

AN OPEN SPACE AND RECREATION PLAN FOR THE TOWN OF LINCOLN

**. . . to protect our natural resources, agricultural heritage,
and recreational values.**

March 2008

The Lincoln Open Space Committee is pleased to present to the citizens of Lincoln an Open Space and Recreation Plan for the future. This Plan re-affirms Lincoln's core natural resource, agricultural and recreational values. It provides a guiding framework that can be used to maintain and enhance the "green infrastructure" of the community, and it identifies pressures and opportunities that may influence the future character of Lincoln.

This Plan celebrates Lincoln's great accomplishments in land protection and stewardship, which were achieved through on-going partnerships and coordinated efforts. First and foremost, the Open Space Committee wishes to express its gratitude to the dedicated residents who so willingly offer their time and expertise in making Lincoln the special place that it is. The Committee also wishes to thank the Conservation Commission, Board of Selectmen, Planning Board, Disabilities Commission and other concerned boards, organizations and their staff. Particular thanks go to the Lincoln Land Conservation Trust and the Rural Land Foundation for their significant and tireless contributions toward land protection efforts in Town. Without their efforts, Lincoln would not have retained the rural character that residents enjoy today.

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TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	iv
INTRODUCTION	
A. Statement of Purpose	1
B. Planning Process and Public Participation	2
COMMUNITY SETTING	
A. Regional Context	4
B. History of Lincoln	5
C. Population Characteristics	6
D. Growth and Development Patterns	6
ENVIRONMENTAL INVENTORY AND ANALYSIS	
A. Geology, Soils and Topography	11
B. Landscape Character	12
C. Water Resources	14
D. Natural Communities (Associated Vegetation & Wildlife)	20
E. Fisheries and Wildlife	26
F. Scenic Resources and Unique Environments	28
G. Environmental Challenges	33
INVENTORY OF EXISTING OPEN SPACE	
A. Deeded Conservation Land	
a. Publicly-owned conservation land (Article 97 land)	38
b. Privately-owned conservation land (land trust or conservation organization)	38
B. Conservation Restrictions	40
C. Trail Easements & Licenses	40
D. Government and Institutional Land	42
E. Agricultural Land	44
F. Recreation Land	46
a. Formal Recreational Facilities	
b. Recreational Uses of Lincoln’s Conservation Lands	
G. Wetlands	48
STEWARDSHIP PROGRAM	48
COMMUNITY VISION	
A. Description of Process	52
B. Statement of Open Space and Recreation Goals	53
ANALYSIS OF NEEDS	
A. Summary of Resource Protection Needs - Lands of Conservation Interest	54
B. Summary of Agricultural Needs	56
C. Summary of Community Needs – Lands of Recreation Interest	57
D. Needs for persons with disabilities	59
E. Stewardship Needs	60

GOALS AND OBJECTIVES	63
FIVE YEAR ACTION PLAN	64
PUBLIC COMMENTS	69
REFERENCES / RESOURCES	80
APPENDICES	
A. Citizen Participation Questionnaire Results	82
B. Summary of Lincoln Land Conservation Trust Neighborhood Meetings	92
C. Lands of Conservation and Recreation Interest	94
D. Lincoln’s ADA Self-evaluation information for handicap accessibility	104
TABLES:	
Table 1: Massachusetts EOE A Buildout Analysis	7
Table 2: Comparison of Parcel Numbers and Sizes between 1976 and 2006	8
Table 3: Town of Lincoln Water Use Comparison (04-05) to (05-06)	16
Table 4: Rare, Threatened and Endangered Plants in Lincoln	24
Table 5: Rare, Threatened and Endangered Wildlife in Lincoln	28
Table 6: Town of Lincoln Open Space: Individual Totals	35
Table 7: Town of Lincoln Open Space: Cumulative Totals	37
Table 8: Conservation Deed Totals by Owner	38
Table 9: Conservation & Agricultural Preservation Restriction Totals by Grantee	40
Table 10: Trail Miles by Ownership Categories	40
Table 11: Non-Conservation Government and Institutional Land	42
Table 12: Agricultural Land by Use	44
Table 13: Agricultural Use by Ownership	44
CHARTS:	
Chart 1: Town of Lincoln Water Pumping Comparison (04-05) to (05-06)	16
MAPS:	
Map 1: Zoning	9
Map 2: Development Limitations	10
Map 3: Scenic Resources and Unique Environments	13
Map 4: Water Resources	19
Map 5: Existing Open Space	36
Map 6: Conservation Deeds by Owner	39
Map 7: Conservation & Agricultural Preservation Restrictions and Trails	41
Map 8: Government and Institutional Land	43
Map 9: Agricultural Land	45
Map 10: Lands of Conservation and Recreation Interest (Action Plan Map)	62

EXECUTIVE SUMMARY

Lincoln residents have worked hard to ensure the long-term protection of the Town's natural watershed systems, productive agricultural land, forests, fields, paths and old colonial roads. Since the first piece of conservation land was acquired in 1957, Town citizens, boards, organizations and staff have continually strived to identify and implement creative land-use strategies that balance growth with environmental protection. Over the past 40 years, Lincoln has made great strides toward achieving its conservation goals. Almost 40% of the Town is permanently protected and most residents enjoy using the extensive trail network. While several critical parcels remain to be protected for conservation and recreation purposes, Lincoln is shifting its efforts to focus on sound stewardship of existing conservation land.

Lincoln continues to celebrate its rich heritage rooted in over 250 years of New England farming traditions. Several of the original farm families and over ten non-profit organizations and private businesses continue to work the land and maintain the rural aesthetic. Many of Lincoln's institutions also uphold local traditions in farming, natural resource protection and sustainable development including: the Walden Woods Project, Farrington Memorial, DeCordova Museum, Historic New England, The Food Project and the Massachusetts Audubon Society.

Through the community survey and public forums, residents expressed their appreciation for the Town's natural habitats, open space and clean drinking water. Lincolnites tend to value simplicity, nature, tradition and history and they enjoy the natural beauty of the New England landscape. They value the extraordinary efforts of land protection groups such as the Rural Land Foundation and the Lincoln Land Conservation Trust. They want to retain the pastoral feel of the Town and limit traffic noise and light pollution. The recurring theme expressed in questionnaires and meetings was to 'keep Lincoln as it is'. Residents want to preserve and manage the currently protected open spaces and protect key areas that are at risk for development. The Town's recreational resources are also valued and residents want to maintain, enhance and appropriately expand playing fields, parks, playgrounds, bike paths and trails.

This Open Space and Recreation Plan represents another step in Lincoln's long tradition of accommodating population growth in harmony with its natural resource base. The Plan, together with its accompanying maps, reflects a keen awareness of Lincoln's metropolitan setting and the regional need for food, water and outdoor recreation, as well as for jobs and housing. It provides a guiding framework that can be used to maintain and enhance the "green infrastructure" of the community and it identifies pressures and opportunities that may influence the future character of Lincoln.

The primary goals of this Plan include:

- Protecting Lincoln's natural, agricultural and recreational resources;
- Promoting active stewardship of existing conservation and agricultural land;
- Maximizing recreational opportunities by maintaining current facilities and exploring the development of new facilities to meet evolving community needs;
- Fostering coordination, education and outreach locally and regionally; and
- Addressing effects of development pressures on new or existing conservation land.

INTRODUCTION

A. Statement of Purpose

Lincoln has a long and rich history of community involvement and open dialogue that has guided its growth since the Town's incorporation in 1754. From the 1950's to the present day, this involvement has largely been oriented towards implementing a vision for land use that balances pressure from a burgeoning population with a commitment to maintaining a strong rural character. An integral component of this vision has been the permanent preservation of open space (undeveloped land including fields, forests, roadsides, etc.), which affords a myriad of benefits to the community including protection of natural resources and drinking water, preservation of Lincoln's agricultural heritage, opportunities for outdoor recreation and increased property values.

The first official Open Space Plan for Lincoln was published in 1977 and this laid out a comprehensive plan for protecting the Town's natural resources. Several plan updates followed with the most recent update completed in 1988 and an Open Space Map update in 1997. In the interim, open-space planning has continued under the auspices of the Conservation Commission, Rural Land Foundation (RLF) and the Lincoln Land Conservation Trust (Land Trust, LLCT).

The 2008 Open Space and Recreation Plan reflects a shift in focus from land acquisition to land stewardship. The value of Lincoln's protected landscape is immense and effective stewardship is critical if the land is to be properly maintained for future generations. While land acquisition is still a vital component of Lincoln's open-space planning efforts, most of the larger parcels have been protected or built upon. Other changes in the 2008 Plan include an added emphasis on recreation, identification of trails that can be made accessible to persons with disabilities and building a sense of community around Lincoln's existing open-space network.

The purpose of this Plan is to provide a comprehensive assessment of where Lincoln stands today, where it wants to go and how it will get there. It achieves this through a current resource inventory, goals and objectives, criteria for land acquisition and a five-year action plan. This document serves both as a reference guide and as a tool for Town boards and committees to help make informed and educated land-use decisions. It provides a structure for analyzing municipal impacts during the decision-making process and makes Lincoln eligible for a variety of State financial grants. This Plan will also become part of Lincoln's first Comprehensive Long Range Plan (Master Plan), which is expected to be completed in 2009.

Development of the 2008 Open Space and Recreation Plan was accomplished with broad input from Town boards, organizations and residents. This endorsement ensures that the document reflects the current views of the Town about how best to preserve the natural resources, rural character and recreational assets of the community. What the Town of Lincoln has accomplished is extraordinary, and it fully expects to carry forward this standard of excellence into the future.



Baker Bridge Road and Conservation Fields. Photo: Tom Gumbart

B. Planning Process and Public Participation

Since 1957 Lincoln has diligently examined and evaluated the conditions, trends and needs of the Town and taken action on the resulting recommendations. A 1958 study entitled *Planning for Lincoln* set forth a broad program that emphasized the need to preserve open space, water supply and town character. Between 1961 and 1965 federal funds enabled the development of major land-use planning efforts and in 1965 Lincoln secured funds to complete the *Comprehensive Development Plan*, which stressed the need to conserve watersheds and protect nature.

The Lincoln Land Conservation Trust was established in 1957, the Conservation Commission appointed in 1958 and the Rural Land Foundation formed in 1965. Since 1976, these organizations have worked together to permanently protect almost 3,000 acres, an increase in conservation lands of nearly 200%. Some recent examples illustrate Lincoln's innovative land-development projects arising from the cooperative efforts of these organizations:

Drane Property: The Rural Land Foundation worked with neighborhood residents and interested buyers to purchase a 36-acre property off Todd Pond Road, which resulted in the permanent conservation of over 26 acres and two permitted house lots.

Lincoln Fields: Townspeople and the conservation organizations worked to protect over 40 acres of significant and highly visible fields and forest on Sandy Pond, Weston, Silver Hill, Trapelo and Tower Roads.

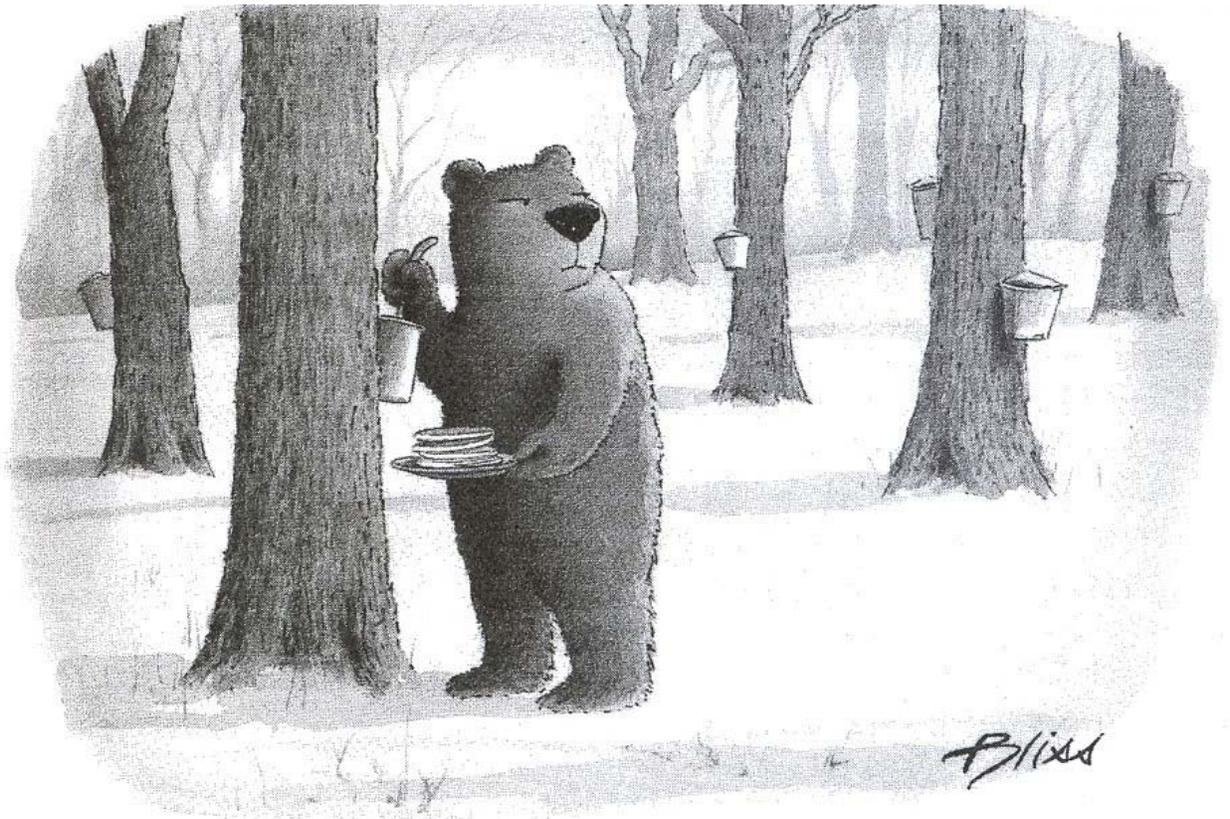
Lincoln's Quiet Places: A cooperative initiative between the landowners, the town of Lincoln, the Rural Land Foundation, the Lincoln Land Conservation Trust and the city of Cambridge secured 54 acres of open space for conservation and watershed protection.

Preparation of the 1977 Open Space Plan started in early 1971 when the Conservation Commission commenced detailed analysis of the Town's natural features on 200-foot scale maps. *An Interim Report on the Open Space Plan* was prepared in 1988 with a focus on management of existing conservation land. The availability of public funds through the Community Preservation Act, adopted by Lincoln in 2002, inspired the Conservation Commission to re-visit the open-space planning process. With the momentum of a town master planning process in 2006 and the staff and resources to formulate a state-approved Open Space and Recreation Plan, the Conservation Commission voted to form the Open Space Committee.

The Open Space Committee formed in September 2006 with approximately 20 members representing Town boards, organizations and the community at large. It held ten committee meetings and over ten sub-group work sessions. The Committee published several articles in the *Lincoln Journal*, sent a survey to every household and the entire seventh-grade class of the Lincoln school, held two public forums and incorporated information gathered at the Land Trust's neighborhood meetings. The Committee worked closely with the Comprehensive Long Range Planning Committee and sought reviews from land-use boards and organizations including the Disabilities Commission, Lincoln Land Conservation Trust, Rural Land Foundation, Lincoln Garden Club, Cambridge Water Department, Walden Pond State Reservation, Walden Woods Project, Minute Man National Historical Park, and Metropolitan Area Planning Council.

The Open Space Committee adhered to the following work program:

- 2006 September: Committee kick-off meeting; review existing plans and maps; brainstorm issues; discuss preliminary goals & objectives.
- October: Review working group progress and tasks; review/revise goals & objectives; communicate with the comprehensive long range planning committee; prepare Town Meeting report to be given by the Conservation Commission; conduct site visits.
- Nov-Dec: Continue working-group sessions; prepare survey and first public forum. Report at State of the Town Meeting; begin drafting sections of the Open Space and Recreation Plan (OSRP).
- 2007 Jan-Feb: Review/revise draft sections of the OSRP; send and compile surveys; host first public forum/workshop.
- Mar-Apr: Update report to Town Meeting; post draft OSRP on Town website; host second public forum; incorporate feedback into draft OSRP.
- May-June: Submit draft OSRP to town boards and organizations for formal review; incorporate feedback into final OSRP.
- July: Submit final OSRP to the Executive Office of Environmental Affairs' Division of Conservation Services for review.
- 2008 Nov-Mar: Compile final edits, publish report, present final OSRP at Town Meeting.



COMMUNITY SETTING

A. Regional Context

“Lincoln is a hill town, a wet town and a forest town.” (Brooks, Paul: *A View from Lincoln Hill*) It is a commuting town and a rural village located 18 miles west of Boston. The hills reach 380 feet above sea level at the Reservoir on Bedford Road and views from Pine Hill reach as far as Mt. Wachusett and Mt. Monadnock. Between the hills the land is wet, with about 30% percent of Lincoln’s approximately 15 square miles of land area classified as “wetland”. The Town’s lowest point, at the Sudbury River, is 112 feet above sea level.



Historic Cemetery and Bemis Hall.
Photo: Anna Wilkins

Aerial photographs dramatically illustrate the undeveloped character of Lincoln. An extensive patchwork of stone walls meandering through the woods indicates that at one time Lincoln was a pasture town. It was virtually deforested during the 19th century; but unlike some other towns in the area, Lincoln has embraced its agricultural heritage as part of its ongoing commitment to conservation. Codman Community Farms which was part of the original Codman Estate, was established in 1973 on town-owned land and has been maintained as an operating farm with a mission to educate the public and promote the continuation of rare breeds. The Conservation Commission licenses nearly two hundred acres of public conservation land to agricultural organizations, which currently include the Food Project, Turtle Creek Winery, Codman, Drumlin, Lindentree, Red Rail, Matlock, Verrill, Arena and Blue Heron Organic Farms. A number of farmers working private lands in Lincoln also greatly add to Lincoln’s agricultural spirit.

Lincoln’s conservation efforts have been recognized as pioneering. However, its achievements could not have been realized without the close collaboration of abutting towns and regional conservation organizations including the Minute Man National Historical Park, Walden Woods Project, Walden Pond State Reservation, Massachusetts Audubon Society, Great Meadows National Wildlife Refuge and Cambridge Water Department. Together with these organizations, Lincoln is able to provide residents of the greater Boston region with an extensive network of roadside paths and trails which are available for walking, biking, horseback riding and cross-country skiing. These recreational activities are available on permanently-protected, public and private conservation lands, which concurrently provide large patches and corridors of undisturbed woodlands and waterways for wildlife habitat, corridor migration, watershed protection and clean drinking water. As regional development pressures and population density increase, Lincoln will continue to be a ‘green sanctuary’ for the greater Boston region.

Lincoln participates in the Minuteman Advisory Group on Interlocal Coordination (MAGIC), Hanscom Area Town Selectmen (HATS), Crossroads Emergency Planning Committee, Home Consortium, Freedom’s Way Landscape Inventory and Bay Circuit Trail to discuss greater open space and planning issues that affect Lincoln and the region.

B. History of Lincoln

The first settlement of the region began in the mid-17th Century when the General Court of the Massachusetts Bay Colony opened up “inland lands” for colonization. Most of the families establishing their farms in what is now Lincoln were part of the Concord Plantation, “allowed” in 1635. In 1734 a group of men from Concord, Weston and Lexington petitioned the General Court that they might be “erected into a separate township.” After ten petitions “a distinct and separate precinct” was allowed in 1746. Lincoln was incorporated in 1754 and named by Judge Chambers Russell, a resident whose family home was in Lincolnshire, England and who influenced the court to approve the petition.

Much of Lincoln’s part in the Revolutionary War appears on the Town records. Compared with other towns, Lincoln was prudent and cautious, preferring lawful and constitutional measures as the colonies moved toward revolution. On the night of April 18, 1775, Paul Revere was captured by a British patrol in Lincoln on North Great Road. The Lincoln Company was the first from any of the neighboring towns to reach Concord to join battle the next day. After the battle at the North Bridge, as the British retreated toward Boston, a small engagement occurred at the junction of Old Bedford Road and North Great Road, later known as the Bloody Angle. Eight British soldiers were killed, five of whom are buried in the Precinct Burying Ground, part of the present Town Cemetery on Lexington Road. At Town Meeting on May 20, 1776, a motion to support independence was ‘past in the negative’. However, on June 24, 1776, the Town voted favorably on the same article. The Battle Road is now protected as the Minute Man National Historical Park.

The railroad came through in 1844, a critical step in Lincoln’s change from an agricultural to a residential community. Distinguished individuals shaped the Town’s environment: George G. Tarbell gave the Town a new library in 1884; John H. Pierce gave his estate; and George F. Bemis contributed generously to Bemis Hall which was dedicated as the Town House in 1892. It was not until after the Civil War that the population began to increase. Lincoln, always considered ‘well-watered’, became increasingly popular for country estates and summer homes. Among the estate owners were Donald Gordon and his widow Louise Hatheway, who built Drumlin Farm and whose estate now houses the headquarters of the Massachusetts Audubon Society, James J. Storrow, financier of railroads and automobiles, whose mansion now houses the Carroll School and A. Henry Higginson, whose “Middlesex Meadows” stabled the Middlesex Hunt and now the headquarters of the Walden Woods Project.

After World War I, agriculture became increasingly specialized and oriented towards Boston. As property values increased, agricultural use declined and residential development increased. Streets were officially named in 1933 and Route 2, connecting Lincoln to Boston, was opened as a highway in 1934. As Lincoln changed from an agricultural community to a residential suburb, it maintained its small town character. This was accomplished through zoning regulations adopted in 1929 as well as innovative projects to conserve land and develop low and moderate-income housing. While new housing starts and subdivision increased dramatically during the post-war “baby-boom” era, Lincoln became the first town in Massachusetts to increase the minimum size of new house lots to 80,000 sq. ft. Significant tracts of land were conserved through the efforts of the Lincoln Land Conservation Trust, the Rural Land Foundation and the Conservation Commission. These included portions of the Codman Estate, Wheeler Farm and others. The Town approved special zoning districts that would allow for denser development in order to create affordable and moderate income housing and connected conservation lands.

C. Population Characteristics

During the 20th Century Lincoln was transformed from a small farming community of 1,000 people in 1900 (67 people/sq.mile) to what by contemporary definition must be described as a suburban town of rural character. In 1935, a year before the completion of Route 2, Lincoln's population was 1,573 (105 people/sq.mile). By 1955, the Town's population had increased to 2,949 (197 people/sq.mile) equivalent to an 87% rate of growth over a twenty-year period.

By 1975, Lincoln's population stood at 4,851 people (324 people/sq.mile) and according to the 2000 census, Lincoln's population is now 5,152, distributed across 1,995 households or (344 people/sq.mile). These population figures (and those in the next paragraph) do not include an additional 2,904 residents living at Hanscom Air Force Base in north Lincoln. While the Town's population grew by approximately 277 people/sq.mile over the last 100 years, the population has remained relatively stable over the last decade, with only a 5% population increase since 1989.

The population contains very little ethnic diversity, with only 1.5% African American, 3% Asian and 0.5% Hispanic or Latino. As of the 2000 Census, the median income for a family in the Town was \$87,842. Over 33% of the Town's population is currently over 45 and more than 17% is over 65. An overwhelming majority of the working population commutes outside of Lincoln for work or is self-employed and works from a home office. In 1990, there were 1,671 jobs in 167 establishments and in 2000, there were 1,875 jobs in 199 establishments (approx. 1,200 in services, 475 in government and the remainder distributed amongst finance, retail, transportation, manufacturing and construction sectors). Currently there are 518 employees that work for the Town, 56 of which also live in Lincoln (data does not include Hanscom Air Force Base).

During the 1980s the school population dropped, but since the early 1990s it has climbed dramatically. Enrollment in Lincoln's K-8 school experienced a 40% rise in students from 1994-2000, and nearly 31% of the Town's population is under the age of 18. With 31% of the population under the age of 18, it is important to include this generation in the planning process and invite them to use and appreciate Lincoln's facilities and natural resources. According to the community survey, Lincoln's kids value open space, wildlife habitat, clean drinking water and recreation. Surprisingly, they agree that Lincoln should focus its efforts on improving recreational opportunities on conservation land rather than playing fields or built infrastructure. It is important to remember however, that as the school-age population increases it is likely that the school facilities will require repair and expansion. The Open Space and Recreation Plan and Map identify criteria for land acquisition and lands of interest should future needs arise.

D. Growth and Development Patterns

Lincoln's population has changed dramatically from the farming and working-class families of the early 1900's. It has developed into a bedroom community of Boston with affluent families and senior citizens. Despite Lincoln's efforts to maintain a diverse population and housing stock, market pressures on real estate are relentlessly pushing property values up. There is an alarming increase in the number of mid-priced homes being torn down and replaced with significantly larger and more expensive structures. The result is that the Town's mid-range housing stock, particularly single-family residences, is decreasing rapidly with little expectation that it will ever be replaced. If the trend toward 'mansionization' remains unchecked, those who are neither wealthy nor qualify for subsidized housing will have few living options in Lincoln. There are a small number of high-density housing projects with an affordable component. Four examples are

Lincoln Woods, cooperative apartments located near the mall and train station; Battle Road Farm, a multi-aged condominium community located in north Lincoln; Minuteman Commons, a 32-unit over 55 community; and the proposed New England Deaconess Project, a 196-unit, senior-living facility.

Many residents working in Boston take advantage of the MBTA commuter-rail stop located on the Fitchburg line and centrally located in the Town’s retail business district; however, since there is no broader in-town transportation network, Lincoln remains an auto-dependent town. Several roads in Lincoln including Route 126, Route 117, Lincoln Road, Old Sudbury Road, Baker Bridge Road, Bedford Road and Trapelo Road provide easy access to major thoroughfares in and out of Boston, and thus also serve as cut-throughs for commuters from surrounding towns.

Zoning regulations were introduced in 1929 with a bylaw that classified most of the Town as a single residence district, with a minimum lot size of 10,000 square feet. In 1936 the minimum lot size was increased to 40,000 square feet and in 1955 the minimum lot size was increased again to 80,000 square feet. Town infrastructure includes a water treatment facility and distribution pipes throughout town. There is no public sewer system - all residences and businesses are served by individual septic systems which significantly influences growth and development patterns.

Table 1, published by the Massachusetts Executive Office of Environmental Affairs in 1999, shows a buildout analysis for Lincoln. It projects an additional 326 residences at buildout. Lincoln had approximately 23 new, single-family houses between 2000 and 2006 (44 including teardowns).

Table 1: Massachusetts EOEa Buildout Analysis

Residents in 1990	7,666
Residents in 1999	8,056
Buildout	8,945
Additional Residents	889
Students in 1990 (K-12)	493
Students in 1999 (K-12)	760
Buildout	840
Additional Students (K-12)	80
Residential Units in 1990	2,632
Residential Units in 1999	2,911
Buildout	3,237
Additional Residential Units	326
Water Use in 1999 (gallons/day)	547,854
Buildout	615,782
Additional Water Demand at Buildout (gallons/day)	67,927
Additional Developable Land Area (acres)	875
Additional Commercial/Industrial Buildable Floor Area (sq ft)	16,542
Additional Solid Waste (tons/yr)	456
Additional Roadway at Buildout (miles)	9

Current and long-term development trends including the replacement of small houses by larger houses; institutional and condominium development; vista clearing and lawn creation on single-family lots results in ecological impacts including deforestation, habitat fragmentation, erosion, increased water use and stormwater runoff and sedimentation. Maximum build-out in Lincoln and surrounding towns will also result in a significant increase in use, carrying capacity on Lincoln’s trails and conservation land. Future changes in zoning or septic system technology could also significantly affect the development potential and ecological integrity of the town.

Some of Lincoln’s creative zoning measures that protect open space include:

R-1 Single Family Residence District: Allows one dwelling on an 80,000 square foot lot. An owner with greater than 160,000 square feet in the R-1 district may appeal to develop their land as a cluster subdivision. Provision must be made that at least 35% of the land area of the tract (exclusive of land set aside for road area) be open land. This open land must be owned (a) by the Town, (b) by the Lincoln Land Conservation Trust (LLCT), or (c) an association of land owners approved by the Planning Board, that grants a conservation restriction to either the Town or the LLCT. The Planning Board encourages cluster development as a tool for preserving open land.

R-2 General Residence District: Allows for multi-unit housing through garden apartments and two-family housing providing there shall be only one detached residential structure per lot.

R-3 Open Space Residential Development District: This zoning district preserves open space through construction of appropriate clusters of dwelling units.

R-4 Planned Community Development District: This zone permits construction of a limited number of subsidized housing units for persons of low and moderate income while ensuring compliance with local planning standards of land use and building design.

C-Open Space District: The C-Open-Space Conservation District, as contained in Lincoln’s Zoning Bylaws, is intended to preserve the ground water table, protect public health and safety against flooding and unsuitable development upon or near wetlands, preserve amenities of the Town and conserve natural conditions. Assignment of land to this district is voluntary by the owner and voted upon by the Town. There are presently 26 parcels totaling 39 acres so zoned.

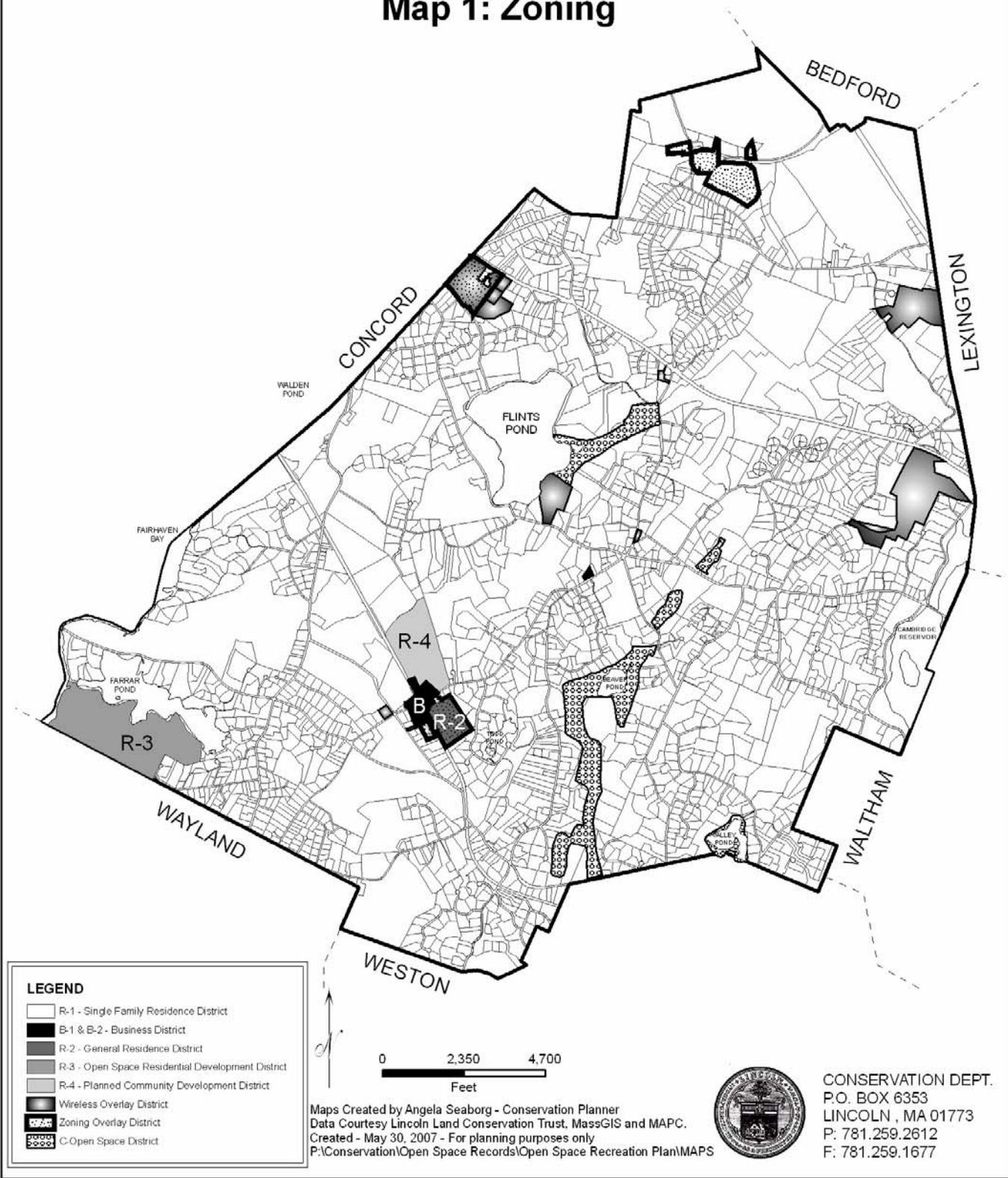
Presently, there are 1,779 parcels zoned for residential use, totaling 4,416 acres. This data is shown in Table 2. The buildable or potentially buildable land currently listed in the Town of Lincoln Assessor’s database includes 87 parcels with a total of 308 acres. This classification does not take into account detailed zoning restrictions, wetlands, or other limiting factors that could affect the building potential of any lot. In addition, some of the parcels with an area of more than 160,000 sq. ft. could possibly be subdivided.

Table 2: Comparison of Parcel Numbers and Sizes between 1976 and 2006

Parcel Size	# Parcels 1976	Total Acres 1976	# Parcels 2006*	Total Acres 2006*
< 80,000 sq. ft.	930	1,093	768	816
80,000 – 160,000 sq. ft.	459	1,320	797	1,892
> 160,000 sq. ft.	216	3,445	214	1,708
Total	1,605	5,858	1,779	4,416

*The 2006 numbers include all parcels except those that are protected conservation land, condominium developments, or government-owned land (town-, city-, state- or federally-owned).

TOWN OF LINCOLN OPEN SPACE AND RECREATION PLAN Map 1: Zoning



LEGEND

- R-1 - Single Family Residence District
- B-1 & B-2 - Business District
- R-2 - General Residence District
- R-3 - Open Space Residential Development District
- R-4 - Planned Community Development District
- Wireless Overlay District
- Zoning Overlay District
- C-Open Space District

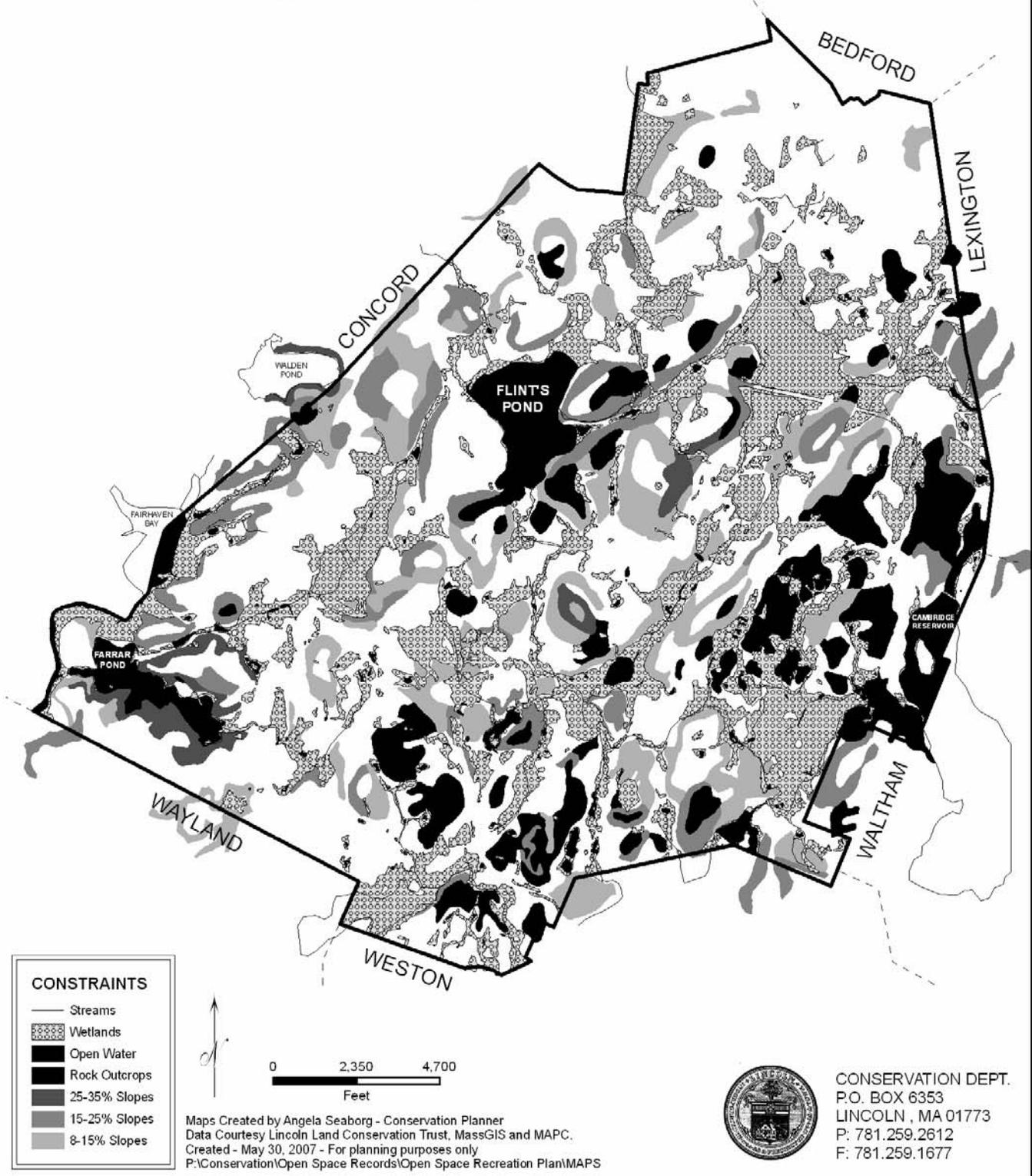
0 2,350 4,700
Feet

Maps Created by Angela Seaborg - Conservation Planner
Data Courtesy Lincoln Land Conservation Trust, MassGIS and MAPC.
Created - May 30, 2007 - For planning purposes only
P:\Conservation\Open Space Records\Open Space Recreation Plan\MAPS



CONSERVATION DEPT.
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TOWN OF LINCOLN OPEN SPACE AND RECREATION PLAN Map 2: Development Limitations



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ENVIRONMENTAL INVENTORY AND ANALYSIS

A. Geology, Soils & Topography

Lincoln is a town of seemingly haphazard winding country roads, which are a clue to the underlying skeletal framework of the landscape. This bedrock pattern is a series of rock ledges that run from southwest to northeast, fractured by faults or cracks. At one time this was a single series of very long ledges that fractured during the most recent period of mountain building in the Atlantic coastal region. In these fractures we find the roads. The most likely places to find exposed bedrock are on the southeast sides of the ledges. Between the ledges lie the wetlands.

Lincoln has many fine examples of glacial features such as drumlins, eskers, outwash plain and kettle holes. The former site of the Nike Station domes on Route 117, is a drumlin, as is Peirce Hill northwest of Beaver Pond. The glacier (semi-plastic ice about one-half mile high) moved southward, gouging valleys and lopping off hilltops, and carrying with it the scrapings of the land it crawled over. Some of this till (ground-up rock ranging from clay to house-sized boulders) was plastered on bedrock ridges as a thin sheet, ground moraine or as “whaleback” like hills or drumlins.

Flint’s esker, the long narrow ridge running north and south from the intersection of Lexington and Old Farm Roads, is a landscape feature produced by deglaciation. As the glacier melted, north-south cracks appeared at the edge of the ice sheet forming melt channels. The cobbly, snake-like eskers of coarse outwash deposit accumulated in these cracks. At the open edge of the crack the outwash produced small, sandy delta-shaped plains known as kame deltas, and below these were sand and silt-collecting lakes and ponds, most of which have filled in to become boggy wetlands today. This pattern of esker, delta, bog is repeated again and again throughout Lincoln. Numerous examples appear on both sides of Lincoln Road.

The plains and ridges are pocked with kettle holes of every size, resulting from stranded ice chunks left behind in the till to melt later. An excellent example exists south of Farrar Pond. Further modification of these patterns occurred over many years following deglaciation as the earth’s crust rebounded from the depression caused by the weight of the ice (a rebound of anywhere from twenty to one hundred-fifty feet).

Lincoln’s soil types vary widely due to differences in topography, substrate type, vegetation, groundwater conditions, micro-climate and land-use history. Over 50 soil types are present ranging from hydric soils such as Freetown Muck to the rocky Charlton-Hollis Rock Outcrop Complex and the well-drained, loamy-sandy Windsor Series.

Since almost all the Town is on individual septic systems, soil types are extremely important when determining the potential for future development in town. Hydric soils, soils with a restrictive hard layer (hard pan) that prevent water from percolating downward, soils with rocky outcrops, or excessively drained soils all have the potential to limit the viability of locating a septic system on a given parcel of land.

B. Landscape Character

The Lincoln landscape provides an idyllic reflection of classic New England countryside. The difference is that it is located only eighteen miles from downtown Boston. One can drive through Lincoln and feel as if they have stepped back in time, where stone walls and distinguished tree-lined roads give way to sweeping views of hayfields and grazing livestock. The scale of the landscape is intimate with a few vistas to the distant horizon. Pine-oak woodlands dominant the upland forests, and red maple swamps fill the lowlands. Active agricultural land, mown fields and streams and ponds provide contrast to the forest and contribute to the open, rolling aesthetic.



View toward 5-way Intersection from Weston Road in 1877. Photo: Courtesy Lincoln Public Library

Lincoln's character has been retained through careful development and the protection of large areas of open space. One particular attribute of this open space network is the connectivity within the landscape. Wildlife and trail users can move through Lincoln with limited road crossings and minimal exposure to developed infrastructure. The natural landscape and built environment blend harmoniously, and most residents live near open space and the excellent trail system. The disturbing trend towards 'mansionization' however, typically results in extensive amounts of vegetation clearing and grading. The finished product usually has large areas of lawn and formal landscaping which detracts from the rural character most residents wish to preserve.

Lincoln does not have the quaint, walkable village with steeples and storefronts that typifies rural New England. The Mall at Lincoln Station, located in south-central Lincoln, provides minimal commercial services, but is unique because it is owned and operated by the Rural Land Foundation, one of the primary conservation organizations in Town.

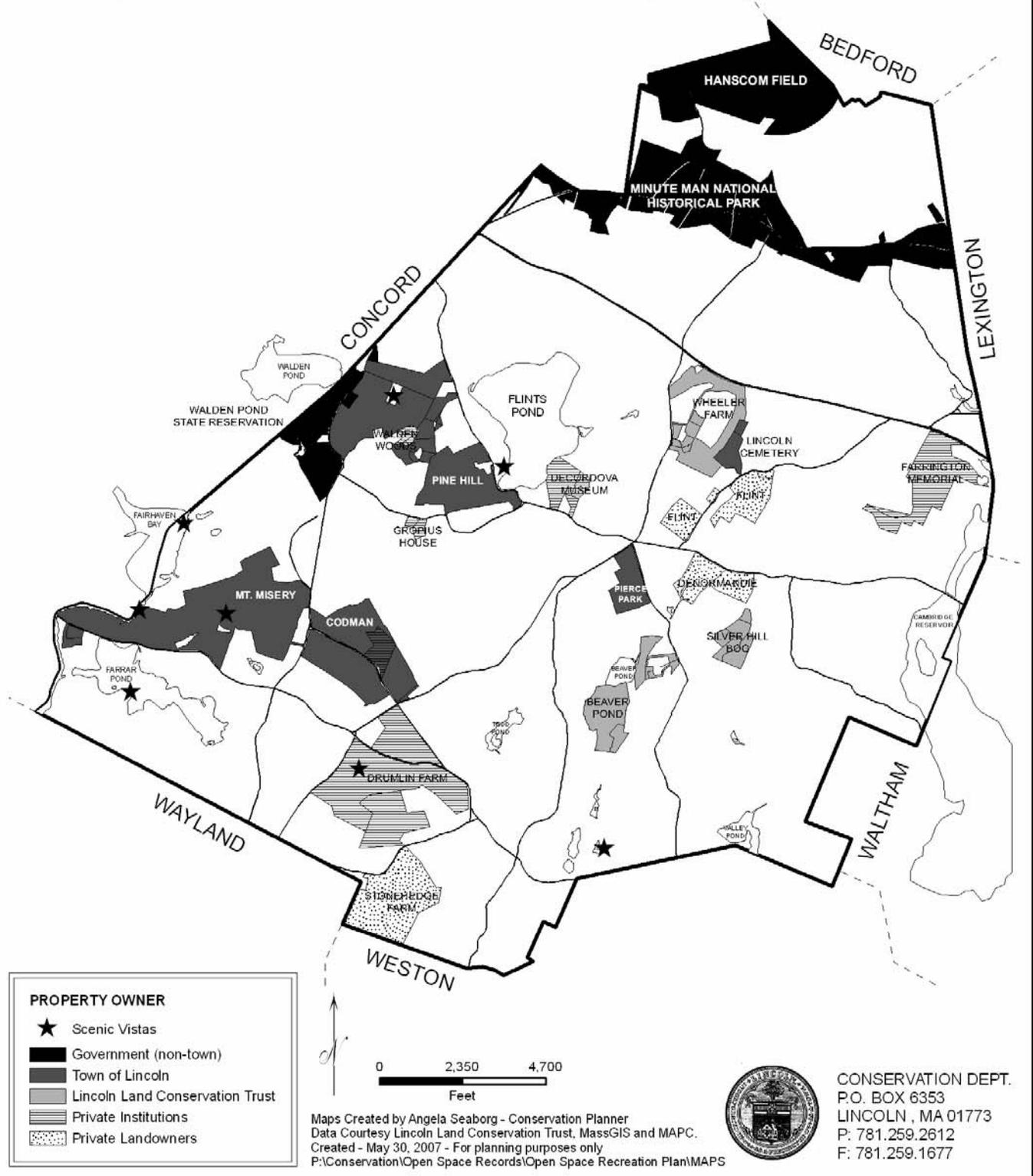
North Lincoln is diverse in character with Hanscom Air Force Base, the Massport Air Field, a uniquely sited office park, Minute Man National Historical Park, single-family residences and Battle Road Farm, a fine example of clustered housing with a traditional New England feel that includes a significant amount of affordable housing.

Several organizations and governmental entities own or manage important landscapes in Town including the Lincoln Land Conservation Trust, the Rural Land Foundation, Minute Man National Historical Park, Walden Pond State Reservation, DeCordova Museum, the Massachusetts Audubon Society (Headquarters and Drumlin Farm), Codman Community Farms, Historic New England, the Cambridge Water Department, Farrington Memorial, Walden Woods Project and the Carroll School.

A thorough inventory of Lincoln's natural features, historic landscapes, viewsheds, working farms and more is included in Section IV. F. Scenic Resources and Unique Environments.

TOWN OF LINCOLN OPEN SPACE AND RECREATION PLAN

Map 3: Scenic Resources and Unique Environments



C. Water Resources

Lincoln is a high town lying at the headwaters of three watersheds. Two-thirds of its area lies within the Charles River basin and one-third is divided between the Sudbury and Shawsheen watersheds, both of which drain to the Merrimack River. Because of its upland character, Lincoln is an island from the standpoint of its water supply. Essentially all of Lincoln's water originates as rainfall and is collected by low-lying wetlands, ponds and streams. Lincoln is fortunate to have within its boundaries two sources of drinking water upon which it depends: Flint's Pond and the Tower Road Well. Also located in Lincoln are portions of the Hobbs Brook and Stony Brook, which lead to the Cambridge Reservoir and supply the City of Cambridge with ninety percent of its water needs.

Because the Cambridge Reservoir and Flint's Pond are public water supplies, they and their perennial tributaries are classified in the State of Massachusetts as Class-A water bodies. As defined by the Code of Massachusetts Regulations (CMR 4.04(3)), *these waters shall serve as excellent aesthetic value, habitat for fish, other aquatic life, wildlife, and suitable for primary and secondary contact recreation*. This designation also sets water quality standards for the following parameters: dissolved oxygen, temperature, pH, fecal *coliform* bacteria, solids, color and turbidity, oil and grease, taste and color.

Household and Drinking Water Supply

Lincoln must protect its two drinking water sources if it wishes to remain independent of the Massachusetts Water Resources Authority, which pipes water to the greater Boston area from the Quabbin and Wachusett Reservoirs. It must also take action to limit water use where and whenever possible. Approximately 97% of residents (not including residents at Hanscom Air Force Base) rely on Town water and only 3% of residents rely on private wells.

Flint's Pond: Flint's Pond, classified by the State as a "Great Pond", is one of Lincoln's most prized natural features. It is a 156-acre pond rimmed by bedrock hills and surrounded by mixed hardwood and softwood forests. The watershed that replenishes Flint's Pond is approximately 400 acres of wooded bedrock slopes and 64 acres of wetlands. There are only fifteen houses located within this confined watershed, only two of which are visible from the shore. Situated atop a hill to the east of the pond is the DeCordova Museum and Sculpture Park, with its commanding view of the pond and environs. The land directly abutting the pond, and the water filtration plant, located south of the pond across Sandy Pond Road, are owned and managed by the Water Department. Several hundred acres of watershed land are permanently protected conservation land owned and managed by the Conservation Department.

Approximately 200 million gallons of water are pumped from Flint's Pond annually, with any excess above the high water mark running out the spillway toward the Tower Road Well. Flint's Pond is a valuable asset to the town because it not only provides a clean, dependable supply of water, but it is a pond of great natural beauty with a large, woodland buffer that provides wildlife habitat, groundwater recharge and recreational opportunities.

Tower Road Well: Realizing that Flint's Pond could not continue to meet the future water demands of Lincoln, around 1965 the town purchased land off Tower Road between Beaver Pond and Todd Pond to construct a well. Enough land was purchased to protect a 400-foot radius around the well and to meet the required state minimum at that time. The well is located between

two streams, the Flint's Pond overflow and the Todd Pond overflow. In addition to the 464-acre watershed of Flint's Pond, the Tower Road Well has a 1,000-acre watershed. Within this watershed are 188 single-family homes, a church, school campus, Lincoln Woods apartments (and its secondary sewage treatment plant) and the Lincoln Mall.

The well pump is designed to deliver 750,000 gallons of water daily, or a maximum annual yield of 270 million gallons. Since the opening of the well in 1966, increasing levels of naturally occurring chloride and sodium in the water have become a concern. Although 240 acres (about 25% of the well's watershed) are classified as wetland and are consequently protected against development, the remainder is composed of a self-contained bedrock basin covered by outwash deposits of highly permeable sands and gravels. The presence of an underlying impermeable bedrock basin means that any substance entering the groundwater will probably enter the water supply as it is pumped from the well. Coarse sands and gravels have a limited cleansing ability because of the high rate of percolation.

Farrar Pond Well: The Farrar Pond Well was one of three water sources used by the town, but was closed in 1986 because trichloroethylene, a chlorinated hydrocarbon commonly used as an industrial solvent, was detected in the water.

In November 2004 the Board of Selectmen established the Natural Resources Preservation Committee "to protect and preserve natural resources important to the Town's well-being and character." Given concerns regarding water resources available in Lincoln, the Committee was charged with analyzing water consumption patterns in Lincoln, collecting and assembling information on private wells and irrigation systems, projecting Lincoln's future resource needs, reviewing regional water supplies, requirements and conservation programs and recommending water conservation measures and/or programs appropriate for Lincoln and its watersheds.

Based on information gathered by the Natural Resources Preservation Committee, approximately 4,975 of 5,152 residents (97% not including residents at Hanscom Air Force Base) rely on Town water. On average, they use 80 gallons/person/day and collectively use up to 200 million gallons of water per year. Chart 1 compares the water pumped from Flint's Pond in millions of gallons per month between 04-05 and 05-06 and Table 3 compares Lincoln's monthly water use during the same two-year period.

The Department of Environmental Protection has a goal for sustainable water use in the Charles River watershed at 65 gallons/person/day. This is approximately 2000 gallons/person/month, 100,000 gallons/year for a family of four or 120 million gallons a year for 4,975 Lincoln residents. As depicted in Table 3, Lincoln residents cumulatively average 12 million gallons per month between October and April. If residents maintained this same level of water use during the summer months, Lincoln would be close to reaching the goals for the Charles River watershed at 140 million gallons a year. It must be noted that while the water calculations given in this report represent data from all Lincoln households, only 2/3rds of the town lies within the Charles River watershed. A more accurate assessment of sustainable water use in Lincoln would reflect water use with respect to each of the Charles, Sudbury and Shawsheen River watershed goals.

Chart 1 and Table 3 illustrate the significant increase in residents' water use between May and September. Billing statements from the Water Department indicate this increase is from homes with extensive lawn-watering programs and/or with swimming pools. To fill a typical swimming pool

requires 35,000 to 50,000 gallons of water. During the course of a summer it can easily require that much water to maintain the water level in the pool. Lawn watering during a dry summer typically requires an inch of water per week. Thus, if a lawn is a third of an acre or 15,000 square feet, it could use up to 9,400 gallons of water in a week or 112,000 gallons over a summer. Automatic sprinkler systems also add to increased water use, as they are often placed inaccurately and misinterpret soil moisture or rain. In the words of one Water Department employee, "all those years of sprinkling driveways have not grown any grass on them yet."

Identification of methods by which Lincoln can conserve and efficiently use its drinking water resources is a vital component of both the open space and comprehensive long range plans. The Natural Resource Protection Committee hopes to work with Town boards and residents to reduce Lincoln's annual water consumption between 60 and 80 million gallons per year. They anticipate doing this work by helping residents eliminate leaks, change wasteful habits, convert to low-flow devices and significantly reduce irrigated lawn size. In addition, the Committee will continue to review possible lawn-irrigation and private-well bylaws for the Town to consider.

Chart 1: Town of Lincoln Water Pumping Comparison (04-05) to (05-06)

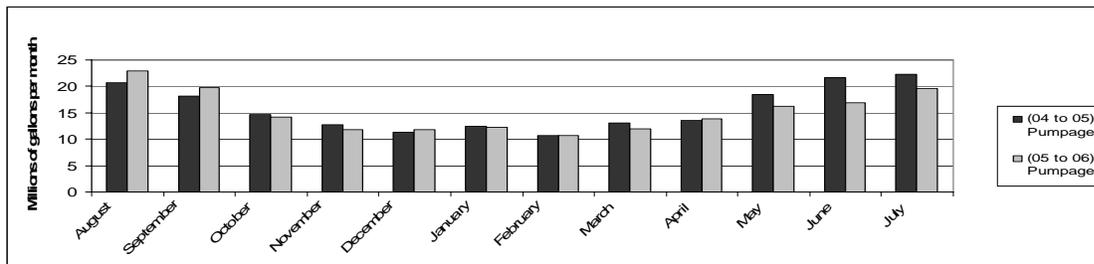


Table 3: Town of Lincoln Water Use Comparison (04-05) to (05-06)

	2004-2005	2005-2006	Change	% Change
	Million of Gallons	Million of Gallons	Million of Gallons	
August	20.8	22.9 *	2.1*	10.1%
September	18.2	19.8 *	1.6 *	8.8% *
October	14.7	14.2	-0.5	-3.4%
November	12.7	11.8	-0.9	-7.1%
December	11.3	11.8 *	0.5 *	4.4%*
January	12.4	12.2	-0.2	-1.6%
February	10.6	10.7 *	0.1 *	.9%*
March	13.0	11.9	-1.1	-8.5%
April	13.6	13.9 *	0.3 *	2.2%*
May	18.4	16.2	-2.2	-12.0%
June	21.6	16.8	-4.8	-22.2%
July	22.3	19.7	-2.6	-11.7%
Year Totals	189.6	181.9	-7.7	-4.1%

Flood Hazard Areas and Aquifer Recharge Areas

Lincoln has 100 and 500-year floodplain areas adjacent to the Sudbury River, south of Flint's Pond and along Valley Pond. Less than five houses in Lincoln are within these zones. There are five Zone 2 Wellhead Protection areas in Lincoln (see Map 4).

Streams

Lincoln's major water course is Stony Brook. It originates from spring-fed Flint's Pond, winds south by east where it is joined by Beaver Pond and Iron Mine Brook from the east and Todd Pond Brook from the west. With these three contributing headwater areas, the Stony Brook carries water from about two-thirds of the Town's area. In the southeastern part of Lincoln along Route 117, Stony Brook carries a substantial quantity of water south through Weston, transporting it by way of the Cambridge Reservoir to the Charles River.

East of Flint's Pond is a wetland complex that forms the headwaters to both Iron Mine Brook and Hobbs Brook. Iron Mine Brook flows south to Stony Brook while Hobbs Brook flows north and easterly, into the upper basin of Hobbs Brook Reservoir, which is bounded to the north by Lexington Road and to the south by Route 2. A dam across Hobbs Brook forms the Cambridge Reservoir, a large lake with wooded islands that follows Lincoln's eastern border and serves as the water supply for the City of Cambridge. As such, Hobbs Brook also holds the state designation of a Class-A water body as defined above.

The remaining third of Lincoln's land area is split between the Sudbury River, which meanders north along Lincoln's southwest boundary and the Shawsheen River, which is fed by Elm Brook and flows north out of Hanscom Field and Hanscom Air Force Base. Farrar Pond, adjacent to the Sudbury River in the southwest corner of Lincoln, is formed by a dam, which contains the waters of Beaver Dam Brook and Pole Brook. The Sudbury River joins the Assabet and Concord Rivers, which together are part of the National Wild and Scenic Rivers System.

Ponds

Open water bodies, often created as dug or dammed farm ponds, add to the habitat diversity in Lincoln. There are numerous vernal pools, isolated wetlands and small bodies of standing water throughout Town. In addition to these small water features, there are approximately nine large water bodies that are one acre or more in surface area. The largest is the Cambridge Reservoir, the northern portion of which extends into Lincoln. Significant ponds include Flint's Pond, Beaver Pond, Farrar Pond, Pierce Ponds, St. Anne's Ponds, Snider Pond, Todd Pond, Twin Pond, and Valley Pond. In January 1997, the Lincoln Pond Committee issued a report describing the character, supporting ecosystems, surrounding land use, current management plans and management recommendations for the significant ponds in Town.

Most of the ponds in Lincoln have a relatively undisturbed, vegetated buffer zone that limits the effect of pollutants, provides wildlife habitat and otherwise maintains a natural setting. Water quality in the larger ponds is generally high and able to support a diverse aquatic community. In some of the smaller ponds water quality is lower, evidenced by low dissolved oxygen and high turbidity levels, and algal blooms have been noted in both larger and smaller ponds in Lincoln (Lincoln Pond Committee, Report to the Lincoln Land Conservation Trust and Conservation Commission 1997).

Wetlands

Because of the glacial origins and impeded drainage of the surface topography, Lincoln is particularly rich in wetlands. These vary in size and ecology from isolated, seasonally flooded forest pools of a few square meters, to the impressively large swamps such as that around Beaver

Pond. Most of the wetlands in Lincoln are associated with streams or ponds. As such, they are designated by the state as Bordering Vegetated Wetlands. Wetlands are valuable assets to the Town for wildlife habitat, flood control, groundwater recharge and pollution control and any activity within 100-feet of wetlands and 200-feet of perennial streams falls under the jurisdiction of the Lincoln Conservation Commission under the Wetlands Protection Act and Lincoln Wetlands Protection Bylaw.

One of the largest wetland systems in Lincoln is located east of Bedford Road and north of Route 2. It forms the headwaters of Hobbs Brook and is primarily forested with some areas of emergent grasses and shrubs. Most of these wetlands have been permanently protected with support from the City of Cambridge for protection of their drinking water supply.

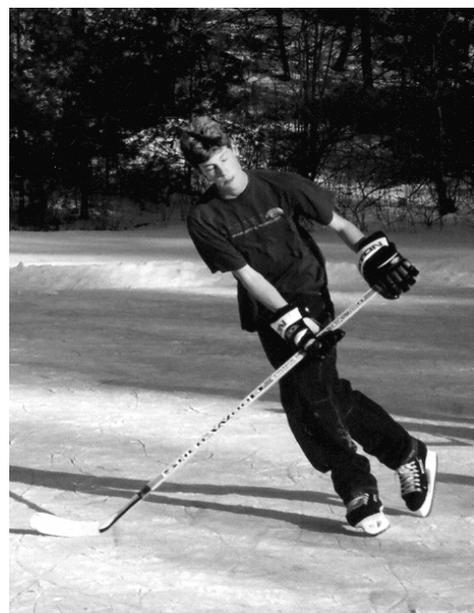
Vernal Pools

Most of Lincoln's vernal pools were created by glacial action that took place thousands of years ago. Other pools occur as the result of more recent events, such as stream channel migration and changes to the forested landscape due to human influences in the past (Colburn, 2004). Vernal pools provide unique habitat for a variety of forest and wetland organisms, some of which depend on this habitat for their survival. The absence of fish within these pools is essential and the breeding strategies of many amphibian species have evolved to the point of total reliance on these seasonal wetlands (Colburn, 1997).

Over 100 vernal pools have been located and mapped in Lincoln, seven of which have been certified through the Massachusetts Natural Heritage Program. Certification requires evidence that a vernal pool exists physically and that it contains the biological indicators that define it as a vernal pool. The Natural Heritage and Endangered Species Program has established specific criteria for certification of a vernal pool including: an area that is a confined-basin depression, holds water for a minimum of two continuous months during spring and/or summer for most years, is free of adult fish populations or dries up sometime during the year and/or provides essential breeding habitat for certain amphibians and/or food, shelter, migrating, and breeding habitat of other wildlife.

Water Based Recreation and Access

The Sudbury River provides the primary, water-based recreation opportunity in Town. North of Route 117, from the Canoe Landing parking lot, the river opens into a wide, slow-moving area called Fairhaven Bay where people enjoy paddling and fishing. The Great Meadows National Wildlife Refuge and Towns of Concord and Lincoln have worked over the past 6 summers to maintain invasive, water chestnut in the Bay in order to keep the open-water conditions. The annual Fishing Derby takes place at Pierce Pond, Valley Pond is used for swimming and boating and the Recreation Department hosts a winter carnival each year with ice-skating and a campfire at the Lexington Road Cemetery. Walden Pond State Reservation lies in Lincoln and provides recreational opportunities for the region.



Winter Carnival. Photo: Dan Pereira

TOWN OF LINCOLN OPEN SPACE AND RECREATION PLAN

Map 4: Water Resources

SHAWSHEEN RIVER
WATERSHED

BEDFORD

CONCORD RIVER
WATERSHED

CONCORD

LEXINGTON

FLINT'S POND

HOBBS BROOK

SUDBURY RIVER

FARRAR POND

BEAVER DAM BROOK

BEAVER POND

POYNTISE BROOK

CAMBRIDGE RESERVOIR

POLE BROOK

STONY BROOK

VALLEY POND

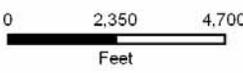
WALTHAM

WAYLAND

WESTON

CHARLES RIVER
WATERSHED

WATER RESOURCE	
	Watersheds
	Streams
	Certified Vernal Pools
	Wellheads
	Open Water
	Wetlands
	50-foot Wetland Buffer
	100-foot Wetland Buffer
	Zone II Wellhead Protection Areas



Maps Created by Angela Seaborg - Conservation Planner
 Data Courtesy Lincoln Land Conservation Trust, MassGIS and MAPC.
 Created - May 30, 2007 - For planning purposes only
 P:\Conservation\Open Space Records\Open Space Recreation Plan\MAPS



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D. Natural Communities (Associated Vegetation & Wildlife)

Approximately two-thirds of Lincoln's open space is forested. The remaining third consists of farms, open fields and wetlands. Though Lincoln consists of over 29 natural communities as described in the Massachusetts Natural Heritage & Endangered Species Program's 'Classification of the Natural Communities of Massachusetts', only the 9 most widespread natural communities (not including agricultural land) are described below. Examples of conservation land properties and trails that allow visitors to observe these community types are included in each section.



Lincoln Conservation Land - Woodlands. Photo: Anna Wilkins

White Pine – Oak Forest

Typically found on dry, moraine or till soils, this is the most common natural community in Lincoln and is widely distributed throughout Town. Oftentimes this community is created when a successional white pine community grades into mixed oak forests. Trails along Fernald Woods and Pine Hill provide visitors with an opportunity to explore this community type. The canopy is dominated by white pine (*Pinus strobus*) and oak species (*Quercus rubra*, *Q. velutina*, and *Q. alba*,) with regular but low occurrences of pitch pine (*Pinus rigida*), red maple (*Acer rubrum*), gray birch (*Betula populifolia*) and black birch (*B. lenta*). American Chestnut (*Castanea dentata*) is frequently present as a shrubby tree. The pine-oak communities in Lincoln typically display a prominent shrub layer of lowbush blueberry (*Vaccinium angustifolium*), huckleberry (*Gaylussacia baccata*), and mountain laurel (*Kalmia latifolia*) and have a sparse herb layer of bracken fern (*Pteridium aquilinum*), wild sarsaparilla (*Aralia nudicaulis*), Canada mayflower (*Maianthemum canadense*), wintergreen (*Gaultheria procumbens*), partridge-berry (*Mitchella repens*) and pink lady's slipper (*Cypripedium acaule*).

Associated wildlife includes white-footed mouse (*Peromyscus leucopus*), gray squirrel (*Sciurus carolinensis*) short-tailed shrew (*Blarina brevicauda*), redbacked vole (*Clethrionomys gapperi*), and eastern chipmunk (*Tamias striatus*). Birds that nest in white pine-oak forests include eastern wood-pewee (*Contopus virens*), red-eyed vireo (*Vireo olivaceus*), brown creeper (*Certhia americana*), hermit thrush (*Catharus guttatus*) and red-tailed hawk (*Buteo lineatus*). Frequently woodland vernal pools are interspersed within these communities.

Successional White Pine Forest

These communities are often times found where old fields have been left to grow in. Because Lincoln is diligent about preserving its farmland and open fields, this natural community remains sparse. It can, however, be found in the transitional edge between woodlands and fields, which provides valuable habitat to the yellow warbler (*D. dominica*), black-capped chickadee (*Poecile atricapillus*) and red-breasted nuthatch (*Sitta canadensis*). This community is susceptible to the encroachment of non-native species and thus must be actively managed.

Oak-Hemlock-White Pine Forest

This community is common on midslopes on rocky, shallow, well-drained soils, with few nutrients. The dry oak-hemlock-white pine community is not sensitive to aspect and is widely distributed throughout Lincoln. Examples of this community type can be found at Mt. Misery and Adams Woods. It is often interspersed with the white pine-oak and mixed oak communities. Behind the Codman Estate in South Lincoln, this community grades into a well established hemlock ravine community.

Associated plant species include: oak, black birch, black cherry, red maple, eastern hemlock (*Tsuga canadensis*) white pine and American beech (*Fagus grandifolia*). Relative proportions of these species vary greatly among sites. Chestnut sprouts are common and the shrub layer is patchy and sparse, with witch-hazel (*Hamamelis virginiana*), mountain laurel, lowbush blueberry, and maple-leaved viburnum (*Viburnum acerifolium*). The herbaceous layer also tends to be sparse including: Indian cucumber (*Medeola virginiana*), wintergreen, wild sarsaparilla, wild oats (*Uvularia sessilifolia*), star flower (*Trientalis borealis*), and Canada mayflower.

Associated wildlife includes a large suite of neotropical migrant birds including: warblers, Eastern wood-pewee and great crested flycatcher (*Myiarchus crinitus*). Common small mammals include smoky shrew (*Sorex fumeus*), masked shrew (*S. cinereus*), short-tailed shrew, woodland jumping mouse (*Napaeozapus insignis*), white-footed mouse, gray squirrel, eastern chipmunk and red squirrel (*Tamiasciurus hudsonicus*). Amphibians include the northern redback salamander (*Plethodon cinereus*), the most common vertebrate in New England woodlands.

Hemlock Ravine Community

A large hemlock grove lies to the north of the Codman Estate where the trees' dense canopy closure limits understory growth and provides cover for a variety of birds including black-throated green warbler (*Dendroica virens*), brown creeper, red-breasted nuthatch and winter wren (*Troglodytes troglodytes*). In the winter, mixed flocks are common with chickadees, kinglets (*Regulus spp.*) and nuthatches. Mammals include red squirrels, red-backed voles (*Clethrionomys gapperi*) and white-footed mice. Woolly adelgid poses threats to this community.

Oak-Hickory Forest

Several of Lincoln's conservation lands have woods dominated by a mix of oak and hickory. One example of this is the area adjacent to Lincoln Hill, in and around the Wheeler Farm and adjacent to Route 2, which has well drained, upper slopes, with west and south-facing aspects. The canopy is dominated by oaks, with hickories (*Carya spp.*) mixed in at lower densities. Other trees include white ash (*Fraxinus americana*), black birch, sassafras (*Sassafras albidum*) and red maple. The sub canopy commonly includes hop hornbeam (*Ostrya americana*), flowering dogwood (*Cornus florida*), shadbush (*Amelanchier arborea*), chestnut and witch-hazel.



Lincoln Conservation Land. Photo: Anna Wilkins

The diverse shrub layer includes maple-leaved viburnum, blueberries, beaked and American hazelnut (*Corylus cornuta* and *C. americana*) and gray dogwood (*Cornus racemosa*). The herbaceous layer is also richer than in many oak forests and includes: hepatica (*Hepatica nobilis*), goldenrod (*Solidago bicolor*), tick-trefoil (*Desmodium glutinosum* and *D. paniculatum*), wild sarsaparilla, rattlesnake weed (*Hieracium venosum*), false Solomon's seal (*Maianthemum racemosum*) and Pennsylvania sedge (*Carex pensylvanica*).

The oak-hickory community is highly valuable to wild turkey (*Meleagris gallopavo*) and supports a mix of animal species including short-tailed shrew, red-backed vole, white footed mice and eastern chipmunks. Birds that nest in these forests include eastern wood-pewee, red-eyed vireo, scarlet tanager (*Piranga olivacea*) and ovenbird (*Seiurus aurocapillus*).

Cultural Grassland

Cultural grasslands are created by humans and are typically maintained by annual mowing. Lincoln has several large, contiguous areas of cultural grassland. These areas have historically been open and are typically not suitable for cultivation because of their dry, rocky and sandy and low-nutrient soils. Lincoln's important cultural grasslands include the runway fields at Hanscom Field, the Smith Andover Field in Lincoln Center and areas of Mass Audubon's Drumlin Farm. Many Lincoln residents also create and maintain variable-sized patches of cultural grassland on their private properties. Grasslands are dominated by graminoids including little bluestem (*Schizachyrium scoparium*), Pennsylvania sedge, and poverty grass (*Danthonia spicata*) and typically include some mix of herbaceous species such as goldenrods (*Solidago* and *Euthamia* spp.) and milkweed (*Asclepias* spp). Associated rare plants include butterfly weed (*Asclepias tuberosa*) and wild lupine (*Lupinus perennis*).

The grasslands at Hanscom Field support a population of upland sandpipers (*Bartramia longicauda*) which are state-listed as endangered, grasshopper sparrows (*Ammodramus savannarum*) which are state-listed as threatened and savannah sparrows (*Passerculus sandwichensis*). Several of Lincoln's fields are managed for bobolinks (*Dolichonyx oryzivorus*) and other grassland ground-nesting birds. Meadow voles (*Microtus pennsylvanicus*), meadow jumping mice (*Zapus hudsonius*) and the northern short-tailed shrew can be found in the grasslands along with garter snakes (*Thamnophis sirtalis*), long-tailed weasels (*Mustela frenata*), kestrels (*Falco sparverius*) and wintering northern harriers (*Circus cyaneus*). Invasive exotic plants, especially cool season grasses that form mats, are a particular threat to this community and include: sheep fescue (*Festuca ovina*), sweet vernal grass (*Anthoxanthum odorata*), velvet-grass (*Holcus lanatus*), bluegrass (*Poa pratensis*), timothy (*Phleum pratense*) and others. European buckthorn also poses a significant threat to the cultural grasslands of Lincoln.

Red Maple Swamp

Many of Lincoln's wetlands are red maple swamps. They extend from the Hobbs Brook basin in North Lincoln to Beaver Brook at Route 126 and Iron Mine Brook in southeast Lincoln. The Vernal Pool Trail in Minute Man National Historical Park allows visitors into this community type. These areas are characterized by acidic soils that are seasonally flooded by groundwater seepage or surface water flow. Red maple is the dominant canopy tree, but may associate with yellow birch (*Betula alleghaniensis*), black gum (*Nyssa sylvatica*), white ash, white pine,

American elm (*Ulmus americana*), eastern hemlock, pin oak (*Quercus palustris*) and swamp white oak (*Quercus bicolor*). The shrub layer is often dense and well-developed with sweet pepperbush (*Clethra alnifolia*), swamp azalea (*Rhododendron viscosum*), highbush blueberry (*Vaccinium corymbosum*), winterberry (*Ilex verticillata*), spicebush (*Lindera benzoin*), northern arrow-wood (*Viburnum dentatum*), speckled alder (*Alnus incana*) and nannyberry (*Viburnum lentago*). The herbaceous layer is variable with cinnamon fern (*Osmunda cinnamomea*) sensitive fern (*Onoclea sensibilis*), royal fern (*Osmunda regalis*) and wood fern (*Dryopteris carthusiana*) often common. Herbaceous species include skunk cabbage (*Symplocarpus foetidus*), false hellebore (*Veratrum viride*), spotted touch-me-not (*Impatiens capensis*), swamp dewberry (*Rubus hispidus*) and marsh marigold (*Caltha palustris*). Red maple swamps provide habitat for wood ducks (*Aix sponsa*) red-eyed vireos and black-throated green warblers. Mammals that commonly utilize these habitats include beaver, raccoon (*Procyon lotor*), mink (*Mustela vison*) and deer (*Odocoileus virginianus*).

Vernal pools in these habitats are important for amphibian breeding and red maple swamps contain several rare plants and animals. The Massachusetts Wetlands Protection Act and our local Wetlands Protection Bylaw limit common threats to these critical resource areas.

Deep Emergent Marsh

Lincoln has areas of deep emergent marsh along the Sudbury River and adjacent to both its natural and man-made ponds and low-grade streams. Deep emergent marshes form in broad, flat areas where there are saturated, mucky mineral soils that are seasonally inundated and permanently saturated. There is typically a layer of well-decomposed organic muck at the surface and standing or running water covers the area during much of the year. Deep emergent marshes are dominated by tall graminoids like cattail (*Typha latifolia*) and wool grass (*Scirpus cyperinus*), along with tussock sedge (*Carex stricta*), beggar-ticks (*Bidens* spp.), marsh fern (*Thelypteris palustris*) and slender-leaved goldenrod (*Euthamia tenuifolia*). These marshes often transition into shallow emergent marshes, wet meadows and shrub swamps.

Marsh communities provide critical waterfowl habitat and are home to leopard, pickerel, green and bull frogs and red-spotted newts. Wood frogs use areas that are fish free and many rare plants and animals are associated with these communities. Bird species commonly found in marshes include common yellowthroat (*Geothlypis trichas*), tree swallow, swamp sparrow (*Melospiza georgiana*), common grackle (*Quiscalus quicula*) and red-winged blackbird (*Agelaius phoeniceus*). While the Massachusetts Wetlands Protection Act and our Wetlands Protection Bylaw limit common threats to these critical resource areas, they remain threatened by nutrient loading from fertilizer application and septic systems, by the use of chemical pesticides on adjacent lawns and grounds and by the abundance of invasive exotics such as purple loosestrife and phragmites.



Lincoln Conservation Land – Emergent Marsh. Photo: Anna Wilkins

Woodland Vernal Pool

As mentioned in the water resources section, Lincoln's rolling topography makes for great vernal pool habitat. Approximately 60 vernal pools are known to exist in town and can be observed along the Codman Forest Trail and the Silver Hill Bog Trail. These small, shallow depressions often have hydric soils, are temporarily flooded and provide important breeding habitat for wood frogs (*Rana sylvatica*), spotted turtles (*Clemmys guttata*) and two species of mole salamanders (*Ambystoma* spp.). Vernal pools also support a diverse invertebrate fauna, including fairy shrimp (*Eubranchipus* spp.) which complete their entire life cycle in vernal pools. Vernal pools often have little or no vegetation, but are ringed by trees or shrubs, such as sweet pepperbush.

Lincoln's Exemplary Habitats

In 2003 Massachusetts Natural Heritage and Endangered Species Program published *Living Waters: Guiding the Protection of Freshwater Biodiversity in Massachusetts*. The publication identifies Core Habitats (important habitats for rare aquatic plants and animals and exemplary freshwater habitats) and Critical Supporting Watershed (portions of a core habitat's watershed with the greatest potential to sustain or degrade the Core Habitat ecosystem). Both Core Habitat and Critical Supporting Watershed have been identified in Lincoln and include Walden Pond and its watershed, as well as Elm Brook (locally known as Tanner's Brook) that flows north out of Lincoln toward Bedford and the Shawsheen River.

In 2001 Massachusetts Natural Heritage and Endangered Species Program published *BioMap: Guiding Land Conservation for Biodiversity in Massachusetts*, which identified Core Habitats (most viable habitat for rare plants, rare animals, and natural communities) and Supporting Natural Landscape (buffer areas around Core Habitats, large undeveloped patches of vegetation, and undeveloped watersheds). Lincoln has many areas of Core Habitat and Supporting Natural Landscape. The primary areas include those surrounding north Lincoln's Hanscom Air Force Base and Hanscom Field, the Cambridge Reservoir, Walden Pond and the banks along the Sudbury River.

Rare, Threatened and Endangered Plants

According to the Massachusetts Natural Heritage and Endangered Species Program, Lincoln has two areas of Priority Habitat of Rare Species and Estimated Habitat of Rare Wildlife (discussed more in section IV.). In addition, ten species of vascular plants which are threatened, endangered or rare have been identified in Lincoln. An interesting note, however, is that several of these species have not been observed since the 1800's.

Table 4: Rare, Threatened and Endangered Plants in Lincoln

Scientific Name	Common Name	MESA* Status	Most Recent Observation
<i>Sphenopholis pensylvanica</i>	Swamp Oats	T	1961
<i>Spiranthes vernalis</i>	Grass-leaved Ladies'-tresses	T	1958
<i>Lipocarpus micrantha</i>	Dwarf Bulrush	T	1966
<i>Sagittaria teres</i>	Terete Arrowhead	SC	1894
<i>Oxalis violacea</i>	Violet Wood-sorrel	E	1899

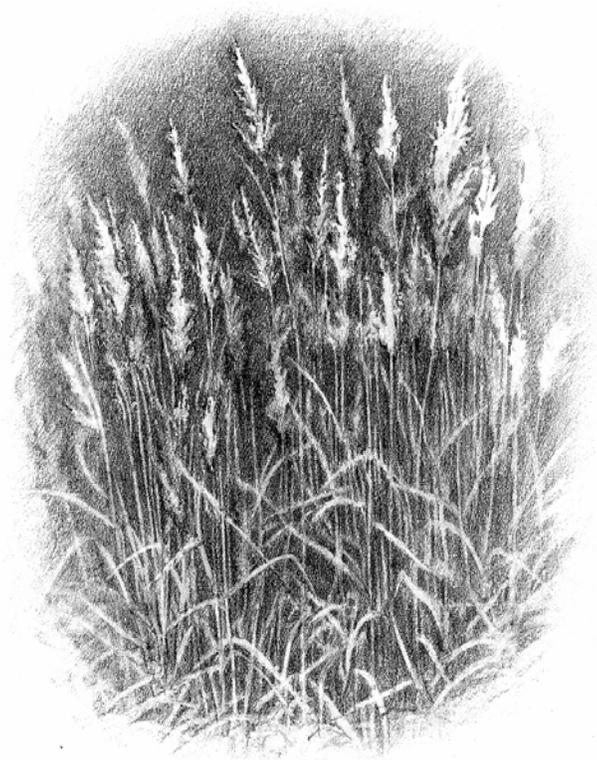
<i>Utricularia resupinata</i>	Resupinate Bladderwort	T	1895
<i>Linum medium var. texanum</i>	Rigid Flax	T	1961
<i>Gentiana andrewsii</i>	Andrews' Bottle Gentian	E	2006
<i>Senna hebecarpa</i>	Wild Senna	E	1858
<i>Doellingeria infirma</i>	Cornel-leaved Aster	E	2004

*MESA – Massachusetts Endangered Species Act

Threats to Lincoln’s Natural Communities

One of the most conspicuous and unfortunate changes in Lincoln is the rapid spread of non-native, invasive plants. In spite of efforts by the Town and individuals to control these alien plants, they are establishing themselves on roadside, fields, woods, ponds and waterways - displacing native plants. The following three species have increased dramatically in recent years. Black swallowwort (*Cynanchum louiseae*), perhaps the worst invader because it’s dense growth and root mat make it hard to eradicate, seems to have come into town along the train tracks and Route 117. Garlic mustard (*Alliaria petiolata*) carpets the ground, especially along disturbed roadsides, and is known to affect the pH and microbiology of the soil. Japanese knotweed (*Polygonum cuspidatum*) forms monocultures that displace all native plants and it spreads quickly, often coming into a new area when soil and fill is imported during construction activities.

Other common non-native invasive plants include water chestnut (*Trapa natans*) Eurasian milfoil (*Myriophyllum spicatum*), common reed (*Phragmites australis*), purple loosestrife (*Lythrum salicaria*), Oriental bittersweet (*Celastrus orbiculatus*), glossy buckthorn (*Frangula alnus*), common buckthorn (*Rhamnus cathartica*), multiflora rose (*Rosa multiflora*), Japanese barberry (*Berberis thunbergii*), burning bush (*Euonymus alata*), and honeysuckle (*Lonicera spp.*). These species continue to spread and threaten natural plant communities in Town.



Phragmites. Sketch: Angela Seaborg

E. Fisheries and Wildlife

The size and relative location of natural community types, along with the nature of the surrounding landscape, largely determine the distribution and abundance of wildlife species (DeGraaf, 2005). Lincoln's diverse pond, marsh, forest and field communities allow for a great diversity of wildlife. Much of Lincoln's protected open space abuts conservation land in adjacent towns and thus creates extensive wildlife corridors across the region. Examples of this include the wooded corridor along the Sudbury River in southwest Lincoln, through Mt. Misery, Adams Woods and into Concord's Walden Pond; protected woodlands through central Lincoln surrounding Flint's Pond and extending north of Route 2 toward Minute Man National Historical Park; the wooded wetland corridor from the Weston Town Forest and Sudbury Valley Trustees land in Wayland north through the Harrington Land and Beaver Pond and Minute Man National Historical Park which links open space in Lexington, Lincoln, and Concord. Several wetland and river systems also cross Town boundaries including Stony Brook, Elm Brook, Hobbs Brook the Sudbury River and Cambridge Reservoir, all of which provide critical habitat and travel corridors for wildlife.

Lincoln's wildlife diversity and abundance has been measured using a number of methodologies including Christmas bird counts, breeding bird counts, wildlife tracking surveys and biodiversity day tallies. Since its inception in 2000, Lincoln has participated in the State's Biodiversity Days. Biodiversity Days is a challenge to citizens to familiarize themselves with the wealth of animal and plant species with which we share our communities and to identify in each participating city/town at least 200 species in backyards, schoolyards, conservation land, and other open space by permission. Participants find record and learn about the component species of flora and fauna in their home cities/towns. Over the past 6 years, Lincoln has held 20 local trips in June which have observed 828 distinct taxa (species of plants, animals, and fungi).

Mammals

Several mammal species have adapted to coexist with humans and have increased in abundance over the last 15 years. Red fox are common in Lincoln as well as fisher, which were first reported in 2000. Beaver are well established in Town, particularly along the Sudbury River, Farrar Pond, Mt. Misery and the Tower Road Well site. The Massachusetts Division of Fish and Wildlife estimates that Lincoln has approximately 12-15 deer per square mile or about 200 resident deer in its 14.5 square mile area and they would like the population reduced to 6-8 deer per square mile. Residents have anecdotally observed the abundance of deer by the number of reported deer/car collisions, transmission of Lyme disease and over-browsing of shrub and groundcover vegetation (LLCT, *A Guide to Conservation Land in Lincoln*, Second Edition, 2005).

Birds

Bird populations have been variable. More people now feed birds by putting up outdoor feeders and planting landscaping that attracts birds. This seems to enable southern birds, such as Carolina wrens (*Thryothorus ludovicianus*), to survive in the area year round. However, large flocks of northern birds such as evening grosbeaks (*Coccothraustes vespertinus*), pine grosbeaks (*Pinicola enucleator*) and purple finches (*Carpodacus purpureus*) are diminishing.



Red-tailed Hawk. Photo: Angela Seaborg

Still rebounding from DDT use before the 1972 ban, bald eagles (*Haliaeetus leucocephalus*) are now reported occasionally and Cooper's hawks are often seen. After a number of attempts by the state to reintroduce the wild turkey, they are now common and can be observed in flocks of 20-40 birds. Turkey vultures (*Cathartes aura*), uncommon in Lincoln 20+ years ago, are observed regularly during warm weather. Red-bellied woodpecker and eastern bluebird (*Sialia sialis*) populations are increasing. Currently, a Town-wide bluebird survey is underway to find out how many bluebirds and nest boxes there are in Lincoln, which properties and nest boxes are most productive and what Lincoln's overall nest productivity rate is.

Ravens were first observed in Lincoln in 2005. Mute swans (*Cygnus olor*) were introduced from Europe and are becoming invasive in the vicinity of Farrar Pond and the Cambridge Reservoir. Canada geese (*Branta canadensis*) pose an increasing threat to natural habitats through water pollution, crop damage and displacement of other waterfowl. Birds whose numbers have declined in recent years include indigo buntings (*Passerina cyanea*), barn swallows (*Hirundo rustica*), wood ducks (*Aix sponsa*), eastern towhees (*Pipilo erythrophthalmus*), many species of warblers, chimney swifts (*Chaetura pelagica*), ruffed grouse (*Bonasa umbellus*), eastern meadowlark (*Sturnella magna*), whip-poor-will (*Caprimulgus vociferous*) and pheasants. Lincoln maintains several bobolink sanctuaries on its conservation land and requires farmers to delay their harvest until after July 20th where critical habitats exist. A comprehensive list of birds in Lincoln can be found in "*A Guide to Conservation Land in Lincoln*" (LLCT 2005).

Reptiles/Amphibians

In spite of efforts to conserve land in Town and to protect salamanders and frogs during spring migration, numbers of reptiles and amphibians seem to have decreased. Observations in the late 1990's pointed to a decrease in painted and snapping turtles. Anecdotally, bull frogs seem fewer in number, as do their predators, water snakes.

For ten consecutive years conservation staff and residents have gone out to help the spotted salamanders, wood frogs, and spring peepers cross the roads. Crews focus their efforts along Lexington Road, Silver Hill Road, and Conant Road to assist the amphibians in their quest to reach their ancestral vernal pools. Mortality rates for these species due to automobiles can be extremely high when their migration paths cross roadways.

Fish

The lakes, ponds and streams in Lincoln contain many fish species that are important to the food chain. Although fish caught in the Sudbury River are not recommended for eating due to high mercury content, fishing is a well-established activity in Lincoln. Fish species that have been observed in Lincoln include sunfish (*Enneacanthus obesus*), brook trout (*Salvelinus fontinalis*), largemouth bass (*Micropterus salmoides*), redbfin pickerel (*Esox americanus*), chain pickerel (*Esox nige*), northern pike (*Esox lucius*), black crappie (*Pomoxis nigromaculatus*) and yellow perch (*Perca flavescens*) among many others.

Changes in local fish populations have been documented through studies done by Walden Pond State Park, Minute Man National Historical Park and non-profit river watch groups as well as anecdotally by fishermen. The general consensus is that some of the more sensitive fish populations are in decline while the more hearty species are thriving.

Rare, Threatened, and Endangered Wildlife

According to the Massachusetts Natural Heritage and Endangered Species *Atlas of Estimated Habitat of State-listed Rare Wetlands Wildlife*, there are 11 documented occurrences of state-listed rare wildlife species in Lincoln that are threatened, of special concern or endangered as listed in Table 5.

Table 5: Rare, Threatened and Endangered Wildlife in Lincoln

Taxonomic Group	Scientific Name	Common Name	MESA* Status	Most Recent Observation
Amphibian	<i>Ambystoma laterale</i>	Blue-spotted Salamander	SC	2003
Amphibian	<i>Hemidactylium scutatum</i>	Four-toed Salamander	SC	1945
Beetle	<i>Cicindela purpurea</i>	Purple Tiger Beetle	SC	1935
Bird	<i>Accipiter striatus</i>	Sharp-shinned Hawk	SC	2007
Bird	<i>Bartramia longicauda</i>	Upland Sandpiper	E	2000
Bird	<i>Tyto alba</i>	Barn Owl	SC	1953
Bird	<i>Cistothorus platensis</i>	Sedge Wren	E	1993
Bird	<i>Vermivora chrysoptera</i>	Golden-winged Warbler	E	1950
Bird	<i>Ammodramus savannarum</i>	Grasshopper Sparrow	T	1999
Bird	<i>Ammodramus henslowii</i>	Henslow's Sparrow	E	1994
Dragonfly	<i>Somatochlora linearis</i>	Mocha Emerald	SC	1972

*MESA – Massachusetts Endangered Species Act

**Any occurrence >25 years old is considered 'historic'.

F. Scenic Resources and Unique Environments

Lincoln is fortunate to have a wealth of visually stimulating and unique places within its borders. These areas, ranging from scenic woodlands to historic homes, define the community. Below is a compilation highlighting some of the scenic and unique resources that are found in Town. This compilation reflects input from public forums, from past community planning exercises and from the experiences of those on the Open Space Committee. While this listing does not include every scenic resource (conservation land, farms, historic homes and more), it provides a flavor of what makes Lincoln unique.

Scenic landscapes and unique environments are categorized below into: municipal, land trust, governmental (non-Lincoln), private institutions, private landowners, roadways, and open water resources. For additional information, readers should consult the “Lincoln Reconnaissance Report” published in June 2006 as part of the Freedom’s Way Landscape Inventory that was sponsored by the Massachusetts Heritage Landscape Inventory Program (under the Massachusetts Department of Conservation and Recreation).

Governmental (non-town)

Minute Man National Historical Park – This federal land, totaling 970 acres, parallels Route 2A and is now a state designated Scenic By-way as it runs through Concord, Lexington and Lincoln. The park was created by Congress in 1959 with the broad mission to protect the monuments, sites, structures, roads and landscapes associated with the American Revolution. The park is increasingly involved with diverse and sustainable agricultural activities and is once again taking on a vibrant agrarian character. Open agricultural fields, lined with stone walls and split-rail

fences, define historic structures such as the Samuel Hartwell House Site and the Noah Brooks Tavern. The Battle Road Trail is a multi-use trail that runs the length of the park.

Walden Pond State Reservation – The State’s Division of Conservation and Recreation (DCR) manages this reservation dedicated to the preservation of the landscape and literary heritage of Henry David Thoreau. Although the majority of Walden Pond is in Concord, a small, southern section of the pond lies within Lincoln’s borders. Approximately 95 acres of the reservation area are in Lincoln including one particularly scenic spot, Emerson’s Cliff.

Hanscom Field – The grasslands along Virginia Road, both inside and outside the airport’s fence, are classified as Priority Habitat because they provide nesting cover for upland sandpipers (MA endangered) and grasshopper sparrows (MA threatened). The current vegetation management plan for Hanscom has created additional grassland habitat west of Virginia Road in Lincoln.

Municipal

Pine Hill – This 108-acre permanently protected area connects Flint’s Pond to Walden Pond and is primarily a pine-oak woodland. At the top of Pine Hill (elev. 351 feet) there is an underground drinking water storage tank that provides pressure for Concord’s water distribution system. When standing on top of this open grassy field one can get some magnificent distant views. To the west you can see Wachusett Mountain in Princeton and to the northwest you can see Mount Monadnock in New Hampshire. In addition there are views looking down to Walden Pond itself.

Mount Misery – Lincoln’s most popular conservation parcel is certainly the 227-acre Mount Misery land. Multiple parking areas and easy access from South Great Road (Route 117) combined with its natural beauty and trails make it a frequent destination for both residents and visitors. The Sudbury River flows along a portion of the western boundary and Beaver Dam Brook runs through the property, with earthen dams creating several ponds. Mount Misery itself rises 284 feet above sea level and has several steep exposed bedrock sections on its southern slope. Glacial influence is quite evident here with well-defined eskers and a deep kettle hole that is also a productive vernal pool. Large agricultural fields at the eastern end of the property are farmed by Lindentree Farm (organic crops) and Codman Community Farms (hay).

Codman Community Farms – Founded in 1973, Codman Community Farms (CCF) is a venerable, community institution. The non-profit organization works to keep agriculture alive with a variety of programs including a community garden, hay production and livestock husbandry, all of which maintain an educational focus. The center of the operation is a farmhouse and barn at the intersections of Codman and Lincoln Roads. The farm leases the 20-acre site from the Town, which protected the land by a Town Meeting vote in 2000 “to designate and restrict for agricultural uses (including buildings and structures serving such uses) and for conservation and open-space uses which are compatible with agricultural preservation. The farm leases an additional 86 acres of land from the Conservation Commission for hay production.

Pierce House and Park – The Pierce House, a Georgian mansion built by John H. Pierce in 1900, sits on a 26-acre property in the heart of Town. Gently rolling expanses of lawn, mature specimen trees, gardens, a pond and a diverse woodland with its own trail system all contribute to making this Lincoln’s “Town Common”. This land was gifted to the Town for parkland use.

Lincoln Cemetery – This historically significant cemetery on Lexington Road is located on 21 acres of land. Large trees and flowering shrubs are interspersed throughout the open grounds that also contain a pond and an old cranberry bog. Walkers are welcome to explore the site, but activity must be quiet and respectful.

Lincoln Land Conservation Trust

Silver Hill Bog – This 26-acre bog has an unusual assortment of acid-loving plants that are unique to this environment. Vernal pool wildlife is abundant in the wetlands around the bog.

Wheeler Farm – This 56-acre piece of land contains numerous signs of the Wheeler Farm that was originally settled in 1717. Stone walls, foundations and a colonial-era road are markers of Lincoln's heritage. The trees also reflect the long farming history of the land which include remnant fruit trees from the orchard operation and planted Douglas fir trees.

Beaver Pond – Another large holding of the Lincoln Land Conservation Trust is the 55-acre Beaver Pond conservation land. A wide variety of ecological community types and their associated flora and fauna surround the large, shallow pond, bog and marsh. Iron Mine Brook flows into the pond and the outflow meets other tributary streams to form Stony Brook, which ultimately discharges into the Cambridge Reservoir.

Private Institutions

Walden Woods Project/Thoreau Institute – At the end of Baker Farm Road is the 18-acre Thoreau Institute Property. Owned and operated by the Walden Woods Project, the grounds are located in the heart of Walden Woods in a peaceful and natural setting. The headquarters, library and research collections are in an historic Tudor mansion that blends nicely with the landscape.

Codman Estate – This 15-acre property, also known as The Grange, is one of two in Lincoln owned by Historic New England (formerly the Society for Preservation of New England Antiquities). On the high point of the land sits an elegant Georgian mansion dating back to 1740. The grounds are maintained as an estate property and include a traditional Italian garden. Abutting the Codman Estate are the Codman Community Farm and Town conservation land, which were part of the original Codman Estate.

Gropius House – The second Historic New England property is the Gropius House, built in 1938 by Walter Gropius. This home is a prime example of the Bauhaus architectural movement founded by Gropius and it is a National Historic Landmark.

Drumlin Farm – Drumlin Farm is run by the Massachusetts Audubon Society. It holds 170 acres of land on the south side of South Great Road (Route 117) just east of Lincoln Road. The farm offers a wide variety of educational programming. Agricultural operations include most types of New England farming, from maple sugaring to animal husbandry to crop production. Trails traverse the property and the drumlin offers distant views to the west.

DeCordova Museum and Sculpture Park – Sitting high above Flint's Pond, the DeCordova Museum and Sculpture Park offers magnificent views and intriguing grounds to explore on foot. The facility encompasses 28 acres, most of which is owned by the Town. The Museum and Park combine culture and the natural world through unique visitor experiences.

Farrington Memorial – A non-profit organization that provides a rural learning and recreation experience for children sits on 80 wooded acres with classrooms, a barn, trails and a pond.

Private Landowners

Flint's Farm – This farm lies to the east of Lincoln Hill and is one of the few remaining private working farms in Town. Owned by the Flint Family and protected with Agricultural Preservation Restrictions the farm consists of thirty-four acres on the east of Lexington Road and 17 acres on the west. In addition, nine acres of municipal conservation land adjoining the field on the west side of the road are leased to Matlock Farm (Flint's). With the cornfields and Belted Galloway cows visible from the road, this farm complex exhibits true New England heritage.

DeNormandie Sledding Hill – Found in the center of Lincoln, this open agricultural landscape with its sweeping hayfields is a well-known landmark for generations of Lincoln residents. The land is in Chapter 61A, the state agricultural tax-incentive program and is identified as land of conservation interest.

Stonehedge Farm – Stonehedge Farm, located on the south side of Old Sudbury Road evokes a feeling of northern New England. The pastureland, with grazing cattle, abuts vast woodlands that lead to Weston conservation land. The roadside frontage is in Chapter 61A and the back land, once the Van Leer Property, is protected by a Conservation Restriction. The farm also uses land owned by Massachusetts Audubon Society on the north side of Old Sudbury Road.

Scenic Vistas

Mt. Misery, Pine Hill, Adams Woods, Drumlin Hill, Flint's Pond, Farrar Pond and Harrington.

Scenic Roadways

Roadways are a critical part of Lincoln's open space network and form the gateways into Town. Stone walls, open fields, and majestic trees form scenic corridors that make compelling vistas and enhance the rural character of Town. Roadside paths, accessible to pedestrians and bicycles, meander along many primary roadways and serve to connect different open space parcels. The Scenic Road Bylaw protects the integrity of 27 roads by regulating tree removal and stone wall alteration.

Designated Scenic Roads in Lincoln include Baker Bridge Rd, Bedford Lane, Bedford Rd, Brooks Rd, Codman Rd, Conant Rd, Lexington Rd, Library Lane, Lincoln Rd, Mill St, Old Bedford Rd, Old Cambridge Turnpike, Old Conant Rd, Old County Rd, Old Lexington Rd, Old Sudbury Rd, Old Winter Street, Oxbow Rd, Page Rd, Peirce Hill Rd, Sandy Pond Rd, Silver Hill Rd, Tower Rd, Trapelo Rd, Virginia Rd, Weston Rd, and Winter St.



Old Concord Road. Photo: Herbert Gleason, Courtesy Concord Free Public Library

In 1980 the Lincoln Roadside Committee wrote the Lincoln Roadside Study and in 1997 the Town issued its Roadway Design Guidelines document. At the time of this writing the Lincoln Garden Club is undertaking an initiative on behalf of the Town to make residents aware of the need to protect and maintain the rural character of our roadsides. This project will categorize roads into five categories: natural, agricultural, historic, suburban and commercial, and will then develop guidelines for roadside maintenance and restoration. Educational outreach efforts will be used to inform all residents about these guidelines.

Open Water Resources

Lincoln is fortunate to have an abundance of open water resources of various types and sizes that provide drinking water, scenic value, wildlife habitat and recreational opportunities. Addressed more fully in Section IV. C. Water Resources, they include a diverse mix of vernal pools, man-made and natural ponds and streams (both intermittent and perennial). Although many are small features of the landscape, they each lend their own special character to the land where they are found and are protected under state and local laws.

Reservoirs - Flint's Pond is the primary water supply for the Town and offers great wildlife habitat. A large portion of the Hobbs Brook Reservoir (part of the Cambridge Reservoir System) is found in Lincoln.

Sudbury River and Fairhaven Bay – This federally-designated Wild and Scenic River skirts the western edge of Town and borders land owned by the Lincoln Conservation Commission, Great Meadows National Wildlife Refuge and private property owners.

Rivers – The Shawsheen River has its headwaters in north Lincoln where Tanner's Brook (Elm Brook) flows into the Shawsheen. Other brooks include Stony Brook, Beaver Dam Brook, Iron Mine Brook, Hobbs Brook and Pole Brook.

Ponds – As discussed earlier, Walden Pond, Farrar Pond, Todd Pond, Beaver Pond, Twin Pond and Valley Pond, many of which are made or enlarged by man-made earthen dams, are important natural and scenic resources in Lincoln.

Historic Districts and Structures

There are many historic buildings and sites throughout Lincoln, several of which are referenced in this report. A full inventory is beyond the scope of this Plan. However, a few structures with their connected landscapes play a critical role in defining Lincoln's open-space character. They are reminders of Lincoln's heritage and enhance the value of the community.

Lincoln has four Historic Districts including; the Lincoln Center Historic District, Woods End Road Historic District, the Codman Historic District and the recently adopted Cory-Brown-Hunt District. Many properties are on the National Register of Historic Places including the Daniel Brooks House, the Flint House, The Grange, the Gropius House, the Henry Higginson House, the Hoar Tavern, the McCune Site (archaeological), and Walden Pond.

All of Minute Man National Historical Park fall within the "Minute Man National Historical Park Historic District" and is on the National Register of Historical Places. Over the years Lincoln residents have considered creating a Historic Overlay District around the park to help guide new development adjacent to the national park.

G. Environmental Challenges

As mentioned earlier, the alarming increase in moderately-sized homes being torn down and replaced with significantly larger and more expensive structures poses a serious environmental challenge for maintaining open space. Not only does the extensive tree clearing and grading associated with the new construction affect the ecological integrity of the land, but critical viewsheds from roads into historic agricultural fields, along trails and into and out of conservation land can be greatly affected by people wanting to locate their new, large home to take advantage of views over conservation land. Fortunately, when critical properties come on the market, local residents have consistently worked with the Rural Land Foundation and LLCT to try and implement creative development plans that protect valuable resources. The Conservation Commission also regulates large additions and new construction that is adjacent to wetlands by upholding existing wetland and buffer zone regulations, which help to prevent large disturbance to upland buffer zone resource areas that are so critical for wetlands protection.

In recent years the threat of development through Comprehensive Permits under Chapter 40B has become a major environmental challenge for Lincoln. The completion of a Consolidated Housing Plan and the approval of several projects helping to meet the 10% requirement for affordable housing have lessened the threat, but it will continue to be an ongoing challenge.

The rural nature of Lincoln, along with other factors such as its recreational resources and excellent schools, makes it an attractive location for institutions. While Lincoln benefits from fine institutions that share its land conservation values, it is left vulnerable to unregulated development by institutions that might seek to bypass local zoning requirements under the Dover Amendment, which allows non-profit religious and educational organizations to build in residential districts. It is important to note that institutions may also provide a false sense of security for land protection because they often own large parcels with critical resources that are only protected by the nature of their mission. The Massachusetts Audubon Society is an excellent example of a conservation-oriented organization that owns and manages several hundred acres of valuable open space in Lincoln. While Mass Audubon does excellent work and has excellent relations with the Town, this land does not have any formal protection that conserves its open space and recreational uses. If at some point, the organization wanted to re-allocate their assets, for example focusing on their properties in western Massachusetts, the Drumlin Farm property could potentially be sold for residential home sites. Farrington Memorial, at 71 acres, is the second largest parcel of unprotected land in Lincoln at the current time. It is currently a place where inner-city youth can learn about farming and the natural environment.

On a regional scale, Hanscom Air Force Base and Massport continue to present an environmental challenge. Noise pollution and additional development, as well as projected increases in air operations, constitute threats to Lincoln's open space and recreational lands.

In addition, Lincoln faces many ecological challenges that will require constant efforts in manual labor, land-use permitting, education, coordination and outreach. Such ecological problems include the control of non-native, invasive plants, preserving the peaceful and serene nature of conservation land for people to enjoy, maintaining dark skies, maintaining the Town's scenic roadsides as large, road-side trees die off and balancing increasing numbers of users with the carrying capacity of the conservation land. The human-animal interface will become increasingly problematic, especially as public health concerns increase about disease and their animal vectors.

Chemical pollution from industrial facilities is limited to the Sudbury River, which contains contaminated sediments from a former dye factory (currently the Nyanza super-fund site). There are four gas/service stations in Lincoln and the only manufacturing industry is located at Hanscom Air Force Base. As mentioned earlier, the Farrar Pond Well was closed due to trichloroethylene contamination. Other chemical concerns include the increased use of chemical pesticides and fertilizers on private lawns, which often accompany new construction.

The Lincoln Board of Health, Conservation Commission and Water Commission issued a statement in 2002 regarding the growing concern about the increasing use and abuse of chemical fertilizers and pesticides in the community. Chemical herbicides and pesticides are by nature poisons. Exposure, even at low levels, may cause serious adverse health and environmental effects. In addition to their intended effects, pesticides can simultaneously harm non-target organisms such as humans, pets, beneficial insects, aquatic and other wildlife. Children are especially vulnerable to chemical contaminants, as these may interfere with development of children's immune, nervous and endocrine systems. The Environmental Protection Agency (EPA) asserts that the widespread use of pesticides is both a major environmental problem and a public health issue. Therefore, the Boards and Commissioners encourage Lincoln residents to learn about the hazards of pesticides and about ecological approaches to landscaping and pest control, to reduce the use of pesticides in their homes, gardens, lawns, schools and workplaces and to protect children from exposure to treated areas.

INVENTORY OF EXISTING OPEN SPACE

Lincoln's pioneering conservation efforts have been recognized at regional, national and international levels. The extraordinary inventory of existing open space is a result of the cooperative efforts of public and private organizations and many individuals working together over the long-term to achieve the vision of a "town that cherishes its rural, agricultural character, small-town heritage, open space and historical legacy." (*Town Mission Statement*) The product of these efforts is a rich resource of conservation land that protects natural resources and provides recreational opportunities to the citizens of Lincoln and the neighboring communities. Specifically, Lincoln's conservation land secures important trail connections, provides recreational opportunities, maintains wildlife corridors, preserves farmland and conserves critical watershed and other ecologically significant areas.

Roughly 35% of Lincoln or 3,282 total acres are permanently protected for conservation purposes (Table 6: Town of Lincoln Open Space: Individual Totals and Table 7: Town of Lincoln Open Space: Cumulative Totals). These lands were gradually acquired since 1957 by direct purchase, public and private partnerships and outright gifts. An additional 3%, or 312 acres of land in Lincoln is owned by the City of Cambridge for the purposes of watershed protection. Approximately 2,666 acres are open to the public for passive recreational use (Table 7: Cumulative Totals: Protected Land Grand Totals minus Conservation Restrictions on non-Deeded Conservation Land) and there are approximately 80 miles of trails that link virtually every major conservation area in Town.

A Comprehensive list of all town-owned conservation deeds with ownership, management agency, current use, recreational potential, type of grant used to purchase the land, public access, ADA accessibility and degree of protection is available in the Town Conservation Department. In addition property baselines, monitoring reports and a Conservation Land Database are available and the Town recorded a Restriction Tract Index with the Registry of Deeds in 2006.

Lincoln's permanently protected open space consists of land in the following categories:

- Town-owned conservation land designated under MA Article 97 for conservation;
- Land Trust-owned conservation land;
- Conservation restrictions held by the Town;
- Conservation restrictions held by private organizations;
- Agricultural preservation restrictions;
- National Parks;
- State Parks; and
- Trail easements.

Because in many cases, a parcel of land is protected by more than one of these means, the total amount of protected land must reflect overlapping categories of protection. Table 6 shows the total parcels and acres of land in each of Lincoln's most important land-protection categories. Table 7 shows the cumulative totals for the same categories of protection with each parcel counted in the category that affords it the highest level of protection.

Though 35% of Lincoln is permanently protected for conservation purposes, several hundred acres of open space remain of interest to the town, including:

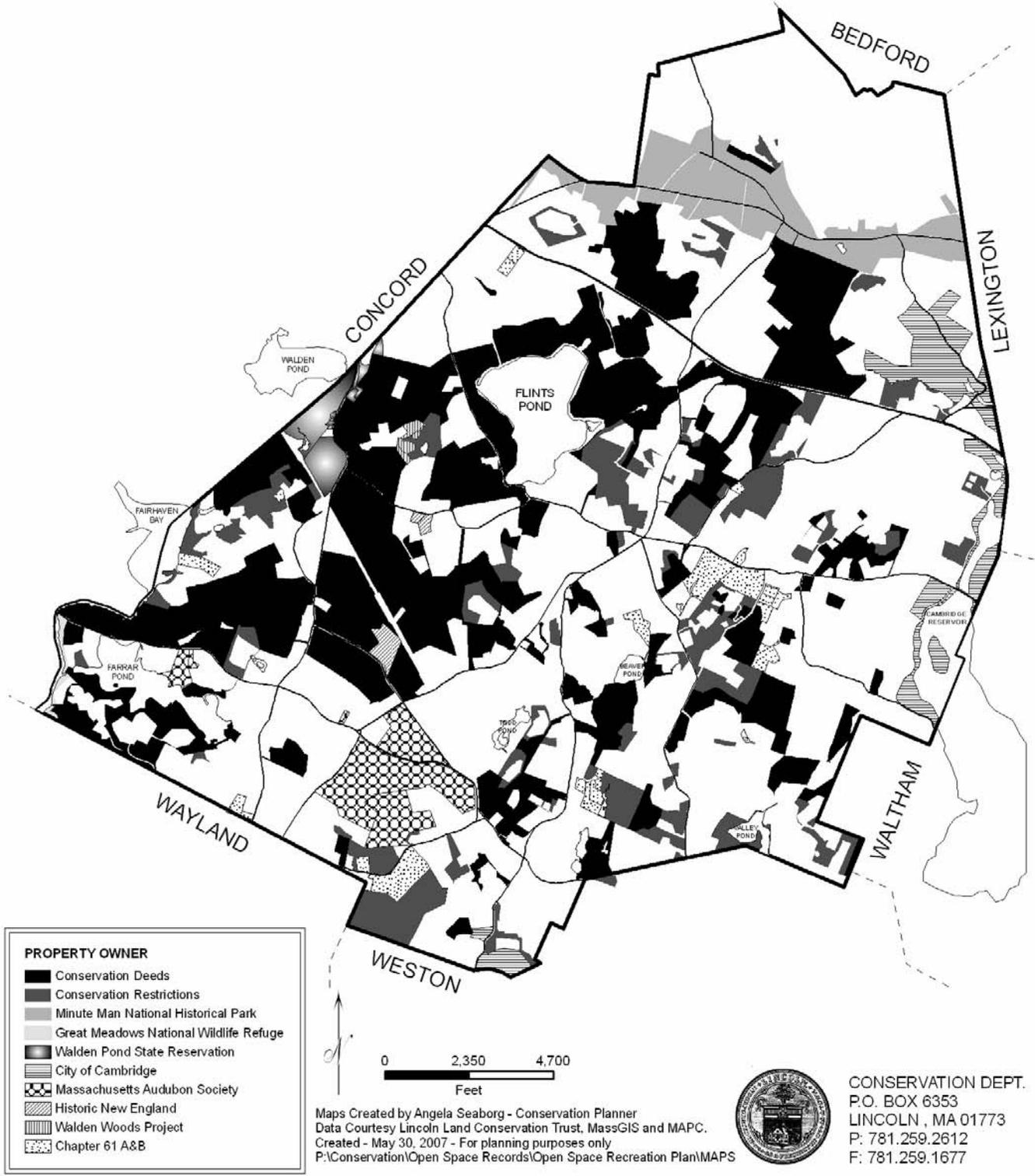
- Municipal and Institutional land;
- Privately-owned agricultural land;
- Private property with important resources;
- Trails that cross private land;
- Chapter 61 agricultural restrictions;
- Lands that provide suitable access for people with disabilities;
- Cluster-subdivision open space; and
- Trail licenses.

Table 6: Town of Lincoln Open Space: Individual Totals

	<u>Parcels</u>	<u>Acres</u>
Conservation Deeds	173	2230
Conservation Restrictions	170	845
Agricultural Preservation Restrictions	4	75
Minute Man National Historical Park	124	313
Great Meadows National Wildlife Refuge	4	14
Walden Pond State Reservation	12	95
National and State Park Totals	140	422
City of Cambridge	12	383
Massachusetts Audubon Society	9	226
Historic New England	3	6
Walden Woods Project	6	18
Other Protected Land Totals	24	616
Chapter 61A	27	286
Chapter 61B	3	51
Chapter 61 Totals	30	338

* Some parcels have both a Conservation Restriction and Agricultural Preservation Restriction.

TOWN OF LINCOLN OPEN SPACE AND RECREATION PLAN Map 5: Existing Open Space



- PROPERTY OWNER**
- Conservation Deeds
 - Conservation Restrictions
 - Minute Man National Historical Park
 - Great Meadows National Wildlife Refuge
 - Walden Pond State Reservation
 - City of Cambridge
 - Massachusetts Audubon Society
 - Historic New England
 - Walden Woods Project
 - Chapter 61 A&B

0 2,350 4,700
Feet

Maps Created by Angela Seaborg - Conservation Planner
Data Courtesy Lincoln Land Conservation Trust, MassGIS and MAPC.
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Table 7: Town of Lincoln Open Space: Cumulative Totals²

	<u>Parcels</u>	<u>Acres</u>	<u>% Total Acres</u>
TOWN OF LINCOLN LAND TOTALS ¹	2392	9337	100%
Conservation Deeds (public and private ownership) ³	173	2230	24%
Conservation Restrictions on non-deeded conservation land ⁴	148	630	7%
Conservation Land Totals	321	2859	31%
Minute Man National Historical Park	124	313	3%
Great Meadows National Wildlife Refuge	4	14	0.1%
Walden Pond State Reservation	12	95	1%
National and State Park Totals	140	422	4%
PROTECTED LAND GRAND TOTALS	461	3282	35%
City of Cambridge non-conservation land ^{5,6}	10	312	3%
Mass Audubon non-conservation-restricted land ⁶	8	214	2%
Historic New England	3	6	0.1%
Walden Woods Project non-conservation-restricted land	4	12	0.1%
Other Open Space Totals	21	544	6%
Chapter 61A non-conservation-restricted land	21	128	1%
Chapter 61B non-conservation-restricted land	2	6	0.1%
Chapter 61 Totals ¹	23	134	1%
PROTECTED LAND PLUS OTHER OPEN SPACE AND CHAPTER 61 GRAND TOTALS	505	3960	41%

Notes:

- *¹ Town of Lincoln total land acres listed here does not include streets. It is the sum of the acres for all parcels in the Assessors' database.
- *² Individual parcels can belong to more than one open space category. They are counted only once in Table 7 in the category with the highest level of protection.
- *³ Some of the deeded conservation land parcels have Conservation Restrictions on them.
- *⁴ The Conservation Restrictions category includes Agricultural Preservation Restrictions.
- *⁵ Some of the City of Cambridge parcels in Lincoln are City of Cambridge conservation land.
- *⁶ Some of the City of Cambridge and Massachusetts Audubon Society parcels also have conservation restrictions on them.
- *⁷ Some of the Chapter 61 parcels have conservation restrictions on part or all of the parcel.

A. Deeded Conservation Land

a. Publicly-owned conservation land (Article 97 land)

Today there are roughly 2,000 acres of publicly-owned conservation land specifically designated for conservation purposes. Public agencies that own land in Lincoln include the: Town of Lincoln, City of Cambridge, Minute Man National Historical Park, Walden Pond State Reservation and Great Meadows National Wildlife Refuge. Approximately 1,500 acres are managed by the Town's Conservation Department and roughly 190 of those acres are licensed for agricultural purposes (Section V.E. Agricultural Lands). Specific goals and strategies for managing Lincoln's conservation land are outlined in a General Land Management Plan currently being drafted by Conservation staff and Land Trust representatives.

b. Privately-owned conservation land (land trust or other conservation organization)

Lincoln has five private land trusts and conservation organizations that have been established with a mission of holding land in conservation for the enjoyment of its members. Use of these lands has frequently been extended to the public. For example, the Farrar Pond Conservation Trust, which owns land on the south side of Farrar Pond, offers public trail easements through their holdings. These organizations and their ownership information are presented in Table 8: Conservation Deed Totals by Owner.

Table 8: Conservation Deed Totals by Owner

Owner	As of 12/1976		As of 12/2006		Increase Acres
	Parcels	Acres	Parcels	Acres	
Town of Lincoln	45	934	89	1495	561
Lincoln Land Conservation Trust	28	286	72	495	209
Farrar Pond Conservation Trust	1	30	5	81	51
Farrar Village Conservation Trust	1	36	1	36	0
Lincoln Ridge Conservation Trust	0	0	2	31	31
Rural Land Foundation	0	0	1	19	19
Weston Forest & Trail Association	1	0.4	1	0.4	0
City of Cambridge	0	0	2	72	72

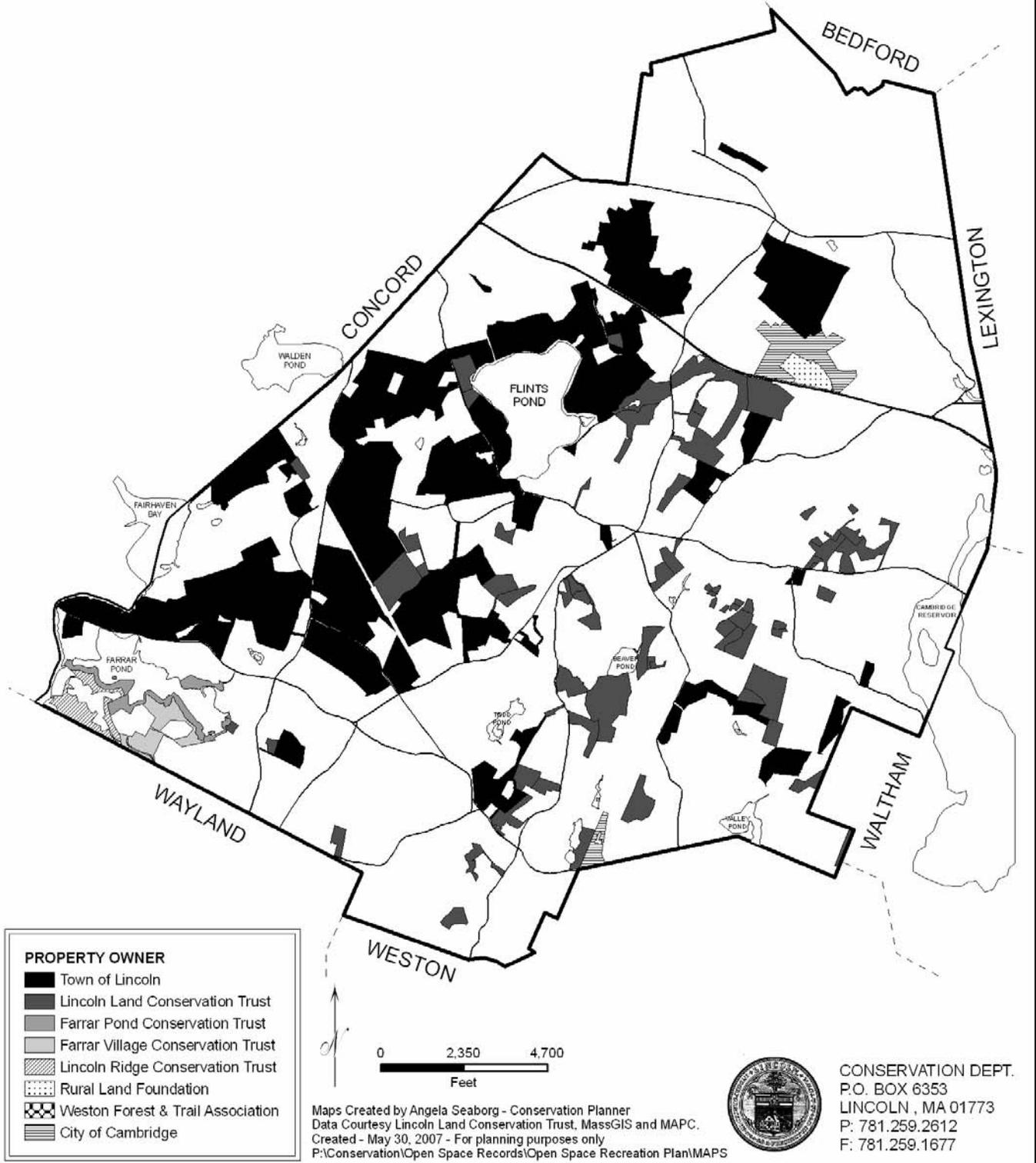
Old Mill on the Harrington Ponds.

This land was protected through a cooperative initiative to conserve 54 acres of open space thanks to the generosity of the Harrington family and Town residents.

Photo: Historic New England



TOWN OF LINCOLN OPEN SPACE AND RECREATION PLAN Map 6: Conservation Deeds by Owner



B. Conservation Restrictions

Existing conservation land that is privately owned and restricted from development amounts to 890 acres. These lands are owned by individuals who have given up the right to develop their property, thereby dedicating the land for conservation purposes. Lands under this category have been protected by conservation restrictions or agricultural preservation restrictions that range from separate agreements between the owner and the Town to those prescribed by legislation associated with tax abatement. Both conservation restrictions under Chapter 184, Sections 31, 32, and 33, and the agricultural restrictions under Chapter 61A fall into the latter category.

Since conservation restrictions can be written with great flexibility in the agreed upon terms, not all privately owned conservation land is open to the public. However, even if closed to public access, these lands make a significant contribution to the overall open space structure of the Town. Lincoln is fortunate to have many generous landowners who open their property to local residents. The Lincoln Land Conservation Trust and Lincoln Conservation Commission work with landowners who are willing to place trail easements on their property.

Table 9: Conservation & Agricultural Preservation Restriction Totals by Grantee

Grantee	As of 12/1976		As of 12/2006		%Change
	Parcels	Acres	Parcels	Acres	Acres
Lincoln Land Conservation Trust	10	18	113	417	399
Town of Lincoln	4	22	57	404	382
Massachusetts Audubon Society	0	0	1	69	69

C. Trail Easements and Licenses

Lincoln has approximately 80 miles of trails including roadside paths. Roadside paths are on municipal-purposes land, conservation land and private property and are maintained by the Highway Department. Many trails on privately-owned land have trail easements or licenses protecting them and are maintained by the organizations holding the easement or license.

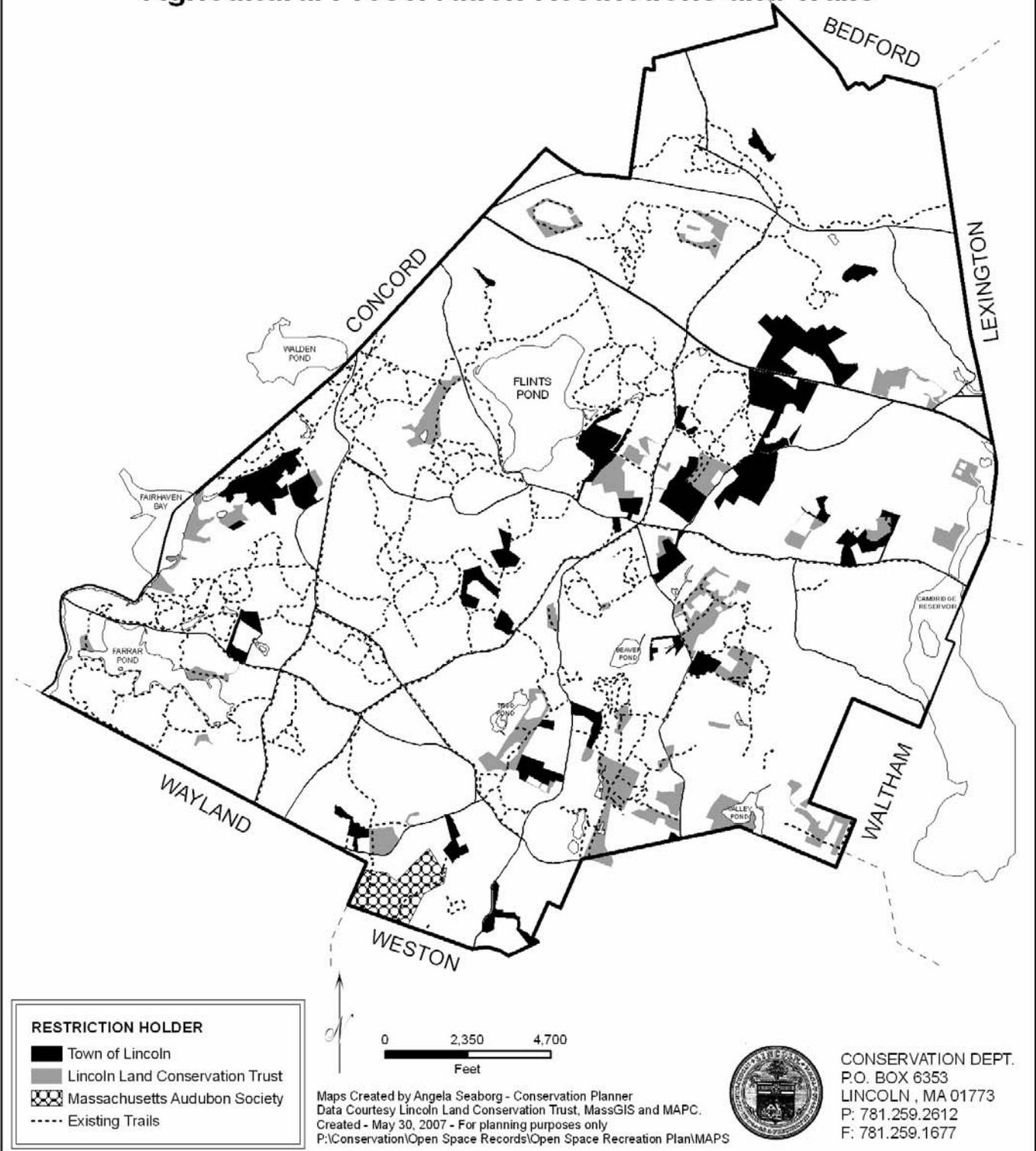
The Conservation Commission is currently working with the Disabilities Commission to identify suitable trails for universal access. The Commissions are also working with the City of Cambridge to build a universally accessible parking lot and trail into the Harrington property.

Table 10: Trail Miles by Ownership Categories

Ownership Categories	Miles
Trails on Town of Lincoln Conservation Land	30
Trails on Lincoln Land Conservation Trust Land	12
Trails on all other Deeded Conservation Land	3
Trails on Minute Man National Historical Park Land	4
Trails on Walden Pond State Reservation Land	2
Trails on Private Land	24
Roadside Paths*	10

*Roadside paths are on municipal-purposes land, conservation land and privately-owned land.

TOWN OF LINCOLN OPEN SPACE AND RECREATION PLAN Map 7: Conservation Restrictions, Agricultural Preservation Restrictions and Trails



D. Government and Institutional Land

Municipal and Institutional lands are included in the Open Space Plan because they provide varying degrees of protection from development. Most contain buildings, but the buildings are generally surrounded by large amounts of open space, field or forest. They comprise 1,795 acres and are owned by the Town of Lincoln, City of Cambridge, State and Federal governments, and quasi-public institutions. Restricted from extensive development by virtue of their charters, they are not necessarily restricted from change of use.

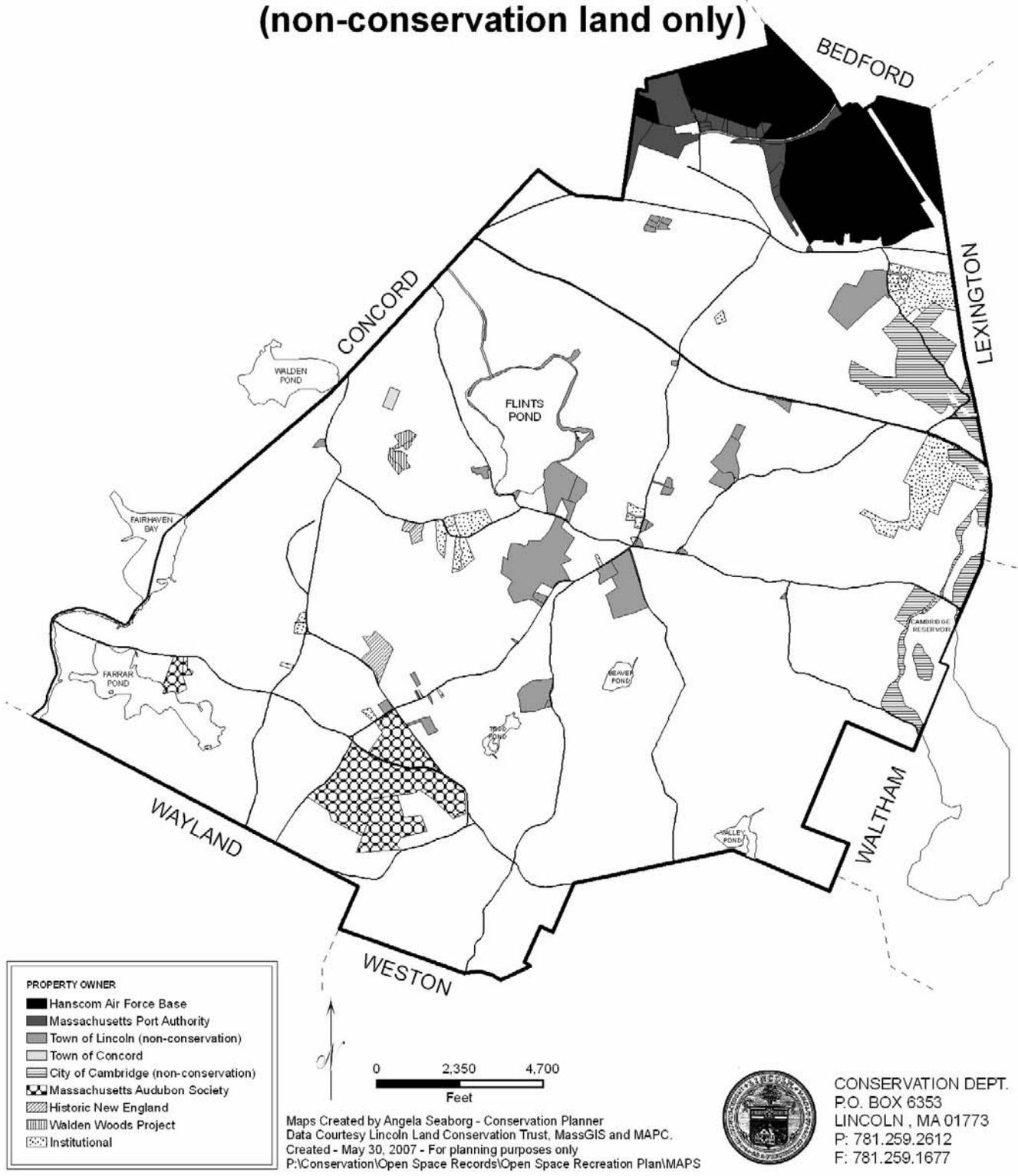
These lands are important in another significant way. In several instances the institutions draw a large number of visitors. The activities they provide are frequently incompatible with use of the conservation lands. Thus, connectors to them are considered important.

Table 11: Non-Conservation Government and Institutional Land

Owner	Use	Acres
United States of America	Hanscom Air Force Base	544
Commonwealth of Massachusetts	Massachusetts Port Authority	117
Town of Lincoln	Water Department	196*
Town of Lincoln	Municipal	135*
Town of Lincoln	Cemeteries	23*
Town of Lincoln	Highway	7*
Town of Lincoln	Housing	3*
Town of Concord	Water Department	8*
City of Cambridge	Watershed Protection	312*
Massachusetts Audubon Society	Conservation/Education	214*
Historic New England	Historic Preservation	21
Walden Woods Project	Conservation/Education	12*
Institutional	Farrington Memorial Inc.	71
Institutional	Private Schools	75
Institutional	Museums	35
Institutional	Churches	13
Institutional	Other	8
TOTAL		1794

*Non-conservation-deeded or non-conservation-restricted land only

TOWN OF LINCOLN OPEN SPACE AND RECREATION PLAN Map 8: Government & Institutional Land (non-conservation land only)



E. Agricultural Land

Agricultural land plays a critical role in Lincoln’s Open Space Plan. Since the end of World War I the number of farms in Massachusetts has declined from 35,000 to 6,000 and Lincoln’s last dairy herd was sold in 1964. Lincoln recognizes both the aesthetic role that farms and fields play in the continuance of its rural character and the economic value they provide as a local food source.

Approximately 638 acres were in agricultural production in 1976. Today, the total agricultural land in Lincoln is 547 acres. Of that area, 389 acres or 71% is on permanently-protected conservation land. Approximately 158 acres of agricultural land is unprotected. This land is privately owned without conservation restrictions.

Currently the Baker Bridge fields are licensed to the Food Project, which teaches inner city youth to farm. Codman Community Farms raises livestock, runs a community garden and licenses several conservation fields for hay production. Lindentree Farm licenses land off Old Concord Road for a Community Supported Agriculture program and Blue Heron Organic Farm licenses land off Route 117. Massachusetts Audubon Society owns and operates approximately 80 acres for agricultural use. Small amounts of land have been set aside to assist the American Chestnut Foundation and permission is regularly granted to a resident’s group to tap sugar maple trees on conservation land for maple syrup production.

Table 12: Agricultural Land by Use

Production Type	Acres
Hayfield	194
Horticulture/Viticulture	12
Fallow	83
Tilled	151
Pasture	107
Total	547

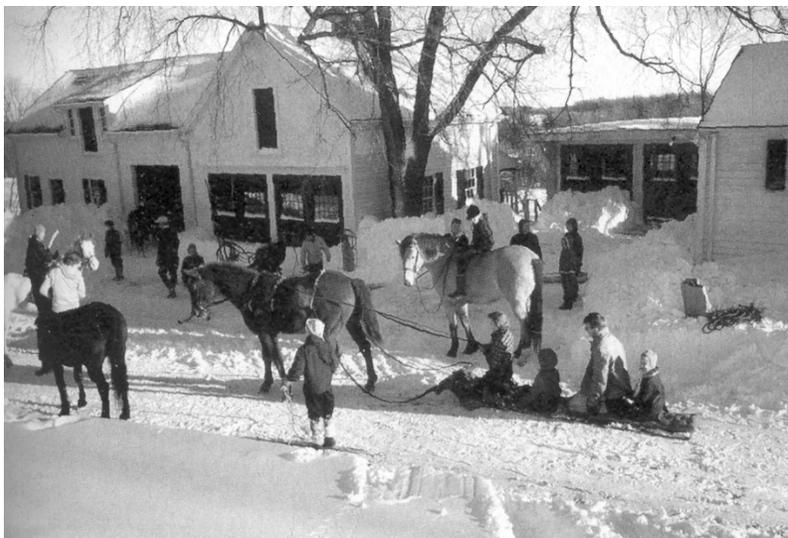
Table 13: Agricultural Land by Ownership

Ownership	Acres
Town of Lincoln	229
Lincoln Land Cons. Trust	55
Minute Man National Park	16
Walden Pond Reservation	8
Private	239
Total	547

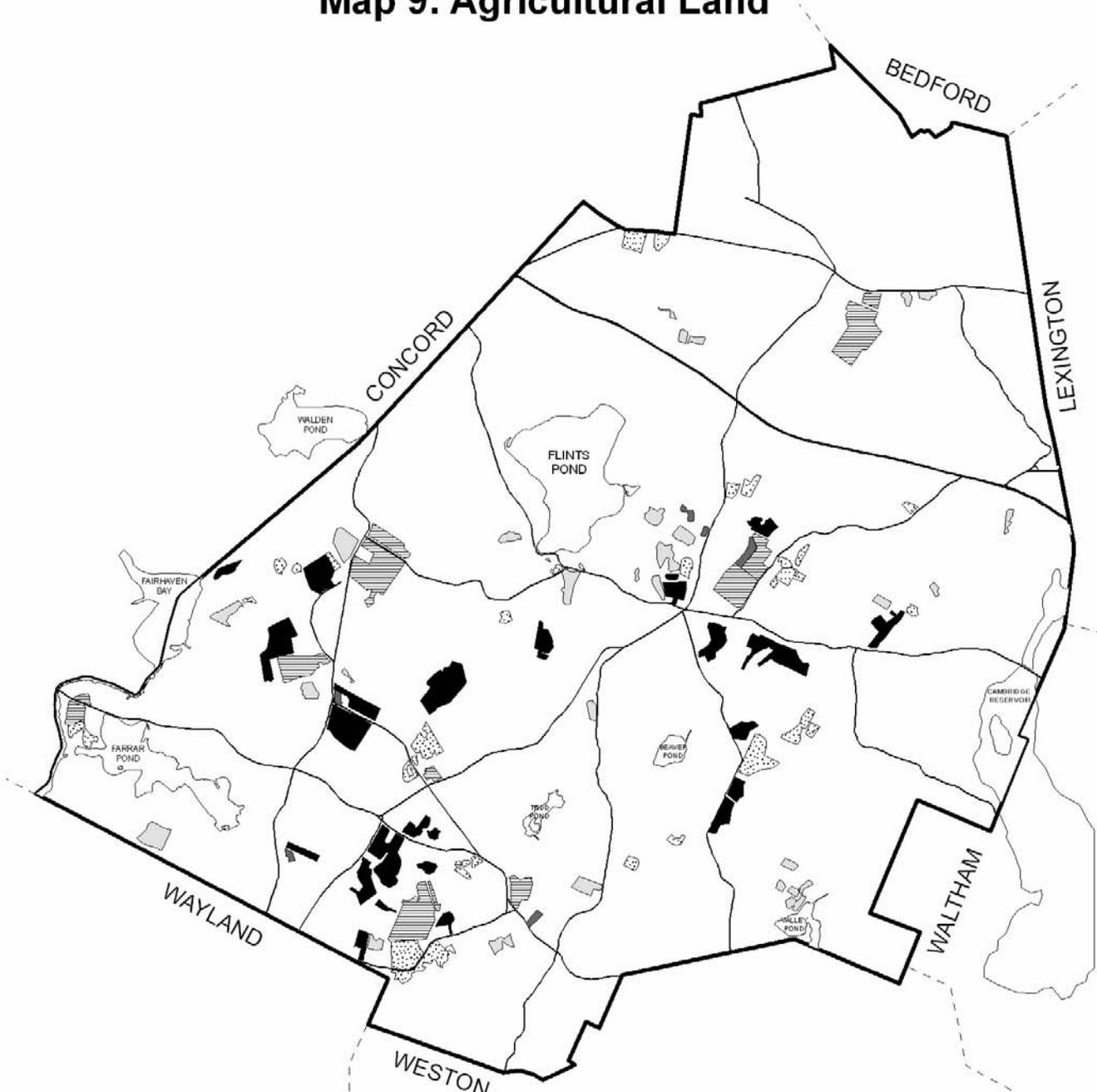
An additional 29 acres of Town-owned conservation land are managed as meadows for wildlife habitat. They may have been in agricultural production in the past, but are no longer suitable because of land characteristics such as steep slopes, rock outcrops, or extremely wet soils.

Historic Agriculture & Recreation off of Old Lexington Rd.

Photo: Polumbaum Collection, Lincoln Public Library. Circa 1960

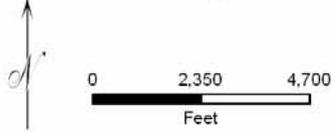


TOWN OF LINCOLN OPEN SPACE AND RECREATION PLAN Map 9: Agricultural Land



PRODUCTION TYPE

- Hayfield
- Horticulture/Viticulture
- Fallow
- Tilled
- Pasture



Maps Created by Angela Seaborg - Conservation Planner
 Data Courtesy Lincoln Land Conservation Trust, MassGIS and MAPC.
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F. Recreation Land

Lincoln has many opportunities for both formal and informal recreation. Formal recreation is centered at the school complex and informal recreation activities take place on conservation land. Over the years, evolution of the recreation facilities has paralleled growth of the school complex located near the center of Town. In this way the development of the recreation facilities has been able to serve two compatible functions: to provide school children with an athletic program and to offer these facilities to residents when they are not in use by the students.

Because of Lincoln's low population density, the clustering of the active recreation facilities at the school complex best serves the community. The six-member Recreation Committee sponsors most of the organized recreation programs, which include a summer day camp, swimming instruction, bicycle tours, races, bird walks, cross-country and downhill skiing instruction, skating programs and winter carnivals.

Lincoln's conservation land is ideally suited to informal recreational activities not requiring extensive facilities, structures or professional organization. These activities are centered around an ever-improving trail system and include hiking, horseback riding, bird watching, nature study, cross-country skiing, skating, kite flying, limited overnight camping and others. In addition to Lincoln residents, many people from the greater Boston area take advantage of Lincoln's open space and trail network. The Conservation Commission and Lincoln Land Conservation Trust host a variety of nature walks, talks and outings on conservation land.

a. Formal Recreation Facilities

Located at the Smith and Brooks school complex are the following recreational facilities:

Playgrounds: The Town maintains four public playgrounds. These playgrounds receive periodic inspection, maintenance and resurfacing to ensure they meet recommended safety standards.

Smith School Gymnasium and Reed Field House: Standard school gymnasiums offer opportunities for basketball, volleyball, gymnastics, etc.

Codman Pool: The Codman Pool was donated to the Town by the Ogden Codman Trust in 1973, and received a complete overhaul in the late 1990's. It is an outdoor pool that is open to the community for use from mid-June through Labor Day each year. Maintenance and operational expenses are offset by user fees.

Athletic Fields: The Town has four athletic fields, including three on the school campus and one behind the Town Offices. The fields provide four soccer-sized fields and three baseball diamonds. These fields are heavily used by the Lincoln Public Schools, as well as various inter-town youth and adult sports leagues. Maintenance expenses are offset by field rental fees and contributions from community-based organized youth sports programs.

Tennis Courts: The Town owns and maintains six tennis courts that are open for use May through October each year. Two courts are lit for evening play. Although not considered a part of the school complex, their proximity to the school facilities and parking areas is an asset. Maintenance and operational expenses are offset by user fees.

Basketball Courts: There are four outdoor basketball courts, of varying heights, for use by all ages. They have asphalt surfaces with weather resistant equipment to enable year round use. They are for “pick up” play only as they do not meet specifications for basketball leagues.

Minuteman Regional Vocational Technical High School: An indoor pool at the school offers certain hours for family swimming during the year.

Walden Pond State Reservation: State-operated park for swimming, boating, hiking and fishing.

Valley Pond: A 50-acre facility located at the Weston-Lincoln line where recreational swimming and swim instruction are provided in one area and boating is allowed in another area. Membership in the Valley Pond Association is offered to the public on a limited basis.

b. Recreational Uses of Lincoln’s Conservation Lands

Hiking, Jogging, Walking, Skiing: Approximately 80 miles of trails are available for residents and visitors to hike, walk, and jog. On these trails, one can traverse the entire Town in any direction.

Bicycling: Permitted on roadside paths and designated trails. The Conservation Commission is currently exploring options for opening additional trails to mountain bikes.

Horseback Riding: A riding ring and an outside jumping course have been rehabilitated on the Upper Browning conservation fields. The Old North Bridge Pony Club runs a riding program and sponsors an annual horse show at the fields. In addition to this site, the majority of the 80 miles of trails on both public and private conservation land are available for horseback riding.

Field Trips and Nature Study: The local elementary and secondary schools conduct field trips and picnics on conservation lands. Students from both Boston and Harvard Universities have used Lincoln’s conservation lands as sites for water studies and the study of wildlife species.

Canoeing and Fishing: The Sudbury River is accessible from the Canoe Landing Parking Lot and Mount Misery conservation area for boating and fishing (though not recommended for eating).



Kayaking on the Sudbury River.
Riverfest 2005.

Photo: Tom Gumbart

G. Wetlands

Wetlands are presented as part of the Open Space Plan because they are protected from development through regulations administered by the Conservation Commission and the Massachusetts Department of Environmental Protection. Lincoln has a local Wetlands Protection Bylaw that provides greater protection than the State Wetlands Protection Act. Together they ensure that wetlands continue to perform their valuable functions for water quality and watershed protection, wildlife habitat, flood control, groundwater recharge and pollution control. These lands have limited access and are not necessarily open to the public.

Approximately 1,226 acres of wetlands (47% of the total wetlands in Town) are also permanently protected through conservation deeds and/or restrictions. When land owned by the City of Cambridge dedicated for watershed protection is added, the total amount of protected wetlands comes to 1,417 acres or 57% of the total wetlands in Town. On certain tight construction sites, the Commission implements an additional land-protection tool by requiring homeowners who wish to perform work within the Buffer Zone Resource Area to place a deed restriction on the remaining portion of undisturbed buffer zone in order to ensure that no future development occurs in that area.



Amphibians. Photos: Lincoln Resident

STEWARDSHIP PROGRAM

The Conservation Commission and Lincoln Land Conservation Trust work cooperatively to manage over 2,000 acres of conservation land. Both organizations are committed to planning and management strategies that protect the integrity of the land and work hard to balance its carrying capacity for recreational use with the ecological, cultural, scenic and historical values of each property.

As stewardship partners, the Town and Land Trust may have developed one of the country's most thorough land-stewardship programs. The program includes baseline inventory, monitoring and conservation planning; land management and ranger presence; wetlands protection; and public education and outreach, most of which are based out of the Conservation Department at the Town Offices. The Conservation Department currently employs a Conservation Director, Conservation Planner, Land Manager and Ranger. The Land Trust employs stewardship and land management interns and has many dedicated volunteers that work in cooperation with landowners, and Town and Land Trust staff.

It is important that residents continue to understand and support the substantial financial and time commitment that is required to keep Lincoln's conservation land healthy and productive. Lincoln's conservation staff know a great deal about the complex systems under their care. They continually strive to apply the best science available to their decision-making process and to balance conflicting land-use goals.

Baseline Inventory and Monitoring Program

In 2000, the Lincoln Land Conservation Trust and Conservation Department initiated a baseline inventory and monitoring program for the Town's conservation land including:

- Acquiring legal records that validate each property's conservation status;
- Developing a database of legal records;
- Gathering baseline documentation including photographs and biological inventories;
- Preparing Baseline Inventory Reports;
- Establishing a monitoring program for all conservation-restricted and conservation-deeded properties; and
- Establishing a procedure for resolving problems found during monitoring.

Over the course of two years, all files and records concerning conservation deeds, restrictions and trail easements were reviewed. This effort involved determining the location on the Assessor's maps of each property described in the legal documents, obtaining recorded copies of all legal documents and plans, and duplicating a complete set of files for both the Conservation Department and Land Trust. In conjunction with reviewing the files, a comprehensive, computerized Conservation Land Database was developed to track legal records including:

- Conservation deeds;
- Conservation restrictions;
- Agricultural preservation restrictions;
- Historic preservation restrictions;
- House restrictions – both deed and conservation restrictions;
- Wetland and Buffer Zone restrictions imposed by the Conservation Commission; and
- Trail easements and licenses.

The Conservation Land Database allows users to view a summary of the information in each legal document, to search for documents based on certain criteria, to determine where the documents are filed in hardcopy form, to view and print scanned copies of legal documents, plans and maps, and to locate abutter information for each conservation property.

From 2003-2007, LLCT hired stewardship interns to document the features of each conservation property. This and previously compiled data make up the Baseline Inventory Reports, which give an accurate portrayal of each property as a basis for future comparison. The Baseline Inventory Reports provide a reference for future annual, on-the-ground monitoring activities.

Stewardship Interns and Conservation Staff continuously perform monitoring activities on Lincoln's conservation land. Annual monitoring allows the Town and Land Trust to find and track encroachments and/or inappropriate use of its conservation land or conservation restriction holdings. It facilitates open dialogue with homeowners that abut conservation land and helps to guide future management decisions. Monitoring begins with a review of the Baseline Inventory Report and previous monitoring reports. It includes a site visit to each property to track the boundaries and document any changes that have occurred through photos and written accounts.

The monitoring program also includes incident tracking and problem resolution. This process begins by evaluating an issue to determine whether it should be classified as an incident or

simply a minor concern. Minor concerns, such as dumping of leaves and yard debris over stone walls onto conservation land, are often resolved through informal discussion with the landowner or abutter. Incidents are handled more formally, with appropriate measures taken to address the specific problem. A common incident in Town involves tree clearing on conservation land *and* in, or adjacent to, wetlands. Both incidents and minor concerns are thoroughly documented in order to track future compliance.

Land Management and Ranger Presence

Active land management and ranger presence are critical components of the stewardship program. Both the Land Trust and Conservation Department perform on-going maintenance of Lincoln's conservation land, including inspection and monitoring of conservation properties and trails, periodic field mowing and clearing, repairing stone walls and clearing new trails. Most of the fieldwork for Town-owned land is carried out by the Land Steward and Ranger. The Ranger also provides a much needed presence on conservation land and is primarily responsible for monitoring and educating the public about rules and regulations that are meant to protect natural resources. Management of land owned by the Land Trust is carried out by volunteers and summer land-management interns. Conservation-restricted land that is privately owned is generally managed by the owner of the land.

The base of field operations for the Conservation Department is the Muster Barn located at the intersection of Sandy Pond and Baker Bridge Roads. Restoration of the Barn in 2006, along with the purchase of a new tractor, has significantly increased land-management productivity.

Both the Land Trust and the Conservation Department track their land management activities in a daily log. In addition the Conservation Department has recently developed a Land Management Database that keeps track of activities by type and location, as well as tracking the hours of use and maintenance of Conservation Department equipment.

One of the primary land-management activities is controlling invasive plants on conservation land, an essential and time-consuming task. Non-native, invasive plants such as Oriental bittersweet, glossy buckthorn, and black swallow-wort are a major threat to the integrity of Lincoln's natural communities. Management efforts are concentrated on sites with new infestations and the work is done by a combination of hand pulling, cutting, mowing and smothering with plastic. Much of this work is done along roadsides to maintain scenic vistas and uncover historic stone walls. Department Staff work in conjunction with the Lincoln Highway Department to maintain roadside paths, roadside right-of-ways and other Town-owned land.

Over the past six years Lincoln has worked in collaboration with the Town of Concord and Great Meadows National Wildlife Refuge to control water chestnut in Fairhaven Bay. This project takes place in late summer as an effort to break the cycle of seed production of this invasive annual plant. While this work has significantly reduced the amount of water chestnut growing in Fairhaven Bay, control of this plant requires an ongoing effort as it continues to move downstream in the Sudbury River.

Conservation staff is also responsible for managing the agricultural licensing program.

Wetlands Administration

The Conservation Commission is responsible for administering both the Massachusetts Wetlands Protection Act and the Lincoln Wetlands Protection Bylaw, an important part of providing stewardship of Lincoln's natural resources. In most cases, the Commission requires that specific conditions be followed by an applicant for construction within 100 feet of wetlands or within 200 feet of any perennial stream. Through regular site inspections the Commission ensures that these conditions are met during construction.

Expansion of existing homes and construction on lots constrained by wetland resources continue to be an area of concern for the Conservation Commission. If work is permitted on such lots, the Commission may require a deed restriction and permanent markers to protect upland buffer zone and wetland resource areas. All wetlands filings are tracked in a database.

Wetlands violations often happen when a property changes hands. To be more proactive on this front, starting in 2006, the Conservation Commission sends an educational packet to new homeowners who have wetlands on their property. This packet includes a personalized GIS-based map with trails, wetlands and surrounding conservation land, language of a conservation or deed restriction if applicable, brochures and a welcome letter.

Public Outreach and Education

The Land Trust, Conservation Commission and staff provide both formal and informal education to the Lincoln community on conservation-related issues. The Conservation Office is a repository of general and Lincoln-specific information and the staff is always willing to help. They are available to meet with private property owners to discuss wetlands, wildlife, plants, land management, permanent protection or other conservation issues.

Other organized offerings include a variety of natural history outings, a series of weekly Wednesday morning walks, conservation coffees, lectures and workshops.

For ten consecutive years, conservation staff have organized Salamander Crossings in which residents and concerned citizens go out during the first warm spring rains to help spotted salamanders, wood frogs and spring peepers safely cross heavily traveled roads on their quest to breed in nearby vernal pools. This activity raises awareness of how humans and wildlife share the land.

As part of the fifth annual RiverFest, in 2006 the Conservation Department held a bike ride to explore the Sudbury-Assabet-Concord River watershed. RiverFest takes place on an early June weekend with hopes of increasing public awareness and raising support for the environment.

The Land Trust and Conservation Department help with a hands-on invasive plant removal program for the fifth grade science classes at the Lincoln Public Schools. While learning about invasive species and having fun outside, the students have restored a significant amount of land along the Muster Field and Town Pool.

COMMUNITY VISION

A. Description of Process

As part of its planning effort, the Open Space Committee developed a Citizen Participation Questionnaire. The survey was conducted in order to understand the open-space related desires, needs and concerns of Lincoln residents. It was distributed to all Lincoln households in January 2007 through a Town-wide mailing, publication in the Lincoln Journal and as a 7th grade class project. Surveys were also distributed with drop boxes at several high-profile locations around Town. Out of 2801 households, 418 surveys were returned giving a 15% return rate. Full survey results can be found in Appendix A.

Based upon the Town-wide survey, Lincoln residents reaffirmed their long-standing dedication to the protection, use and maintenance of conservation land. Forty-eight percent of respondents indicated that they use Lincoln's conservation areas, Town parks and/or recreation facilities three times a week or more. Question 9 indicated that the two highest conservation/recreation priorities over the next five years should be to protect and maintain existing conservation land (33% of 720 responses) and to acquire new lands of conservation interest (24% of all responses). Eighteen percent thought the highest priority should be to improve existing recreational facilities, 15% thought the highest priority should be to acquire and/or build additional recreational facilities and 10% thought the highest priority should be to facilitate the creation and leasing of more agricultural land.

Question 10 of the community survey indicated that residents felt the following items were of high importance to them: protection of drinking water sources, preservation of agricultural land, preservation of biodiversity and natural communities, retaining/restoring the historical character of Lincoln and promoting sustainable building and landscape practices. These priorities substantiate the goals set forth in this Open Space and Recreation Plan.

The Open Space Committee also hosted two public forums, one in January and one in April. Attendants at the first public forum expressed great interest in the preservation of Lincoln's agricultural heritage by highlighting the important role roads play in town. Specific aspects of road preservation include maintaining historic stone walls, considering future implications of utility lines on large canopy trees and maintaining clear views into and out of conservation fields. The Lincoln Garden Club is currently working to classify the major roads in Town and provide guidelines for the care and maintenance of the roads which is consistent with their desired character (i.e. agricultural, natural, etc.). Attendants at the second public forum had an opportunity to review the draft Open Space and Recreation Plan which was made available on the Town website and in the Conservation Office before March Town Meeting.

This Open Space and Recreation Plan has also been informed by feedback received at neighborhood meetings organized by the Land Trust over the past seven years. The purpose of these annual mid-winter meetings, each held in a different Lincoln neighborhood, has been to educate residents about the natural and cultural resources in their area. Residents are invited to raise concerns or suggestions for improving the open space and trail network. A summary of these meetings, together with action items and outcomes is in Appendix B.

Listed below are a few creative ways in which residents could build a sense of community around existing open space. It is only a partial list of ideas, some of which were highlighted in the comments section of the survey, others were suggested by Open Space Committee.

- Build a bench and covered shelter at the train station.
- Build a skate park near the existing tot-lot at the schools.
- Increase Lincoln schools' educational use of conservation land.
- Create destinations for mountain bike & roadside path users.
- Bring team sports groups into conservation land through stewardship.
- Build a ropes course.
- Build a lookout or canopy walk with suspension bridge.
- Build a handicapped accessible tree house.
- Build wildlife viewing blinds or boardwalks.
- Create a scavenger hunt through conservation land.

B. Statement of Open Space and Recreation Goals

Lincoln residents have worked hard to ensure the long-term protection of the Town's natural watershed systems, productive agricultural land, forests, fields, paths and old colonial roads. Since the first piece of conservation land was acquired in 1957, Town citizens, boards, organizations and staff have continually strived to identify and implement creative land-use strategies that balance growth with environmental protection. Over the past 40 years, Lincoln has made great strides toward achieving its conservation goals. Almost 40% of the Town is permanently protected and most residents enjoy using the extensive trail network that borders open fields, wanders through woods and skirts wetland areas. While several critical parcels remain to be protected for conservation and recreation purposes, Lincoln is shifting its efforts to focus on sound stewardship of existing conservation land.

Lincoln continues to celebrate its rich heritage rooted in over 250 years of New England farming traditions. Several of the original farm families and over ten non-profit organizations and private businesses continue to work the land and maintain the rural aesthetic. Many of Lincoln's institutions also uphold local traditions in farming, natural resource protection and sustainable development including: the Walden Woods Project, Farrington Memorial, DeCordova Museum, Historic New England and the Massachusetts Audubon Society.

Through the community survey and public forums, residents expressed their appreciation for the Town's natural habitats, open space and clean drinking water. Lincolnites tend to value simplicity, nature, tradition and history and they enjoy the natural beauty of the New England landscape. They value the extraordinary past and ongoing efforts of land protection groups such as the Rural Land Foundation and the Lincoln Land Conservation Trust. They want to retain the pastoral feel of the Town and limit traffic noise and light pollution. The recurring theme expressed in questionnaires and meetings was to, "keep Lincoln as it is". Residents want to preserve and manage the currently protected open spaces and protect key areas that are at risk for development. The Town's recreational resources are also valued and residents want to maintain, enhance and appropriately expand playing fields, parks, playgrounds, bike paths and trails.

This Open Space and Recreation Plan represents another step in Lincoln's long tradition of accommodating population growth in harmony with its natural resource base. The Plan, together

with its accompanying map, reflects a keen awareness of Lincoln's metropolitan setting and the regional need for food, water and outdoor recreation, as well as for jobs and housing. This Plan reaffirms Lincoln's core agricultural, natural resource and recreational values. It provides a guiding framework that can be used to maintain and enhance the "green infrastructure" of the community and it identifies pressures and opportunities that may influence the future character of Lincoln.

The primary goals of this Plan include:

- Protecting Lincoln's natural, agricultural and recreational resources;
- Promoting active stewardship of existing conservation and agricultural land;
- Maximizing recreational opportunities by maintaining current facilities and exploring new facilities to meet evolving community needs;
- Fostering coordination, education and outreach locally and regionally; and
- Addressing effects of development pressures on new or existing conservation land.

ANALYSIS OF NEEDS

A. Summary of Resource Protection Needs - Lands of Conservation Interest

While Lincoln is no stranger to acquiring lands of conservation interest, it must continue to use creative strategies to permanently protect the remaining lands of interest. Lincoln's conservation groups' efforts should remain supported as they continue to work towards current land protection and stewardship goals. The Open Space Map identifies critical parcels or corridors that, if protected, will play a key role in fulfilling the objectives of the Open Space and Recreation Plan. Appendix C lists specific properties of conservation interest and their conservation value.

The Open Space Map contains lands of conservation interest previously identified on Lincoln's Open Space Map of 1997 as well as properties added during this planning process by the Open Space Committee, Conservation Commission, Recreation Committee, Disabilities Commission, Lincoln Land Conservation Trust, Rural Land Foundation, City of Cambridge Water Department and residents based on intimate knowledge of critical resources and/or trail connections. Some of the identified parcels may be of interest for other uses by the Town. Others may only have a portion that is of interest, such as for a trail connection.

In order to permanently protect and expand the trail network, existing trails that are not protected by permanent easements and corridors for new trail connections must be identified. Acquisition of permanent trail easements for non-protected trails should be secured.

The following outline, created by the Lincoln Land Conservation Trust, serves as a guide for reviewing a property's suitability for inclusion in the Open Space and Recreation Plan. These considerations neither ensure nor limit the decision to conserve a property. Boards, organizations and individuals should retain discretion over the acquisition process and may choose to deviate from these guidelines after careful review of a specific proposal.

Factors that Enhance the Value of Lands of Conservation Interest

- Expands and enhances existing or proposed public and private holdings.
- Links significant public and/or private open space/natural areas.
- Preserves or buffers natural areas containing:
 - plant/animal species of unusual merit or special concern,
 - representative local plant and animal communities,
 - valuable wildlife habitat,
 - wetlands, streams, drinking water supply,
 - migration corridors.
- Contains important historical, geological, archeological or local landmark features.
- Protects scenic vistas or view corridors.
- Permits existing agricultural practices to continue on land that would otherwise succumb to development pressures.
- Provides access to or is itself a large, contiguous area for recreation or community.
- Offers educational opportunities to the public.
- Provides access or opportunities to people with disabilities.
- Does not adversely affect the organization's financial and land management capabilities.
- Provides concurrent gift for endowment of property stewardship.
- Protects wetlands and watershed as storage areas and protection for public water supplies.

Factors that Detract from the Value of Lands of Conservation Interest

- Few conservation/natural resource values remain intact on the property.
- The presence of noxious weeds, hazardous materials, contaminants or refuse requiring containment, control or disposal.
- Small size and conflicting adjacent land use.
- Development of adjacent properties that would diminish existing conservation values.
- Difficult enforcement or management issues including:
 - dangers from land forms,
 - difficult access to land,
 - multiple ownership tangles,
 - restrictive deed provisions,
 - potentially burdensome maintenance issues.
- Ethical or public image problems for the grantor or organization grantee associated with accepting the property.

In addition, land-use boards including the Conservation Commission, Planning Board, Zoning Board of Appeals, Board of Health and Lincoln Historical Commission need to maintain vigilance and communication in administering the Town Bylaws created to protect Lincoln's natural resources. This will be important as the future will bring increasing pressure to develop remaining, and often marginally developable land.

B. Summary of Agricultural Needs

Lincoln's famed "rural character" is the result of conscious efforts among residents and conservation groups to protect large, contiguous farms and to maintain their historic agricultural use. While it is quite remarkable that Lincoln has only lost around 100 acres of productive agricultural land since 1976, pressures on Lincoln's farming tradition remain.

It is debatable whether or not the number of interested and capable farmers in the region is declining. There is no debate, however, that farmers generally can not afford to support a family on or near a Lincoln farm because of exorbitant land values. Thus, along with identifying and protecting lands of agricultural interest, the Town must take action to support farmers who know how to care for and use the land. Lincoln approved the establishment of an Agricultural Commission in 2006. Once the Commission is formed it will be able to dedicate itself to understanding the needs of the farming community and may want to work with the Housing Commission to explore opportunities for creating affordable housing near leased agricultural lands. The Agricultural Commission should also pursue a Right-to-Farm Bylaw for Lincoln.

Monitoring Existing Farm Leases

Uphold the monitoring program for farm licenses which will include a yearly visit to each farm, a process for reviewing the required farm reports and plans and discussions with farmers to help support them in good stewardship of the land.

Saving Agricultural Sites from Future Development

As development pressures rise and prime agricultural lands diminish, Lincoln's remaining private farmland becomes of conservation interest. Lincoln needs to be financially prepared to quickly respond to acquisition opportunities. Acquiring these lands and keeping them in productive agricultural use will help to ensure that Lincoln's agricultural heritage is preserved. Small homes near leased agricultural fields are also of interest as affordable housing for farmers. The Agricultural Subcommittee of the Conservation Commission is currently exploring different lease or license periods with yearly site visits and cumulative reviews in order to give farmers a sense that they can work on and invest in their farms with a longer-term vision.

Developing New Regulations

While many of the licensed agricultural operations use ecologically responsible farming practices, some rely more heavily on chemical fertilizers, herbicides and pesticides. As the Town and LLCT look more closely at their responsibility as stewards of the land, new regulations that promote ecologically-responsible farming practices should be adopted. Given current understanding of the dangers of certain chemical herbicides and pesticides, the Town should consider use of organic and soil-improving farming methods on Town agricultural land and it should be a Town-wide goal to build soil health over time.

Expanding Agriculture Opportunities

It is appropriate at this time to explore mechanisms whereby new farmers might have the opportunity to farm on new or currently farmed conservation land. Because of the interest in promoting local, responsible farms and increasing the diversity of farming opportunities in Lincoln, it may be appropriate to lease some fields that currently lay fallow. The Town continues to support community directed activities such as Community Supported Agriculture.

C. Summary of Community Needs – Lands of Recreation Interest

Lincoln's extensive open-space network allows for a wide variety of recreational opportunities for citizens of all ages and interests, and contributes significantly to the community's quality of life. Conservation and recreation land in Lincoln support field-based, water-based and nature-based activities and the extensive trail network offers a wide variety of activities including walking, hiking, bicycling, horse-back riding, cross-country skiing, nature study and wildlife observation. Lincoln assesses its community demand for recreational activities by extrapolating from the Statewide Comprehensive Outdoor Recreation Plan (SCORP), evaluating the level of use of existing programs, resources and facilities, by conducting surveys and public forums on specific topics and by maintaining close communication among town boards and organizations.

The most recent SCORP report, *Massachusetts Outdoors 2001*, assessed statewide and regional demands for additional recreational facilities and activities. Statewide, the highest perceived needs among respondents were for swimming, walking, road biking, playgrounds, tennis, golf, hiking and mountain biking. Lincoln, as part of the northeast region, had more specific needs for road bicycling, playground activities, swimming and walking.

Of approximately 450 total responses to the 2007 Community Survey (see Appendix A), all existing recreation and conservation-land facilities in Lincoln were rated 'adequate' except for roadside paths, which had a higher response of 'need more'. Looking beyond the 'adequate' responses, 10 out of 14 facilities had 'need more' as the next highest rating. While roadside paths had the highest response for 'need more', conservation land facilities including canoe access, natural areas, mountain bike trails, conservation land parking, and handicapped accessible trails had a higher percentage of 'need more' responses than field-based recreation facilities.

Athletic Fields

While the current acreage of athletics fields is sufficient to meet current demand, there is a greater need to allow athletics fields to "rest" and to let turf reestablish itself. This, combined with an increase in population and a potential school building project, point to a time when existing field space will no longer be adequate and additional fields will be needed. The addition of a synthetic turf field, with its many environmental and budgetary benefits (i.e. does not require water, mowing, any turf applications; can withstand a tremendous amount of wear and tear; will allow other natural fields to "rest") should be considered by an Athletic Field Subcommittee. The Subcommittee should be made up of members of the Recreation Committee, a liaison from the Conservation Commission and representatives from various user groups including the School Committee, soccer, baseball, lacrosse and other sport representatives. The Subcommittee should discuss individual program needs, field space requirements, on going field maintenance issues and periodically review town maps to determine potential sites for future athletic fields.

Building Community through Open Space

Several Open Space Committee discussions focused on how Lincoln can use its wealth of conservation land to build a greater sense of community. Extending the network of roadside paths is one way of building community as it facilitates human-propelled transportation. More bike path networks including roadside paths and opening additional trails to bicycles will connect different parts of Town. This will allow children to get around on their own and to visit

friends and adults can bike the trails for exercise. Lincoln must continue to encourage and acquire trail easements in order to improve connectivity, while remaining cognizant of increased use and potentially conflicting user groups on the trails. Other ideas for building community through open space include orienteering courses, scavenger hunts, wildlife viewing platforms or a handicapped accessible tree house and re-opening views once seen from Mt. Misery.

Pierce Park is a 30-acre parcel of land made up of woodlands, rolling lawns and a fishing pond. It is home to the John H. Pierce House, an elegant Georgian mansion built in 1900 by John H. Pierce (1830-1910). In 1964 the Pierce family left the property to the town of Lincoln. Currently Pierce Park hosts organized functions such as weddings, banquets, meetings and various community celebrations, as well as informal leisure opportunities. Opportunities for sponsoring recreational based activities out of the Pierce House should be explored by the Town.

Maintenance and Improvement of Existing Recreation Facilities

In addition to Pierce Park, roadside paths and the trail network, the community benefits from formal recreational opportunities provided by athletic fields, tennis courts, Town pool, playgrounds, basketball courts and gymnasiums. These facilities, with the exception of the gymnasiums, are maintained and/or operated by the Recreation Department using Town appropriated funds. It is important that these facilities continue to receive appropriations for repair and maintenance. Options for rehabilitating existing facilities for new uses should be explored prior to constructing new buildings or facilities.

Lands of Recreation Interest

Lincoln needs to identify lands that would serve a variety of recreational needs now and in the future. Improved trail connections, additional bike paths, canoe access points and new athletic fields have been mentioned previously in this report. A community center, skate park, neighborhood parks or basketball courts are just a few examples of new facilities that would require additional land. The Open Space Map contains lands of recreation interest identified through this planning process by the Open Space Committee, Recreation Committee and residents based on detailed knowledge of specific properties. The following outline serves as a guide for reviewing a property's suitability for inclusion in the Open Space and Recreation Plan as land of recreation interest. These considerations neither ensure nor limit involvement in purchasing the property for recreational use. Boards, organizations and individuals should retain discretion over the acquisition process and may choose to deviate from these guidelines after careful review of a specific proposal.

Factors that Enhance the Value of Lands of Recreation Interest

- Land acreage is suitable to meet a goal in the Open Space and Recreation Plan.
- Land is already owned by the Town, thus improving the cost-effectiveness of the project.
- Land improves the recreational balance in Town (facilities in north and south Lincoln).
- Land has appropriate access for intended use. Athletic fields, community buildings, canoe access, playgrounds, etc. would require vehicle access and parking. Trail connections and bike paths would require appropriate pedestrian access.
- Land requires limited preparation to achieve intended use. Minimal leveling and/or woodland clearing required.

- Land can support multiple uses, allowing for maximum use.
- Use would not have unnecessary adverse vehicle or pedestrian traffic implications.
- Use would not have unnecessary adverse impact on neighbors.
- Land has been previously used for active recreation.
- Land has adequate cellular service in the event of emergency.
- Land would allow for adequate bathroom facilities.
- Project allows for an extended playing season.

Factors that Detract from the Value of Lands of Recreation Interest

- Land conflicts with stated conservation goals.
- Recreational use would have a negative impact on neighbors.
- Land has limited or unsafe vehicle or pedestrian access.
- Land acreage does not allow for versatility of use.
- Land is too inaccessible to maintain appropriately.
- Project costs are cost-prohibitive.
- Intended use conflicts with wetland, watershed protection

D . Needs for persons with disabilities

Please refer to Appendix D. for Lincoln’s ADA self-evaluation information for handicap accessibility. The self evaluation provides an outline of how accessible the Town’s conservation and recreation properties and programs are to people with disabilities. Shortcomings are identified and the importance of making more comfortable and safer properties, trails and programs for handicapped residents and visitors is highlighted. Also included is a letter explaining the Town’s administrative and employment practices.

People with disabilities have access to a wide range of recreational opportunities in Lincoln. The primary programming spaces for the Recreation Department include the Hartwell Pods, Brooks Gym, Smith Gym, Bemis Hall, Carroll School Gym, athletic fields and tennis courts, all of which are ADA compliant and have handicap parking nearby. In 2006 the Recreation Department installed a wheelchair lift in the Codman pool and has made recommendations to add a handicap parking spot near the pool driveway.

Accessibility of Trails to People with Disabilities

The Conservation and Disabilities Commissions should continue to work together to evaluate existing and potential ADA trails based upon the accessibility standards set forth in the *Guidelines for Outdoor Developed Areas*, published by the Architectural and Transportation Barriers Compliance Board in June 2007 and the *Trail Accessibility Guidelines* published by the USDA Forest Service in May 2005. The only existing trail in Lincoln which meets the Guidelines’ standards is the Battle Road Trail in the Minute Man National Historical Park. However, many of Lincoln’s roadside paths are purportedly accessible to people with disabilities and the Conservation Commission hopes to work with the City of Cambridge to build a handicapped accessible trail into the recently protected Harrington conservation land. They have also identified a potential ADA parking space and trail in the Mt. Misery conservation area.

E. Stewardship Needs

As Lincoln shifts its perspective from land acquisition to stewardship it needs to ensure that adequate policies, resources and staff are available to engage in planning and land management practices that protect natural resources and balance recreational and other uses of the land.

Baseline Inventory and Monitoring Program

Land Trust and Conservation Department staff should continue to develop the baseline inventory and monitoring program for new and existing conservation properties. Biological inventory and habitat evaluations should be conducted for each baseline property in preparation for completing specific property management plans. To protect Lincoln's extensive trail network, it is necessary to identify existing trails that are not protected or where public access is permitted by license rather than by permanent easement. Further research is needed to gather additional legal documentation regarding trail-protection status.

Land Management Plans

Land Trust and Conservation Department staff should review existing land-management plans and continue to develop new general land management plans, such as forest, wetland and field management plans, including strategies for monitoring the effectiveness of specific management practices. These plans should be guides for property management plans that outline specific objectives and actions for specific conservation properties. Best land management practices should be encouraged, including variation in agricultural use, farming practices that are compatible with natural resource and wildlife protection, enhancing the diversity of flora and fauna in age density distribution and species and carefully studying and executing forest management plans. In some cases, property management plans might include recommendations for sustainable woodlot cutting, pond dredging or changing the current use of a property. All management plans should articulate goals and objectives that are in line with this Open Space and Recreation Plan.

Land Management Needs

Conservation and Land Trust staff should continue to: 1) identify critical habitat areas and take all practicable actions to sustain their physical and biological conditions; 2) develop and implement plans, wherever resources permit, to control non-native, invasive species with special attention to (a) new infestations that might be controlled through prompt action and (b) occurrences where wildlife, agriculture or human activities may be adversely affected by such vegetation and 3) carefully research impacts, risks, and alternative actions when problems arise with certain species or wildlife populations which may be a public safety concern. After public discussion with all stakeholders, land managers should enact management decisions that balance the interests of the wildlife, people and land.

Conservation staff should continue to focus land management efforts on clearing vegetation from stone walls in order to open scenic vistas into and out of conservation land. Historic roadsides should be maintained to enhance views into agricultural land and other roadsides should be maintained to keep their desired character, and to keep them free from invasive species to the extent possible. The Conservation Commission, Planning Board, Department of Public Works,

Tree Warden and others should make a coordinated effort to improve the visual quality of public roadways.

Consideration should be given to restoring distant views that were once available from the top of Mt. Misery. In addition to views, adherence to the Dark Skies Initiative and maintaining a quiet experience for users of the trail network should be promoted. In the past, intensive recreational use of certain conservation properties has led to the limitation of certain activities, including mountain biking and dog walking. In such situations, management practices should be developed to protect the ecological integrity of the land while also permitting a sustainable level of use. Such limitations should be reviewed periodically to ensure that the limitations remain appropriate and necessary.

Wetlands Administration

To adequately protect Lincoln's critical natural resources, it is imperative that the Conservation Commission remain vigilant about administering the Wetlands Protection Act, the Rivers Protection Act and the Lincoln Wetlands Protection Bylaw. The Commission should continually evaluate the effectiveness of its Bylaw and Regulations and propose changes to the Town when necessary. Examples of current challenges in wetlands administration include the conflicting desire to keep local ponds open while also protecting wetland resource values, and the increased pressure to develop marginal land including wetlands and steep slopes.

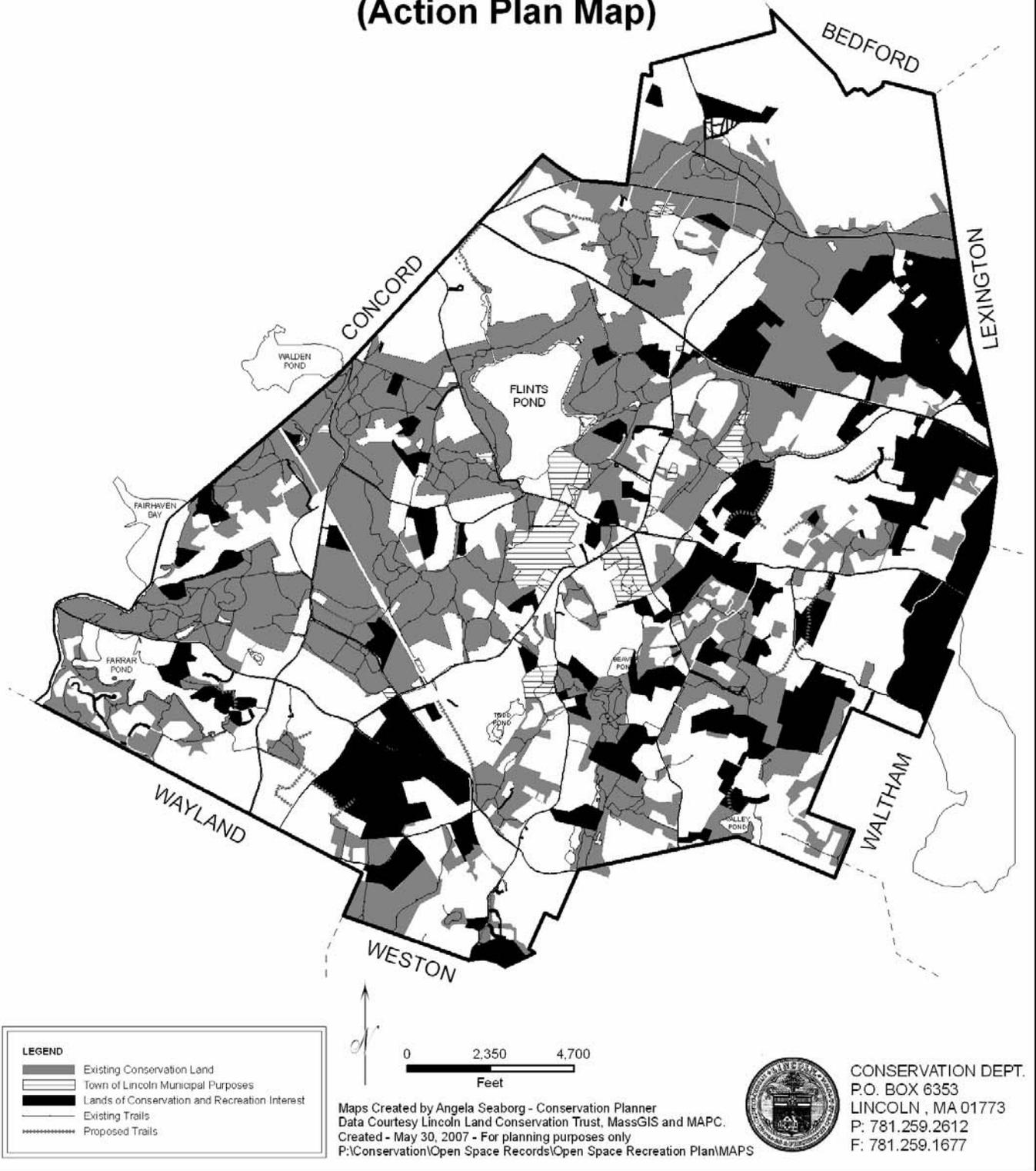
Public Outreach and Education

To meet Lincoln's open space and recreation goals, it is important to continue coordination, education and outreach efforts within Town government, with local and regional organizations and with the general public. Conservation staff should continue to develop the GIS database, provide educational brochures and conservation-related information, hold information sessions, walk series and work days and sponsor educational events.



TOWN OF LINCOLN OPEN SPACE AND RECREATION PLAN

Map 10: Lands of Conservation and Recreation Interest (Action Plan Map)



GOALS AND OBJECTIVES

The focus of this plan is to re-affirm Lincoln's core agricultural, natural resource and recreational values, to provide a guiding framework that can be used to maintain and enhance the "green infrastructure" of the community and to identify pressures and opportunities that may influence the future character of Lincoln.

Goal: Preserve Lincoln's natural resource, agricultural and recreational values.

Objectives:

- A. Protect existing conservation land and open space from conversion.
- B. Protect lands of conservation and recreation interest including:
 - high-value water resources and/or natural communities (plant & animal),
 - high-value scenic vistas into existing agricultural land from roads and trails,
 - appropriate roadside character,
 - chapter 61 and 61A lands,
 - privately-owned farms in agricultural use,
 - visual corridors, buffers and scenic vistas along trails and fields or meadows,
 - outstanding natural features (geologic, topographic, hydrologic),
 - appropriate recreational facilities.
- C. Explore opportunities for maintaining and expanding agriculture in Lincoln.

Goal: Promote active stewardship of existing agriculture and conservation land.

Objectives:

- A. Maintain baseline inventory and monitoring program.
- B. Encourage best land management practices including:
 - farming practices compatible with natural resource and recreation values,
 - ecologically sound woodlot management,
 - scientifically sound management of existing open farm ponds,
- C. Acquire funds and resources for long-term land stewardship and scientific study.

Goal: Foster recreational opportunities on recreational and conservation land.

Objectives:

- A. Encourage multiple and diverse uses on recreation and conservation land.
- B. Evaluate maintenance needs and expansion opportunities of roadside paths and trails.
- C. Provide new facilities and maintain current facilities as appropriate.

Goal: Foster coordination, education and outreach regionally and locally.

Objectives:

- A. Coordinate with boards and organizations to promote current goals.
- B. Partner with regional organizations to promote conservation and recreation goals.
- C. Foster a long-term stewardship ethic among all property owners in Town including:
 - water conservation measures,
 - ecological landscaping practices,
 - energy and resource conservation,
- D. Provide opportunities for community-building and individualized recreation.
- E. Continue to develop and retain professional and highly competent staff.

Goals and Objectives from Lincoln's 1977 Open Space Plan (X's indicate completion).

- Protect the Warner, Snider and Phillips Academy (formerly Sumner Smith) properties.
- Assist land owners interested in preserving their open space.
- Publish an advisory pamphlet on Conservation Restrictions.
- Establish liaison with the Board of Assessors to encourage and assist landowners qualifying for agricultural assessment under Chapter 61A program.
- Expand agricultural utilization program.
- Cooperate with the Commonwealth and the Walden Pond Restoration Committee in the re-routing of Route 126.
- Cooperate in Cambridge Reservoir watershed protection efforts.
- Participate actively in our regional solid waste management program.
- Cooperate with the SuAsCo and Charles River Watershed Associations and the Metropolitan Area Planning Council in the Federal Waste Water Management Program.
- Cooperate with Minute Man National Historical Park as it becomes a major tourist attraction.
- Encourage increased organized summer outdoor programs utilizing conservation lands.
- Design and construct small parking areas to provide access to conservation lands.
- Update Lincoln's Open Space Plan.
- Present to March Town Meeting, in conjunction with the Board of Water Commissioners, a proposal for a study of protection of the Tower Road Well watershed area and obtain necessary funding authorization for the study.
- Begin study of Chapter 61A&B assessment programs as they apply to landowners in Lincoln.
- Notify owners of land qualifying for Chapter 61A&B assessment program, and assist in applications.
- Support and work with the Planning Board on their Neighborhood Lot Open Space Program.
- Study parking problem created by out-of-town users of conservation lands.
- Devise a clear working system of ensuring the privacy of landowners adjacent to conservation land and trails, and upgrade existing trails which have become overgrown or in need of re-routing.
- Begin study of possible forest management program to be undertaken on selected conservation land.
- Along with the School Committee and Planning Board study possibility of leasing part of the Smith School complex for recreational oriented activities related to use of conservation land.
- Study demand for additional trails and new trails on newly acquired lands and construct determined trails.
- Continue study of various herbicides and pesticides and their environmental effects to determine those best suited for use on Conservation Commission managed agricultural lands.

FIVE YEAR ACTION PLAN

The five-year action plan is an outline of specific actions to be achieved by the townspeople, the Conservation Commission and all involved Town boards in order to accomplish the goals articulated in this 2008 Open Space and Recreation Plan. Although it serves as a blueprint for several activities of the Conservation Commission, the action plan acquaints all Town boards and residents with the goals of the Open Space Committee as articulated during the open space planning process.

Funding sources vary for each goal, objective and action item and should be determined within the suggested timeline of each task and upon detailed analysis of available resources and funding opportunities. Funding sources include: Operating and Capital Budget Expenses, Community Preservation Act, Wetlands Protection Fund, private party donations and local, state and federal grants.



Baker Bridge Road. Photo: David Webster, courtesy Lincoln Public Library

Goal: Preserve Lincoln's agricultural, recreational and natural resource values.

- **Protect existing conservation land and open space from conversion.**

Actions	Responsible Party	Timeline
Place back-up restrictions on deeded cons. land.	Conservation land owner	Ongoing
Provide injunctive relief clause on new CR's.	Restriction holder	Ongoing
Maintain compliance with bylaws and regulations.	Land-use boards	Ongoing
Create new bylaws or regulations as appropriate.	Land-use boards	If necessary
Secure deed restrictions to protect wetland buffer zones.	ConCom	Ongoing

- **Protect lands of conservation and recreation interest including: private farms, Chapter 61 lands, view corridors, buffers and scenic vistas, roadsides, water resources and/or natural communities, outstanding natural features and appropriate fields for recreation.**

Actions	Responsible Party	Timeline
Distribute OSRP to relevant boards & organizations.	ConCom	2007
Identify and protect critical buffers to new development	ConCom, Planning	Ongoing
Work with Drumlin Farm, Farrington Memorial, Walden Woods, Historic New England and Cambridge to place conservation restrictions on unrestricted land.	ConCom, LLCT, RLF	Ongoing
Work with land owners to protect identified lands of conservation and/or recreation interest.	ConCom, LLCT, RLF	Ongoing
Determine priorities for land with multiple interests.	All boards	2008-2010
Obtain CPA funds to purchase lands of interest.	ConCom, RecCom	Ongoing
Maintain open communication among conservation organizations and continuously explore funding, land acquisition or conservation/development opportunities.	ConCom, LLCT, RLF	2007 Ongoing
Coordinate with local and regional conservation organizations to secure funding, acquire lands of interest and make trail connections.	Adjacent towns, Local and Regional Organizations	2008-2010
Consider providing incentives to farmers to place conservation or agricultural preservation restrictions on private, non-protected agricultural land.	ConCom, AgCom, LLCT	Ongoing
Develop guidelines for restoring rural roadside character.	Garden Club, Planning	2007-2008
Encourage developers to submit conservation development plans.	ZBA, Planning, ConCom	Ongoing
Require larger buffer setbacks for new development abutting existing conservation land	ZBA, Planning, ConCom	Ongoing
Review criteria for evaluating lands of interest.	ConCom, LLCT, RLF	2010

- **Explore opportunities for maintaining and expanding agriculture in Lincoln.**

Actions	Responsible Party	Timeline
Form Agricultural Commission (AgCom).	BOS	2007
Determine suitability for converting fallow fields on existing conservation land into agricultural production.	ConCom, AgCom	2007
Obtain CPA funds to restore fallow fields.	ConCom, AgCom	2008
Find ways to support new farmers who wish to license new or existing conservation land.	ConCom, AgCom	Ongoing
Explore opportunities for securing affordable housing on or near leased fields on existing conservation land.	BOS, AgCom, HousingCom	Ongoing
Continue agricultural licensing program.	ConCom, AgCom	Ongoing
Town meeting adoption of a right-to-farm bylaw.	Town Meeting	2008

Goal: Promote active stewardship of existing agriculture and conservation land.

- **Maintain Property Baseline Inventory and Monitoring Program.**

Actions	Responsible Party	Timeline
Dedicate funds and staff to maintain program.	LLCT, ConCom	Annually
Acquire legal records for new conservation acquisitions.	LLCT, ConCom, Volunteers	Ongoing
Acquire legal records for existing & new trail easements.	LLCT, ConCom, Volunteers	Ongoing
Add to and build Conservation Land Database.	LLCT, ConCom	Ongoing
Prepare Baseline Inventory Reports for new acquisitions.	LLCT, ConCom	Ongoing
Conduct biological inventories on all baseline properties.	LLCT, ConCom, Volunteers	Ongoing
Monitor all conservation properties annually.	LLCT, ConCom	Ongoing
Resolve encroachment incidents when found.	LLCT, ConCom	Ongoing
Establish landowner CR contact program.	LLCT, ConCom	2007
Evaluate effectiveness of stewardship program.	LLCT, ConCom	2010
Establish policies and processes for violations of CR's and conservation land.	LLCT, ConCom	2007

- **Encourage best land management practices including: farming practices compatible with natural resource & recreation values, ecologically sound woodlot management, scientifically sound management of existing open farm ponds.**

Actions	Responsible Party	Timeline
Review/revise existing field and forest mgmt. plans.	LLCT, ConCom, AgCom	2008
Establish best management strategies for specific topics like farm ponds, hemlock stands, and deer/deer ticks.	LLCT, ConCom, AgCom	Ongoing
Prepare a town-wide management map identifying each conservation area's resource values and strategies to manage for such (i.e. biodiversity, wildlife, recreation, agriculture, etc.).	ConCom	2008
Create a matrix to evaluate each properties best use.	ConCom	2008
Create individual property management plans.	LLCT, ConCom	2009
Collect and disseminate current scientific research on sound management for all types of conservation land.	LLCT, ConCom	Ongoing
Explore burning as a management tool.	ConCom, AgCom	2008
Explore opportunities to use CPA funds for management	ConCom	2008
Establish guidelines for the use of chemical pesticides & fertilizers on Town land.	ConCom, AgCom	2007
Use monitoring data to inform management decisions.	LLCT, ConCom	Ongoing
Monitor compliance with Ag. licenses annually.	ConCom, AgCom	Ongoing
Use recreation field maintenance practices compatible with resource protection goals.	RecCom	Ongoing
Evaluate effectiveness of current management practices.	ConCom, LLCT	2010

- **Acquire funds and resources for long-term land stewardship.**

Actions	Responsible Party	Timeline
Find outside grant opportunities for stewardship.	LLCT, ConCom, RLF	Ongoing
Coordinate with regional conservation organizations to secure funding and complete projects between cross-jurisdictional areas and/or town boundaries.	MMNHP, Walden Pond, Walden Woods, Mass Audubon, Cambridge Water	Ongoing
Institute a stewardship fee for newly acquired CR's.	LLCT, ConCom, RLF	Ongoing
Set up an independent stewardship fund.	LLCT, ConCom, RLF	Ongoing
Acquire funds to research how existing conservation lands were funded (grant, donation, etc.)	LLCT, ConCom	Ongoing

Goal: Foster recreational opportunities on recreational and conservation land

- **Encourage multiple and diverse uses on recreation and conservation land.**

Actions	Responsible Party	Timeline
Address, as appropriate, overuse of conservation land.	LLCT, ConCom	Ongoing
Identify, then provide opportunities for universal access to recreational lands and facilities.	LLCT, ConCom, Disabilities Commission	Ongoing
Maintain trails suitable for multiple rec. opportunities.	LLCT, ConCom	Ongoing
Preserve the natural atmosphere for people using trails.	LLCT, ConCom	Ongoing
Ensure that events and facilities are accessible to people with disabilities.	RecCom, Disabilities Commission	Ongoing
Explore opportunities for providing raised garden beds at Codman Community Farms' Gardens.	Codman Community Farms, ConCom, BOS	2009

- **Evaluate maintenance needs and expansion opportunities of roadside paths and trails.**

Actions	Responsible Party	Timeline
Acquire trail easements where no legal protection exists.	LLCT, ConCom	Ongoing
Include trail maintenance needs in monitoring reports.	LLCT, ConCom	Ongoing
Respond to citizen ideas for roadside paths.	DPW, ConCom	Ongoing
Identify & protect unprotected existing trails.	LLCT, ConCom	Ongoing
Ensure pedestrian crossing with Rte. 2 expansion project	ConCom, Planning	2007
Work with highway department, residents and conservation organizations to locate & construct new roadside paths & trails.	LLCT, ConCom, BOS, DPW, Planning, Regional conservation organizations	2009

- **Provide new recreation facilities and maintain current facilities as appropriate.**

Actions	Responsible Party	Timeline
Establish an Athletic Field Subcommittee to periodically review town maps to determine potential sites for future athletic fields and/or recreation facilities.	RecCom, ConCom, Disabilities Commission	2008
Establish a Subcommittee of the Disabilities Commission to periodically review ADA status of conservation & recreation facilities.	RecCom, ConCom, Disabilities Commission	2008
Evaluate effectiveness, condition and use of facilities.	RecCom, ConCom	Ongoing
Consider re-allocating recreation uses on existing fields.	RecCom	As necessary
Identify need for new recreation facilities or activities.	RecCom, ConCom	Ongoing
Research legal status of Tanner's Brook rec. area	RecCom	If necessary
Explore plans for new facilities.	Schools, Public Safety	Ongoing
Maintain water quality in existing swimming ponds.	ConCom, Residents	Ongoing
Stay current on best management practices to balance healthy pond ecosystems with water-based recreation.	ConCom, Residents, Pond Associations	Ongoing

Goal: Foster coordination, education and outreach regionally and locally.

- **Coordinate with boards and organizations to promote current goals.**

Actions	Responsible Party	Timeline
Distribute Executive Action Plan to all boards and orgs.	Open Space Committee	2007
Identify individuals within the boards to spearhead efforts to complete action items.	Respective Boards	2008

- **Partner with regional organizations to promote conservation and recreation goals.**

Actions	Responsible Party	Timeline
Work with regional organizations to build new trails.	ConCom, LLCT	2008
Identify individual contacts and allies.	All boards & organizations	Ongoing
Participate in area outreach activities.	All boards & organizations	Ongoing
Re-evaluate Lincoln role in the metrowest region as trends and pressures change	All boards & organizations	2010

- **Foster a long-term stewardship ethic among all property owners in Town including: water conservation measures, ecological landscaping practices, and energy and resource conservation.**

Actions	Responsible Party	Timeline
Develop strict guidelines for the best maintenance practices of all public buildings and grounds including limited or no use of chemical pesticides & fertilizers.	Selectmen, ConCom, RecCom, BOH, DPW	Ongoing
Continue street sweeping and catch basin cleaning	Highway Dept	Ongoing
Increase public outreach regarding ecological stewardship and development practices.	Water Dept, ConCom, LLCT, Planning, DPW, Garden Club	Ongoing
Endeavor to become a leading community for conservation innovation and coordination.	Selectmen, ConCom	Ongoing
Investigate state, national and global initiatives and educate about Dark Skies and Green Cities Initiatives.	LLCT, ConCom, Selectmen	Ongoing
Prepare outreach materials for new residents about Lincoln's ethics and recommendations for resource conservation and land stewardship.	ConCom	Ongoing
Develop lawn-irrigation and construction-site bylaws that define and require best management practices.	Selectmen, Planning, ConCom, Water Dept.	Ongoing
Establish public-private partnerships to complete town-wide stewardship projects.	All boards & organizations	Ongoing

- **Provide opportunities for community-building and individualized recreation.**

Actions	Responsible Party	Timeline
Sponsor public activities year-round.	LLCT, ConCom, RecCom	Ongoing
Create outings that appeal to all age groups.	LLCT, ConCom, RecCom	Ongoing
Sponsor multi-media presentations.	LLCT, ConCom, RecCom	Ongoing
Use the internet for networking opportunities.	LLCT, ConCom, RecCom	Ongoing
Sponsor events to build community through open space, like Town-wide scavenger hunts.	LLCT, ConCom, RecCom	Ongoing
Designate areas for a shelter, picnic areas or fire ring.	ConCom, Citizens	Ongoing
Work with school or special-interest groups to rebuild boardwalks and wildlife platforms throughout Town.	Citizens, LLCT, ConCom, RecCom, Garden Club	Ongoing

- **Continue to develop and retain professional and highly competent staff.**

Actions	Responsible Party	Timeline
Provide competitive pay and benefits.	Selectmen	Ongoing
Continue to provide a supportive working environment.	All boards & organizations	Ongoing

PUBLIC COMMENTS

The Draft Open Space and Recreation Plan was distributed to the following boards and organizations for review and comments on May 30, 2007. Feedback was requested by Friday, June 29, 2007 and has been incorporated, where appropriate, into the final Plan.

Town of Lincoln:

Board of Selectmen
Planning Board
Long Range Planning Committee
Conservation Commission
Recreation Committee
Board of Health
Board of Assessors
Disabilities Commission

Local and Regional Organizations:

Metropolitan Area Planning Council
City of Cambridge Water Department
Rural Land Foundation
Lincoln Land Conservation Trust
Lincoln Garden Club
Walden Pond State Reservation
Minute Man National Historical Park
Walden Woods Project
Massachusetts Audubon Society
Drumlin Farm Sanctuary

Summary of Citizen Comments from Survey and Public Meetings: January - May 2007

- Stewardship of conservation land is vital -- we should expand our resources there.
- Keep Lincoln the way it is. I love Lincoln because of the ample access to trails & open space.
- I don't want "facilities" but rather \$ to go toward more open space.
- We don't need any more conservation acquisitions.
- We have more conserved land than homes.
- The sooner we buy all possible land for conservation, the less development will happen.
- Protect as much open space as possible.
- Do not want to sacrifice open space for "developed" recreation.
- Preserve DeNormandie Hill and fields.

- Create spaces that bring the community into more common areas, like the new mall.
- Create activities in addition to team sports that use open spaces to bring community together.
- Increase Lincoln Schools' educational use of conservation land.
- Align recreation goals with conservation goals.
- The Town should be very careful not to use conservation lands for other Town uses.
- Make use of DPW land on Lewis St. for recreation and move DPW to transfer station.

- Clean up woods to improve their appearance by removing fallen trees, branches and debris.
- Clear out brush especially invasive species - open vistas along Baker Bridge Fields.
- We need undisturbed land for biodiversity and marginal species.
- Brush needed as habitat for birds. (management will differ in different areas: some woods are kept less accessible for water protection, protection of wildlife, etc).
- Increase invasive species control on Town conservation land.
- Roadside trees: overenthusiastic trimming of limbs interferes with beauty of trees.
- Address views and character adjacent to conservation land.
- Think of roads as the open space they are.

- How close to the road should trees and walls be?
- Roadside fences on private land affect views. Consider setting fence standards.
- Remember to think about value of serenity, (decreased noise/people a plus to some).
- Address carrying capacity of the open lands. Should we discourage use by people of neighboring towns?
- Do we need to provide more public access/parking for people from outside Lincoln?
- There are high use areas which require extra management for increased use by public.
- Address overuse issues: horses, bicycles, traffic, airplanes, burning wood, dogs.
- Increase local food production and consumption (organic only).
- Make some land available for horses and cattle grazing on Town agricultural land.
- Identify land appropriate for vegetable farming.
- Continue to ban hunting - ban fishing as well.
- Need weather shelter at commuter rail station with a bench.
- Create more Town ice skating areas.
- More biking trails & places to ride.
- Mountain bike trail for kids in the center of Town.
- Add roadside paths on all through roads.
- Open more trails for mountain bikes and take better care of all existing bike paths.
- Prevent erosion and damage to ecosystem on bike trails.
- Connect National Park trails to conservation trails.
- Safe foot/bike crossing over Route 2 and 2A, prefer tunnel under 2A.
- We need more dog walking trails--off leash.
- Dogs are a real problem!
- Designate one or two parcels for dog walkers and ban dogs from other lands.
- Parking on Bedford Road, Tower Road, and Old Concord Roads is impossible.
- North Lincoln needs and easily accessible flat field for baseball, soccer and frisbee etc.
- Make canoe landing better and more accessible.
- The current pool is over used and not big enough.
- Build a toilet facility at tennis court.
- More and better outdoor basketball courts.
- Soccer Fields need maintenance, also playgrounds need trash removal.
- Build a skate park next to the new playground near Brooks gym.
- Please do something about the deer tick population (many concerns).
- Important to reduce deer/deer-tick population and get Board of Health support.
- Control deer and Canada goose population.

TO: Lincoln Open Space Committee
 FROM: Lincoln Recreation Committee

This note is to verify that the Recreation Committee has reviewed and approved of the Lincoln Open Space Plan at it's May 21, 2007 meeting. We appreciate the time and effort that has been put into this plan, and extend our regards to the Open Space Plan Committee, as well Angela Seaborg, Plan Administrator, for their work.



TOWN OF LINCOLN
CONSERVATION COMMISSION

CONSERVATION DEPARTMENT
TOWN OFFICES
P.O. Box 6353
LINCOLN CENTER, MA 01773
781-259-2612
FAX 781-259-1677

June 22, 2007

Dear Lincoln Open Space Committee Members,

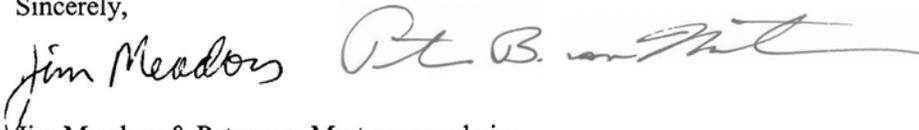
The Conservation Commission reviewed the 2007 Open Space and Recreation Plan and discussed it at our June 20th meeting. We are in unanimous agreement that this thoroughly rewritten and updated document does a great job of describing the history and current state of open space and our natural resources in Lincoln. It captures the special mix of conservation land, agricultural enterprises, and recreational opportunities that make Lincoln unique. More importantly it is the blueprint for how Lincoln should proceed in the coming years to protect our community and ensure that we retain the character that residents enjoy and appreciate.

Lincoln has always valued its open space and this is clearly stated in the Plan. Although it has been a while since we produced the last Open Space Plan the Town has been constantly vigilant in identifying and saving key parcels of unprotected land. These efforts have been spearheaded by three organizations working together with strong support from the community, the Lincoln Land Conservation Trust, the Rural Land Foundation, and the Conservation Commission. What we find in Lincoln today was made possible by diligent work of many who have come before us and their efforts need to be acknowledged.

One of the important themes in the current Plan that needs highlighting is the shift from acquisition to sound ecologically based stewardship. Now that Lincoln has a very significant investment in permanently protected conservation land it is time to put appropriate resources towards proper management to preserve the integrity of the land for future generations. Following the five-year action plan laid out in the document will be a good start along this long-term commitment to stewardship of our common lands.

We are grateful for all the hard work that each member of the Open Space Committee contributed to creation of the new Plan. We are especially appreciative of the work that Angela Seaborg, our Conservation Planner, has so effectively done in bringing together a strong working committee, getting and analyzing a tremendous amount of data and public commentary, and doing the lion's share of the work in writing and editing the final document. The 2007 Open Space and Recreation Plan is one that we completely endorse and feel confident reflects the needs and wishes of the community as a whole. This document will certainly serve the residents of the Town and the boards and committees who work on open space and natural resource issues.

Sincerely,


Jim Meadors & Peter von Mertens, co-chairs



TOWN OF LINCOLN
BOARD OF SELECTMEN

CONSERVATION OFFICE
TOWN OFFICES
P.O. BOX 6353
LINCOLN CENTER, MA 01773
781-259-2612
FAX 781-259-1677

June 19, 2007

Angela Seaborg, Conservation Planner
Lincoln Open Space Committee and Conservation Commission

Dear Committee Members,

The Board of Selectmen has reviewed the 2007 Open Space and Recreation Plan and is most impressed by your thorough and thoughtful approach. You have created a document which accurately reflects Lincoln's long-term conservation ethic, as well as its dedication to preserving the town's agricultural and recreational resources. The 5-year Action Plan sets forth reasonable goals and objectives for achieving both the greater vision of the town and specifically, its conservation, agricultural and recreational values. The Lincoln Board of Selectmen looks forward to working with the Commission to implement its plan.

Thank you,

Timothy Higgins, Town Administrator

On behalf of the Lincoln Board of Selectmen



TOWN OF LINCOLN
MASSACHUSETTS
PO BOX 6353 LINCOLN CENTER, MA 01773-6353

PLANNING BOARD

Robert Domnitz, Chairman
Ken Hurd
Ephraim Flint
John Snell
Bryce Wolf

(781) 259-2610
FAX (781) 259-1677

Fr: Planning Board
To: Conservation Commission
Date: July 19, 2007

Re: Comments on Open Space and Recreation Plan

The Open Space and Recreation Plan for the Town of Lincoln as prepared by the Lincoln Open Space Committee is a thorough and well researched document. The information it provides will contribute greatly to the Town's ability to maintain and enhance its open space, agricultural land and recreational opportunities.

However, it must be acknowledged that this document is only one part of the overall Town planning process, as there are issues and concerns that this plan does not attempt to meet. Many of these may be found in the "charge" and "examples of responsibilities" provided to the Open Space, Recreation and Natural Resources (OSRNR) subcommittee of the Comprehensive Long Range Planning Committee (CLRPC). These issues may well be beyond the scope of this particular document, and thus properly reserved for OSRNR examination. Therefore, in the full context of the long range planning process currently underway, this plan may require further action.

Below are a few comments and remarks, followed by some additional brief notes and corrections:

- Use of the Mass EOEI Building Analysis (p. 6). The Hanscom data should be separated out and the school enrollment data might look back further than 1990 (In 1966, the year of maximum enrollment, there were 1041 students in Lincoln K-8.)
- Mention is made in several places of the "disturbing trend towards mansionization," the frequency of tear-downs, and large homes taking advantage of views over conservation land. No recommendations are proposed to address these concerns. Perhaps the OSRNR will have more opportunity to examine these complex issues as they relate to open space.
 - Although invasive vegetation is highlighted as a management problem, little attention is given to the difficulties of wildlife management in a suburban setting other than a passing reference to the large deer population (p. 26). The human-animal interface will become increasingly problematic, especially as public health concerns intrude (deer = Lyme disease, raccoons = rabies, etc.). Beavers also impact human environments, and coyotes and other predators require human acceptance. Wetland produced mosquitos also generate public

health issues that may influence how these areas are managed and what pesticides or other treatments may be used.

- Roadside maintenance and restoration (pp. 31, 32, 61, 64). If the Garden Club is undertaking this project, where is the interface with the Planning Board with regard to Scenic Roads? Additionally, while expanded roadside paths and trails are identified as desirable, no mention is made of the need for small parking areas to access conservation lands although the need is cited among the various citizen comments.
- Agriculture. Interest is expressed in establishing affordable housing for farmers near leased agricultural land as part of initiatives to support farming (p. 57). Is the Town prepared to identify certain occupations for which it wishes to subsidize housing? Could it, even if it wanted to? Is this an opportunity to work with the Housing Commission?
- Lincoln's role in the region seems somewhat lightly addressed. How do Lincoln's conservation lands and trails interface with those in abutting towns? Are these links wildlife corridors? Are they used recreationally? Are we welcoming of visitors using our land? Could we, for example, put land and trail maps on the Town website, as some other towns do? Is the Bay Circuit concept still alive? Do other responsibilities to meet regional growth needs for housing, transportation, etc. conflict with conservation goals?
- How does this plan fit in with broader town needs?

Briefly:

- Pierce House and Park (pp. 29, 58). Technically speaking, most of the land was given as a park, but the building and surrounding land was gifted as a hospital (the will was broken) during the 1920s (?). Family members occupied it until 1964. Just fact-check.
- Chemical pollution (p. 34). There are four gas/service stations in Lincoln, not three. And chemical pollution (TCE) closed the Farrar Pond well (as noted p. 15).
- Mute swans (p. 27). Most American ornithologists regard mute swans as an invasive species.
- Fishing (p. 47). Unfortunately, it might be noted that the fish in the Sudbury River cannot be eaten.

Again, this is a commendable plan showing much research, thought, and hard work. Your effort is very much appreciated.

Respectfully for the Planning Board,


Robert Domnitz,
Chairman

CC: Board of Selectmen
Planning Board files
Town Planner



Metropolitan Area Planning Council

60 Temple Place, Boston, Massachusetts 02111 617-451-2770 fax 617-482-7185 www.mapc.org

Serving 101 cities and towns in metropolitan Boston

June 19, 2007

Angela Seaborg, Conservation Planner
Lincoln Open Space Committee
Town Offices
P.O. box 6353
Lincoln Center, MA 01773

Dear Ms. Seaborg:

The Metropolitan Area Planning Council has reviewed the Town of Lincoln's Open Space and Recreation Plan 2007. The plan is very well-written and thorough. The only omission that I would like to call to your attention is that the plan makes no mention of Lincoln's participation in MAGIC, a subregion of the MAPC. The Minuteman Advisory Group on Interlocal Coordination (MAGIC) is a group of thirteen communities northwest of Boston who work collaboratively on issues of mutual concern. This is an excellent forum for the discussion of regional open space issues.

Thank you for the opportunity to review this plan. If we can be of further assistance, please don't hesitate to call.

Sincerely,

Marc D. Draisen, Executive Director

Richard A. Dimino, *President*

Gordon Feltman, *Vice President*

Grace S. Shepard, *Treasurer*

Jay Ash, *Secretary*

Marc D. Draisen, *Executive Director*

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LINCOLN LAND CONSERVATION TRUST

P.O. BOX 6022

LINCOLN, MASSACHUSETTS

01773

June 29, 2007

Mr. Jim Meadors & Mr. Peter VonMertens, Co-Chairs
Lincoln Conservation Commission
Lincoln, MA 01773

Re: Open Space Plan

Dear Jim and Peter:

The Lincoln Land Conservation Trust has long participated with the Lincoln Conservation Commission in land protection, stewardship and planning for Lincoln's open space resources. Today, the LLCT takes a step back, as the Conservation Commission deserves the accolades for assembling an outstanding open space plan. In substance, in public process and in presentation, the draft Town of Lincoln's **Open Space and Recreation Plan** captures the information, the spirit, and the aspirations of the unique community which is Lincoln. By preserving habitats, landscapes, community character, educational and recreational resources, and historic sites, Lincoln serves local, statewide, national, and international constituencies. Working with federal and state professionals, Lincoln's team of community leaders and staff has protected lands which will be a conservation landmark for many generations.

As noted in the Plan, the Commission and the LLCT have increased their focus on stewardship of conservation resources, establishing programs in baselines, monitoring and management activities which serve as models for other small communities. Lincoln has long been forward-looking. This Plan reflects a consensus that we now "raise the bar" still further, recognizing that the land for which we are stewards is community land forever, and will forever require our care.

While we have all traditionally been proud of the work accomplished by Lincoln's volunteers and community activists, I respectfully suggest that, for this Plan, particular credit is due to Angela Seaborg, working with Tom Gumbart and Anna Wilkins. Angela has admirably composed, coordinated, organized and responded to the myriad individuals and issues which affect the Plan.

The Lincoln Land Conservation Trust looks forward to continuing our partnership with the Conservation Commission, other agencies, and the vast wealth of community activists in Lincoln, to implement this Plan as well as to care for both the daily needs of and the perpetual objectives for Lincoln's open space.

Sincerely,

William G. Constable President

cc: Tim Higgins, Town Administrator,
Tom Gumbart, Conservation Director
Angela Seaborg, Conservation Planner



RURAL LAND FOUNDATION

P.O. Box 6328
Lincoln, MA 01773
Telephone: (781) 259-9250
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e-mail: RLF@LincolnConservation.org

TRUSTEES:

June 28, 2007

Susan Allen,
Vice Chair

Lincoln Open Space Committee
Lincoln, MA 01773

Gary Anderson

Re: Open Space and Recreation Plan
Draft 5/30/07

Kenneth Bassett

Roger Bergen

Dear Members of the Lincoln Open Space Committee:

William Constable

On behalf of the Rural Land Foundation of Lincoln, I would like to commend you for your significant effort on behalf of the Town of Lincoln. You have done an excellent job of obtaining feedback from the residents of Lincoln and incorporating that feedback into a comprehensive plan.

Jonathan Donaldson,
Vice-Chair

Daniel England,
Chair

The trustees of the Rural Land Foundation have reviewed the draft dated May 30, 2007 of the Open Space and Recreation Plan for the Town of Lincoln and are in full support of the goals and objective set forth. Consistent with RLF's mission "to help preserve the rural character of Lincoln," we look forward to doing whatever we can to help implement the plan and "protect our agricultural heritage, natural resources and recreational values."

Warren Flint, Jr.

James Henderson

Weston Howland, III,
Treasurer

Thank you for your good work.

Kenton Ide

Sincerely,

Amalie Kass

Julia Miner

Dan England
Chair

Ann Risso

Susan Welsh

Geoff McGean,
Executive Director

Sarah Andrysiak,
Assistant Director

...preserve open spaces in Lincoln for future generations.

Comments from Minute Man National Historical Park

Thank you for the opportunity to comment on the Draft Plan. We have a few thoughts to share with you; some of which you may already have incorporated in the final version.

* we were not able to determine, with certainty the number of acres within the park's boundary which are located in Lincoln by the comment due date. The figure you use in the report - 327 acres - seems small but you are probably using excellent data. We have 970 acres total. How was the 327 number derived?

* just an fyi, Lincoln is really at the heart of the national park and the town was instrumental in its establishment. Town meeting and the various town boards have been of exceptional assistance to the national park over the decades of our relationship together. They have, time and again, been our partners in protecting the historic, recreational, natural and scenic resources of the park. We deeply appreciate the opportunities for cooperative stewardship on our closely related lands.

* on page 2 reference is made to the national park's participation with the open space Committee; I am not certain if the park was involved before now...we are only concerned because we may have missed an opportunity to support and participate with the town in this effort. Did we miss the boat somehow on this?

* under "Regional Context" would it be appropriate to mention the conservation lands of other agencies/entities in our 'neighborhood'? ex: Walden Woods State Reservation; Walden Woods Project; Great Meadows; Mass Audubon, MM Nat'l Historical Park, Concord, others? The amazing thing about this region is how the lands of all these conservation minded groups combine together. We are all part of something much larger than what each of us protects alone. ...and the potential for more linkages, collaboration, and impact is great.

* in the "History of Lincoln" section, you might want to mention the significant efforts of the Town to create Minute Man National Historical Park. The role the Town played was essential to the protection of these lands as a national park for future generations.

* Map 1; page 9 - The park boundary should be shown on the zoning map with a distinct hatching or background. Currently parkland is shown as R-1 Single Family Residence. Parkland is not within a town zoning district.

* p. 14 or.....? I can't remember exactly where the designation begins and ends but the Sudbury, Assabet and Concord Rivers are part of the "National Wild and Scenic Rivers System" and could be listed under a "Rivers" subsection.

* p.28 Section F. You could include somewhere in this section that Route 2A as it runs through the National Park in Lincoln is now a state designated Scenic By-Way. The entire By-Way runs from Arlington, through the park and on to the North Bridge in Concord. The ultimate goal is national Scenic By-Way designation. Designation was sought and obtained by a multi town grass roots group.

* p. 30 "Minute Man National Historical Park" section. The park's total acreage is 971 acres...in three towns. The Lincoln acreage may be more than the 327 acres the plan sites but we were not able to tabulate this before the comment deadline. Samuel Hartwell House SITE. The park was

created by Congress in 1959 with the broad mission to protect the monuments, sites, structures, roads and landscapes associated with the opening battle of the American Revolution on April 19, 1775. AND, the park is becoming increasingly involved with diverse and sustainable agricultural activities. This whole area is once again taking on a very vibrant agrarian character with many different branches - produce, meat and dairy products, hay etc.

* p. 32 All of Minute Man National Historical Park falls within the "Minute Man National Historical Park Historic District" and is on the National Register of Historic Places, with multiple historic structures, sites, landscapes, roads etc. including stone walls and archaeological sites. Did the idea of creating a town Historic District around the National Park ever come up during the formation of this draft Plan? This has been suggested by many in town who have been particularly dismayed about inappropriate structures proposed on park boundaries; they have suggested that an historic district overlay could help guide new development adjacent to the national park.

* p. 41 Map 7... within the national park, Old Bedford & Virginia Roads are no longer roads but part of the park's trail system and should be dotted lines

* p. 42 Table 11 ...the Park and Great Meadows NWR are shown on the table of "Non-Conservation and Institutional Land". Even though we are federal agencies ('institutions?'), NPS and USFW are definitely conservation agencies....maybe the table title could add 'federal' after 'municipal'?

* Minute Man National Historical Park would very much like to work with the Town in meeting the identified needs and goals of the Plan! ...to the extent that our dwindling numbers will allow! We can imagine many exciting opportunities for collaboration on trails, wildlife connectivity, interpretive/educational programs, mutual support, etc. etc. I hope you will call on us as you move to implement the vision of this plan!

Nancy Nelson
Minute Man National Historical Park
174 Liberty Street
Concord, Massachusetts 01742
978-318-7811 Phone
978-318-7800 Fax

REFERENCES / RESOURCES

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APPENDICES

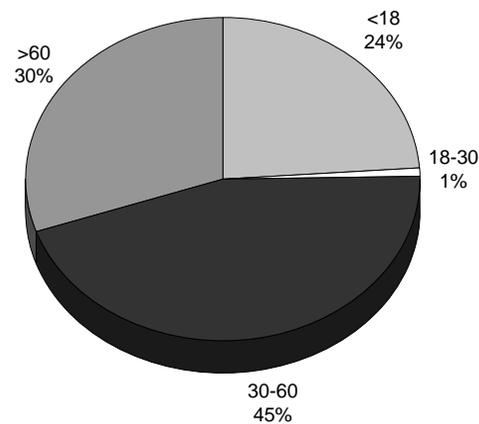
A. Citizen Participation Questionnaire Results

As part of its planning effort, the Open Space Committee developed a Citizen Participation Questionnaire. The survey was conducted in order to understand the desires, needs and concerns of Lincoln residents. It was distributed to all Lincoln households in January 2007 through a Town-wide mailing, publication in the Lincoln Journal, distribution with drop boxes at several high-profile locations around Town, and as a 7th grade class project. The Open Space Committee made their best efforts to avoid duplicate responses. The results are summarized below.

Out of 2801 households, 418 surveys were returned giving a 15% return rate.

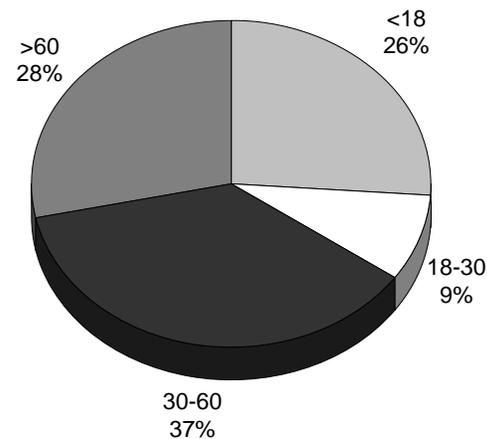
1: Please circle the appropriate age category of the questionnaire respondent:

<18:	100 respondents
18-30:	3 respondents
30-45:	52 respondents
45-50:	49 respondents
50-60:	88 respondents
>60:	126 respondents



2: How many people in each age category currently live in your house?

<18:	218 respondents
18-30:	72 respondents
30-45:	86 respondents
45-50:	80 respondents
50-60:	144 respondents
>60:	238 respondents



Questions 1&2 suggest that the opinions of most major groups of residents living in Lincoln were equally represented in the survey results.

3: Please fill in the matrix below for each member of your household. Rate your (or their) present feelings about Lincoln's existing recreation & conservation facilities.

(T=too much, A=adequate, R=needs repair, M=need more)

	Soccer Fields	Baseball Fields	Play Grounds	Basketball Courts	Swimming Pool	Tennis Courts	School Gyms	Roadside Paths	Trails	*ADA Trails	Mtn. Bike Trails	Natural Areas	Canoe Access	Cons. Land Parking	
Preschool															T too much A adequate R needs repair M need more * Americans with Disabilities Act
Elementary															
Middle School															
High School															
College Age															
Adult															
Adult															
Senior (over 60)															
Senior (over 60)															

Question three was intended to gauge the condition of Lincoln's existing facilities by age group. Respondents were asked to rate the existing facilities using four descriptions: too much, adequate, needs repair, and needs more. Based upon the results, it appears that only the responses of Seniors, Adults and Middle Schoolers can be considered significant. This is because each of these age groups answered the question more often and it was answered directly by the person represented in that age category. Less than 35 responses were received in each of the age categories of Preschool, Elementary, High School and College. In addition, it was apparent that most of those responses were interpreted by the adults that completed the survey and were not necessarily the opinion of the person in that age category.

Results

Of approximately 450 total responses, including all age categories, all facilities rated 'adequate' except for roadside paths, which had a higher response of 'need more'. Roadside paths also had the highest 'repair' response of all facilities.

Looking beyond the 'adequate' responses, 10 out of 14 facilities had 'need more' as the next highest rating. Conservation land facilities including canoe access, natural areas, mountain bike trails, conservation land parking, and handicapped accessible trails respectively had a higher percentage of 'need more' responses than recreation facilities.

The breakdown of responses into their age groups highlights the needs, wants and interests of each population. The data underscores the desire for often conflicting recreational needs, thus challenging us to accommodate all age groups on the same land.

Ages 3-11

Preschool and Elementary School respondents rated most facilities as 'adequate'. The exceptions were basketball courts, roadside paths and mountain bike trails, which all rated 'need more'.

Ages 12-25

Middle School, High School and College age respondents all rated canoe access as 'need more' well over 'adequate'. College age respondents also indicated 'need more' over 'adequate' for the following facilities: roadside paths, mountain bike trails and natural areas.

It is noteworthy that Middle School and College respondents indicated 'too much' for more types of facilities and as a higher percentage of the individual facility than any other age category (including soccer fields, baseball fields, tennis courts and play grounds).

7th grade class

This survey was completed by the entire 7th grade class at Lincoln Public Schools and from them, 100 were randomly selected to represent the Middle School age category. The Open Space Committee felt comfortable that they could accurately reflect upon the Town's existing facilities and help to fill an age gap that was developing in the data. A greater percentage of Middle School respondents felt the Town 'needs more' canoe access and over 50% of respondents indicated that the Town 'needs more' mountain bike trails, roadside paths, and basketball courts.

Over 70% of Middle School respondents indicated 'repair' for existing school gyms and baseball fields. It is interesting to note that this group above all other age groups, including Seniors and Adults, indicated 'needs more' for handicapped accessible trails.

Ages 25-60

Adult respondents indicated 'need more' over 'adequate' for roadside paths. Beyond the 'adequate' rating, facilities for which 50% or more of Adult respondents indicated 'need more' were mountain bike trails, natural areas and canoe access.

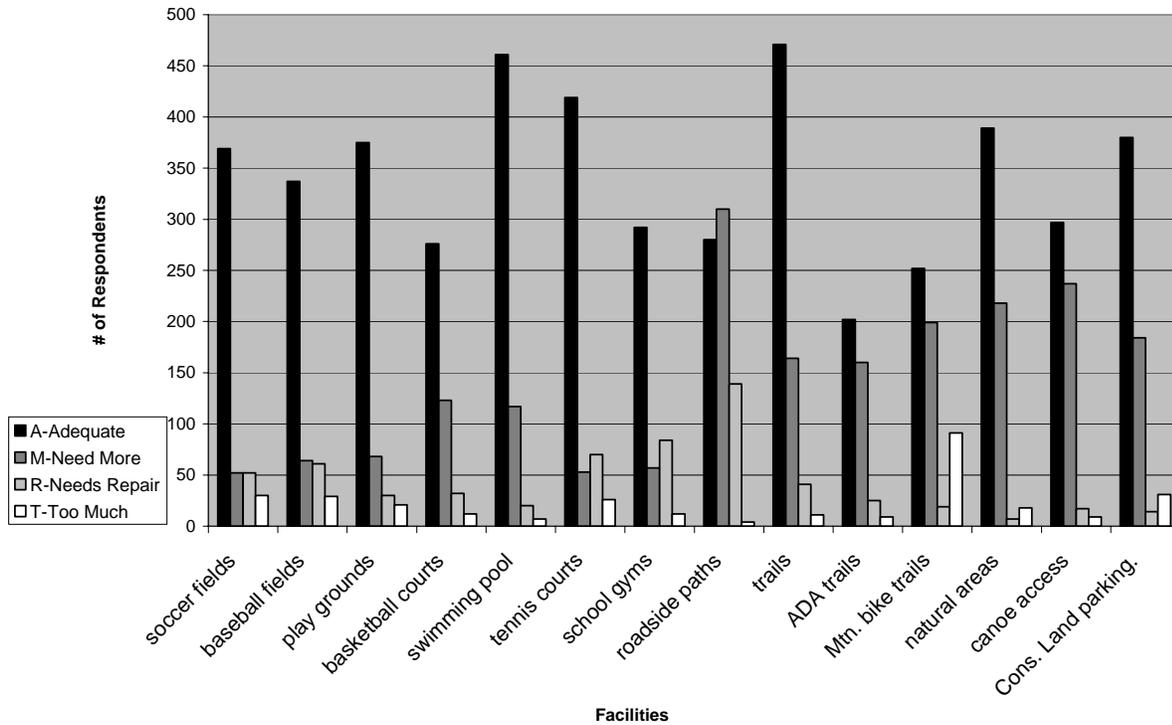
Seniors Age 60+

Senior respondents indicated 'need more' for roadside paths and all other facilities were rated as 'adequate'. Facilities for which 50% or more of Seniors indicated 'need more' included handicapped accessible trails and conservation land parking.

Using the Results

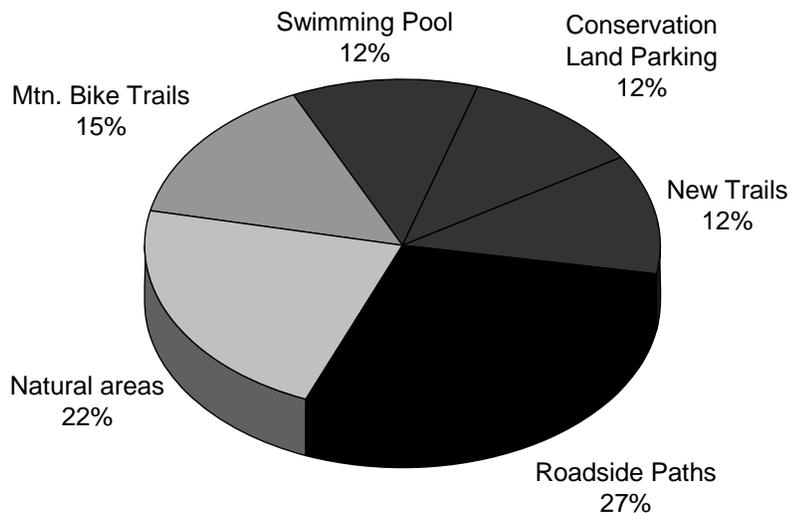
The maintenance and/or expansion of existing open space and recreation facilities should not be based solely upon this question or survey. However, the trends highlighted in the paragraphs above and the graph below offer some considerations if and when the Town conducts its facilities planning. Generally, the Town should repair and reuse existing facilities before creating new facilities. If expansion of existing facilities is an option, the Town should first consider building new roadside paths. It might also look to create more canoe access, natural areas, handicapped accessible trails and mountain bike trails. Of the active recreation facilities, the Town might repair existing school gyms, tennis courts, baseball fields, soccer fields, basketball courts and pool (in that order).

All Ages Summary of Facility Ratings



4: Of the facilities for which you indicated 'More', which is your highest priority?

Total responses: 288



5: How often do you use Lincoln conservation areas, town parks, and/or rec facilities?

Never:	16 respondents
Occasionally:	197 respondents
Three times a week or more:	194 respondents
TOTAL:	407 respondents

6: What recreation facilities outside of Lincoln do you use?

Other parks/forests for outdoor recreation	122
Healthclubs/Sports Clubs	110
Indoor Pool	40
Other towns playing fields/playgrounds	27
Bike paths/trails	13
Ice skaing arenas	10
Yoga/pilates studios	9
Cultural venues/events	5
Golf course	4
Kayak Launch Points	3
Horseback Riding	1

7: What do you consider to be our Town's most attractive landscape or natural feature?

Open fields / Agricultural farms / Rural scenery	112
Existing conservation land / Open space	112
Pierce Park	45
Trails	38
Woods / Trees	33
Flint's Pond	12
Walden Pond	8
Drumlin Farm	7
Town Center / 5-way stop	6
DeNormandie Hill	6
Minute Man National Historical Park	5
Ponds	4
DeCordova grounds and views from	4

8: Please check your top 5 priorities for new facilities.

GENERAL SURVEY

recreation center	109
spa/fitness facility	91
indoor swimming pool	89
ice skating rink	70
school common improvements	67
neighborhood parks	67
wildlife observation blinds	64
yoga/dance studio	64
outdoor amphitheater	56
handicapped accessible trails	51
playground/picnic areas	46
no new facilities	34
croquet court	31
rock climbing wall	29
skateboarding park	28

7TH GRADE SURVEY

indoor swimming pool	65
ice skating rink	60
rock climbing wall	60
skateboarding park	44
spa/fitness facility	41
school common improvements	32
recreation center	29
outdoor amphitheater	24
wildlife observation blinds	23
neighborhood parks	22
playground/picnic areas	20
yoga/dance studio	19
handicapped accessible trails	19
croquet court	16
no new facilities	0

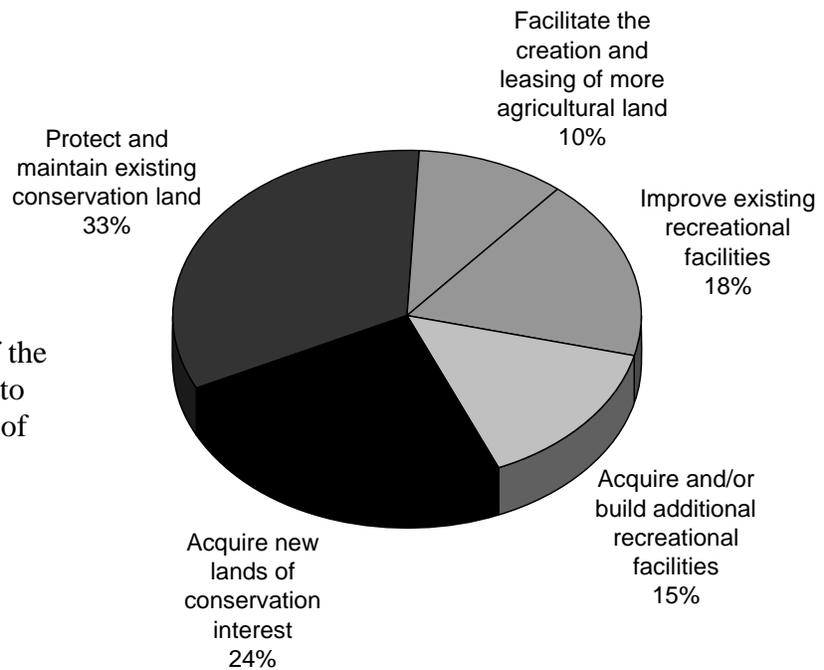
Other: 34

Other: 13

9: What should Lincoln's most important conservation/recreation priorities be for the next 5 years? (circle two)

Total responses: 720

The answers to this question provide strong re-affirmation of the resident's long-term dedication to the protection and maintenance of conservation land in Lincoln.

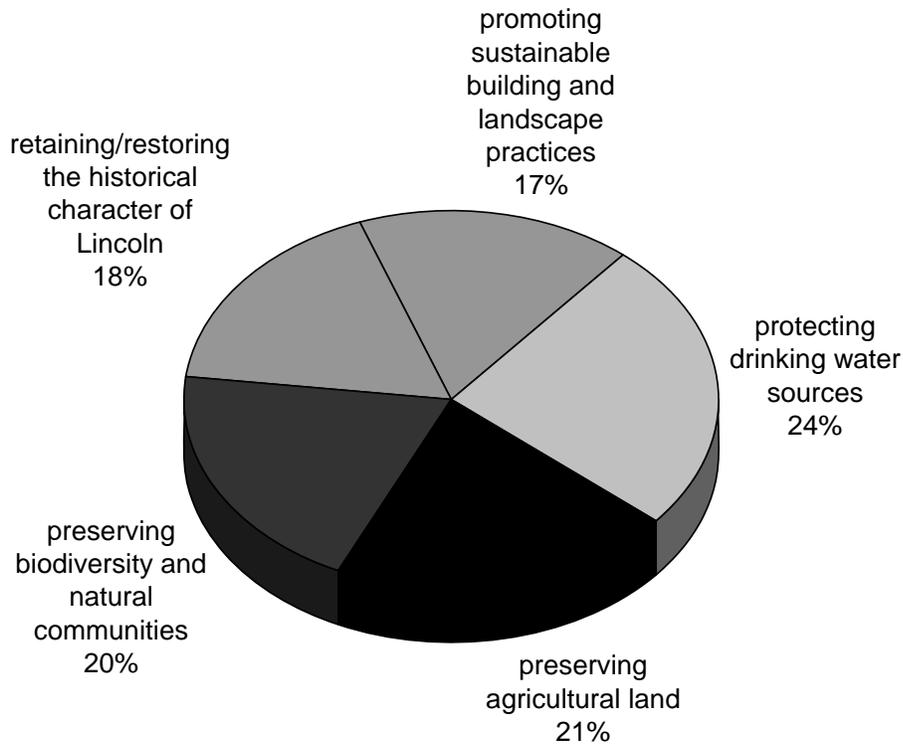


10: Rank each of the following items in order of importance to you as a resident. (L=low, M=medium, H=high)

	GENERAL			7TH GRADE		
	Low	Med	High	Low	Med	High
preserving biodiversity and natural communities	19	69	203	28	35	33
banning gas-fueled leaf blowers	153	43	94	36	39	21
expanding recreation facilities and activities	108	111	76	5	29	61
protecting drinking water sources	4	35	270	6	20	69
retaining/restoring the historical character of Lincoln	24	93	185	20	43	33
preserving agricultural land	17	67	225	24	39	32
allowing deer hunting on conservation land	150	57	77	72	13	9
encouraging higher-density development	182	63	41	45	42	9
promoting sustainable building and landscape practices	25	93	162	32	48	16

Other: 47

Total response ranged from 376-404, suggesting that almost 100% of people who returned their survey answered this question. It is of high importance to residents that the Town strive to protect drinking water sources, preserve agricultural land, biodiversity and natural communities, retain/restore the historical character of Lincoln and promote sustainable building and landscape practices. Promotion of the following items are of low importance to Lincoln residents, encouraging higher-density development, banning gas-fueled leaf blowers, allowing deer hunting on conservation land and expanding recreation facilities and activities. (The following graph is composed only of the general survey data).



11: Would you support town appropriations for the acquisition of:

	yes	no	maybe
conservation land	207	53	5
recreation facilities	165	97	17
affordable housing	206	73	9

12: Please describe your specific ideas regarding existing or new conservation/rec facilities.

GENERAL

- Maintenance of existing land, trails, paths and facilities a priority over new facilities
- I am for leaving things as natural as possible
- Keep builders out of Lincoln
- The sooner we buy all possible land for conservation, the less development will happen
- Educate people about the role Lincoln has created of care-taker of a beautiful land-the biodiversity here must be preserved
- Create spaces that bring the community into more common areas, like the new mall
- Make use of DPW land on Lewis St. and move DPW to transfer station
- Pave the stretch of Trapelo road between Lexington Rd. and the flower pot
- Need weather shelter at commuter rail station--both directions
- How about a "BENCH" on the train platform
- How about a community effort to pick up litter

CONSERVATION/AGRICULTURAL/WILDLIFE

- Put money into maintenance of current open space.
- How about a place (stand?) on the canoe landing field to market local products (agricultural and other)
- Large "conservation" parking area are inadequately policed crime zones
- We need undisturbed land for marginal species

Increase invasive species control on town conservation land
Clear out brush - open vistas
Hire summer interns to attend to conservation land
Increase Lincoln schools educational use of conservation land
Survey open lands for important biodiversity & develop a management/restoration program for threatened natural habitats
Make some land available for horses and cattle grazing on town agricultural land
Increase local food production and consumption (organic only)
Identify land appropriate for vegetable farming
Improve the use of hay fields--get 2 cuttings
Meter water use on agriculture land at a lower rate than other land
There should be un-trailed, conservation land where people can walk (bushwack) if they want to fight brush, etc.
Shoot a few beavers
Continue to ban hunting - ban fishing as well

PATHS/TRAILS

Restore and activate bike path plan
New roadside path along Weston Road
New path connecting Old County Rd. to path on Trapelo Rd.
Roadside path from Lincoln Rd. to Drumlin Farm on Rte. 117
More roadside paths and please buy no more property
Create a safe bike route to Walden Pond
Add roadside paths on all through roads
We need more smooth bike trails
Maintain bike paths throughout town
More biking trails & places to ride
Mountain bike trails
Open more trails for mountain bikes and take better care of all existing bike paths
Better trail signage
Clarify mountain biking trail signs
Better signs for designated parking areas
Connect all trails in one huge loop where possible
Link open spaces with paths along roadways
Connect North Lincoln with the rest of the town through hiking and biking trails
Pedestrian crossing for 2A at Lincoln Rd. to Battle Rd trail (preferably a tunnel)
Need safe crossing from North Lincoln trails to Bedford Rd.
New trail connecting Page and Lexington Roads
Continue to implement/enforce dog leash control rules on trails
Trails are wonderful--keep them maintained and make new ones
Maintain the Three Friends Trail
Cover muddy wet area in Black Gum Trail off Sandy Pond Rd.
Repair trails with boardwalks
Promote walking program for kids
Posion Ivy along bike path is dangerous
Concerned re: erosion and damage to ecosystem on bike trails

COMMUNITY/RECREATION CENTER

Senior or community center with room for exercise classes, cards, ping pong, meetings, etc.
A common restaurant/café/meeting area for families (usable in winter)
A park in commercial downtown with picnic tables
Renovate the vacant Pod at Lincoln Schools for a community center or recreation facilities
Save Pod A+B. Re-open Pod B- especially for cub/girl scouts
Create a multi-use building for pre-school/COA/after school meeting place/teen center
Create a Tween/Teen center

We desperately need a modern rec replacement for the pods
 A facility with an indoor pool and gym would be amazing
 A spa with a heated pool area for the elderly
 If you build a swimming pool, use an ionization (non-chlorine) process for the water
 Make arrangement in Concord so Lincoln residents could join indoor pool facility for less \$
 Add an indoor swimming pool to school campus for students (adults at night)
 Waterpark like swimming pool
 Build skateboard park, teen center, and better pool with more features (diving, slides-waterpark)
 Squash courts in rec facility, with climbing wall for kids too

RECREATION FACILITIES

Remodel school facilities
 School grounds and building could be better maintained
 Concentrate on repairing school gym
 Improve school facilities before creating new ones
 Use existing facilities or developed land for new facilities
 Codman pool needs repair
 New recreational facilities that are free for Lincoln residents
 More recreational facilities (ie. basketball court) in North Lincoln
 Build a toilet facility at tennis court
 Skate park next to new toddler playground near Brooks gym
 Make toddler playground improvements
 Clear some space along the wooded side and end of the Town Hall soccer field
 All weather turf field
 More outdoor basketball courts
 Golf course/club adjacent to Hanscom-Old Virginia
 Cover the two tennis courts
 Lincoln pool could use some shady areas
 Make the Pierce House into a Rec. Center with indoor swimming pool
 Soccer Fields need maintenance, also playgrounds need trash removal
 Need tennis backboards

13: If there is a critical property you think should be identified for conservation, agriculture, trail or recreation purposes, please describe.

DeNormandie Hill / Fields	23
DeNormandie 55-acre land (north of Rte. 2)	5
Farrington Memorial woods	3
Audubon CR	2
Pole Brook between S. Lincoln Road & Rte. 126	1
Drane & Harrington/Rowe properties connected	1
Trail all around Beaver Pond	1
Shoreline of Fairhaven Bay (pleasant meadow)	1
The old horse farm on Lexington Road	1
Corner of Rte. 117/126 junction	1
South side of Old Sudbury Rd. to link Drumlin & Weston	1
Valley at southeast end of Farrar Pond--(Naiman/Brodney)	1
Davis field on Conant Rd.	1
North Lincoln - Old Bedford Rd. to Virginia Rd. corridor	1
Codman School A and B pods	1
Lands adjacent to potential roadside paths	1

Additional Comments:

GENERAL

Thank you.

Thanks for the opportunity for input

Thank you, Keep up the good work

Thank you! All of this is what make Lincoln so special

I treasure the ability to walk the wonderful trails in Lincoln. Thank you

My whole family loves going for walks exploring the Lincoln trails.....We also love to see more agriculture

I love Lincoln the way it is. Keep maintaining and expanding the conservation land...let's keep it and protect it...

Leave Lincoln as it is--we don't need this stuff [new recreational facilities]

I love being in Lincoln because of the ample access (w/out driving) to trails & open space. I hope this character can be preserved

The leaf blower question is ridiculous. Have a simple 9pm-6am noise ordinance and end this nonsense

A less noisy public works department

The town is doing a better job cleaning up sides of roads

Trash pick up in areas we "let go" as not "ours"--117 to Lee's bridge, 117 Wooded toss-out strip, others similar.

Encourage MMNHP to relocate 2A around Minuteman High school

Prohibit loud noise from Pierce House that affects the peace of Lincoln Center

Ban weed-wackers along with leaf blowers

Why not have Conservation and Preservation Committee, Bemis etc. sponsor meetings on green building practices

HOUSING/DEVELOPMENT

If the town still values and wishes to increase diversity through affordable housing it must also provide services

Lincoln is surrounded by (some) towns that created purpose through development. Let's avoid this in Lincoln and preserve open space

Prevent suburban mansions

We need enough affordable housing that tracts of lands are not at risk of being taken by an unfriendly developer

Keep as much open space as possible

Do we really need 5,000 to 15,000 sqft houses? And make it so hard for small houses on small lots to add 250 sqft?

We need different zoning areas so we could TRULY have diversified housing

Keep as much development, including residential, back from roads as possible to preserve Lincoln's rural visual image

I would like to see large properties that come up for sale have restricted cons. land rather than mansions

Create higher density housing within 1/2 mile of RR station and shopping center

anti-McMansion zoning, buy land before developers

RECREATION

Will there be recreational/exercise equipment at Deaconess elderhousing?

Lincoln is known for open space. Athletic facilities are nice but how much would taxes and membership cost?

Do not want to sacrifice natural space for "developed" recreation

Leverage recreation when we approve large projects like Deconess

There is a lack of commitment to providing a sense of community and recreation for Middle/High School aged children

We wish Lincoln had arranged for its residents to use the new Concord fitness center next to the CCHS

Town should consider "improvements" that could bring activity to its citizens and create income

We need activities for the kids to keep them in the community. A rec center and artificial turf [field] with lights would do that

The current pool is over used-not big enough

Indoor swimming facilities in Sudbury are very far away/difficult to access

I would love to have a swim/fitness center if it did not cost the town too much

Those who don't need to work to live enjoy all of the [conservation and recreation facilities]

I would be happy to discuss how baseball facilities are maintained by youth baseball in town. Dan Cousins 259-1379

Need to address the concerns of an aging population in terms of access to land and rec. facilities

Murals for Lincoln School grounds. Painted and designed by artistic kids and adults--I'll help organize: Debbie x3735.

North Lincoln needs and easily accessible flat field for baseball, soccer and frisbee etc. and a Teen Center

CONSERVATION LAND

Protecting conservation land is vital--and we should expend our resources there

As much open space as possible

I don't want "facilities" but rather the \$ to go towards more open spaces and preserving the land and trails

[Acquiring new conservation land] We have enough

Should not balance recreation and Open Space. Conservation has value beyond recreation

Recreation should not be lumped together with conservation land

Lincolniters have access to plenty of recreational facilities, open land once gone (even for rec facilities) is gone forever

Conservation land is more important than facilities

We feel strongly that people other than town residents and employees should be charged for the use of trails and conservation lands

We need to take better care of existing conservation land for the long term

[Farming] Lincoln is no longer a place for serious and competitive agriculture--it's two generations too late

We don't need any more conservation acquisitions. We have more conserved land than homes

Parking on Bedford Rd is impossible

Parking on Old Concord Rd. for Mt. Misery is very limited and what space there is needs gravel to fill in large drop in leve from road

There is no parking on Tower Rd. to access trails there

Please do something about the deer tick population

The deer tick population must be controlled

Control deer and Canada goose population

Important to reduce Deer/Lyme tick population and get Board of Health support

[Deer control] prefer some form of poisoning or birth control to worrying about being killed by hunters-but deer elimination is very important

[Deer hunting] should be seasonal and limited to Bow and Arrow - Lyme is a huge problem

The deer herd is out of control perhaps use sharp shooters like in N.H. The leaf blower ban is ridiculous

We need more dog walking trails--off leash

DOG-FREE TRAILS

Dogs are a real problem! Should designate one or two parcels for dog walkers (not Mt. Misery, please!) and ban dogs from all other lands

B. Summary of Lincoln Land Conservation Trust Neighborhood Meetings

Compiled by Kim Buell and Sue Klem, 1/27/07, updated 2/14/07

The LLCT has been holding an annual mid-winter meeting in different Lincoln neighborhoods to educate residents about their area with information including maps, flora, fauna, trails and conservation lands. Residents are invited to raise concerns or suggestions for improved use. Approximately 130 households are invited to each gathering, with about 30 households attending. The meetings to date follow, together with a summary of action items and outcomes:

I. Winter Street neighborhood (including south side Trapelo Rd, Old County Rd, Winter Street, Old Winter Street, Stratford Way, Forrester Drive, Huckleberry Hill) 12/3/00 & 1/21/01

Trails of interest: South of Winter and Old Winter Streets into Pigeon Hill; Trapelo Rd to the intersection of Winter and Old Winter Streets. Land of interest: Parcel south of 47 Winter St.

II. Tower Rd Neighborhood (including Tower Rd, Beaver Pond Rd, section of Lincoln Rd, Twin Pond Lane) 2/10/02

Trails of interest: Connect Tower Rd loop trail with Beaver Pond Rd, Weston Rd and Beaver Pond; west of Harrington ponds through Berry land; Pierce Park to Beaver Pond Rd. Trails not currently pursuing: Peirce Hill loop trail to Beaver Pond; West side of Beaver Pond.

III. Lexington Rd Neighborhood (including Rt. 2, north end Old County Rd, Trapelo Rd., east side Lexington Rd, Old Farm Rd, Blueberry Lane, Grasshopper Lane, Page Rd, Storey Drive, Davison Drive, Page Farm Rd, Tabor Hill Rd, Minebrook Rd) 2/9/03

Land of interest: Farrington Memorial. Trails of interest: Minebrook Rd to Flint's esker; Storey Drive to Flint's esker; Page Rd to Storey Drive and Flint's esker; Osborne property to Trapelo Rd; Davison Drive to Blueberry Lane. Trails not currently pursuing: Page Rd to Grasshopper Lane; wet; Old Farm Road to Storey Drive; Oak Meadow driveway north along west side of Lexington Rd. Trail accomplished: Lexington Rd/Old Farm Rd behind cemetery pond.

IV. Old Concord Rd neighborhood (including Red Rail Farm, Cedar Rd, north side of South Great Rd from river to 126, west side of Concord Rd from Walden Pond to 117, east side of Concord Rd from Baker Bridge to Codman Rd) 2/28/04.

Trails of interest: Concord Rd over south part of Mt Misery fields into Mt. Misery woods; North side of Mt. Misery fields to Adams Woods. Land of interest: Two parcels along Fairhaven Bay in Lincoln. Concerns related to the overuse and misuse of Mt. Misery resulted in the requirement that dogs be leashed in certain areas and the limiting of parking on Old Concord Rd. Other concerns raised included beavers and raised water levels; future of pleasant meadow.

V. Southeast Lincoln neighborhood (including Conant Rd, Browning Lane, Moccasin Hill, Laurel Drive, Weston Rd from Conant to Weston line, Old Conant Rd, Hawk Hill, South Brook Rd, Woodcock Lane). 3/2/05

Land of interest: Davis fields south of Conant Rd. Concerns: Increased use of flood lights which challenge the Dark Skies initiative; development in Waltham east of Old Conant Rd.

VI. South Central Lincoln neighborhood (including residents south of South Great Rd and east of Concord Rd and west of Drumlin Farm and the southern end of Lincoln Rd and the western end of Old Sudbury to the fields behind Drumlin farm.) 4/9/06

Trails of interest: Lincoln Rd into Dean land; Meadowbrook Rd to Dean land; Longmeadow Road to Drumlin Farm; Lincoln Road into backside of Drumlin Farm; backside of Drumlin Farm, across Old Sudbury Rd, into Weston Woods.

VII. Sandy Pond Rd neighborhood (including Sandy Pond Rd, Goose Pond Rd, Deer Run Rd, Fox Run Rd, Autumn Lane, Garland Rd, Partridge Lane, Deerhaven Rd, Old Cambridge Turnpike, south side of Cambridge Turnpike, Orchard Lane, Oak Knoll Rd, Rockwood Lane) 1/28/07

Trail of interest: North side of Flint's Pond crossing Garland Rd to Crosby's Corner. Concerns: mountain bike use; Deaconess property – mature tree cutting, maintain buffers on borders, bike path through property; invasive plants; maintain fields; Walden Passage.

C. Lands of Conservation and Recreation Interest (listed clockwise from northeast to southwest)

Parcel ID:	1-2-0 (Virginia Road)
Acreage:	10.5 acres – undeveloped land, existing field
Recreation Value:	Potential use of existing field with backstop in North Lincoln.
Parcel ID:	4-4-0, 4-5-0, 4-8-0, 4-9-3, 4-11-2, 5-4-0--5-7-0, (Old Bedford Road)
Acreage:	18.73 acres – undeveloped land, upland, woods, moderate slopes
Conservation Value:	Wooded buffer to Hanscom Field from Battle Road Farm neighborhood.
Parcel ID:	16-17-12 (Bedford Lane)
Acreage:	4.4 acres – undeveloped land owned by Brooks Hill Ass., upland, wetland
Conservation Value:	Interest in securing conservation restriction and trail easement from Brooks Hill Rd. Association; adjacent to Minute Man National Historical Park.
Parcel ID:	18-6-0 (North Great Road - Mill Street)
Acreage:	36.61 acres – Town-owned land, transfer station, upland, woods, wetland
Conservation Value:	Potential recreation fields in North Lincoln on 4.2 acres along Mill Street;
Recreation Value:	would require significant clearing and difficult access to North Great Road. Southern portion adjacent to Ricci Fields and Minute Man National Historical Park of conservation interest with proposed bike trail.
Parcel ID:	19-4-0, 19-4-5, 19-4-6, (North Great Road - Mill Street)
Acreage:	37.53 Acres - Minuteman Technical VHS
Recreation Value:	Potential new fields and use of existing recreation fields in North Lincoln; adjacent to Minute Man National Historical Park; potential trail connection.
Parcel ID:	20-10-0 (60 Mill Street)
Acreage:	12.62 Acres – one house, woodland, limited frontage
Conservation Value:	Adjacent to Cambridge watershed protection land and trails.
Parcel ID:	20-9-0, 32-1-0, 32-4-0, 48-4-0, 69-3-0, 70-8-0, 89-4-0, 127-14-0, 128-2-0 (Mill Street, Old County Road)
Acreage:	312 acres - Cambridge watershed land, woods, wetlands, water supply
Conservation Value:	Cambridge watershed land and water supply; wildlife habitat; trails
Parcel ID:	23-5-0 (Route 2)
Acreage:	Tanner’s Brook Conservation Land, historic recreation use, difficult access
Recreation Value:	Potential use of historic recreation fields; opportunities to re-establish
Agricultural Value:	agricultural use of existing meadow.
Parcel ID:	31-2-0 (Route 2)
Acreage:	16.3 acres
Conservation Value:	Contiguous conservation lands to the east and west; direct tributary to Cambridge Reservoir (Hobbs Brook), rare species, trails.

Parcel ID:	30-3-0, 30-6-0 (Route 2)
Acreage:	55 acres - 24 acres upland
Conservation Value:	Contiguous upland over 20 acres; wooded vistas to travelers on Route 2; visual and acoustic buffers to homes on Juniper Ridge Road; contiguous conservation lands to the south, east and north; bird and small-mammal travel corridor from Flint's Pond to Hobbs Brook and Ricci Fields; direct tributary to Cambridge Reservoir (Hobbs Brook), rare species, trails.
Parcel ID:	28-2-0 (Old Brooks Road)
Acreage:	Approx. 5.5 acres - undeveloped land, no frontage
Conservation Value:	<u>Land of conservation interest on 1997 OSP</u> ; contiguous upland over 5 acres; woodland patch within Flint's Pond conservation area; buffer zone to Lincoln's drinking water supply; wildlife travel corridor from Mt. Misery to Flint's Pond and Tanner's Brook.
Parcel ID:	29-33-0, 29-24-2, 29-24-0, 29-22-0 (Bedford Road)
Acreage:	15.11 acres – undeveloped land, woodland, wetland
Conservation Value:	Contiguous with Flint's Pond watershed land and Wheeler Farm conservation land, existing trails on property, proposed service road as part of Crosby's Corner - Route 2 Reconstruction Project.
Parcel ID:	37-2-0 (Canaan Drive)
Acreage:	11.2 acres – one house, upland, limited frontage
Conservation Value:	Woodland patch within Flint's Pond and Canaan Drive conservation areas; buffer zone to Lincoln's drinking water supply; wildlife travel corridor from Mt. Misery to Flint's Pond and Tanner's Brook.
Parcel ID:	36-12-7 (Bedford Road)
Acreage:	3 acres – undeveloped upland
Conservation Value:	Corridor between Wheeler Farm and Flint's Pond conservation areas; buffer zone to Lincoln's drinking water supply; open field habitat; trail connection.
Parcel ID:	53-3-0 (10 Canaan Drive)
Acreage:	Approx. 8 acres, 4 acres under permanent CR - 3 acres of interest
Conservation Value:	Contiguous open space to east, south & west; open field habitat; potential trail from Bedford Road to Pipeline trail and Flint's Pond Trails; watershed.
Parcel ID:	53-4-0 (0 Bedford Road)
Acreage:	2.8 acres – undeveloped land
Conservation Value:	Contiguous open space to east, south & west; open field habitat; potential trail from Bedford Road to Pipeline trail and Flint's Pond Trails; watershed.
Parcel ID:	53-1-0 (15 Sandy Pond Road)
Acreage:	8.16 acres - one house, open fields
Conservation Value:	Open field with views from historic Lincoln center; contiguous open space with Canaan Drive CR's, Flint's Pond and Chapin Field.
Agricultural Value:	

Parcel ID:	64-9-0 (24 Sandy Pond Road)
Acreage:	5.89 acres – one house, woodland, wetland
Conservation Value:	Views to historic Lincoln Center and agricultural fields; woodland and wetland values; contiguous open space with CR's between Lincoln Road and Sandy Pond Road; adjacent to Smith-Andover Field.
Parcel ID:	35-4-0 (Route 2)
Acreage:	2.4 acres – Town-owned municipal purposes land
Conservation Value:	Municipal purposes land of conservation interest; adjacent to Wheeler and Ricci Farm conservation lands; direct tributary to Cambridge Reservoir.
Parcel ID:	34-4-5, 34-4-4, 34-4-3, 34-4-2, 34-4-0 (Lexington Road)
Acreage:	7.89 acres – one house, field, woodland, wetland
Agricultural Value:	Fallow agricultural land along Lexington Road; tributary to Cambridge Reservoir;
Conservation Value:	wildlife habitat corridor across Route 2.
Parcel ID:	33-20-0, 50-4-3, 50-4-0 (Page Road, Route 2)
Acreage:	33.21 acres – three houses, wetland
Conservation Value:	Contiguous wetland over 25 acres; tributary to Cambridge Reservoir; wetland values; wildlife corridor to Hobbs Brook conservation land.
Parcel ID:	48-7-0, 48-7-1 (Route 2)
Acreage:	71.48 acres - educational facility, woodland, wetland, fields
Conservation Value:	<u>Land of conservation interest on 1997 OSP</u> ; contiguous upland over 50 acres; wooded vistas to travelers on Route 2; contiguous conservation lands to the south and east; abuts Cambridge Watershed Lands; potential recreation or grazing opportunities.
Recreation Value:	
Agricultural Value:	
Parcel ID:	49-8-0 (26 Tabor Hill Road)
Acreage:	5.09 acres - one house, woodland, wetland, limited access
Conservation Value:	Adjacent to Farrington Memorial and Osborne Farm; Cambridge Watershed land; valuable vernal pool; wetland values; possible trail connector.
Parcel ID:	68-7-0 (Trapelo Road)
Acreage:	3.84 acres – one house, woodland
Conservation Value:	Adjacent to Osborne Farm conservation area; potential trail connection between Osborne Farm and Trapelo Road and Farrington Memorial.
Parcel ID:	68-6-0 (Trapelo Road)
Acreage:	1.06 acres – undeveloped land, potential building lot, wetland
Conservation Value:	Potential trail connection between Osborne Farm and Trapelo Road.
Parcel ID:	52-3-0 (Lexington Road)
Acreage:	APR & CR to LLCT, (3) reserved building lots, fields, woodland, wetland
Conservation Value:	Building lots are within existing conservation and agricultural land;
Agricultural Value:	proposed trail connection from Cemetery to Mine Brook Road.

Parcel ID:	52-5-0 (15 Minebrook Road)
Acreage:	Approx. 13.5 acres - one house, wetland
Conservation Value:	Over 10 acres of contiguous forested wetland; direct tributary to Mine Brook and Cambridge Reservoir; adjacent to Flint Property and Wheeler Farm; possible trail link to Wheeler Farm.
Parcel ID:	52-4-3 (Lexington Road)
Acreage:	2.15 Acres - potential building lot - forested, wetlands
Conservation Value:	Within prominent historic and agricultural views of Flint's Fields; Cambridge Watershed Protection (Iron Mine Brook).
Parcel ID:	52-4-2 (Minebrook Road)
Acreage:	3.31 Acres - potential building lot - forested, wetlands
Conservation Value:	Cambridge Watershed Protection (Iron Mine Brook).
Parcel ID:	51-11-2 (Page Road)
Acreage:	1.7 acres – undeveloped upland, stream, woodland, agricultural field
Conservation Value:	Surrounded by Page Road conservation area; agricultural field; potential trail connection between Osborne Farm and Grasshopper Lane.
Parcel ID:	66-1-0, 66-7-0, 66-6-0, 73-1-1 (Trapelo Road)
Acreage:	Approx. 50+ acres - 2 houses, 41 acres in Chapter 61A
Conservation Value:	<u>Land of conservation interest on 1997 OSP</u> ; contiguous upland over 20 acres; prominent recreation area (sledding hill); productive agricultural land with scenic vistas along Trapelo Road; wildlife travel corridor from Stony Brook and Beaver Pond to Mine Brook north of Trapelo Road; direct tributary to Cambridge Reservoir.
Recreation Value:	
Agricultural Value:	
Parcel ID:	72-9-3, 72-9-2, 72-1-2, 72-9-1, 72-9-0 (Silver Hill Road)
Acreage:	10.84 acres – undeveloped land, woodland, wetland
Conservation Value:	Adjacent to Silver Hill Bog conservation area; wetland habitat; wildlife travel corridor from Stony Brook and Beaver Pond to Mine Brook north of Trapelo Road; direct tributary to Cambridge Reservoir.
Parcel ID:	73-6-0 (26 Beaver Pond Road)
Acreage:	8.6 acres - one house, woodland, wetland
Conservation Value:	Contiguous upland and wetland over 5 acres; adjacent to Pierce Park and Beaver Pond Conservation Area; buffer to trails; wetland values; drains to Stony Brook and Cambridge Reservoir.
Parcel ID:	71-5-0 (Trapelo Road)
Acreage:	1.98 acres - undeveloped land, wetlands
Conservation Value:	Contiguous to LLCT owned land; desired woodland corridor from Pigeon Hill, Browning Fields and Silver Hill Bog to Osborne Farm; Cambridge Watershed; potential trail easement.

Parcel ID:	71-8-1 (Winter Street)
Acreage:	4.85 acres – undeveloped land, no frontage, wetlands
Conservation Value:	Undeveloped upland over 4 acres; contiguous to LLCT owned land; desired woodland corridor from Pigeon Hill, Browning Fields and Silver Hill Bog to Osborne Farm; Cambridge Watershed.
Parcel ID:	88-4-0 (28 Winter Street)
Acreage:	Approx. 9.51 acres – one house, upland, limited frontage
Conservation Value:	Contiguous upland over 5 acres; desired woodland corridor from Pigeon Hill, Browning Fields and Silver Hill Bog to Osborne Farm; Cambridge Watershed.
Parcel ID:	88-1-0 (Winter Street)
Acreage:	3.4 acres – undeveloped land, wetlands
Conservation Value:	Contiguous to LLCT owned land; desired woodland corridor from Pigeon Hill, Browning Fields and Silver Hill Bog to Osborne Farm; Cambridge Watershed.
Parcel ID:	87-16-0 (16 Old Winter Street)
Acreage:	8.61 acres – one house, chapter 61A land, existing sheep pasture, wetlands
Conservation Value:	Opportunities to maintain existing agricultural operations; contiguous to Silver Hill Bog and Browning Fields; wetland values; trail connections.
Agricultural Value:	
Parcel ID:	87-19-0 (21 Silver Hill Road)
Acreage:	6 acres – one house, fallow field
Agricultural Value:	Potential to convert fallow field to agricultural use adjacent to Silver Hill Road; adjacent to Silver Hill Bog and Browning Fields conservation areas.
Parcel ID:	87-19-2 (Silver Hill Road)
Acreage:	3.48 acres – undeveloped land, limited frontage, field, wetland
Agricultural Value:	Potential to convert fallow field to agricultural use adjacent to Silver Hill Road; contiguous with Silver Hill Bog and Browning Fields conservation areas; existing trails through property; wetland habitat.
Conservation Value:	
Parcel ID:	86-7-0 (Weston Road)
Acreage:	1.32 acres – undeveloped land, limited frontage, field, wetland
Conservation Value:	Contiguous with Silver Hill Bog and Browning Fields conservation areas.
Parcel ID:	92-1-0 (91 Weston Road)
Acreage:	13.6 acres – one house, wooded wetland
Conservation Value:	Contiguous to Beaver Pond conservation area; wildlife travel corridor between Beaver Pond, Browning Fields and Silver Hill Bog, potential trail connections to Beaver Pond and Harrington conservation areas.

Parcel ID:	93-3-0 (11 Woodcock Lane)
Acreage:	9.6 acres – one house, wooded wetland, open water
Conservation Value:	Contiguous to Beaver Pond conservation area; wildlife travel corridor around Beaver Pond and between Browning Fields and Silver Hill Bog; direct tributary to Cambridge Water Supply.

Parcel ID:	91-7-0 (63 Winter Street)
Acreage:	Approx. 65 acres - wetlands
Conservation Value:	Contiguous wetland over 50 acres; Cambridge Watershed; wetland values; adjacent to existing conservation lands; winter trail connections.

Parcel ID:	91-8-2 (Winter Street)
Acreage:	4.8 acres – undeveloped land, wetland, no frontage
Conservation Value:	Contiguous wetland complex feeding Cambridge Reservoir; adjacent to Browning Fields and Pigeon Hill conservation area.

Parcel ID:	107-1-0 (16 Conant Road)
Acreage:	4.5 acres – one house, fields adjacent to Browning Lane and Conant Road
Agricultural Value:	Opportunities to convert fallow fields to agricultural use.

Parcel ID:	107-2-0 (20 Browning Lane)
Acreage:	5.3 acres – undeveloped land, limited frontage
Conservation Value:	Open meadow habitat with wetland corridor to Stony Brook; adjacent to Browning Fields conservation land.

Parcel ID:	107-13-0 (20 Conant Road)
Acreage:	6.26 acres – one house, woods, wetlands
Conservation Value:	Open meadow habitat with wetland corridor to Stony Brook; adjacent to Browning Fields conservation land; potential trail to Harrington land.

Parcel ID:	107-4-0 (58 Conant Road)
Acreage:	6.38 acres – one house, limited frontage, wooded wetlands, open water
Conservation Value:	Contiguous to Pigeon Hill conservation area; existing trail corridor; wildlife travel corridor from Valley Pond to Silver Hill Bog; part of large wetland complex leading to Stony Brook.

Parcel ID:	107-7-0 (62 Conant Road)
Acreage:	8.93 acres – one house, limited frontage, wooded wetlands
Conservation Value:	Contiguous to Valley Brook conservation area; existing trail corridor; wildlife travel corridor from Valley Pond to Silver Hill Bog; part of large wetland complex leading to Stony Brook.

Parcel ID:	110-11-0, 110-12-0, 110-13-0, 110-22-0 (Conant Road)
Acreage:	7.87 acres – one house, upland, agricultural fields
Agricultural Value:	Productive agricultural land with scenic views from Conant Road; contiguous to Valley Brook conservation area; potential trail connection from Pigeon Hill to Harrington conservation area.
Conservation Value:	
Parcel ID:	110-23-0, 110-21-0 (Conant Road)
Acreage:	9.45 acres – one house, limited frontage, agricultural fields, woods, stream
Agricultural Value:	Agricultural fields; potential trail connection from Pigeon Hill to Valley Pond, Harrington & Weston; stream tributary to Stony Brook.
Conservation Value:	
Parcel ID:	121-11-0 (190 Weston Road)
Acreage:	4.68 acres – one house, upland
Conservation Value:	Abuts conservation land around Valley Pond and Harrington parcels; potential trail connection to Valley Pond.
Parcel ID:	74-30-1 (79 Lincoln Road)
Acreage:	5.75 acres - one house, woods, stream
Conservation Value:	Large contiguous upland; adjacent to Bergen-Culver conservation land; trail connection to schools; drains to Tower Road Well.
Recreation Value:	
Parcel ID:	85-28-0 (Lincoln Road)
Acreage:	6.13 acres – undeveloped wooded wetland, limited/no frontage
Conservation Value:	Land of conservation interest on 1997 OSP; wetland values; Tower Road wellhead and groundwater protection; drains to Stony Brook and Cambridge Reservoir; contiguous open space to north and south; wildlife corridor from Umbrello to Bergen-Culver across Lincoln Road; trail buffer; potential trail easement.
Parcel ID:	93-1-0 (60 Tower Road)
Acreage:	10.69 acres – one house, wooded wetlands, limited/no frontage
Conservation Value:	Wetland values; Tower Road wellhead and groundwater protection; drains to Stony Brook and Cambridge Reservoir; contiguous open space to south; habitat connection to Beaver Pond and Harrington land.
Parcel ID:	105-11-0 (80 Tower Road)
Acreage:	7.52 acres – one house, wooded wetlands, limited/no frontage
Conservation Value:	Wetland values; groundwater protection; drains to Stony Brook and Cambridge Reservoir; contiguous open space to north, east and south; habitat connection to Beaver Pond and Harrington land.
Parcel ID:	111-2-0 (133 Weston Road)
Acreage:	22.8 acres – one house, woods, wetlands, Stony Brook, limited frontage
Conservation Value:	Habitat connection from Harrington to Beaver Pond; contiguous open space to north, west and south; wetland values; Stony Brook flows through back of property to Cambridge Reservoir, existing trails.

Parcel ID:	106-15-0 (131 Weston Road)
Acreage:	9.18 acres – one house, woods, horse facilities
Conservation Value:	Existing trails across property need easements; watershed land; adjacent to
Agricultural Value:	existing conservation land.
Parcel ID:	120-7-0, 120-7-3 (4 Twin Pond Lane)
Acreage:	10.45, 3.67 acres – one house, undeveloped land, Stony Brook, limited frontage, existing trail
Conservation Value:	Habitat connection from Harrington to Beaver Pond; contiguous open space to east; wetland values; Stony Brook flows through back of property to Cambridge Reservoir, existing trail.
Parcel ID:	103-6-0 (30 Lewis Street)
Acreage:	3.28 acres – Town-owned, municipal purposes land, existing DPW
Recreation Value:	Potential recreation fields in Lincoln Center.
Parcel ID:	83-2-0 (38 Codman Road)
Acreage:	15.73 acres – Historic New England, historic house, open fields, open water
Recreation Value:	Codman Estate within Codman conservation area; scenic views to house, fields and pond from Codman Road; wildlife corridor and trail connections.
Parcel ID:	103-2-0, 113-5-0, 114-1-0 (South Great Road)
Acreage:	152 acres - buildings
Agricultural Value:	Contiguous open space over 100 acres (largest unprotected parcel in town);
Conservation Value:	agricultural use and views; distant views from drumlin; educational opportunities; trails; vernal pools; grassland bird nesting habitat and management; headwaters of two watersheds.
Parcel ID:	126-1-0 (Old Sudbury Road)
Acreage:	95 acres (portion currently under CR)– agricultural fields, wetlands
Conservation Value:	Contiguous wildlife and trail corridor from Wayland and Weston to
Recreation Value:	Codman East, Bergen-Culver and Flint's Pond; Views to agricultural fields;
Agricultural Value:	headwaters of two watersheds; potential for recreation fields.
Parcel ID:	119-3-0 (10 Old Sudbury Road)
Acreage:	3.52 acres - one house, wooded wetlands along commuter rail
Conservation Value:	Woodland buffer along commuter rail; part of large wetland complex draining to Stony Brook and Old Sudbury Road conservation area.
Parcel ID:	110-2-0, 119-27-0 (16 Old Sudbury Road)
Acreage:	10.22 acres - one house, limited frontage, agricultural fields, open water
Agricultural Value:	Productive agricultural land with scenic views from commuter rail;
Conservation Value:	contiguous to Old Sudbury Road conservation area and trails.

Parcel ID:	97-6-1, 97-6-0 (Concord Road)
Acreage:	2.92 acres – undeveloped land, woods
Conservation Value:	Undeveloped upland; adjacent to Farrar Pond; wooded buffer from pond; watershed protection; potential trail easement.
Parcel ID:	97-3-0, 97-3-1, 97-4-0 (Concord Road)
Acreage:	5.64 acres – undeveloped land, woods
Conservation Value:	Undeveloped upland; adjacent to Farrar Pond; watershed protection; potential trail easement.
Parcel ID:	97-19-2 (Concord Road)
Acreage:	4.05 acres – undeveloped land, limited frontage, woods, open water
Conservation Value:	Adjacent to Farrar Pond; wildlife habitat; existing trail on property.
Parcel ID:	97-2-0 (213 Concord Road)
Acreage:	2.05 acres – one house, woods
Conservation Value:	Land borders Farrar Pond; wooded buffer from pond; watershed protection; potential trail easement.
Parcel ID:	81-6-0, 81-5-0, 81-4-0 (South Great Road)
Acreage:	15.98 acres – undeveloped upland, adjacent to Farrar Pond
Conservation Value:	Currently owned by Mass Audubon; existing trails; adjacent to Mt. Misery
Parcel ID:	60-1-0 (262 Old Concord Road)
Acreage:	3.7 Acres – outbuilding, no frontage
Conservation Value:	Undeveloped upland; contiguous to Mt. Misery Conservation Land; wildlife corridor through Mt. Misery, Fairhaven Bay and Adams Woods.
Parcel ID:	60-2-0 (Old Concord Road)
Acreage:	3.8 Acres – undeveloped upland, no frontage
Conservation Value:	Undeveloped upland; contiguous to Mt. Misery Conservation Land; wildlife corridor through Mt. Misery, Fairhaven Bay and Adams Woods.
Parcel ID:	59-4-0 (228 Old Concord Road)
Acreage:	7.2 Acres – one house
Conservation Value:	Several acres of undeveloped woodland; contiguous to Mt. Misery Conservation Land; woodland wildlife corridor through Mt. Misery, Fairhaven Bay and Adams Woods.
Parcel ID:	59-7-0, 59-8-0 (Old Concord Road)
Acreage:	Approx. 5 acres - adjacent to Fairhaven Bay, wetlands
Conservation Value:	Woodland and wetland habitat; bird and wildlife corridor along Sudbury River, Mt. Misery, Adams Woods and Walden Pond; riverfront buffer zone; wetland values; trail connection along eastern edge of Fairhaven Bay to Adams Woods and Walden Pond.

Parcel ID:	58-2-2, 58-2-0, 58-1-0 (Old Concord Road)
Acreage:	Approx. 20 acres - one house, 3 buildable lots
Conservation Value:	Woodland habitat; bird and wildlife corridor along Sudbury River Mt. Misery, Adams Woods and Walden Pond; riverfront buffer zone; wetland values; pond and open field habitat; trail connections between Mt. Misery, Adams Woods and Walden Pond.
Parcel ID:	61-5-0 (104 Concord Road)
Acreage:	6.84 acres – one house, limited frontage, wetlands, open water
Recreation Value:	Contiguous to Codman North conservation area; wooded buffer from commuter rail; associated with large wetland complex draining to Beaver Dam Brook, Farrar Pond and Sudbury River.
Parcel ID:	56-12-0, 56-12-1 (64 Baker Bridge Road)
Acreage:	10.1 acres – one house, limited frontage, woods, wetlands
Agricultural Value:	Contiguous to Bergen Culver conservation land; wooded buffer to Three Friends Trail; wildlife corridor to Pine Hill and Flint’s Pond.
Parcel ID:	62-4-0 (68 Baker Bridge Road)
Acreage:	5.5 acres – Historic New England, historic house, orchard, meadow
Agricultural Value:	Preserve agricultural use.
Parcel ID:	63-9-0 (Baker Bridge Road)
Acreage:	3.93 acres – undeveloped land, woods
Recreation Value:	Potential recreation fields adjacent to/in conjunction with Carroll School.
Parcel ID:	41-3-0 (Concord Road)
Acreage:	2.15 acres – Boston & Maine Railroad, undeveloped land, open water.
Recreation Value:	Contiguous to Walden Pond and Adams Woods conservation areas; wooded buffer to commuter rail; wildlife habitat and corridor.
Parcel ID:	42-5-0, 42-6-0, 42-9-1 (Baker Farm Road)
Acreage:	8.39 acres – Walden Woods Project, woods
Conservation Value:	Within Pine Hill conservation area; historic landscape, trail connections.
Parcel ID:	42-8-0 (Baker Farm Road)
Acreage:	5.66 acres – undeveloped land, woods, wetlands
Conservation Value:	Forms wooded corridor between Pine Hill conservation areas; existing trail easement but no trail.
Parcel ID:	39-6-0 (Concord Road)
Acreage:	4.13 acres – Town of Concord, meadow, scenic vistas
Conservation Value:	Top of Pine Hill conservation area; scenic views to west; existing trails.

D. Lincoln's ADA Self-Evaluation Information for Handicap Accessibility

This ADA self-evaluation provides an outline of how accessible the Town's conservation and recreation properties and programs are to people with disabilities. Shortcomings are identified and the importance of making more comfortable and safer properties, trails and programs for handicapped residents and visitors is highlighted. It also includes information on the Town's administrative and employment practices. Inventory reports for each type of recreation and conservation facility are available in the Conservation and Recreation Offices.

ADA Self-Evaluation Information for the Recreation Department

Function of Department

The mission of the Recreation Department is to provide affordable quality leisure opportunities and safe recreational facilities for all its residents and school children. The Department is to act as a coordination point for athletic organizations, schools, town boards and departments and the citizens of Lincoln to determine the needs of the community. Core programs such as the summer day camp, the swimming pool, and the tennis courts will be consistently offered, while others will be dependent upon user demand. For the most part, these programs will be fee based and self-funding.

Site Access

Office Space: The Recreation Department Office is located on the Ballfield Road campus, in the Hartwell A Pod, abutting the Hartwell Parking Lot. The parking lot has 2 handicapped parking spaces directly in front of the school administration building, (*Please reference Lincoln Public School SMMA Facilities Assessment*) approximately 20 yards from the A Pod entrance. There is a curb cut at the extreme right end of the building (as you face it) and a paved walkway that runs the length of the building.

The front door to the Recreation Office is door #8, featuring a metal handle to enter and a push bar to exit. There is a minimal door threshold and a rug and tiled surface upon entry. Our service counter is 40" high, but we provide a 29" table in the service area for customer use and are happy to assist as needed. The building is Lincoln Public School property. (*Please reference Lincoln Public School SMMA Facilities Assessment.*)

Programming Spaces: These are the core programming sites. Field trips and special events may occur at other locations at the Departments discretion.

Brooks Gym hosts various afterschool sporting events, our basketball league, and the summer camp program. It is located in the back right corner of the Ballfield Road Campus, adjacent to the Brooks Parking Lot. The parking lot offers three handicap spaces approximately 10 yards from the gym entrance (*Please reference Lincoln Public School SMMA Facilities Assessment*) and there is a direct curb cut and walkway to ease entry into the site. The building is Lincoln Public School property. (*Please reference Lincoln Public School SMMA Facilities Assessment.*)

Smith Gym hosts various afterschool, summer camp and community events. It is located on the Ballfield Road Campus, in the center of the Smith end of the Lincoln School, near the Smith School Playground. It can be accessed from the Smith School Parking lot, which offers four

handicapped parking spaces (*Please reference Lincoln Public School SMMA Facilities Assessment*) with curb cuts and paved walkways that lead into the school and gym. It can also be accessed by the Smith Front Parking Lot, which offers two handicapped parking spaces (*Please reference Lincoln Public School SMMA Facilities Assessment*) with curb cuts and paved walkways that lead into the school and gym. The building is Lincoln Public School property. (*Please reference Lincoln Public School SMMA Facilities Assessment.*)

Athletic Fields: Three of the town's athletics fields also serve as school athletic fields. They are reasonably maintained to allow for a level surface, decent grass coverage, and equipment safety.

Town Hall Athletic Field is adjacent to the Town Hall parking lot. There are three handicap parking spaces in front of Town Hall, approximately 50 yards from the athletic field. There is a paved walkway with significant elevation changes that lead back to the athletic field. The field is accessible by grass pathways, and does feature various elevation changes from the parking lot to the field itself. Parking at the left side of the lot (facing the field), and approaching the field from the most extreme left end offers the most gradual elevation change, and the easiest access.

Smith Athletic field is located on Ballfield Road behind the Smith end of the Lincoln School. It is adjacent to the Smith Parking Lot, which offers four handicap parking spaces. (*Please reference Lincoln Public School SMMA Facilities Assessment*). There is an access road that runs approximately 30 yards along the side of the athletic field. The field is accessible by grass pathway and offers no significant elevation changes from the parking lot.

Brooks Athletic Field is in the center of the Ballfield Road circular driveway and is adjacent to both the Brooks and Smith School front parking lots. Both lots offer two handicapped parking spaces each. (*Please reference Lincoln Public School SMMA Facilities Assessment*). The field is accessible by grass pathway and offers no significant elevation changes between the parking spaces and the field itself.

Codman Athletic Field is located in the back right corner of the Ballfield Road Campus, and is adjacent to the Brooks Parking Lot and the Codman Pool. The parking lot offers three handicap spaces approximately 70 yards from the athletic fields (*Please reference Lincoln Public School SMMA Facilities Assessment*) and there is a significant elevation change from the parking lot to the field, so parking at the top of the pool driveway is recommended for handicap access. The field is accessible by grass pathway. Recommendation: Add handicap parking spot to pool driveway.

Tennis Courts: There are six courts located on Ballfield Road in two locations. There are four courts adjacent to the Smith School Parking Lot and two courts directly across the Ballfield Road driveway in the center of the campus. The Smith School Lot offers four handicapped parking spaces (*Please reference Lincoln Public School SMMA Facilities Assessment*) but they are located at the other end of the lot, approximately 40 yards from the court entrance. The additional 2 courts have no adjacent parking. All courts are accessible by grass pathways that lead to the court fence.

The courts themselves are a clay base which provides a firm, smooth surface when the courts are dry. The courts should not be accessed when extremely wet. Fence gates are wide enough to

allow wheelchair access. There is a crushed stone walkway down the center of the 4 courts.
Recommendation: Create paved walkway from Smith Parking Lot to crushed stone walkway.

Codman Pool: The swimming pool is located at the back right corner of the Ballfield Road campus, adjacent to the Codman Athletic Fields and the Brooks Parking Lot. The parking lot offers three handicap spaces approximately 60 yards from the pool entrance (*Please reference Lincoln Public School SMMA Facilities Assessment*), and there is a significant elevation change from the parking lot to the pool, so parking at the top of the pool driveway is recommended for handicap access.

The pool deck was replaced in 2003 to improve accessibility and overall safety, and a lift was installed to allow pool staff to help patrons enter the water at their request. The pool bathhouse does include bathrooms with handicap accessible toilets and showers. Recommendations: 1) Add handicap parking spot to pool driveway. 2) Audit pool bathhouse for accessibility issues.

Playgrounds: All four playground use engineered wood fibers as safety surfacing. While this is currently considered handicap accessible, the surfacing needs to be constantly maintained to support wheelchair access. The Town does not currently provide this type of maintenance.
Recommendation: Maintenance fund to be increased or alternative safety surfacing may need to be considered in the future.

Strat's Playground is located behind the Hartwell Administration Building. It is accessed by the Hartwell Parking Lot. The parking lot has two handicapped parking spaces directly in front of the administration building, (*Please reference Lincoln Public School SMMA Facilities Assessment*), approximately 50 yards (around the building) to the playground entrance. There is a paved walkway with significant elevation change from the parking lot to the playground. Individuals may choose to use the walkway as a driveway, and park directly next to the playground.

The playground was originally built in 1989. It was funded by a volunteer committee and gifted to the Town. It was retrofitted in 2001 to make it compliant with 2001 safety and handicap accessibility codes. (See *Strat's Place Phase one repair List Document*, available in the Recreation Office). Recommendation: Strat's Playground is nearing the end of its lifespan and will eventually need significant upgrades or replacement to remain accessible and safe.

Tot Lot is located in the back right corner of the Ballfield Road campus, adjacent to the Brooks Parking Lot. The parking lot offers three handicap spaces approximately 40 yards from the playground entrance (*Please reference Lincoln Public School SMMA Facilities Assessment*) and there is no direct curb cut or walkway to ease entry into the site.

The Tot Lot was installed in 2006 and the equipment was designed with handicap accessibility in mind. (See *Lincoln Tot Lot Installation Report*, available in the Recreation Office.) It was funded by the Community Preservation Act at the request of the Recreation Committee.
Recommendation: Install curb cut and paved walkway from Brooks Parking lot.

Smith School Playground is adjacent to the Kindergarten wing of the Lincoln School, as well as the Smith School Lot. The Smith School Lot offers four handicapped parking spaces (*Please reference Lincoln Public School SMMA Facilities Assessment*) with curb cuts and paved

walkways that lead to the playground. There is an access road that runs approximately 30 yards along the side of the playground.

The playground was installed in 1994 by the Lincoln School Building Project, so accessibility reports would be available through the School Department.

Oz Playground is located behind the Lincoln School, adjacent to the Smith Athletic Field. There are no parking lots nearby and it is surrounded by grass, save for a brick walkway that connects it to the back of the Lincoln School. This makes public access difficult.

The playground was installed in 1997 and handicap accessibility of the equipment was encouraged in its design. It was funded by the Lincoln PTA and gifted to the Town.

Program and Service Access

The Recreation Department offers approximately 100 – 120 programs and services annually to community members of all ages. Examples include: tumbling and craft programs for preschool children, chess, theater and sports for school-age children, trips for middle school students, and fitness, art, and dance programs for adults and senior citizens. The Department also oversees the town swimming pool, summer camp and basketball league, as well as the town's celebration events (July 4th festivities, summer concerts, Winter Carnival).

The Recreation Department is committed to making its programs as accessible as possible. Should you have any questions or concerns about the accessibility of a program or facility, please contact the office. We will work to make any reasonable accommodations, assuming they do not compromise your safety, or the safety of other program participants.

General Communications

The Department advertises through 3 brochures that are mailed annually: a Fall/Winter, a Spring/Summer/Pool, and a Summer Camp Brochure. We also host a website (www.lincolnrec.com), and a blog page (Lincolnrec.blogspot.com). Additional advertising is done through the Lincoln Journal and Boston Globe newspapers, flyers through the local schools, and the public school parent newspaper (Minilink).

All written communications can be made available in alternate formats upon request.

The Department can be reached in person at the Recreation Office (8:30 am - 4:30 pm, M-F), by phone (781 259-0784) or staff email.

Our brochures and website include the following language: *The Recreation Department's programs are accessible to all. If participants have any special needs, they should contact the Recreation Director in advance.*

Employment Practices

Currently there are two full time employees and one part time employee in the department – none of which have a declared disability. In the summer we hire approximately 60 seasonal, part-time employees. The town is an affirmative action, equal employment opportunity

(AA/EEO) employer. All personnel actions of the department comply with the Town's *Personnel Policies and Procedures Manual*.

ADA Self-Evaluation Information for the Conservation Department

Function of Department

The Conservation Commission is primarily responsible for reviewing site-plans, and subdivision plans for resource and wetland protection, and for maintenance of the extensive conservation property owned or overseen by the town.

Site Access

Office Space: Located on the second floor of the building, the Conservation Commission office is currently not situated on an accessible path. The office provides no service counter for conducting business. Two wide and unobstructed doorways into the office can be accessed by a wheelchair. The front door of Lincoln Town Hall is wheelchair accessible and staff are willing to meet people at the front door to assist anyone who is not able to make it upstairs. Meetings are primarily located within the office on the second floor; however, the Commission is able and willing to move a meeting to one of the accessible meeting rooms as needed. Assisted listening devices will be available upon advance request by anyone with a hearing disability.

Conservation Lands and Trails: Although the only 'official' ADA compliant trail in Lincoln is the Battle Road Trail in Minute Man National Park, Lincoln's extensive network of roadside paths, parking areas and some fire roads/trails are navigable by people in wheelchairs. In several instances, Conservation Staff have made efforts to take people with disabilities on the trails when they request assistance. The Love Lane Riding Facility, a private non-profit located on Baker Bridge Road takes its students on their accessible trail and the adjoining conservation-land trails. In addition, the Lincoln Conservation Commission and City of Cambridge are working together to make a section of trail into the Harrington Conservation Land ADA accessible.

Recommendation: Review 'Guidelines for Outdoor Developed Areas' and 'Trail Accessibility Guidelines' and assess potential trails for ADA accessibility.

General Communications

The Conservation Commission utilizes a variety of communication resources, i.e. Certified/regular mail, telephone, fax, email, local newspapers, and general posting in Town Hall. The Conservation Commission is required by law to post and/or legally advertise a variety of public notices. Public Hearing Notices are posted with the Town Clerk. Legal advertisements are published in the local paper. We are prepared to supply information in connection with all the programs in this office in alternate formats upon request.

Employment Practices

There are two full time employees and two part-time employee in this department – none of which have a declared disability. The town is an affirmative action, equal employment opportunity (AA/EEO) employer. All personnel actions of the Building Department comply with the Town's *Personnel Policies and Procedures Manual*.



TOWN OF LINCOLN
MIDDLESEX COUNTY MASSACHUSETTS

Anita M. Scheipers
Asst. Town Administrator

LINCOLN TOWN OFFICES
16 Lincoln Road, P.O. Box 6353
Lincoln, MA 01773-6353
Phone: 781-259-2600
Fax: 781-259-1677

December 17, 2007

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

Re Town of Lincoln Open Space and Recreation Plan / Town of Lincoln Employment Practices
re ADA

The Town of Lincoln maintains a strict equal opportunity policy when dealing with all
employment practices. The current policy clearly states there shall be no discrimination in
employment on any basis, and is consistent with the ADA.

Please feel free to contact me if you have any additional questions in this matter.

Regards,

Anita Scheipers
Asst. Town Administrator
And ADA Coordinator

cc: Conservation Commission



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Deval Patrick
GOVERNOR

Timothy Murray
LIEUTENANT GOVERNOR

Ian Bowles
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181

February 1, 2008

Angela Seaborg
Town of Lincoln
Conservation Commission
P.O. Box 6353
Lincoln, MA 01773

Re: Open Space and Recreation Plan

Dear Ms. Seaborg:

Thank you for submitting Lincoln's Open Space and Recreation Plan to this office for review for compliance with the current Open Space and Recreation Plan Requirements. I am pleased to write that the plan is approved. This final approval will allow Lincoln to participate in DCS grant rounds through October 2012. Please send a hard copy of the final product to me for our files.

Congratulations on a great job. Please call me at (617) 626-1171 if you have any questions or concerns about the plan.

Sincerely,

Melissa Cryan
Grants Manager

cc: Board of Selectmen
Recreation Department

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