETING

The Pelham Conservation Commission is in the process of revising the Town's Open Space and Recreation Plan; the Commission updates this plan every five years. The Commission will be discussing the plan at its next meeting on Wednesday, December 12, 2007 at 7:00 p.m. at the Rhodes Building. Please come to the meeting to learn about the plan and to provide input on our town's open space priorities.

## SECTION 11: REFERENCES

In preparing this Open Space and Recreation Plan Update, the following sources were used:

Bigelow, Paul J. 1998. *The Stone Industry, Pelham, Massachusetts*. Privately printed by the author (36 pages).

Bigelow, Paul. 1993. *Wrights and Privileges, the Mills and Shops of Pelham, Massachusetts from 1740 to 1937*. Haley's Athol, MA ( 139 pages).

*Draft Growth Management Plan for the Town of Pelham*, Pioneer Valley Planning Commission, 1988.

*Environmental Handbook for Conservation Commissioners*, Alexandra D. Dawson, J.D. and Sally A. Zielinski, Ph.D., ninth edition, 2006.

*Natural Heritage and Endangered Species Program Information*.

*Natural Resources Program of the Town of Pelham*, Massachusetts, April 1971.

Parmenter, C. O., *History of Pelham, Mass. From 1738 to 1898*, Amherst MA, 1898.

*Pelham Growth Study Committee Report 2004-2006*.

*Pelham Hills Forest Conservation Project Report 2007*.

*Pelham, Massachusetts Land of Historic Heights*, Pamphlet published by Pioneer Valley Association, Inc., Hampshire County Commission.

Pelham Residents, Boards and Commissions.

*Preliminary Strategic Master Plan for Pelham, Massachusetts*, University of Massachusetts Regional Planning Study, John Mullin, Jack Ahern and Rod Warnick, advisors, 1987.

*Valley Vision 2: the New Regional Land Use Plan for the Pioneer Valley*, Pioneer Valley Planning Commission, September 2007.



## **APPENDIX A**

### **Pelham Growth Study Committee 2006 Progress Report and Survey, Press Release and Final Report**

## **APPENDIX B**

### **Pelham Hills Forest Conservation Project 2007 Summary and Mailings**

## **APPENDIX C**

**Information from the Division of Fisheries and Wildlife  
Natural Heritage and Endangered Species Program  
Obtained in 2007 Regarding Pelham**

## **APPENDIX D**

### **Butter Hill Sanctuary Species Data 1998 - 2007**

## **APPENDIX E**

### **Americans with Disabilities Act Accessibility Report**

Kim Leahey is the town of Pelham's new ADA Coordinator. Together with the Conservation Commission and other appropriate boards she will be reviewing the town's compliance with the American Disabilities Act. She already has certified that the town's employment practices are consistent with the ADA. Pertinent parts of the ADA Access Self-Evaluation Forms are included for the elementary school playground as well as the town's conservation and recreation areas under the jurisdiction of the Conservation Commission or Recreation Commission. Of these areas, the Pelham School playground is ADA compliant. Buffam Falls Conservation Area is partly accessible. The Harkness Road Conservation Area entrance, lower trail and Partridge Meadow possibly could be altered to make them more accessible. However, the Butter Hill Wildlife Sanctuary is located in hilly terrain and cannot be reasonably altered to make it accessible to wheel chairs. Nor can the other areas be reasonably altered (see evaluation forms). The Committee will continue to monitor and improve the accessibility of conservation areas to those with disabilities (see Goal 1: Action 6).

## **APPENDIX F**

### **MAPS**

#### **Required Maps**

- 1. Zoning Map**
- 2. Soils and Geologic Features Map**
- 3. Unique Features Map - Landscape Points of Special Interests**
  - 3A. Mills and Shops of Pelham, MA from 1740 to 1937**
  - 3B. Pelham, MA Stone Quarries**
- 4. Water Resources Map**
- 5. Open Space Inventory Map**
- 6. Action Plan Map**

#### **Additional Maps**

- 7. FEMA, Hazardous Sites and Public Water Supplies Map**