The City of Northampton's Seven-Year Plan of open space and recreation:
agriculture
conservation
multi-use trails
open space
recreation

2011–2018
(valid through March 2018)

Open Space, Recreation & Multi-Use Trail Plan

Open Space, Recreation, and Multi-Use Trail Planning & Sustainable Northampton

The City of Northampton *Open Space, Recreation and Multi-Use Trail Plan* provides the framework for how Northampton can continue to work towards maintaining vibrant urban centers and obtaining the benefits of sustainable development, without compromising the City's valued environmental resources.

The plan is consistent with the Sustainable Northampton Comprehensive Plan (2008), the City's duely adopted comprehensive plan, and has been adopted as a additional component of that plan.

For additional on related projects and initiatives, please visit the Office of Planning and Development's website at: www.northamptonma.gov/opd.

Plan Adopted or Endorsed by 10 City boards:

Planning Board: 10/28/2010 (as Open Space Plan AND component of Comprehensive Plan)

Conservation Commission: 10/28/2010

Recreation Commission: 11/01/2010

Historical Commission: 10/27/2010

Recreation Commission: 11/01/2010

Transportation and Parking Commission: 11/16/2010

Agriculture Commission: 12/14/2010

Youth Commission: 12/15/2010

Committee on Disabilities: 12/13/2010

City Council: 12/16/2010

Plan Approved by the Commonwealth of Massachusetts:

Executive Office of Energy and Environmental Affairs: 6/23/2011-- valid to March 2018

Staff:

Wayne Feiden, FAICP, Director of Planning and Development (project manager)

Sarah LaValley, Conservation, Preservation, and Land Use Planner

Ann-Marie Moggio, Director of Recreation

James Thompson, GIS Coordinator

Lauren Woodard, Smith College Intern, Design and Layout

and numerous U. Mass and Smith College Interns

Table of Contents

1	*Plan Summary*	*4*
2	*Introduction*	*5*
3	*Community Setting*	*6*
4	*Environmental Inventory & Analysis*	*23*
5	*Conservation and Recreation Inventory*	*43*
6	*Community Vision*	*141*
7	*Analysis of Needs*	*142*
8	*Goals and Objectives*	*146*
9	*Seven-Year Action Plan*	*152*
A	*ADA Self-Evalutation Report*	*197*
11	*References*	*184*

1 Plan Summary

The *Open Space, Recreation and Multi-Use Trail Plan* provides guidance on how the City of Northampton can best use limited resources to meet the City's open space, agriculture, conservation, multi-use trail, and recreation needs. Building on extensive participation of citizens and the adopting and endorsing municipal boards (see inside cover page), the City has identified critical steps that the City should undertake to meet some of these needs.

Northampton aims to be one of the most sustainable communities in the Commonwealth. In the context of this plan, this means protecting valuable habitat and restoring natural systems, creating passive and active recreation opportunities for our citizens. It also means encouraging development in the appropriate places and creating jobs and economic development in those areas, without harmful sprawl, and creating opportunities for all citizens.

The open space and recreation actions by which we hope to achieve this goal are:

1. Manage conservation lands to preserve natural systems and be user friendly
2. Preserve the City's most ecologically valuable and intact ecological areas
3. Preserve conservation land to connect neighborhoods and urban areas
4. Preserve farmland
5. Support agricultural operations to ensure farmers for farmland
6. Ensure adequate land for active recreation
7. Improve recreation areas to serve active recreation needs
8. Create a mixed-use Connecticut River waterfront park and boathouse
9. Maintain existing recreation areas
10. Develop multi-use trails for easy public access
11. Reclaim pavement for parks as appropriate
12. Honor places where history comes alive in the landscape
13. Improve public awareness of all of these open space and recreation resources

2 Introduction

Statement of Purpose

Northampton is blessed with an exceptional wealth of scenic, natural, cultural, and recreational resources. The city and our public and private partners and land stewards provide great open space, conservation, and recreation opportunities.

There is unmet demand, however, for open space and recreation areas for public use, public health and public appreciation. This plan inventories land of ecological, cultural, and recreational importance in order to best utilize limited resources to meet Northampton's open space, conservation, recreation and multi-use trail needs.

The plan is specific, to guide decision-making, while allowing flexibility to respond to changing opportunities to maintain, manage, acquire, and improve open space, recreation, and trails.

Through adoption of this Plan, the City acknowledges that permanent protection and wise stewardship of its natural, cultural, and recreational resources are not only intrinsically important but are also essential to the community's quality of life, long-term economic health, and sustainability.

This plan meets the Open Space and Recreation Plan requirements of the LAND/PARC Act and is an element of the Northampton Comprehensive Plan. The Conservation Commission, Recreation Commission, and the Planning Board have adopted the Plan. The Planning Board adopted the Plan in accordance with Massachusetts General Laws, Chapter 41, §81D.

Participatory Planning

This plan builds on seven earlier *Open Space, Conservation and Recreation Plans* and other planning, including *Sustainable Northampton Comprehenisve Plan* (2008), *Northampton Vision 2020* (1999) and *Grow Smart Northampton: Community Development Plan* (2002).

The plan was developed with extensive public and board participation. This included three formal public workshops, each one of which was advertised in the newspaper, the City's website, and the Planning and Development's listserve, plus interactive public sessions at meetings of each of the ten boards who adopted or endorsed the plan sessions, and one with a key management partner.

Enhanced outreach was provided to Environmental Justice neighborhoods through outreach to the Housing Authority, City Councilors whose wards include EJ populations, an extra meeting at one of the largest low and moderate income housing complex in the City (River Run), and direct invites of memberfs of the EJ community.

The Office of Planning and Development and Recreation Department, working with all of the boards who adopted or endorsed the plan, are charged with implementing the plan.

3 Community Setting

Regional Context

The City of Northampton contains approximately 35.7 square miles in Massachusetts and is mid-way between Connecticut to the south and Vermont to the north. The City is also mid-way between Albany, NY to the west and the City of Boston to the east.

The City of Northampton is located on the west side of the Connecticut River and sits in the valley between that ancient waterway and the glacial formed hills to the west. The land nearest the Connecticut River has rich, fertile soils and a deep agricultural history. Adjacent to the fertile floodplains of the Connecticut River is the flat glacial outwash, which underlies much of the historic residential, commercial, and industrial development in downtown Northampton and downtown Florence. Further to the west, where the elevation rises and the soil thins out, are the steep sloping hills composed of bedrock-dominated glacial till, where the more recent residential development is occurring.

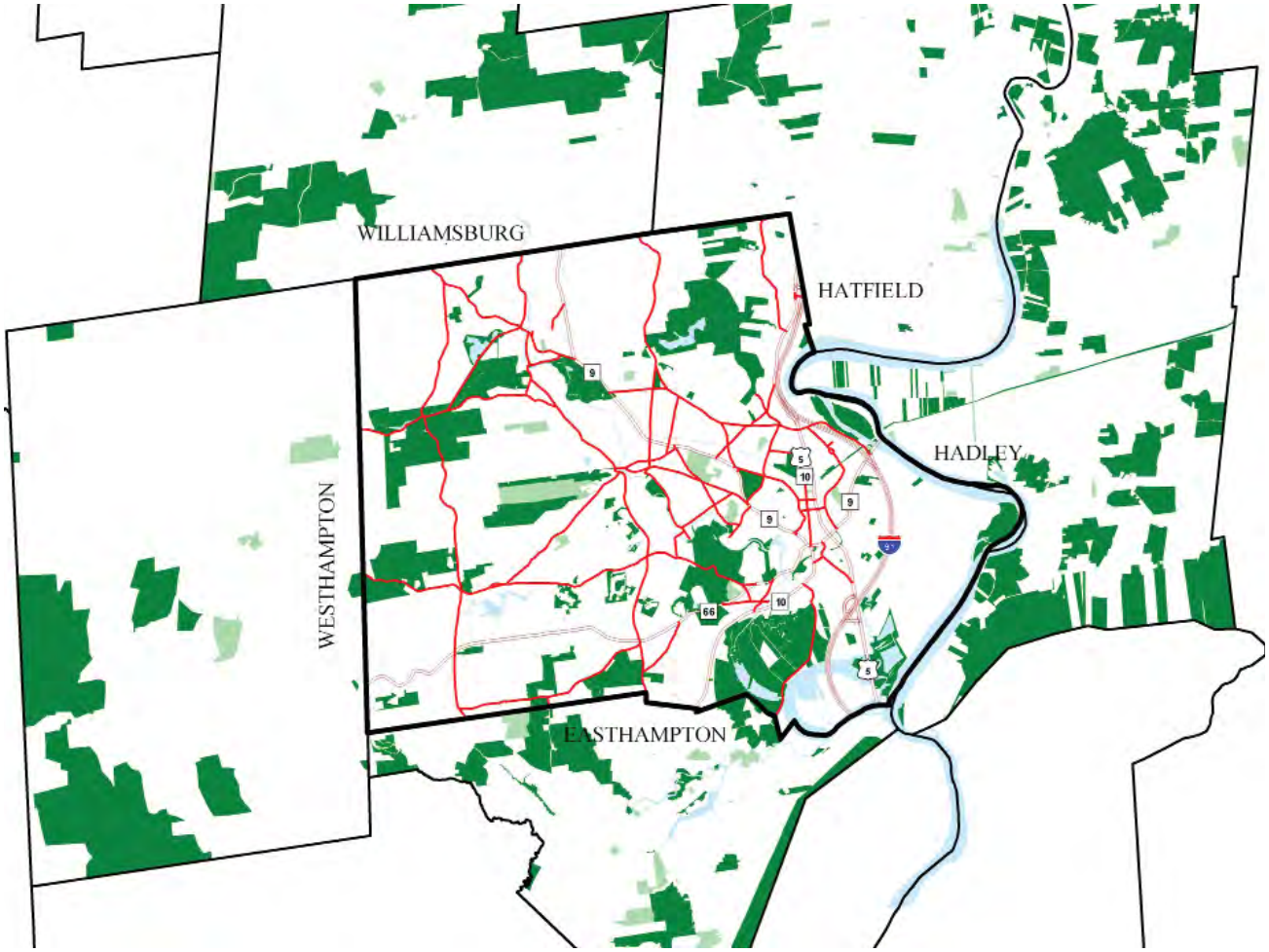
The City of Northampton is contained within the Connecticut River Watershed. The Connecticut River Watershed is the largest river ecosystem in New England and spans four states, including Vermont, New Hampshire, Massachusetts, and Connecticut. The river itself defines the eastern border of the City of Northampton. The many brooks and streams that flow through Northampton eventually find their way to the Connecticut River.

From its beginnings on the Canadian border to its end in Long Island Sound, the Connecticut River drains a landscape that is 11,000 square miles and 410 miles long. The river drops 2,400 feet from its source to the sea and is one of the most developed rivers in the Northeast. It enters Massachusetts through the Town of Northfield and flows through 45 communities before entering the state of Connecticut. The watershed is approximately 80% forested, 12% agricultural, 3% percent developed, and 5% wetlands and surface waters. The Connecticut River Watershed was designated the "Silvio O. Conte National Fish and Wildlife Refuge" by an act of Congress in 1991, the first refuge of its kind, encompassing an entire watershed ecosystem. The Connecticut River also received special attention in 1998 when it became one of only 14 rivers in the US designated as a National Heritage River.

While Northampton's natural neighbors are the Connecticut River and surrounding picturesque hills, its political neighbors are the Towns of Westhampton to the west, Williamsburg to the north, Hatfield to the northeast, Hadley to the east, and the City of Easthampton to the south.

The City of Northampton has worked and continues to work with the neighboring communities to acquire water supply lands and

REGIONAL CONTEXT



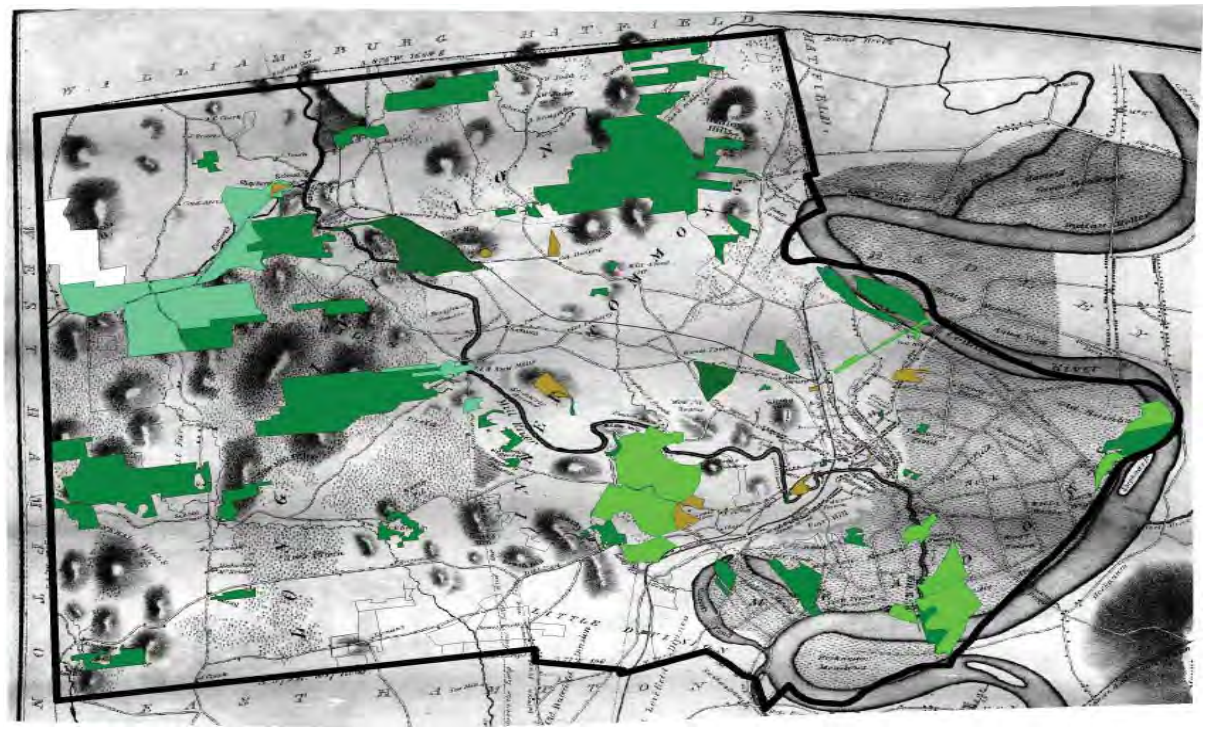
jointly preserve forestland and watershed areas. The City of Northampton receives its primary water supply from surface water reservoirs in the towns of Conway, Williamsburg, and Hatfield. Additionally, much of Hatfield's drinking water aquifer is located in Northampton, and the City of Northampton has aggressively regulated this area and acquired forestland to protect Hatfield's water supply.

Contiguous forestland is important to Northampton and the neighboring communities. Forestland conserves water supplies by sustaining the soil's ability to receive precipitation and recharge ground and surface waters slowly. Woodlands and their changing foliage give residents surroundings upon which to gaze and appreciate. Forests clean the air and provide cool air currents in warm months. Large blocks of contiguous forestland are important regional resources. Northampton, like other cities in the Connecticut River Valley, still contains many very large forests on relatively pristine lands that cross political borders.

The map of open space in a regional context shows the open space holdings within Northampton and the surrounding communities (open space in surrounding communities is based on the MassGIS layer and has not been verified). Riverfront, agricultural, wetland, and upland resources all extend from Northampton into all neighboring communities.

The City of Northampton not only shares its resources with the neighboring communities but also strives to engage in regional conservation and land protection efforts. The City has worked with the Easthampton on

OPEN SPACE OVERLAY ON HISTORICAL MAP OF NORTHAMPTON



joint open space acquisitions in the past and has worked with the Department of Conservation and Recreation to coordinate projects involving the Hatfield. The Northampton Conservation Commission has identified additional opportunities for joint projects with Hatfield, Williamsburg, Westhampton, and Easthampton. Joint projects with Hadley are less likely to occur because the communities are separated by the Connecticut River, but Northampton and Hadley have worked together with the Department of Conservation and Recreation, the Division of Fisheries and Wildlife, and the Valley Land Fund, Inc. on projects concerning the Connecticut River.

Northampton has also worked with its neighboring communities on a series of projects designed to extend recreational facilities across political borders—a rail trail network that connects the City of Northampton to its abutting communities. currently, Northampton is working on joint conservation and/or rail trail projects with Hatfield, Easthampton, Westhampton, and Williamsburg.

Northampton is also working with some of its neighboring communities on economic development efforts. The City of Northampton prepared a joint economic development strategy with the City of Easthampton and worked with the Hatfield to develop a coordinated plan for development off Interstate 91-Exit 21, which is located on the Northampton/Hatfield town line.

Socioeconomic Context

Northampton offers a sophisticated rural lifestyle that is rich in cultural, artistic, academic, and business resources. Northampton features one of the most vibrant downtown centers in New England and was named “Number One Best Small Arts Town in America” by author John Villani and was recognized as one of the top 25 Arts Destinations in the nation by American Style magazine. The National Trust also named it as one of the Dozen Destinations of Distinction for Historic Preservation.

Residents see Northampton as both traditional

and innovative. Several village centers provide focal points for outlying residential areas while the downtown is alive during the days and evenings. The City offers a wide selection of retail, services, restaurants, coffee, and ice cream shops; theaters, including the only municipally owned theater in the state; clubs featuring an array of music; street musicians; and a Center for the Arts. All of this activity provides a perfect atmosphere for casual strolling along the tree-lined streetscape.

The City also offers strong municipal programs in education, recreation, public safety, and public works. It is known for its energy conservation program and an initiative to improve handicap access to downtown establishments.

CITY OF NORTHAMPTON DEMOGRAPHIC INDICATORS

Percent of the population who is:	% in Northampton	% in MA
Living in urban areas	87.7	88.8
Living in rural areas	12.3	8.6
Under age 18	16.8	23.6
Age 65 and over	13.7	13.5
White	89.7	84.5
Black/African American	1.9	5.3
Asian	3.2	3.8
Hispanic	5.1	6.7
Immigrated in 1990–2000	2.6	4.9
Speak only English at home	87.5	81.3
Speak Spanish at home	4.8	6.2
Speak other Indo-European language at home	5.3	8.9
Speak Asian language at home	1.7	2.9
Percent of Households that are:	**% in Northampton**	**% in MA**
Married couples	37.4	50
Single parents	12.3	15
Non-family	12.8	7.1
Living in urban areas	87.7	88.8
Living in rural areas	12.3	8.6

—Pioneer Valley Planning Commission Factbook 2002

The community has a strong and diverse economic base consisting of a mixture of traditional operations (wire protrusion, plastic molding) and innovative ones (production of heat sensing devises) and a large institutional base, which includes county services and two hospitals. Northampton is also home to Smith College and is strongly influenced by Amherst College, Hampshire College, Mount Holyoke College, and the University of Massachusetts as part of the Five-College system in the region.

The superb quality of life in Northampton contributes to its strong economic base with growing manufacturing, technology, and service sectors. The local labor force is diverse, well educated, and highly skilled.

Any light pointed at Northampton still inevitably shines on the downtown. The City's downtown central business district has succeeded where many of its size across the nation have failed. The downtown serves as the cultural and shopping hub of Hampshire County and attracts tourists, gourmands, and residents from the region. Main Street retail vacancy rates remain low, and the upper floors of Main Street buildings are largely filled with offices and residences.

Around the country, downtowns in similarly sized communities suffer from inattention, competition, and high commercial vacancy rates. The result is decay. Even in communities with healthy downtowns, success often means a bustling downtown from 9 a.m. to 6 p.m., with little evening and weekend activity. Northampton's downtown is hopping day and night, weekdays and weekends.

The lead role played by Northampton's downtown

CITY OF NORTHAMPTON HOUSING INDICATORS

Percent of housing units with:	% in Northampton	% in MA
Owner occupancy rate	53.5	61.7
Vacancy rate	3.1	3.1
No vehicle available	11.3	12.7
No telephone service	0.9	0.9
Inadequate plumbing	1.0	0.7
Inadequate kitchen	1.4	0.8
Median year housing built	1946	1956
Average household size	2.14	2.51
Median gross rent	$647	$684
Rent as % of income	25%	26%
Median owned-home value	$144,600	$185,700
Median monthly owner costs	$1,171	$1,353
Owner costs as % of income	$21	$22

—Pioneer Valley Planning Commission Factbook 2002

is not a new one. It has been the leading retail center for Hampshire County over the centuries. It has long served as a regional center, and it has traditionally had the largest market share of retail spending. While downtown Northampton remains the most defined urban/retail center in the county, it has a smaller market share of total county retail spending now than in the past and a smaller market share of retail (non-restaurant) spending than the malls in Hadley. Per capita retail and restaurants sales for Northampton are significantly above those sales for Hampshire County and for the Springfield Metropolitan Statistical Area.

The City does pulse beyond Main Street. Vibrant service, commercial, and institutional sectors are found in the City's outlying villages of Florence, Leeds, and Baystate.

Those looking can find a hearty commercial and residential hub in Florence Center—the center of business and culture for many City residents and the surrounding hill towns. Florence's "village center," where homes, businesses, and industry are all within walking distance of each other, is a highly praised feature of the village. This close physical proximity of homes and businesses produces a neighborliness that makes the village one of the most livable places in the Pioneer Valley.

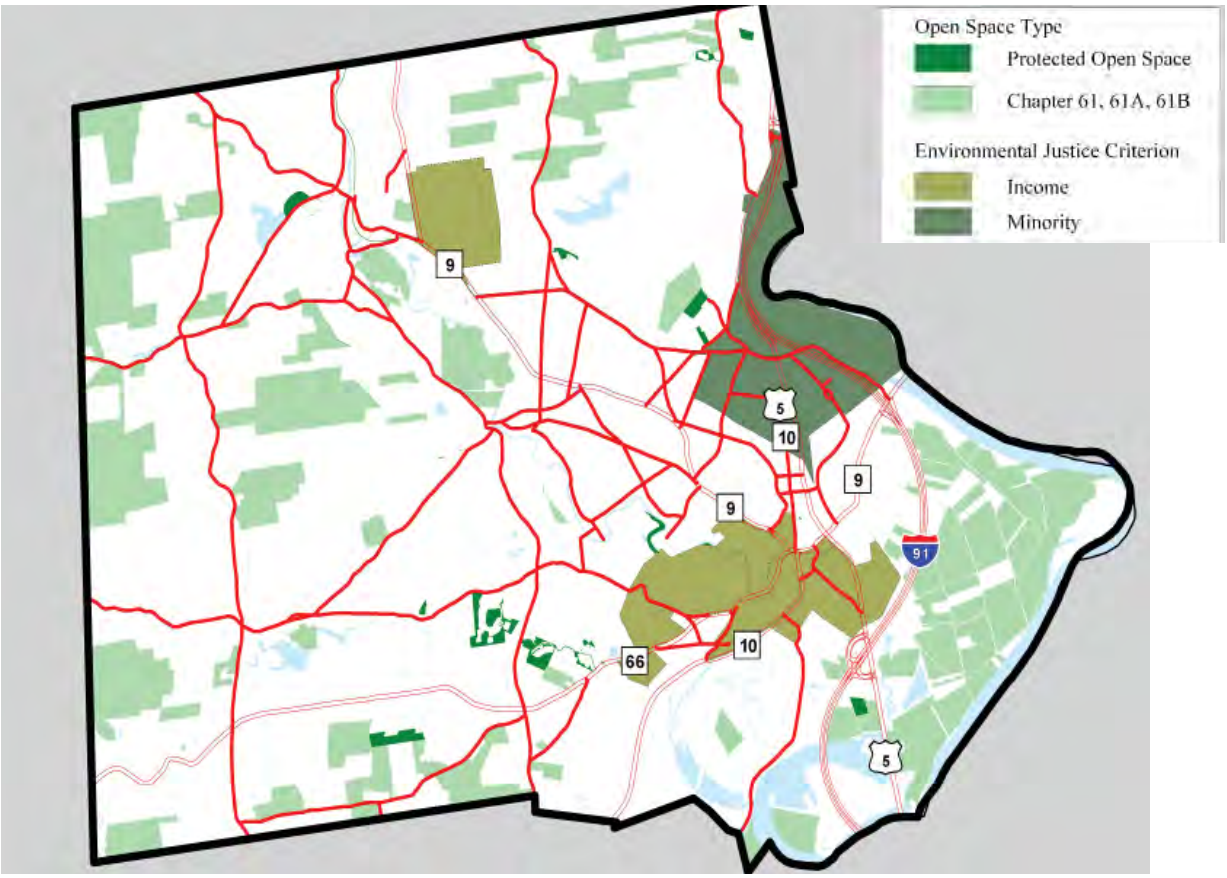
Most of Florence's Main Street retail businesses serve local needs, such as pizza and groceries. Many businesses, however, also serve clients throughout Northampton and the region. Florence's successful village center fills a critical economic and social niche not provided in downtown Northampton (where rents are too high) or on highway strip commercial areas. As in other village centers, Florence's businesses face stiff competition from regional commercial centers and strip commercial areas, such as King Street. Florence Center businesses have maintained a tradition of serving the commercial needs of local shoppers. That niche complements, rather than competes, with other commercial areas.

Environmental Justice

The Connecticut River valley provides an abundant landscape for rural dwellers. Even in the area's more urban spaces, scenic escapes are not far away. Many open spaces are only a short drive, and public parks are scattered throughout Northampton. The diagram above illustrates the location of environmental justice populations (low income and/or minority status) in relation to access to outdoor activity space.

Nationally, disparities in access to open space favor higher income groups. Low-income families tend to conglomerate in urban areas while upper income groups exist in suburban or rural areas. Though these trends are not necessarily discriminatory, actions must be taken to mediate environmental justice.

Northampton environmental justice populations



ENVIRONMENTAL JUSTICE POPULATIONS

are well served by open space, although not always by the open space that serves their needs. Generally, some recreation area or conservation area is within walking distance of urban areas or high density housing projects, but these may be long walking distances without proper transit or pedestrian facilities and some improvements would be extremely helpful. Several areas of low income are not adjacent to public parks and at least one is isolated by high traffic areas. Several areas of low income are not represented in the diagram, such as a housing development just west of downtown. There are, however, six recreation areas in Northampton, three of which are in the urban core.

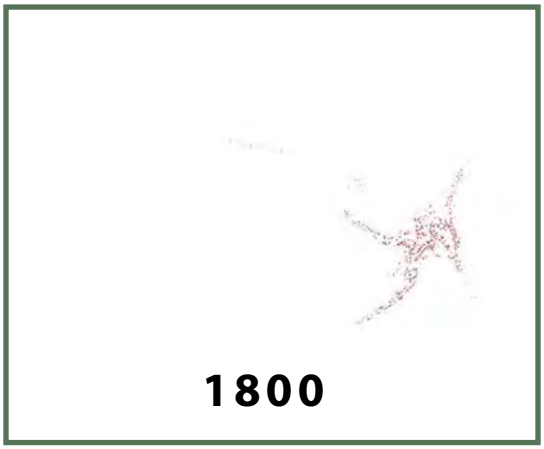
When planning for new bike paths or public parks, Northampton town planners take environmental justice into account. In the past, planning for minority groups has factored into the placement of public areas so as to provide equal opportunity to minority and non-minority groups alike. Future projects will ideally take cultural uniqueness into account as well, providing locations for specific activity within open spaces. For example, Northampton has a significant Hispanic population, so park designs should allocate space for traditional Mexican, South American, and Puerto Rican recreation.

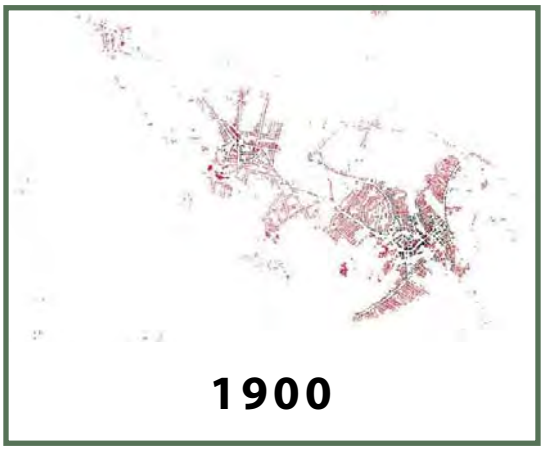
History of Northampton

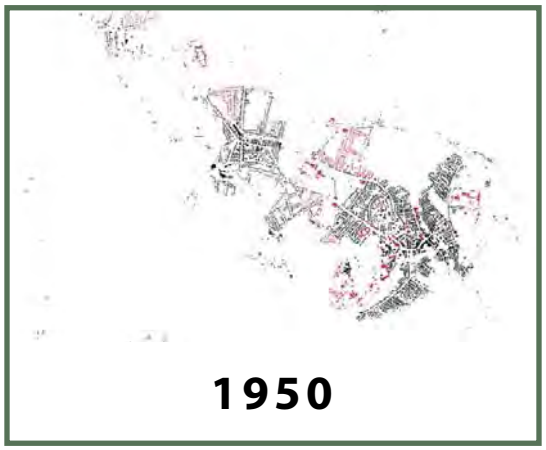
For thousands of years, Native Americans camped and fished along the rich floodplains of the Connecticut River in what is now called the Pioneer Valley.

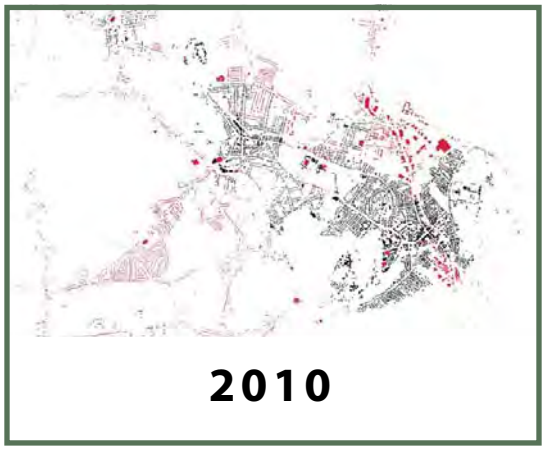
Northampton's founders, though strongly Puritan

HISTORICAL PATTERNS (1800–2010)









in conviction, were drawn to the area more by accounts of abundant tillable land and ease of trade with the Indians than by the religious concerns that characterized their brethren in eastern Massachusetts. In May 1653, 24 persons petitioned the General Court for permission to plant, possess, and inhabit the land called "Nonotuck." Northampton was settled in 1654 on a low rise above the rich meadowlands by the Connecticut River. Relations between settlers and Native Americans, though initially cooperative, became increasingly strained, culminating in King Philip's War in 1675.

Though Northampton grew as a trade and marketing center in the 18th century, the ministry of Jonathan Edwards, whose preaching sparked the religious revivals of the Great Awakening in the 1740s, quickened religious fervor. The Revolutionary War produced heroes like General Seth Pomeroy. The economic upheavals in the wake of the war moved Daniel Shays and his followers into open rebellion on the eve of the Constitutional Convention. A delegate to the Convention, Caleb Strong became Massachusetts's first senator and an 11-term governor.

In the early 19th century, great hopes were raised

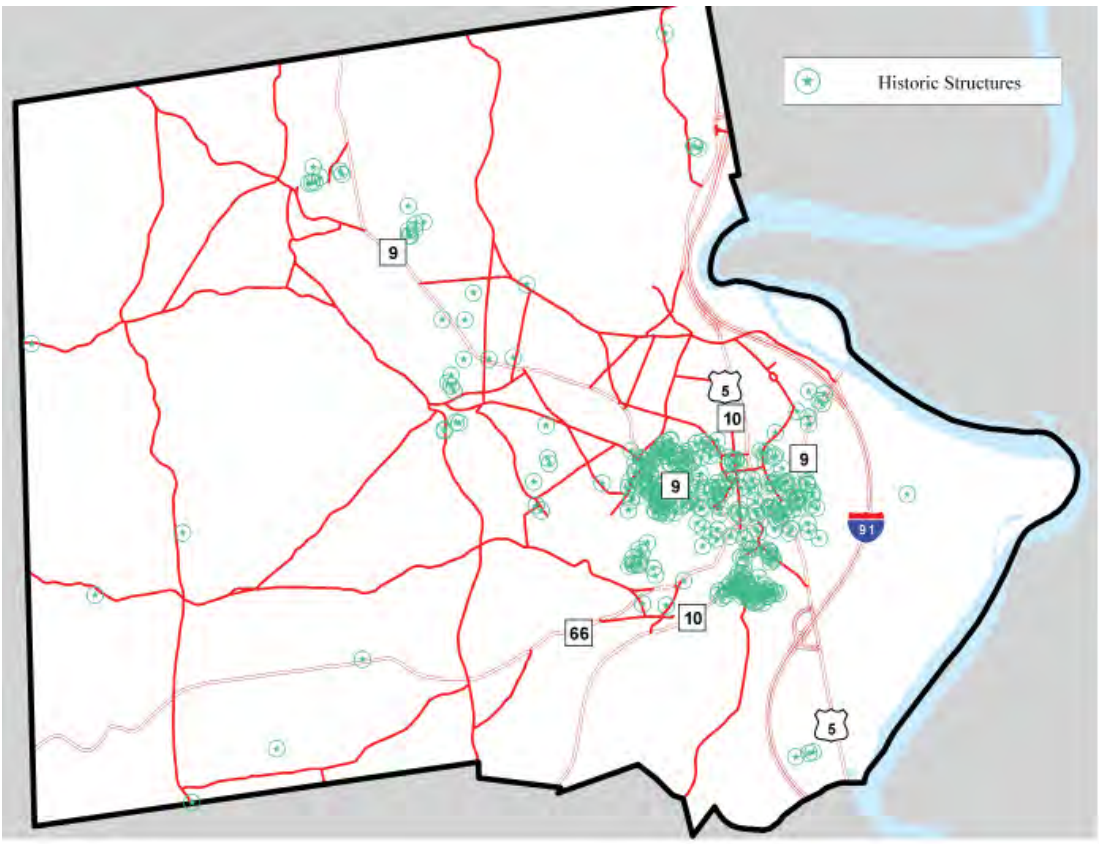
by the prospect of the Northampton-New Haven Canal, but shareholders never recouped their investment and the coming of the railroad signaled the end of the company. Other industries grew and prospered, including the utopian community of the Northampton Association, which combined radical abolitionism with a communally owned and operated silk mill. Sojourner Truth was, at one time, a member of that community which included William Lloyd Garrison and Frederick Douglass among its circle of supporters. Other reformers included Sylvester Graham, diet and health food enthusiast and inventor of the Graham cracker, and abolitionist Lydia Maria Child.

	Population in 1970 (# of people)	Population in 1980 (# of people)	Population in 1990 (# of people)	Population in 2000 (# of people)
Massachusetts	5,689,377	5,737,037	6,016,425	6,349,097
Hampshire County	123,997	138,813	146,568	152,251
Northampton	29,664	29,286	29,289	28,978

19th century Northampton drew visitors like Timothy Dwight, the Marquis de Lafayette, Henry James, Ralph Waldo Emerson, and Jenny Lind who proclaimed it to be the "paradise of America." Indeed, artists like Thomas Cole thought the environs of Northampton to be the epitome of the "picturesque"—the ideal middle landscape between the sordid city and wild nature.

Northampton was the site of a number of schools and educational institutions. Historian George Bancroft established the Round Hill School in 1823, and Smith College opened its doors in 1871. Author George Washington Cable founded the Home Culture Clubs in 1892, and the Hill

HISTORIC & ARCHEOLOGICAL RESOURCES



TABLES

	Northampton 2000	Northampton 1990	Commonwealth Current
Total Households	11,880	11,164	2,443,580
Median Age	37	30 to 34	37
Median Household Income	$41,808	$41,954	$50,502
Per Capita Income	$24,022	$19,2443	$25,952

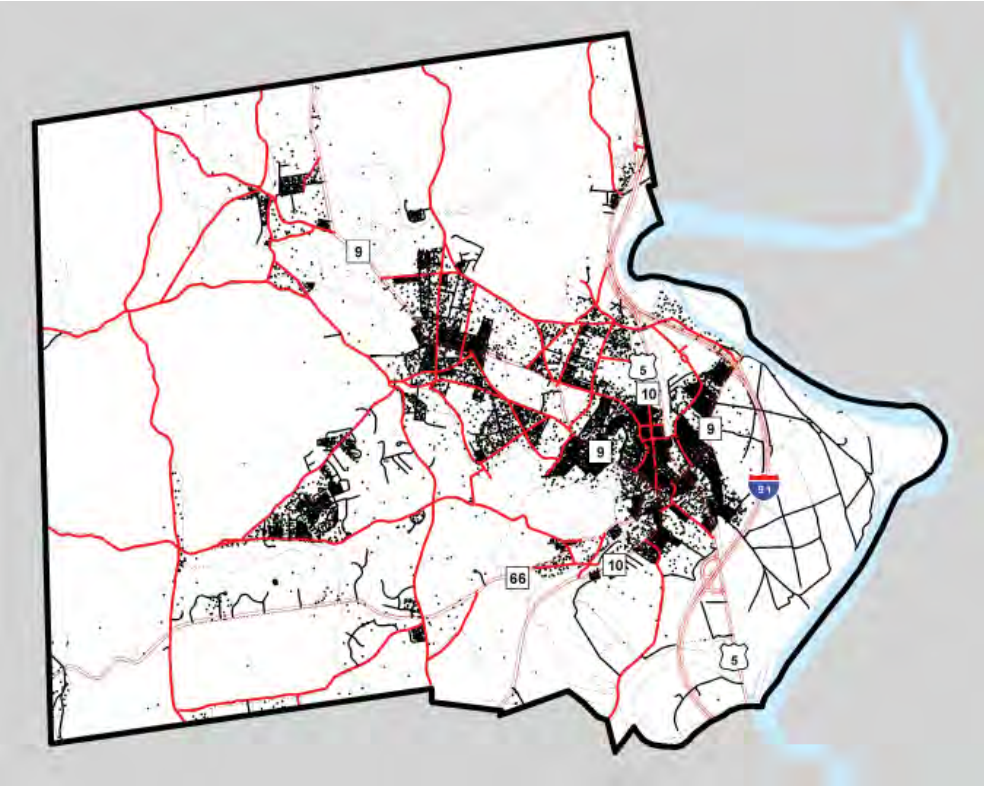
—US Census Bureau, 2000 Census & 2004 Population EstimatesTable from Northampton Community Indicators, March 2006 PVPC

POPULATION 2000 (AS % OF CITY)

Area	Population	% of City Population
City of Northampton	28,978	100%
Live within one mile of center of downtown	11,235	38.8%
Live within one-half mile of center of downtown	5,674	19.6%
Live in or abutting Central Business District	935	3.2%
Live within one mile of Florence Center	5,106	17.6%
Live within one-half mile of Florence Center	3,327	11.5%

—2000 US Census Block Data

POPULATION DENSITY



Institute sponsored one of the earliest kindergartens in America. The Northampton Law School sent one of its students, Franklin Pierce, on to the Presidency. Northampton was also the home of Calvin Coolidge, who became President in 1923.

The 19th century diva, Jenny Lind, did not call this city "paradise" for nothing. Jenny dubbed Northampton "paradise" after a long stay here, and ever since then, some residents, with little humility, have decided to keep the moniker, calling the community "Paradise City."

Northampton's streets follow, essentially, the same paths that were laid out in the 17th century, and there are a number of surviving 18th century structures in and around Northampton. The downtown district retains much of its 19th century character. The modest fortunes of local merchants and industrialists financed numerous Victorian mansions and picturesque cottages as well as the commercial blocks in the Downtown Historic District. Northampton possesses two fine 19th century residential neighborhoods, Pomeroy Terrace (1850-1885) and Elm Street (1860-1920), where Gothic Revival, Italianate, Second Empire, Queen Anne, and Colonial Revival Styles contribute to the City's diverse architectural heritage.

Northampton's economy has changed significantly since the end of World War II. The industrial component of the economy, once the linchpin, has receded. In its place, the commercial and service sectors of the economy have grown.

The City's economy used to be heavily dependent on two major institutions, the former Northampton State Hospital and the U.S. Veterans Affairs Medical Center. The Northampton State Hospital closed in 1994, and the Veterans Medical Center, until recently, had been shrinking over the past 30 years. Smith College, the other large private institution in the City, has remained stable in employment and enrollment while its physical plant has grown. Nearby, the University of Massachusetts at Amherst has remained relatively stable for the past 20 years.

For an artist, a gourmand, a bicyclist, or a parent, the City just might be paradise. Authors of numerous magazine articles and books have named Northampton one of the best places in the country to raise children, ride bicycles, eat out in restaurants, and make a life as an artist.

While residents elsewhere might quibble with Northampton's self embrace of "the best place" in which to raise a child or "the best small arts town," no one can argue that Northampton is rich in history within the Pioneer Valley.

Population Characteristics

Northampton has a population of approximately 29,000 people, with a population density of 840 people per square mile. The population has remained stable since 1950. While the total population of households has been increasing for the past 50 years, it has been offset by a dramatic decrease in family size and by the steady drop in institutionalized populations at the State Hospital and the VA Medical Center. We

	Massachusetts Population		Hampshire County Population		Northampton Population	
Age Cohort (years)	1990	2000	1990	2000	1990	2000
0–19	1,561,017	1,675,113	39,806	40,506	6,664	6,395
20–44	2,530,390	2,394,062	66,952	59,568	13,698	11,650
45–64	1,110,013	1,419,760	22,813	33,850	4,661	6,940
65+	815,005	860,162	16,997	18,327	4,266	3,993

—US Census Bureau, Census of Population & Housing, 1990 & 2000

expect to see a very slight growth in Northampton's population — approximately 1% from 2010 to 2020.

Because of enrollment at Smith College, there are significantly more women than men between the age of 17 and 24. From ages of 25 to 65, there is approximately the same number of men as women. After age 65, women outnumber men, because men tend to suffer from significantly higher mortality rates in the 65 and over age bracket.

The Age-Sex Distribution graph, or population pyramid, shows that Northampton, like many regions of the country, has an aging population. There are significantly fewer people per age range in the ranges less than 19 years versus the ranges between 20 and 44.

Although Northampton's overall population has not increased significantly, a dramatic decrease in family size has created a corresponding increase in the number of households and, therefore, the number of housing units. Furthermore, increases in unit size, e.g., two family homes being converted into single family homes, are driving the need for new housing construction without new residents. While this trend exists in most US communities, the combination of this trend and a major decrease in the number of people living in institutions has fueled most of the last 30 years of residential development.

The migration rates of people moving into and out of Northampton are high, but in- and out-migrations are well balanced. College-age students contribute to the population turnover, but there is also a significant amount of turnover at other age levels. This turnover potentially reduces the sense of stability or a residents' commitment to their neighborhood, but it also contributes to the vibrancy of Northampton.

While Northampton's unemployment rate has risen and has greater monthly fluctation during the 2007-2010 Great Recession, it has remained lower than most Massachusetts municipalities and the Commonwealth as a whole. The sector with the highest number of employees is the service sector, which includes health care and education. It also employs a higher percentage than the State. The next highest is retail/whole trade, although this represents a decline over the past decade. The percentages of people who are self-employed, work from home, and are part time continue to be greater than the State.

Approximately 51% of employed Northampton residents work in Northampton. Most of the remaining 49% of the employed residents commute out of the City, mostly to Amherst and cities and towns in Hampden County. Northampton residents fill slightly over half of the available jobs in Northampton (U.S. Census Bureau, 2000 Journey-to-Work statistics, prepared by PVPC).

The number of people who live within walking distance of downtown or Florence Center is high for a city the size of Northampton. Over half the population lives within walking distance of downtown or Florence Center. This population, with a wide variety of incomes, may be the most important single factor in allowing for a healthy downtown. This population provides a base of customers for downtown businesses and helps provide the vibrancy that is critical to the health of downtown. It also generates a need for a variety of housing types and opportunities.

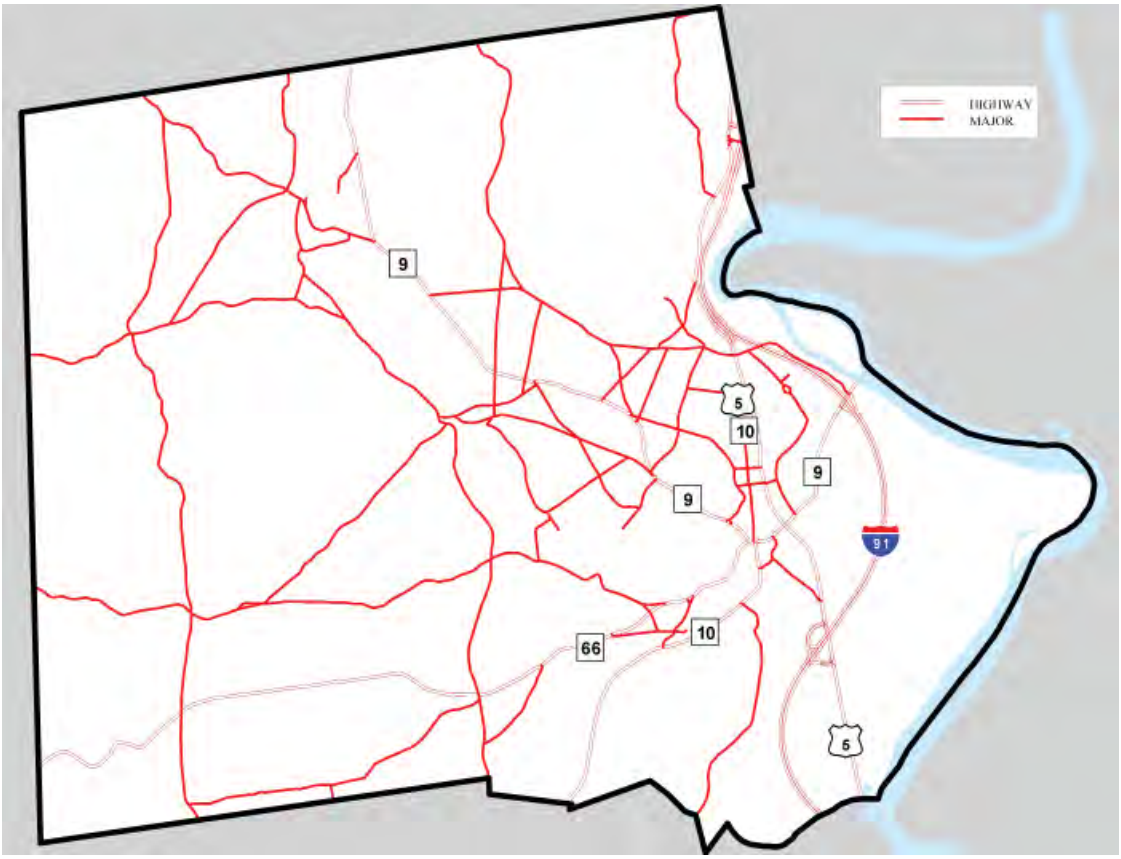
RENTAL HOUSING (AS % OF ALL UNITS)	
City of Northampton	46.5%
Within 1 mile of downtown	68.4%
Within 1/2 mile of downtown	80.8%

—1990 US Census. The presence of Smith College does skew these figures. These figures include all non-dormitory Smith College housing.

Development Patterns

The terrain of Northampton ranges from the flat Mill River and Connecticut River floodplains to the moderately steep hills along its western and northern boundaries. The hills are covered with shallow ledge, soils, and topography poorly suited for development. Most development in Northampton has occurred in the areas bordering the floodplain and below the steeper hills. Although Northampton looks "built-out" from many of the roads,

ROADS



the majority of the City's land area has not been developed.

Most of the City's development occurred in a corridor along the Mill River and other level areas of the city northeast of the Mill River. Downtown Northampton, Bay State, Florence, and Leeds are all located within one mile of the Historic Mill River (in 1939 the Mill River was diverted from downtown to control floods).

Transportation Systems

Northampton is located in the Pioneer Valley, with a strategic position along the Connecticut River and its excellent transportation facilities. The Massachusetts Turnpike (I-90) connects the region to Boston and Albany. Interstate 91 provides access to Hartford and Brattleboro. The principal highways are US Routes 5 and 10, which run north-south, and Interstate Route 91, which runs east-west. Amtrak, which currently stops in Amherst, will be moving their Hampshire County stop to Northampton in 2012, providing connectsion to Vermont, Springfield, New Haven, and the entire Amtrak system. Freight rail service is available from Pan Am, and will be upgraded along with Amtrak's return in 2012. Northampton is served by the Pioneer Valley Transit Authority (PVTA), which provides fixed route and para-transit service to the region. The Franklin Transit Authority also has a bus service that runs from Greenfield to Northampton. Peter Pan and other inter-urban transit services provide service to Vermont and points north and to Springfield and points south, east, and west.

Northampton Airport is a general aviation airport one mile southeast of downtown Northampton. It has a 3,506-foot by 50-foot asphalt runway. The airport has been in operation since 1929.

The City of Northampton consists of approximately 150 miles of paved streets, 15 miles of unpaved (gravel) public ways, 70 miles of sidewalks and crosswalks, 20 bridges, and ten miles of rail and multi-use trails.

The percent of workers walking or bicycling to

work is higher that the state as a whole, but the percent of people using transit is lower than the state average.

Water Supply Systems

The vast majority of Northampton's drinking water came from three surface water reservoirs outside of Northampton and a drinking water aquifer within the city. The system draws filtered water from reservoirs located in the hill towns and the water is piped to Northampton through transmission lines.

Reservoir water is treated at a new central water treatment plant (2008) in Williamsburg. Additional treatment comes from decentralized clorination and corrosion control facilities.

The City of Northampton supplies approximately 1.25 billion gallons of water to the residents per year. On average, the City supplied 3.4 million gallons of water each day, with a maximum peak of 4.8 million gallons. On large water withdrawal days, water is drawn from the two wells located in Florence. The City of Northampton has approximately 150 miles of water pipes, 1000 water valves, 1200 fire hydrants, and 8000 water meters.

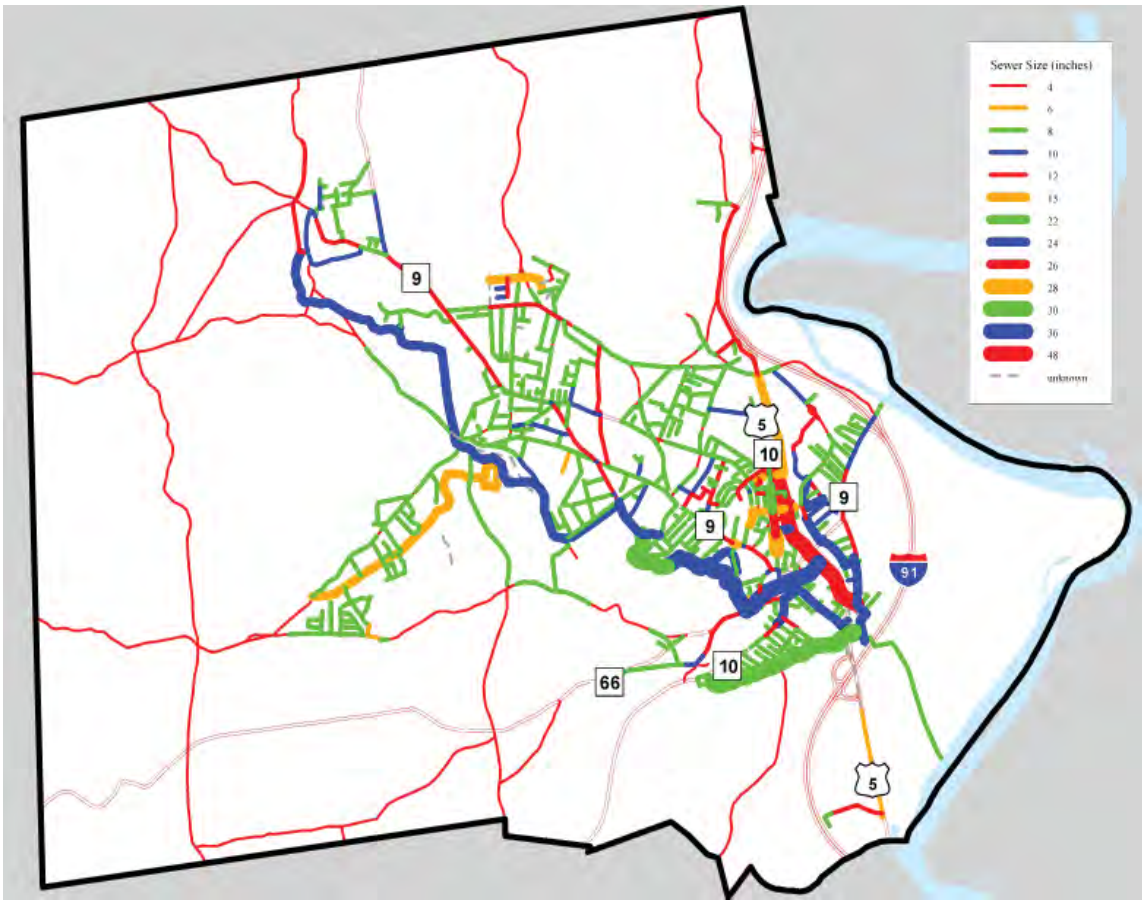
The Department of Environmental Protection Source Water Assessment Program Report reviewed the watershed lands and aquifer protection zones. The largest threats to the water supply identified in the report were from residential fuel storage and large scale commercial uses.

The Department of Public Work's Water Division continues to protect, and monitor the water supply and watershed land and acquire additional lands to preserve current and future water supplies.

Wastewater Systems

The Northampton Wastewater Treatment Plant is an 8.6 million gallon per day secondary wastewater treatment plant that serves approximately 29,000

WASTEWATER TREATMENT



people in Northampton and an additional 425 people in the Williamsburg, and commercial and industrial users. The treatment plant was deisgned in 1973 and expanded most recenly in 1998. It consists of:

- Preliminary treatment (pre-chlorination, bar rack, grit tank, comminutor, and Parshall flume)
- Primary treatment (primary clarififers, settling tank and lift pumps)
- Secondary treatment (aeration tanks with diffused air and secondary clarifiers)
- Disinfection (chlorination with sodium hypochlorite, Chlorine contact tank)
- Discharge to Connecticut River via outfall pipe (to the historic Mill River when the Connecticut is at high flow)
- Sludge treatment (holding tanks, sludge thickeners, gravity belt thickening, filter press, sludge cake disposal)

The facility accepts industrial wastewater from significant industrial users (SIUs) including: Coca Cola, Cooley-Dickinson Hospital, Kollmorgen Corporation, Packaging Corporation of America, Perstorp Compounds, Inc., Saint Gobain Company, and the Veterans Affairs Medical Center.

The City of Northampton has approximately 100 miles of sewer pipes and 2,400 manholes.

Development Constraints

Budget constraints and the geographic boundaries of the current infrastructure systems constrain large-scale commercial, industrial, and residential expansion. Some areas do not have sewerage and rely on septic systems, which can be a challenge in areas with shallow soils and bedrock.

The potential for Northampton to accommodate new large-scale commercial or light industrial land uses may also be restricted by the City's water system infrastructure, although to date this constraint has been relatively minor. Many commercial and light industrial uses require large quantities of water and produce large discharges that must comply with environmental regulations and protect natural resources.

Except for the planned Business Park, upgrading and extending water and sewer lines outside of the currently developed areas to proposed locations for commercial or light development may not be feasible due to the high costs and limited available sites. Improvements to roadways, water and wastewater systems will have a great impact on future development. Upgrades of existing water and sewer lines may encourage infill development for greater concentrations of commercial, industrial, and large scale residential uses near current village center areas, and they may limit large-scale development in agricultural and environmentally sensitive areas.

Development Patterns

Almost all development in Northampton is located outside of the Connecticut River floodplain because of the potential for flood damage. During the last three decades, the agricultural economy of Massachusetts has declined, resulting in the loss of some marginal farms, both on and off the floodplain. Northampton is seeing a small increase in the number of small farms but a decrease in acreage currently being farmed.

Since World War II, many rural areas have been transformed to suburban residential development. Commercial development has spread from the original Northampton-Florence-Leeds corridor to include strip development on King Street. Industrial uses in the Northampton-Florence-Leeds corridor and along the Mill River have shrunk. That industrial contraction has been offset, in part, by industrial development in the Northampton Industrial Park.

Clear lines still exist between urban, "small town," suburban, and rural areas. Northampton remains a city with a strong sense of community and place. The development pattern has been shaped by the strength of the urban centers of Northampton and Florence, the King Street shopping areas, the strong character of the residential neighborhoods, and the existence of large tracts of public and quasi-public land, including the Northampton State Hospital, Smith College, Arcadia Wildlife Sanctuary,

Smith Vocational and Agricultural School, Look Memorial Park, Northampton Reservoir watershed lands, and the VA Medical Center.

Land Use Controls

Zoning and land use controls are designed to promote the economic, environmental, and social health of Northampton. Environmentally focused zoning includes:

1. **Open Space Residential and PUDs:**

   Allow clusters of residential and predominately residential development, with a majority of a site undeveloped and in open space.

2. **Residential Incentive Development:**

   Encourage housing opportunities for low and moderate-income persons.

3. **Planned Village District:**

   Encourage creation of a new mixed-use village with a development pattern similar to the best of traditional Northampton development.

4. **Special Conservancy and Watershed Protection Districts:**

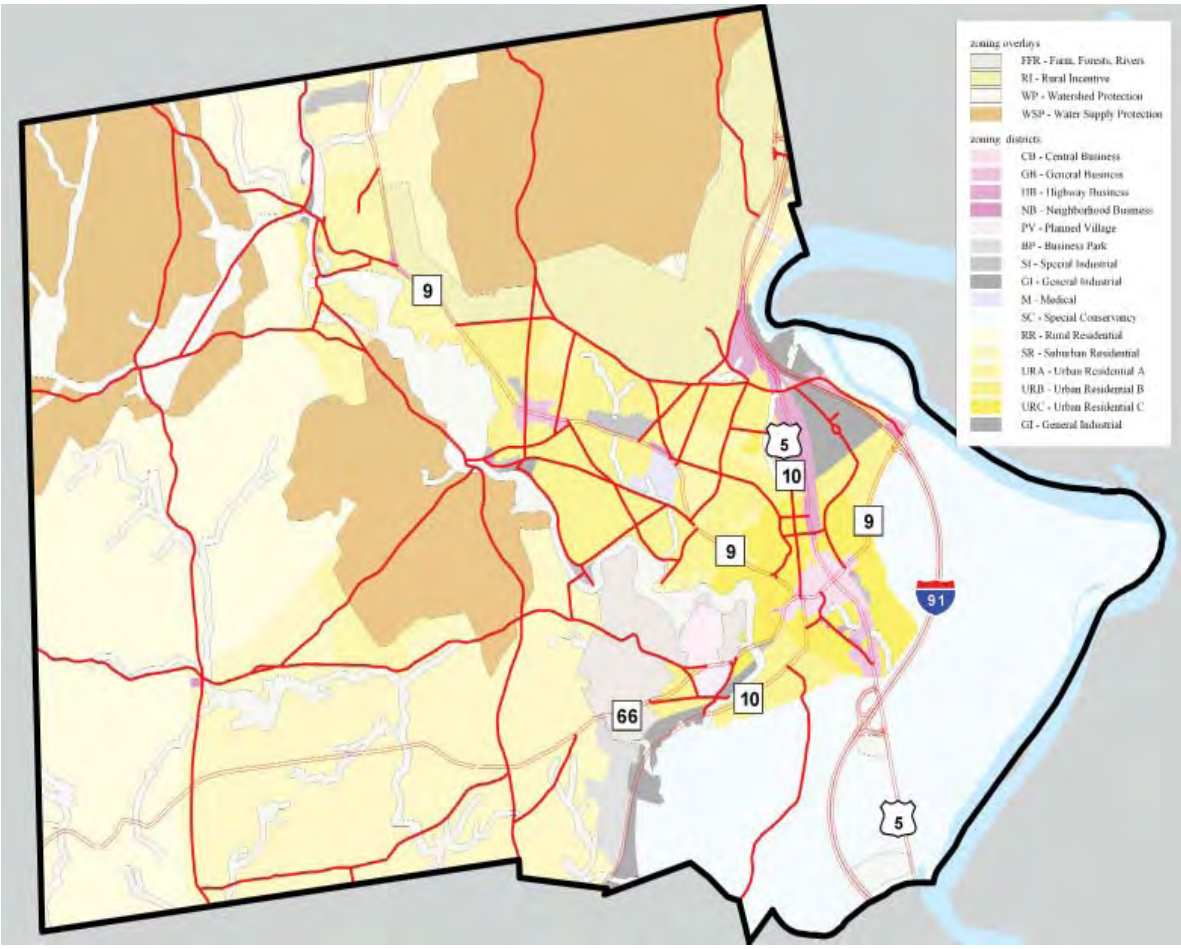
   Protect against flood hazards by prohibing new development in the floodplain, while allowing redevelopment of existing builidngs and uses. Protect the streams and rivers by strict development rules.

5. **Water Supply Protection District**

   Protect public drinking water from any inconsistent use or development pattern.

6. **Farms, Forests and Rivers Overlay**

OVERVIEW OF ZONING



Residents	
Current	28,978
Buildout	48,062
Additional Residents	19,084
Students (K-12)	
Current	3,083
Buildout	5,343
Additional Students	2,260
Residential Units	
Current	12,405
Buildout	20,775
Additional Residential Units	8,370
Water Use (gallons/day)	
Current	3,840,380
Buildout	5,786,366
Additional gallons/day	1,945,986
Additional Buildout Impacts	
Additional Solid Waste (tons/yr)	9,790
Non-Recyclable	6,961
Recyclable	2,829
Additional Roadway	101 miles

—EOEA Buildout Analysis, 2001

Zoning District:	Acres of Developable Land:	Percentage of Total Developable :
Business Park	112	1
Central Business	4	0
General Business	6	0
General Industrial	164	1
Highway Business	15	0
Medical	1	0
Neighborhood Business	1	0
Rural Residential	6,232	49
Special Conservancy	1,696	13
Special Industrial	61	0
Suburban Residential	2,378	19
Urban Residential A	949	8
Urban Residential B	311	2
Urban Residential C	119	1
Percent not accounted for	557	6
TOTAL DEVELOPABLE	12,604	100
		Total Northampton Acres: 22,879

—EOEA Buildout Analysis, 2001

Preserve the farms, forests and river corridors by requiring mandatory cluster projects and authorizing transfer of development rights to Planned Village.

Buildout Analysis

"Buildout" is when the community has reached its maximum potential for development, with all land developed, permanently protected, or is prohibited by constraints from being developed.

A decade ago, PVPC did a buildout analysis. It is interesting, although not always accurate:

Additional Developable Land: 503,335,800 sq ft

Additional Developable Land: 11,555 acres

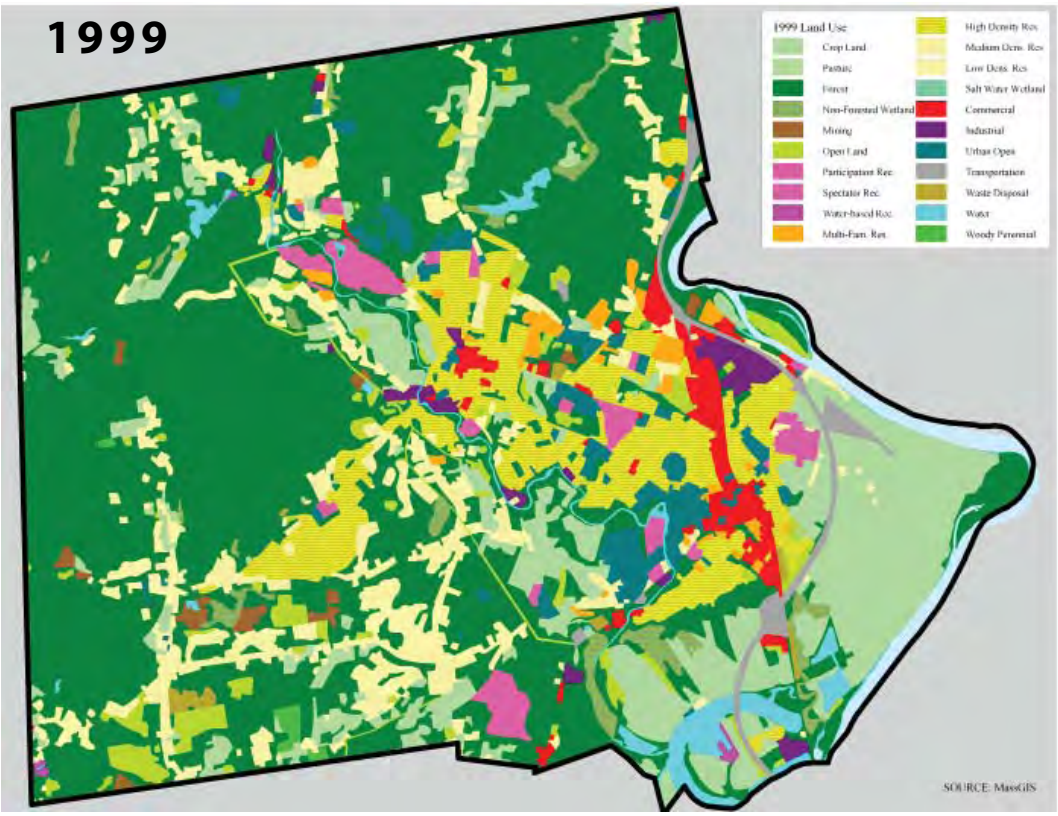
Additional Commercial/Industrial Buildable Floor Area: 6,862,877 sq ft

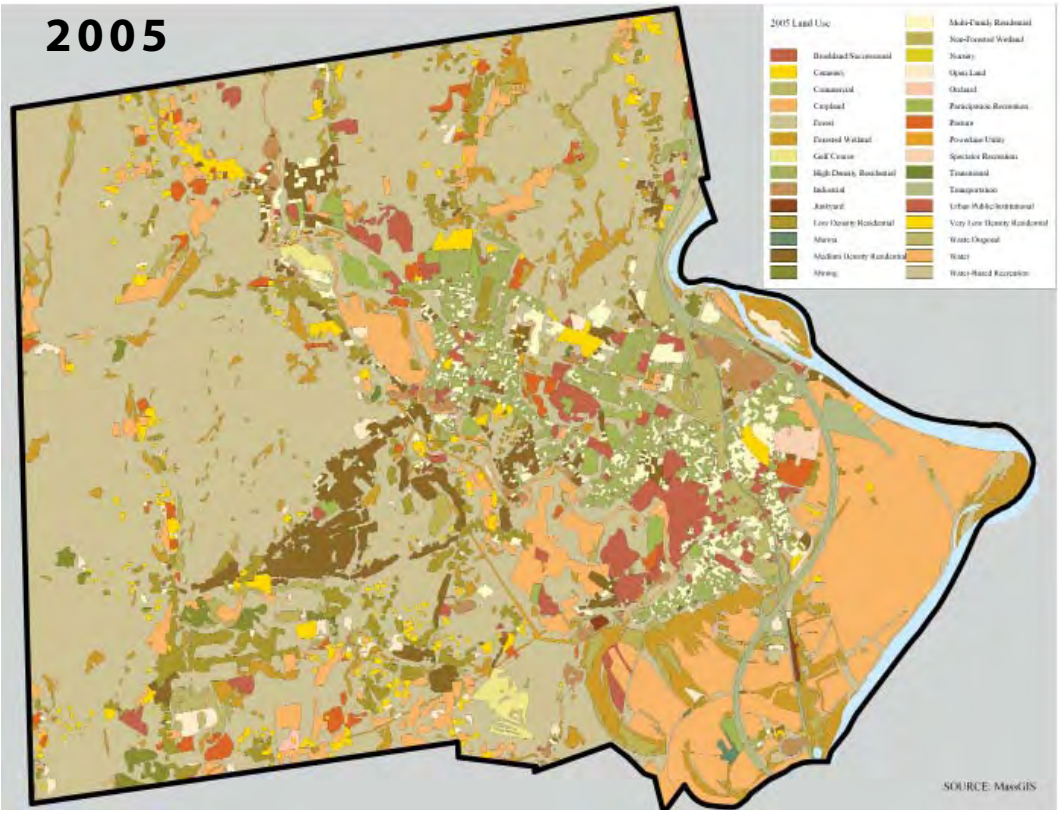
NORTHAMPTON LAND USE

Land Use--1985	Acres	Land Use--1999	Acres
Non-protected Forests	12,306	Non-protected Forests	11,607
Non-protected Agricultural Lands	3,385	Non-protected Agricultural Land	3,176
Developed Land	1,264	Developed Land	1,177
Residential Land	3,414	Residential Land	4,236
Water/Recreational/ Openland	2,478	Water/Recreational/ Openland	2,652
Total	22,847	Total	22,848

—MassGIS Data

LAND USE


1999
1999 Land Use
Crop Land
Pasture
Forest
Non-Forested Wetland
Mining
Open Land
Participation Rec.
Spectator Rec.
Water-based Rec.
Multi-Fam. Res.
High Density Res.
Medium Dens. Res.
Low Dens. Res.
Salt Water Wetland
Commercial
Industrial
Urban Open
Transportation
Waste Disposal
Water
Woody Perennial
SOURCE: MassGIS


2005
2005 Land Use
Multi-Family Residential
Non-Forested Wetland
Nursery
Open Land
Orchard
Participation Recreation
Pasture
Powerline/Utility
Spectator Recreation
Transitional
Transportation
Urban Public/Institutional
Very Low Density Residential
Waste Disposal
Water
Water-Based Recreation
Cemetery
Commercial
Cropland
Forest
Forested Wetland
Golf Course
High Density Residential
Industrial
Junkyard
Low Density Residential
Marina
Medium Density Residential
Mining
SOURCE: MassGIS

4 Environmental Inventory & Analysis

Topography, Geology, Soils

Topography

Northampton's land is a three-part geological story. First, the alluvial/ lacustrine floodplain, which includes 3,000 +/- acres of farmland and floodplain along the Connecticut River. Then, the deep, flat glacial outwash, underlying much of Baystate, downtown Florence, and downtown Northampton. Finally, there is the rolling glacial till in Leeds and in the areas where most of the recent residential development has occurred and the steeply sloping bedrock-dominated glacial till in the hills on the north and western ends of town where development is very limited. Elevations range from 99 feet mean sea level (MSL) at the Connecticut River to 890 feet MSL on the western hills. Mount Tom and Mount Holyoke, running in a unique east-west oriented boomerang shape, are southeast of Northampton. These mountains define the northerly limit of the Springfield-Chicopee-Holyoke metropolitan area and help define Northampton and Hampshire County.

Geology

Northampton as we know it today is the result of millions of years of geologic history: great upheavals of the earth's crust and volcanics and the sculpting power of water, ice, and wind. This distinctive physical base has determined the distribution of water bodies, soils and vegetation and settlement patterns, both prior to and since colonial times. Understanding Northampton's current landscape requires a journey back in time.

The earth's crust is a system of plates whose movements and collisions shape the surface. As the plates collide, the earth's crust is compressed and forced upward to form great mountain ranges. In the northeastern United States, the plates move in an east-west direction, forming mountains that run north to south.

The pressure of mountain building folded the earth, created faults, and produced the layers of metamorphosed rock. Collision stress also melted large areas of rock, which cooled and hardened into the granites that are found in the area. Preceding the collisions, lines of volcanoes sometimes formed, and Franklin County shows evidence of this in bands of dark rock schist metamorphosed from lava flows and volcanic ash.

Hundreds of millions of years ago, a great continent, known as Pangaea, formed through the collisions of plates. Pangaea began to break apart almost 200 million years ago and continues to do so as the continents drift away from each other today. This "continental drift" caused earthquakes and formed large rift valleys, the largest of which became the Atlantic Ocean. The Connecticut

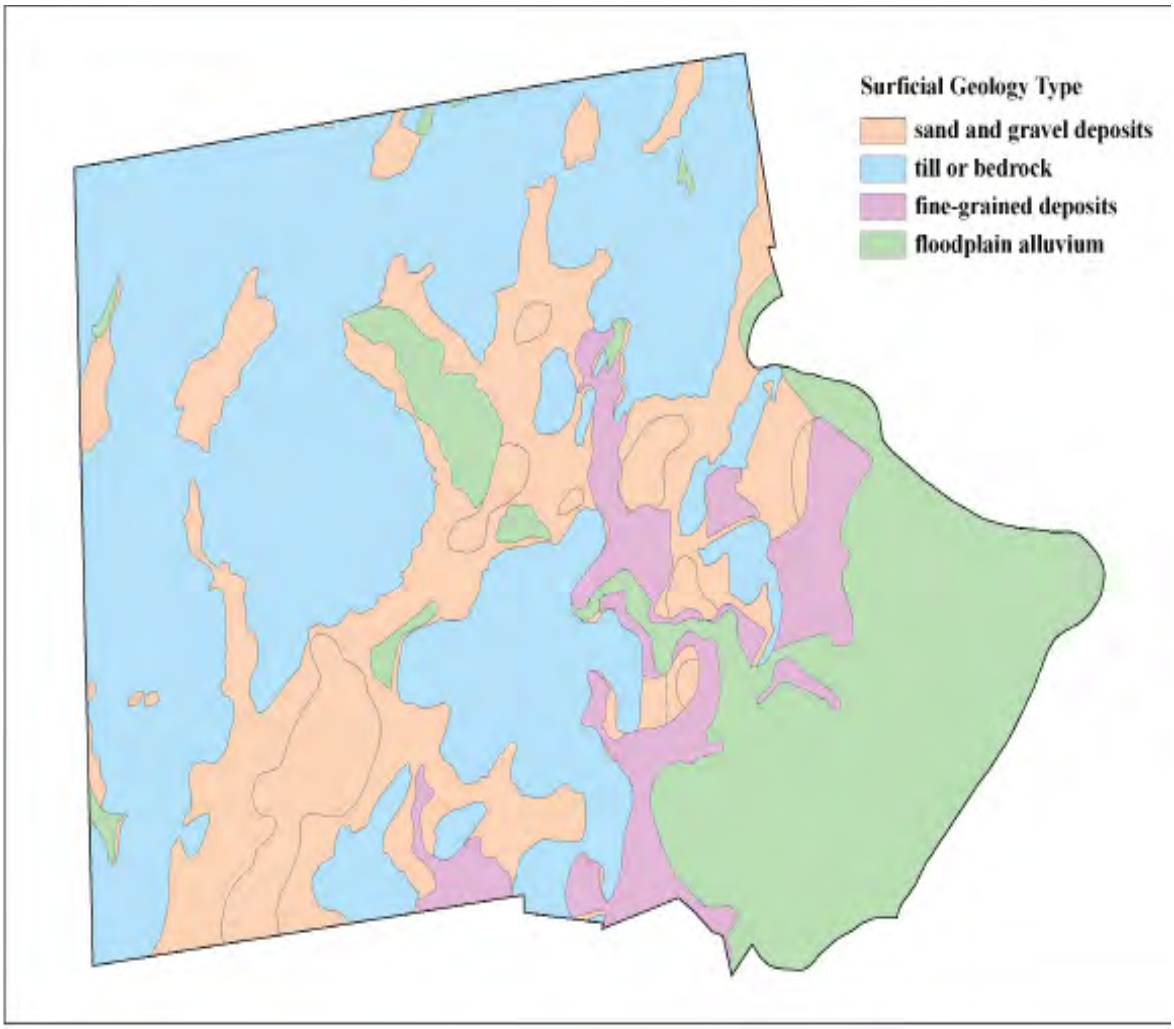
Valley was one of many smaller rifts to develop. Streams flowing into the river from higher areas brought alluvium, including gravels, sand, and silt. At the time, the area that is now Northampton was located south of the equator. The Dinosaur era had begun, and the footprints of these giant reptiles are still visible in the rock formed from sediments deposited on the valley floor millions of years ago.

By the close of the Dinosaur age, the eastern United States, including Northampton, was part of a large featureless plain, known as the peneplain. It had been leveled through erosion, with the exception of a few higher, resistant areas. Today, these granite mountaintops, called monadnocks, are still the high points in this region. Local examples include Mt. Wachusett, Mt. Greylock, and Mt. Monadnock in New Hampshire.

As the peneplain eroded, the less resistant rock eroded to form low-lying areas, while bands of schist remained to form upland ridges. By this time, the Connecticut Valley had been filled with sediment while streams that would become the Deerfield, Westfield, and Farmington Rivers continued to meander eastward.

A long period of relative quiet in geologic terms followed the Dinosaur era. Then, as the Rocky Mountains were forming in the west eight million years ago, the eastern peneplain shifted upward a thousand feet. As a result of the new, steeper topography, stream flow accelerated, carving deep valleys into the plain. Today, the visible remnants of the peneplain are the area's schist-bearing hilltops, all at about the same 1,000-foot elevation.

SURFICIAL GEOLOGY



Mountain building, flowing water, and wind had roughly shaped the land; now the great glacial advances would shape the remaining peneplain into its current topography. Approximately two million years ago, accumulated snow and ice in glaciers to the far north began advancing under their own weight. A series of glaciations or "ice ages" followed, eroding mountains and displacing huge amounts of rock and sediment. The final advance, known as the Wisconsin Glacial Period, completely covered New England before it began to recede about 13,000 years ago. This last glacier scoured and polished the land into its final form, leaving layers of debris and landforms that are still distinguishable.

The glacier picked up, mixed, disintegrated, transported, and deposited material in its retreat. Material deposited by the ice is known as *glacial till*. Material transported by water, separated by size and deposited in layers is called *stratified drift* (Natural Resource Inventory for Franklin County, University of Massachusetts Cooperative Extension; May 1976). The glacier left gravel and sand deposits in the lowlands and along stream terraces. Where deposits were left along hillsides, they formed kame terraces and eskers. Kames are short hills, ridges, or mounds of stratified drift, and eskers are long narrow ridges or mounds of sand, gravel, and boulders.

During the end of the last ice age, a great inland lake formed in the Connecticut River Valley. Fed by streams melting from the receding glacier, Lake Hitchcock covered an area approximately 150 miles long and 12 miles wide, stretching from St. Johnsbury, Vermont to Rocky Hill, Connecticut. Streams deposited sand and gravel in deltas as they entered the lake, while smaller silts and clays were carried into deeper waters.

Soils

Soil is the layer of minerals and organic material that covers the rock of the earth's crust. All soils have characteristics that make them more or less appropriate for different land uses. Scientists classify soils by these characteristics, including topography; physical properties including soil structure, particle size, stoniness, and depth of bedrock; drainage or permeability to water, depth to the water table, and susceptibility to flooding; behavior or engineering properties; and biological characteristics such as presence of organic matter and fertility (Natural Resource Inventory for Franklin County, University of Massachusetts Cooperative Extension; May 1976). Soils are classified and grouped into associations that are commonly found together.

The United States Department of Agriculture Soil Conservation Service lists three generalized soil types for Northampton:

1. Hadley-Winooski-Limerick Association: Deep, nearly level, well-drained, moderately well drained, and poorly drained, loamy soils formed in alluvial material; on floodplains. Includes the "meadows," the floodplain of the Connecticut River.
2. Hinckley-Merrimac-Windsor Association: Deep nearly level to steep, excessively drained and somewhat excessively drained, sandy and loamy soils formed in outwash deposits; on outwash plains. Includes most of Downtown Northampton and Florence.
3. Charlton-Paxton-Woodbridge Association: Deep, level to steep, well and moderately well drained, loamy soils formed in glacial till; on uplands. Includes much of the residential area of town, and most of the areas that may be developed in the next 20 years.

Prime farmland soils have contributed to the City's economy throughout its history and Northampton's agricultural sector continues to contribute to the thriving economy of today. The soils that constitute Northampton's prime and unique agricultural land include the Hadley-Winooski-Limerick association and the Hinckley-Windsor- Merrimac soils. The Hadley-Winooski-Limerick association is found on the floodplains along the entire length of the Connecticut River and in the eastern portions of Northampton.

The soils are generally silty and free of stones. The Hadley soils are well drained and are located on small knolls and terraces. The Winooski soils are

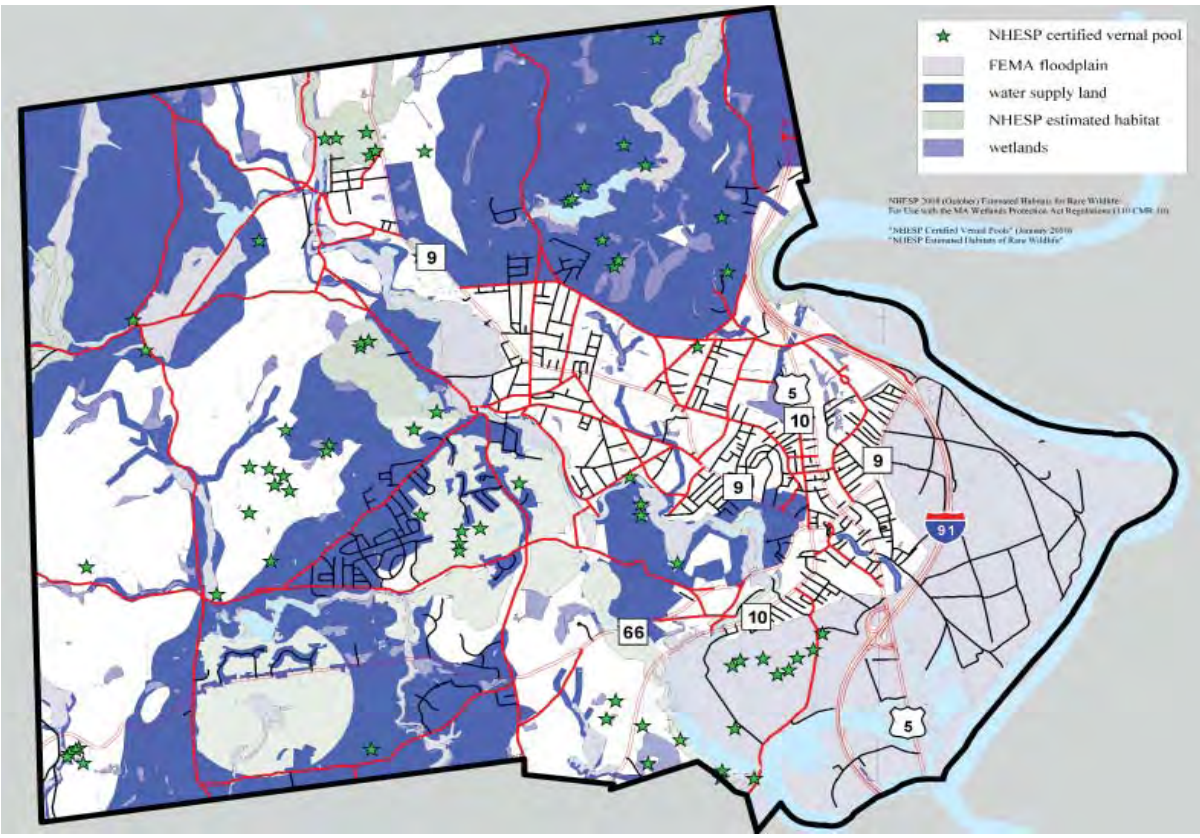
SOILS

moderately well drained and are located in the more level areas, whereas the Limerick soils are located in depressions and are poorly drained. Due to their high nutrient content, these soils are considered the most productive soils for farming in Northampton and the remainder of the Connecticut River Valley in Hampshire County. Due to the location of these soils, they are subject to flooding and are found in areas with a high water table for most of the year.

The Hinckley-Windsor-Merrimac Association is found on the level to rolling terraces parallel to the Connecticut River and is located in the developed urban areas of Northampton. The Hinckley soils, which dominate this association, are droughty and have formed in deep sandy and gravelly deposits. Gravel can be found within a foot and a half of the surface and sometimes on the surface itself. The Windsor soils are droughty and located on deep sand deposits. The Merrimac soils are similar to the Hinckley soils; they are somewhat droughty, but the subsoil is sandy loam with the gravel layer found more deeply-approximately two feet from the surface. The Hinckley-Windsor-Merrimac soils are best suited for development and dairy farms and are also considered important recharge areas for groundwater.

The Charlton-Paxton-Woodbridge soils can be found in the western hills of Northampton. These soils are the most common upland soils found in Massachusetts and were developed on glacial till. The Charlton soils are found on the upper slopes and hilltops and are deep and well drained. Paxton soils are very deep to the bedrock and moderately deep to densic contact. Woodbridge soils were formed from dense glacial till and have large surface and subsurface stones and boulders that may interfere with excavation. These soils are

WATER RESOURCES



located in the areas where new developments and residential expansion is occurring in Northampton-areas beyond the City's infrastructure limits.

Landscape Character

The diverse landscape character of the City of Northampton distinguishes it from surrounding communities. The City consists of densely developed urban areas, open farmland, forested hills, numerous streams, wetlands, and an abundance of wildlife patches, corridors, and matrices. The Connecticut River, a dominant landscape feature defines the eastern boundary of the City where much of the City's prime agricultural lands can be found within the Connecticut River floodplain (Northampton Meadows Area). Another outstanding feature in the City of Northampton is the steep forested uplands that define the western border and occupy approximately one-third of the City's landscape.

Water Resources

Watersheds

Northampton is rich in water resources, including brooks, streams, ponds, vernal pools, wetlands, and aquifers *(see the Water Resources Map).*

Most of the City of Northampton lies in the Connecticut River Watershed. The Connecticut River has a "Class B" water quality designation from the New Hampshire-Vermont border to Holyoke and is classified as a warm water fishery. Class B waters should provide suitable habitat for fish and other wildlife and should support primary contact recreational activities such as fishing and swimming. The water should also be suitable for irrigation and other agricultural uses. The classification of rivers and streams in Massachusetts does not necessarily mean that the river meets that classification; rather, classifications represent the state's goal for each river.

According to the 2003"Connecticut River Watershed Water Quality Assessment," the river is impaired by polychlorinated biphenyls (PCBs) along its total length. A report published in January 1998 by the New England Interstate Water Pollution Control Commission listed bioaccumulation of toxins in organisms at the higher end of the chain and toxicity as water quality issues for the river in Massachusetts. The report specifically identified PCBs in fish. As most recently as April 2004, the Massachusetts Department of Public Health and the Bureau of Environmental Health Assessment issued a public health advisory for certain species of fish contaminated by PCBs in the Connecticut River (Department of Public Health website; 2004). The general public is warned not to eat any affected fish species, which include channel and white catfish, American eel, and yellow perch. Pregnant women and nursing mothers are advised not to eat any fish from the Connecticut River.

Although wastewater treatment facilities constructed throughout the watershed have been treating major pollution discharges for more than 20 years, the Connecticut River is still plagued by pollution from PCBs, chlorine, heavy metals, erosion, landfill leachate, storm water runoff, and acid rain. These pollutants come from both point sources, like wastewater treatment plants and manufacturing plants, and non-point sources, including failed residential septic systems, improperly managed manure pits, and stormwater runoff carrying herbicides.

According to the Connecticut River Five-Year Action Plan 2002-2007 developed by the Massachusetts Executive Office of Environmental Affairs, the City of Northampton lies in the Central Reach of the Connecticut River Watershed in Massachusetts. Important characteristics of this part of the watershed include agricultural lands, large tracts of forestland, and the presence of the important wildlife habitat areas near the Mt. Tom/ Mt Holyoke Mountain Range and the Rainbow Beach area in Northampton.

The Plan lists the following objectives for the Central Reach:

- Increase awareness of the importance of riparian buffers along the mainstem of the Connecticut River and its tributaries;
- Reduce human-influenced erosion along the mainstem and its tributaries;
- Restore vegetative riparian buffers where appropriate;
- Protect water quality through the implementation of growth management strategies;
- Obtain additional water quality and quantity data;
- Assist communities with the protection of drinking water resources;
- Improve fish passage;
- Encourage the protection of important wildlife habitat;
- Complete an updated inventory of existing boat access points;
- Implement an education program for boaters; and
- Control invasive plant species within the riparian buffers of the Central Reach.

Although never as polluted as the section of the river below the Holyoke Dam, the water quality in the Connecticut River in Northampton has improved since 1972, when the federal Clean Water Act was passed. Improved sewage treatment plants, expansion of areas served by sanitary sewers, and the ending of combined sanitary and storm water sewers (CSOs), have combined to improve water quality in the Connecticut River and Mill River. Northampton's Hockanum Road wastewater treatment plant was upgraded to secondary treatment in the early 1980s and currently services approximately 85 percent of houses in Northampton. There have also been some improvements in pollution from stormwater runoff. That source, though, remains the most significant threat to water quality.

Flood Hazard Areas

Federal and local flood programs establish a 100-year floodplain, which is divided into two zones: a "floodway" and a "flood fringe." The "floodway"

is defined as the channel of a river or other water course and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water elevation more than one foot. Floodways that are depicted on National Flood Insurance Program maps are more highly hazardous areas. They are areas where, if construction occurs, it places structures at significant risk in terms of depths and velocities of floodwaters. Northampton zoning prohibits structures in these areas.

The "flood fringe" is the area of the floodplain lying outside of the floodway but subject to periodic inundation from flooding. Development may be permitted in such areas if it satisfies conditions and requirements regarding the height of the structure's first floor above the projected 100-year flood elevation, "flood proof" construction, displacement of flood waters, and related concerns. The State Building Code requires that all new living space be constructed at or above the projected 100-year flood level within the 100-year "flood fringe" area and that there be equal space for water to come into and go out of a foundation.

Floodplain boundaries are delineated on FEMA's Flood Insurance Rate Maps (FIRMs). This delineation also includes a 500-year flood area. In Northampton, the 500-year floodplain does not generally extend significantly beyond the 100-year flood area. The 500-year floodplain is not subject to local regulation. Major floods, such as those caused by heavy rains from hurricanes, and localized spot flooding can exceed the 100- and 500-year flood levels. In addition, many small streams are not mapped for their flood hazard.

Northampton can experience flooding in any part of the City. One great misunderstanding is the belief that floods only happen in the floodplain. With sufficient rain, almost any area will experience at least pockets of surface flooding or overland flooding. Overland flooding in rural areas can result in erosion, washouts, road damage, loss of crops, and septic system back-ups. Heavy rain in the more urbanized parts of the City with extensive paved and impervious surfaces can easily overwhelm stormwater facilities resulting in localized flooding and basement damage. Stormwater flooding also contributes to water pollution by carrying silt, oil, fertilizers, pesticides, and waste into streams, rivers, and lakes.

The following table represents existing flood mitigation strategies in Northampton.

Type of Mitigation	Description	Area Covered	Effectiveness and/ or Enforcement	Options for Improvements or Changes
Federal, State, and Local Regulations				
NPDES Phase II	Federal stormwater regulations	Any project w/n City w/ one or more acres of land disturbed	In effect since 7/30/03	DPW in process of implementing Phase II Plan
Wetland Protection Act, Northampton Wetlands Ordinance, & Rivers Protection Act	State & local laws regulating development w/n buffer zones of wetland resource areas & w/n riverfront area	100 foot buffer around wetlands & wetland resource area itself; 200 food resource area on both sides of every perennially flowing river & stream	Effective; Building permits cannot be issued w/o review by Conservation Commission	Strengthen Wetland Ordinance; establish no disturbance area adjacent to wetlands in less developed areas

Type of Mitigation	Description	Area Covered	Effectiveness and/ or Enforcement	Options for Improvements or Changes
Stormwater Management Standards	State regulation under Wetland Protection Act to regulate stormwater & other point source discharges	New residential subdivisions; alterations to non-residential structures subject to site plan review; roadway projects	Effective; Enforced by Conservation Commission & Planning Board	City in process of adopting stormwater managemetn ordinance for DPW administration
Northampton Stormwater Mangement Ordinance	Local regulation to ensure that erosion & sedimentation is managed & post construction runoff rates & volumes are controlled	Any new development or construction that disturbs over one acre of land & will discharge directly/ indirectly into City's stormwater system	Effective since 6/17/2004; Administered & enforced by DPW	One of main purposes of this new ordinance is to minimize damage to public & private property from flooding
MA State Building Code	Requires flood-proofing of new construction w/n 100-yr floodplain	All new/improved structures that require building permit	Effective; Enforced by Building Inspector	Improve outreach to floodplain residents about state regulations for property upgrades
Title V Regulations & Northampton Regulations	Minimum requirements for subsurface disposal of sanitary sewage	Areas of City not serviced by municipal sewers	Very effective; Enforced by Board of Health	Develop policy (Conservation Commission) on compensatory storage requirements for septic system repairs in floodplain
Local Zoning				
Special Conservancy District, per current Northampton Zoning Ordinance	Floodplain zoning that regulates development	Majority of area contained w/n floodplain of CT River (see Appendix A)	Very effective; Enforced by Building Inspector & Conservation Commission	Work w/ residents, land & business owners to develop land use plan Discussions should help determine rules for new development that will not damage resource areas while encouraging investment in existing properties
Watershed Protection Overlay District, per current Northampton Zoning Ordinance	Overlay District that regulates development	Land adjoining streams & rivers (see Appendix A)	Very effective; Requires special permit from Planning Board; Enforced by Building Inspector & Conservation Commission	

Type of Mitigation	Description	Area Covered	Effectiveness and/ or Enforcement	Options for Improvements or Changes
National Flood Insurance Program & Community Rating System	Federal Law regulating new & substantially improved construction in floodplain	100-year floodplain (Zone A) as shown on Flood Insurance Rate Map	Effective; Enforced by Building Inspector; CRS participation can reduce insurance premium up to 45%	Reduce insurance premiums by 15% through CRS by passing Flood Mitigation Plan
Open Space Preservation				
State & local land preservation w/n floodplain	APR & CR lands, Arcadia Wildlife Sanctuary, Rainbow Beach (state & City), Shepard's Island, Elwell Island, CT., River Greenways State Park, Mill River Greenway	1,251 acres w/n floodplain	Very effective; Permanently preserves floodplain area	Pursue federal & state grants to buy repetitive loss properties, & APRS & CRs on properties posing environmental risks, & on land w/ valuable habitat, all on willing buyer-willing seller basis
State, local & non-profit land preservation outside floodplain	Conservation areas, APR lands, parks, playgrounds, buffer areas	3,134 acres throughout City	Incrementally effective, limits development in watershed areas	Make land acquisition a priority in City budget
Structural Projects				
Dikes	Man-made physical barriers to floodwaters	Surrounding downtown	Extremely effective up to 100-year flood level	On-going maintenance
Dam maintenance	Necessary to prevent dam failure & flooding downstream	Area downstream of each dam	Fairly effective; Records kept by Northampton DPW, OPD, & by MA Dam Safety	Study possibility of removing obsolete dams along Mill River
Water Retention & Detention Ponds	Man-made ponds collect or diffuse stormwater runoff	New devleopment (commercial, industrial, & residential when under subdivision control), City-wide	Effective; Part of site review process; inspected by DPW (public & private structures)	Improve monitoring & enforcement; develop design manual for "green" solutions to reducing run-off rates & volumes in new development
Maintenance & repair of City Stormwater Management Infrastructure	Storm drains & sewers	City-wide	Case-by-case as done, could be very effective in certain areas	Ongoing, develop plan; identify & implement funding stream, such as dedicated fee for service

Wetlands

Wetlands are transitional areas where land-based and water-based ecosystems overlap. Inland wetlands are commonly referred to as swamps, marshes, and bogs. Technically, wetlands are places where the water table is at or near the surface or the land is covered by shallow water. Sometimes, the term wetland is used to refer to surface water as well.

Historically, wetlands have been viewed as unproductive wastelands, to be drained, filled and "improved" for more productive uses. Over the past several decades, scientists have recognized that wetlands perform a variety of extremely important ecological functions. They absorb runoff and prevent flooding. Wetland vegetation stabilizes stream banks, preventing erosion, and trap sediments that are transported by runoff. Wetland plants absorb nutrients, such as nitrogen and phosphorus, which would be harmful if they entered lakes, ponds, rivers, and streams. They also absorb heavy metals and other pollution. Finally, wetlands are extremely productive, providing food and habitat for fish and wildlife. Many plants, invertebrates, amphibians, reptiles, and fish depend on wetlands to survive. Wetlands have economic significance related to their ecological functions: it is far more cost-effective to maintain wetlands than build treatment facilities to manage stormwater and purify drinking water, and wetlands are essential to supporting lucrative outdoor recreation industries including hunting, fishing, and bird-watching.

In recognition of the ecological and economic importance of wetlands, the Massachusetts

Wetlands Protection Act is designed to protect eight "interests" related to their function: public and private water supply, ground water supply, flood control, storm damage prevention, prevention of pollution, and protection of land containing shellfish, fisheries, and wildlife habitat. To this end, the law defines and protects "wetland resource areas," including banks of rivers, lakes, ponds, and streams; wetlands bordering the banks; land under rivers, lakes, and ponds; land subject to flooding; and "riverfront areas" within 200 feet of any stream that runs all year. Local Conservation Commissions are responsible for administering the Wetlands Protection Act; Northampton also has its own local wetlands regulations.

Many of Northampton's wetlands are mapped by the National Wetlands Inventory (NWI) (*see the Water Resources Map*).

Vernal Pools

Vernal pools are temporary bodies of fresh water that provide critical breeding habitat for many vertebrate and invertebrate wildlife species. They are defined as "basin depressions where water is confined and persists for at least two months during the spring and early summer of most years, and where reproducing populations of fish do not survive." Vernal pools may be very shallow, holding only five or six inches of water, or they may be quite deep. They range in size from fewer than 100 square feet to several acres (Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife, *Massachusetts Aerial Photo Survey of Potential Vernal Pools,* Spring 2001). Vernal pools are found across the landscape, anywhere that small woodland depressions, swales, or kettle holes collect spring runoff or intercept seasonal high groundwater and along rivers in the floodplain. Many species of amphibians and vertebrates are completely dependent on vernal pools to reproduce. Loss of vernal pools can endanger entire populations of these species.

The state's Natural Heritage and Endangered Species Program (NHESP) has predicted the location of vernal pools statewide based on interpretation of aerial photographs. NHESP believes that its method correctly predicts the existence of vernal pools in 80 to 90 percent of cases. They acknowledge, however, that the method probably misses smaller pools. The NHESP has identified approximately 60 potential vernal pools throughout Northampton with several clusters especially in the northwestern part of town. According to NHESP, clusters indicate particularly good habitat for species. Also, with clusters, there are alternate habitats if something happens to one pool, and slightly different conditions in each may provide different habitats for species dependent

upon the pools.

In addition to identifying potential vernal pools, NHESP certifies the existence of actual vernal pools when evidence is submitted to document their location and the presence of breeding amphibians that depend on vernal pools to survive. Certified vernal pools are protected by the Massachusetts Wetlands Protection Act and by additional state and federal regulations. In Northampton, there are 74 Certified Vernal Pools.

Potential Aquifers and Recharge Areas

Aquifers are composed of water-bearing soil and minerals, which may be either unconsolidated (soil-like) deposits or consolidated rocks. Consolidated rocks, also known as bedrock, consist of rock and mineral particles that have been welded together by heat and pressure or chemical reaction. Water flows through fractures, pores, and other openings. Unconsolidated deposits consist of material from the disintegrated consolidated rocks. Water flows through openings between particles.

As water travels through the cracks and openings in rock and soil, it passes through a region called the "unsaturated zone," which is characterized by the presence of both air and water in the spaces between soil particles. Water in this zone cannot be pumped. Below this layer, water fills all spaces in the "saturated zone." The water in this layer is referred to as "groundwater." The upper surface of the groundwater is called the "water table" (Masters, Gilbert. *Introduction to Environmental Engineering and Science, Second Edition*; 1998).

The route groundwater takes and the rate at which it moves through an aquifer is determined by the properties of the aquifer materials and the aquifer's width and depth. This information helps determine how best to extract the water for use, as well as determining how contaminants, which originate on the surface, will flow in the aquifer.

Aquifers are generally classified as either unconfined or confined (EPA and Purdue U.; 1998). The top of an unconfined aquifer is identified by the water table. Above the water table, in the unsaturated zone, interconnected pore spaces are open to the atmosphere. Precipitation recharges the groundwater by soaking into the ground and percolating down to the water table. Confined aquifers are sandwiched between two impermeable layers (Masters; 1998). Almost all the public wells in Massachusetts, including those in Northampton, and many private wells tap unconfined aquifers (Mass. Audubon Society; 1985). Wells that rely on confined aquifers are referred to as "artesian wells."

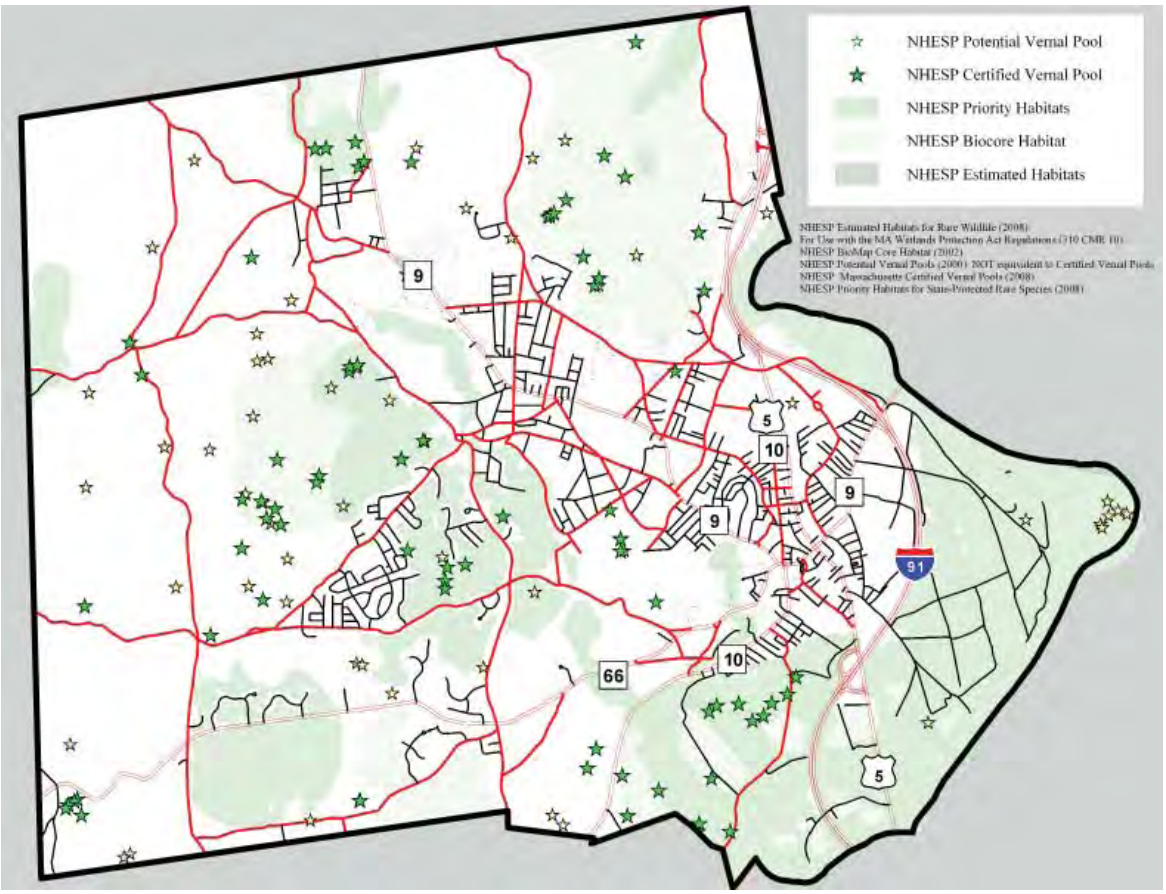
The Northampton Water District also has three delineated Zone II recharge area. A Zone II is that area of an aquifer that contributes to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at approved yield with no recharge from precipitation). The Zone II areas are located in the southwestern section of the City and the northeastern section of the City. Threats to the District's Zone II recharge area contributing to a designation of "high" threat of contamination include residential use, roadways, potential hazardous materials storage and use, presence of an oil contamination site as noted by DEP, and agricultural uses.

Vegetation

Northampton has diverse natural habitats

Water Resource Type:	
Water bodies (rivers, streams, ponds)	1,200 acres
Floodplain (100 year flood)	4,800 acres
Wetlands (swamps, marshes)	approx. 3,000 acres (2,000 acres mapped)
Drinking Water Supply Watersheds & Acquifers in Northampton	5,000 acres (includes water and wetlands)
Note: Water supply land is not open for public recreation and some land may show up in more than one category in this table.	
	—MassGIS Data

VEGETATION, FISHERIES & WILDLIFE



that support a variety of plants and animals. Approximately 50 percent of Northampton is covered by a mixed deciduous forest, including oak, maple, and beech, with smaller coniferous forests, including spruce, pine, and hemlock. Several thousand more acres of land are in agriculture, abandoned fields, and wet meadows.

In 1993 the Conservation Commission hired a trained naturalist to do an ecological assessment of the Conservation Commission's properties, the lands abutting those properties, and several other sensitive sites in the city. This information, summarized in a report entitled, *Rediscovering Northampton, The Natural History of City-Owned Conservation Areas,* was collected to provide greater data with which to make land management and land acquisition decisions. Major findings have been incorporated into this plan.

Unfortunately, non-native invasive plants are threatening to these resources. These plants can take over part of the indigenous habitat and decrease the ecological value for native animals.

Public Shade Trees

Public shade trees are highly valued in Northampton and, especially in many older neighborhoods, add substantially to the economic and ecological values of those neighborhoods. The City has a Tree Committee, made up of a representative of the Department of Public Works and citizen members. The Tree Committee collectively serves as the City's Tree Warden, ensuring that broad issues and community concerns are reflected in maintaining, improving, and removing shade trees. That said, resources limit the City's ability to be as agressive as

desireable at planting new trees.

Community Preservation Act funds are going to be used in 2011 to conduct a detailed shade tree inventory. This baseline will make management of shade trees easier.

In addition, the City trees trees in parks, cemetaries and public spaces with the same care that it treats shade trees, even when they are not under the jurisidcation of of the Massachusetts Public Shade Tree Law (M.G.L. Chapter 87).

Forests

Plants are a critical component of ecosystems in Northampton. Plants convert solar energy into food, which supports all animal life. Plants cycle energy through the ecosystem by decaying, by removing carbon from the atmosphere, and by shedding oxygen. Plants help moderate temperatures and act as shelter and feeding surfaces for herbivores, omnivores, and carnivores. Plants and animals together make up *natural communities*, defined as interacting groups of plants and animals that share a common environment and occur together in different places on the landscape (NHESP; 2001). Over the past decade, ecologists and conservationists in Massachusetts have devoted increasing effort to studying and protecting these natural communities, rather than focusing on individual species.

Forests are one of the City's most important renewable natural resources. The City's forests are diverse, including unusual communities such as major river floodplain forests. This section describes vegetated areas in town and their ecological and economic significance.

MAJOR-RIVER FLOODPLAIN FOREST

Major-River Floodplain forests occur along large rivers such as the Connecticut River.

The soils found within this environment are predominantly sandy loams without a surface organic layer. Flooding occurs annually and is usually severe. The "island variant" occurs on elevated sections of riverine islands and riverbanks where there are high levels of disturbance from intense flooding and ice scour. The dominant species of this floodplain forest is the silver maple (*Acer saccharinum*), covering the majority of the overstory with lesser amounts of cottonwood (*Populus deltoides*). American elm (*Ulmus americana*) and/or slippery elm (*Ulmus rubra*) can be found in the subcanopy. Shrubs are lacking and the herbaceous layer primarily consists of stinging nettles (*Laportea canadensis*). Ostrich fern (*Matteuccia struthiopteris*) also occurs and whitegrass (*Leersia virginica*) is found in small amounts. The "island variant" has similar species, but cottonwood, sycamore (*Platanus occidentalis*), and American ash (*Fraxinus americana*) are also present in the canopy. Box elder (*Acer negundo*), staghorn sumac (*Rhus typhina*), bittersweet (*Celastrus orbiculata*), riverbank grape (*Vitis riparia*), and Virginia creeper *Parthenocissus quinquefolia*) are also present.

Floodplain forests are insect-rich habitats that attract many species of songbirds. Raptors such as bald eagles and red-shouldered hawks also use riverbank trees as perch sites. Wood ducks and hooded mergansers are found along the shady edges of the riverbanks, as are Eastern comma butterflies and several species of dragonflies. Floodplain forests also provide sheltered riverside corridors for deer and migratory songbirds. Many state protected rare animal species use the floodplain forest as an important component of their habitat.

Rare, Threatened, and Endangered Plant Species

Vascular Plant Lygodium palmatum Climbing Fern SC

Vascular Plant Ophioglossum pusillum Adder's-tongue Fern T

Vascular Plant Panicum philadelphicum Philadelphia Panic-grass SC

Vascular Plant Eragrostis frankii Frank's Lovegrass SC

Vascular Plant Eleocharis diandra Wright's Spike-rush E

Vascular Plant Eleocharis intermedia Intermediate Spike-sedge T

Vascular Plant Carex typhina Cat-tail Sedge T

Vascular Plant Carex bushii Bush's Sedge E

Vascular Plant Arisaema dracontium Green Dragon T

Vascular Plant Salix exigua Sandbar Willow T

Vascular Plant Waldsteinia fragarioides Barren Strawberry SC

Fisheries and Wildlife

Deer, bear, and other mammals thrive in the woodland and forest edge, especially in the northern and western sides of Northampton. Game birds, such as pheasants, native grouse, woodcock, and turkey are also present in large numbers, along with raccoons, muskrats, and fox. For several years, there have been increases in the numbers of otter, opossum, and beaver. Arcadia Wildlife Sanctuary, which conducts detailed biological assessments and bird counts, has counted upwards of 200 species of birds in or passing through the sanctuary, including the Bald Eagle, Redtail Hawk, and Screech Owl.

Northampton's lakes, rivers, and streams support a variety of fish, including trout, salmon, bass, pickerel, northern pike, shad, and walleye. The Connecticut River, the Ox-Bow, and the Mill River in the Arcadia Wildlife Sanctuary are especially significant aquatic habitats.

Northampton wildlife habitat is not as productive as it once was; wetlands were filled prior to federal, state and local wetlands protection programs, development has fragmented habitat, and non-native species have been introduced.

Wildlife Corridors

Two decades ago, the City hired Laurie Sanders to research and write "Rediscovering Northampton" to identify ecological resources and wildlife habitat in Northampton. A decade ago, the Conservation Commission's wildlife subcommittee worked to identify wildlife corridors. These data sources are woven into this plan and the targets of acquision.

The short version of wildlife corridors is an exercise that we often do when we work with the community on open space and greenway planning. Take a map of Northampton. Draw a 200' corridor in blue along every stream and river in the city. On the same map, draw connecting lines between all of the major conservation areas in the city. These maps will cover the vast majority of the wildlife corridors in the city. We have not yet mapped the corridors in much greater detail than this, but we are doing more detailed assessments as we have the opportunity do do so. The City's emphasis preserving all wildlife corridors, not only the ones used by charasmatic large game species that tend to get more of the press.

This plan renames some conservation areas to greenways and merges ecologically connected areas to communicate these are ecological and wildlife corridors and not disperate unrelated areas.

Rare, Threatened, and Endangered Species

We have identified many species that are rare or of special concern ("SC"), threatened ("T"), or endangered ("E") in Northampton. This information is considered in permitting, planning, and open space preservation efforts:

Amphibian Ambystoma jeffersonianum Jefferson Salamander SC

Amphibian Ambystoma opacum Marbled Salamander T

Amphibian Scaphiopus holbrookii Eastern Spadefoot T

Beetle Cicindela duodecimguttata Twelve-spotted Tiger Beetle SC

Bird Botaurus lentiginosus American Bittern E

Bird Ixobrychus exilis Least Bittern E

Bird Haliaeetus leucocephalus Bald Eagle E

Bird Accipiter striatus Sharp-shinned Hawk SC

Bird Vermivora chrysoptera Golden-winged Warbler E

Bird Pooecetes gramineus Vesper Sparrow T

Bird Ammodramus savannarum Grasshopper Sparrow T

Bird Ammodramus henslowii Henslow's Sparrow E

Butterfly/Moth Satyrium favonius Oak Hairstreak SC

Dragonfly/Damselfly Gomphus ventricosus Skillet Clubtail SC

Dragonfly/Damselfly Gomphus abbreviatus Spine-crowned Clubtail E

Dragonfly/Damselfly Ophiogomphus aspersus Brook Snaketail SC

Dragonfly/Damselfly Aeshna mutata Spatterdock Darner SC

Dragonfly/Damselfly Boyeria grafiana Ocellated Darner SC

Dragonfly/Damselfly Neurocordulia yamaskanensis Stygian Shadowdragon SC

Dragonfly/Damselfly Stylurus amnicola Riverine Clubtail E

Dragonfly/Damselfly Stylurus scudderi Zebra Clubtail SC

Dragonfly/Damselfly Stylurus spiniceps A Clubtail Dragonfly T

Fish Acipenser brevirostrum Shortnose Sturgeon E E

Fish Hybognathus regius Eastern Silvery Minnow SC

Fish Catostomus catostomus Longnose Sucker SC

Fish Lota lota Burbot SC

Mussel Alasmidonta heterodon Dwarf Wedgemussel E E

Mussel Alasmidonta undulata Triangle Floater SC

Mussel Lampsilis cariosa Yellow Lampmussel E

Mussel Ligumia nasuta Eastern Pondmussel SC

Mussel Strophitus undulatus Creeper SC

Reptile Glyptemys insculpta Wood Turtle SC

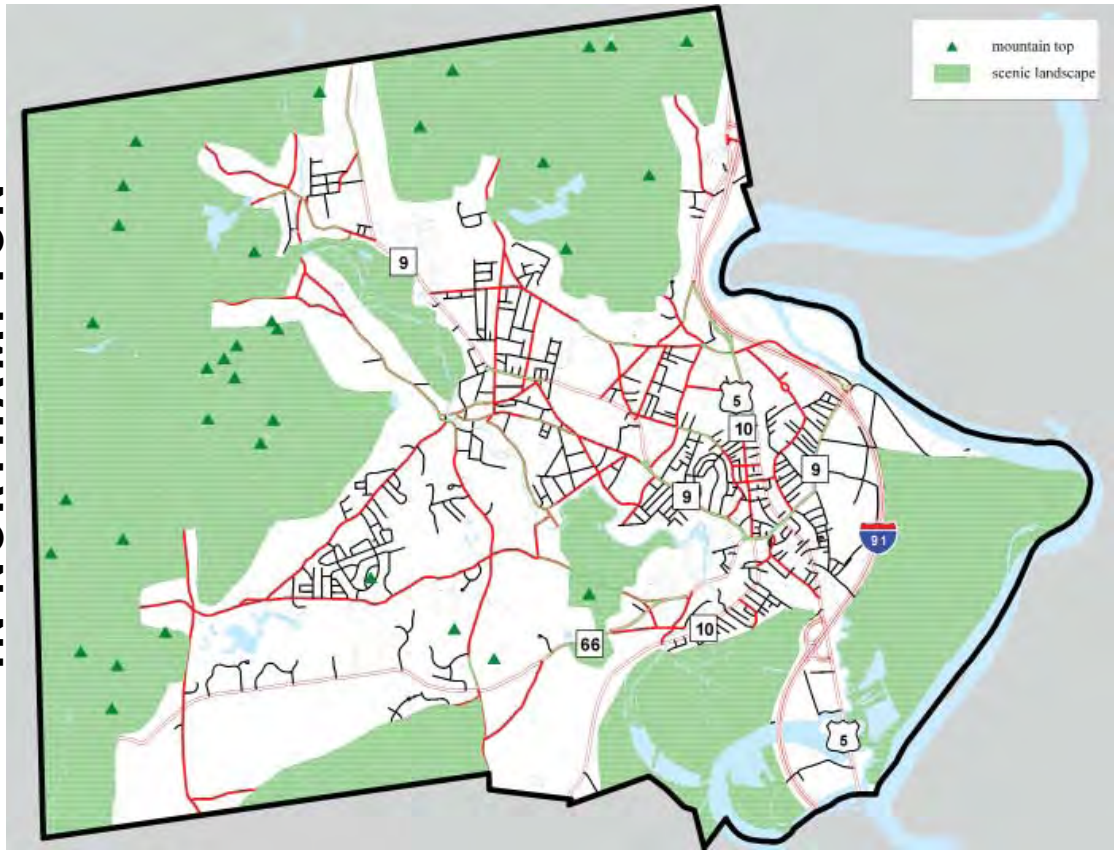
Reptile Terrapene carolina Eastern Box Turtle SC

Snail Ferrissia walkeri Walker's Limpet SC

Scenic Resources and Unique Environments

The city has built on the Dept. of Conservation

UNIQUE AND SCENIC FEATURES IN NORTHAMPTON



and Recreation (DCR) Scenic Landscape Inventory to identify significant scenic resources and unique environments in Northampton. These resources include the notable viewsheds, or vistas, from roads, water bodies, protected open space, and historic districts. Archaeological sites are **not** specifically identified to protect them. They are primarily concentrated on the Connecticut River and, to a lesser extent, on the Mill River.

Some development with little sensitivity to the community's views has obscured some scenic views. As farmland is abandoned, closed forests are replacing formerly pastoral views.

Scenic Landscapes

Landscapes can be scenic in different ways. The cultural and historic areas and areas with unique geology (see below) provide important local scenery. The DCR scenic resource inventory and results of community workshops show many people identify distant vistas when we ask them what is scenic. Community members identify the following as broad categories for the most scenic landscapes in Northampton:

- The Northampton Meadows, in essence the 3,000 acre floodplain of the Connecticut River, and all other pastorial and agricultural views in the city.
- Vistas of Mt. Tom and the Holyoke Range, the Saw Mill Hills and the Mineral Hills.
- Vistas of any waterbodies, e.g., Connecticut River, Mill River, Manhan River, Oxbow, City reservoir system and streams.

Cultural and Historical Areas

THE NORTHAMPTON STATE HOSPITAL

The Northampton State Hospital (NSH) and its burial ground are on the National Register of Historic Places. The *Preservation Guidelines for Municipally Owned Historic Burial Grounds and Cemeteries* (Dept. of Environmental Management Historic Cemeteries Preservation Initiative, 2000) provides additonal details on the NHS cemetary:

The "Northampton Lunatic Asylum" (1858) was the state's second state hospital. It was co-founded by Dorothea Dix, who led the reform movement for more humane treatment of the "insane." She found the mentally ill people were often chained or caged in basements and attics and beaten or otherwise mistreated. She successfully campaigned for state asylums with more humane methods (Brown 1998).

The NSH burial ground was in use from 1858 until 1921. At least 181 patients who were not claimed for burial elsewhere were buried there. An additional 413 burials of state hospital patients are poorly documented, and at least some of them were probably also buried on-site.

The cemetary location was described as "what used to be the hospital cemetery which borders on Mill River and runs up towards the spring in the back of the barn" (Superintendent's Report, 1933). This matches the oral history from DMH groundskeepers.

The burial ground is accessed by dirt roads that run from Burts Pit Road to the Mill River. It is an open field with no gravestones, paths, entranceways, or fences indicating the locations of graves or the boundaries of the cemetery. There is also an unmarked gravestone in woods to the north of the field. A cobblestone-covered north-south mound marks the grave with a small upright gravestone at the south end that is flat on the north side but is not engraved. A bit to the west, another north-south cobblestone-covered mound that might also be a grave although it lacked a gravestone.

Archaeological reconnaissance of the site confirmed the burial ground's location. Squarish soil deflations were found extending in two to three fairly straight, nearly north-south rows from the woods on the south edge of the field northerly along the top of the hill. Further, very distinctive squarish to rectangular patches of very green mound cover about one inch high were found where the taller straw-colored hay in the rest of the field did not grow. The long axis of the patches of low green vegetation extended roughly east to west, which is the traditional direction for Christian burials. Further, the patches were roughly formed

rows running north-south as is typical in Christian cemeteries.

There is little indication of underground disturbance in the pattern of deflations and patches of low green vegetation, except that some vegetation patches were no longer or shorter than a typical adult burial would be. Historic tilling of the field may have caused some disturbance of the vegetation patches. A 1916 map labels the burial ground parcel as "Tillage" (Davis 1916). Alan Scott reported in 2000 that groundskeeper Bud Warnock said he planted corn in the field c. 1943. Mr. Warnock had heard that the field was a cemetery from his father and uncle who were groundskeepers in the 1920s. Since the 1950s, the parcel has changed hands between various state departments and, at one point in the 1950s, was used for instruction in haying by the University of Massachusetts agricultural department.

A memorial bench on the site was rehabilated by Smith Vocational School and the Northampton Historical Commission (c. 2004). Bill Goggins, former superintendent who started working at NSH in 1958, had helped install the bench and associated plantings to honor the cemetary and especially four veterans.

HISTORIC NORTHAMPTON

Historic Northampton is a collection of 50,000 objects and three historic buildings. It is a repository of Northampton and Connecticut Valley history from the Pre-Contact era to the present. The three contiguous historic houses are on their original sites at the edge of downtown Northampton. The grounds are part of an original Northampton home lot laid out in 1654.

The **Damon House** (1813), built by architect, Isaac Damon, contains Historic Northampton's administrative offices and a Federal era parlor, featuring Damon family furnishings and period artifacts. A modern structure, added in 1987, houses the museum and exhibition area. It features changing exhibits and a permanent installation, *A Place Called Paradise: The Making of Northampton, Massachusetts*, chronicling Northampton history.

The **Parsons House** (1730) affords an overview of Colonial domestic architecture with its interior walls exposed to reveal evolving structural and decorative changes over more than two and a half centuries.

The **Shepherd House** (1796) contains artifacts and furnishings from many generations, including exotic souvenirs from the turn-of-the-century travels of Thomas and Edith Shepherd and reflects one family's changing tastes and values.

Historic Northampton's collections attract historians and scholars of New England material culture from around the world. The museum's collection includes more than 10,000 photographs, documents, and manuscripts from the 17th to the 20t^{h} centuries, fine art, furniture, ceramics, glass, metals, toys, tools and implements, and an important collection of textiles and costumes.

SMITH COLLEGE MUSEUM OF ART

The Smith College Museum of Art is housed in the spectacular and renovated (2003) Brown Fine Arts Center (designed by Polshek Partnership).

THE CALVIN COOLIDGE PRESIDENTIAL LIBRARY AND MUSEUM

The Calvin Coolidge Presidential Library and Museum documents the private life of Calvin Coolidge (1872-1933), beginning with his birth and formative years in Vermont, his student days at Amherst College, and his years as a lawyer in Northampton. Exhibits and manuscripts cover his political career from Northampton to Boston to the White House, his post-presidential years back in Northampton resident, and the life of Grace Goodhue Coolidge (1879-1957).

Areas of Critical Environmental Concern

Massachusetts designed Areas of Critical Environmental Concern (ACEC) are places that receive special recognition because of the quality, uniqueness, and significance of their natural and cultural resources. ACEC's are community nominated and then reviewed and designated by the Secretary of Environmental and Energy

Affairs. ACEC designation creates a framework for stewardship of critical resources and ecosystems. There are no ACECs in Northampton.

Unusual Geologic Features

MOUNT HOLYOKE AND MOUNT TOM RANGES

Northampton many special geologic features include: glacial outwash plains and deltas (i.e. sandplains/pitch pine habitats), drumlins, ravines, woodlands on glacial tills, and rocky uplands.

Though not in Northampton, the adjacent Mt. Holyoke/Mt. Tom Range to the east and south help define the city and form the city's backdrop. They formed 200 million years ago when lava flowed from the valley floor, cooled, and was upended. More recently, glaciers left their signature, scouring the ridges' jagged edges smooth in some places, exposing bedrock, or depositing till, sand, clay, or muck in others. Since the early days, settlers used all but the sheerest inclines for woodlots and pastures. Now mostly wooded, the ridge's steep slopes and east-west orientation create a number of forest types, including birch-beech-hemlock on the north side and oak-hickory on the south. Thickets, streams, ponds, and wetlands add to the diversity.

The Range runs east to west (one of very few mountain ranges that do so) for 20 miles across the Connecticut River Valley, rising up to 900 feet from the valley floor. They are laced with hiking trails including the Metacomet-Monadonock Trail, which runs the length of the Range and is a National Recreational Trail. Mt. Holyoke borders the towns of Hadley, South Hadley, Amherst, Granby, and Belchertown to the east of the Connecticut River and rises again to the west of the river as Mt. Tom, bordering Northampton, Holyoke, and Easthampton. The Mt. Holyoke and Mt. Tom Range were named one of 10 'Last Chance Landscapes,' defined as natural wonders with pending threats and potential solutions by the National Scenic Organization (2000).

TURKEY HILL QUARRY

Turkey Hill Quarry has unique exposures of bedrock. The quarrying operations uncovered a glacially smoothed surface with folded metamorphic rocks intruded by Williamsburg Granodiorite, an igneous rock. Area geologists study this unusual natural feature and incorporate it into classroom teaching.

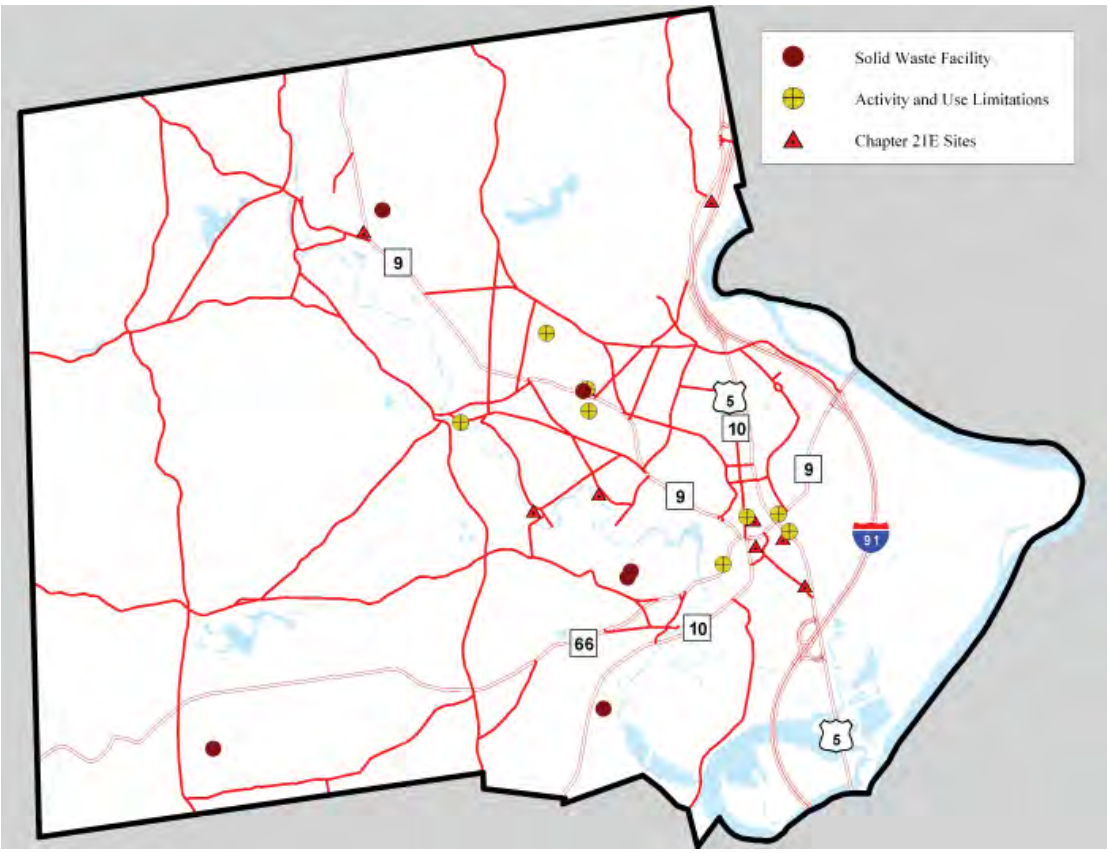
Environmental Challenges

Northampton has many sensitive ecological resources, especially water resources (e.g., wetlands, streams, floodplain, and aquifers and watersheds). Some of the richest wildlife habitat is at some risk, and some surface water and wetland resources have been degraded, especially from new suburban development.

Over the past 50 years, our approach to the environment, separation of combined sanitary and storm sewers, construction and expansion of the wastewater treatment plant and pretreatment facilities, lined landfills, wetlands regulations, erosion control standards, improved forest management practices, and our newer focus on reducing city and community energy uses and carbon dioxide emmissions have all softened the impacts of development on ecological resources. Air pollution continues to present a health hazard, especially ground level ozone during the summer months, in the Pioneer Valley.

Non-Point Source Pollution, Erosion and Sedimentation and Flooding

Non-point source pollution from contaminated runoff (e.g., stormwater that picks up contaminents from septic systems, soil erosion, roadway salt and sand, leaking underground storage tanks, agricultural runoff, and excessive lawn chemicals). Government and private actions have focused on reducing man-made pollutants, designing and building to reduce the liklihood of picking up contaminents, and providing opportunity for removal of contaminents that enter stormwater, groundwater, and surface water.



ENVIRONMENTAL CHALLENGES

Erosion is a key part of non-point source pollution, as soil is exposed to fast moving water and gets carried away by that water. The problem is especially accute from unprotected soil during construction some agricultural operations. Sedimentation is when the speed of the water slows down and drops its sediment load, typically in lakes and slower water bodies. Paradise Pond, for example, needs to be dredged every five to eight years as sediment carried by the Mill River gets dropped when the speed of the river slows down.

Keeping storm drains that connect to our lakes, streams, and rivers clear of debris, minimizing lawn chemicals and roadway sand and salt, controling soil erosion, enforcing city stormwater and erosion control ordinances, ensuring good septic system use and management, and educating residents about the issues and their role are all critical.

Stormwater, erosion and sedimentation are controlled through four seperate coordinated regulatory programs:

- City stormwater permits for projects that will disturb one acre or more.
- Federal clean water act permits for projects that will disturb one acre or more or is within a water body or wetland.
- Wetlands permits for projects within 100' of a wetlands, 200' of a river, or on any floodplain.
- Planning Board site plan approval for any project over 2,000 square feet.

The City has approximately 4,000 acres of FEMA mapped floodplains with some of the strictest floodplain regulations in the state (no new buildings are allowed in most of the floodplain) and obviouslproperty . These areas suffer from periodic flooding but at least such flooding is predictable using the FEMA maps. Other areas outside of the mapped floodplains have localiazed flooding from natural sources aggrevaited by obsolete infrastructure.

Hazardous Waste

Massachusetts General Law, C. 21E, and the Massachusetts Contingency Plan regulations implement regulate the release and clean up of hazardous materials. Waste site clean-up is largely privatized. Potentially Responsible Parties (PRPs) hire Licensed Site Professionals (LSPs) to oversee most cleanups, with limited DEP oversight. Releases, cleanup, tier classification, institutional controls ("activities and use limitations") must be reported to DEP. They generally have a paper review but also have emergency response capability, ability to montior sensitive projects, and audits both cleanups and AULs. There are provisions for informing and involving the public.

Northampton has is share of historic releases of hazardous materials in various states of cleanup, monitoring, and instituional controls (AUL).

Solid Waste Sites

Northampton's regional solid waste landfill opened in 1969. The 52 acre site serves 40+ communities with a design capacity of almost 3 million tons and accepts 50,000 tons per year. It will close in about 2013. The landfill is lined with a leachate collection system with a methane to electricity conversion system. The City has aggressive recyciling and composting programs.

Development Impacts

Much new development in Northampton is "smart growth," reusing previously developed land within the historic core of Northampton with very little environmental impacts. New sububan projects in undeveloped greenfields, however, usually generate greater enviornmental impacts, especially habitat and farmland loss and development patterns that emit more carbon dioxide, generate more traffic, and energy consumption.

Forestry Impacts

Northampton has few large scale forestry operations, but numerious small forest cutting, which support sustainable working landscapes, with relatively little environmental impacts. Some poor forestry operations, however, reduce wildlife habitat and lead to erosion and sedimentation.

Environmental Equity

A critical environmental challenge is ensuring that open space and recreation is equitably shared by all populations, even those that have historically been underserved (i.e., "environmental justice" populations). This issue is discussed and analyzed in detail in Chapter 3, Community Settings. The key findings are that open space resources are provided equally to all populations, but additional recreation opportunities may be necessary to serve diverse cultures with different sport backgrounds.

Unique Community Concerns

This plan was developed with extensive community participation, described earlier. Some areas of the city, however, have unique concerns. The plan has a strong focus on urban neighborhoods to ensure that their needs are met, consistent with the City's goal of making urban neighborhoods more desirable, and thus reducing pressure for suburban and rural development.

Open space forums were held in the downtown wards. In addition, Ward 3 worked with Smith College on a non-random open sapce survey. Over half the residents reported (in decending order) that the parks and open spaces that they liked the best near their homes are streetscapes, rail trails, their own yards, Smith College campus, Downton benches and steps, Pulaski Park, and the Meadows. Over a third of respondents included the Bridge Street cemetary, the Connecticut River, the Fairgroudns, the Mill River, the Bridge Street School playground, Sheldon Field, and the State Hospital.

There was strong support for conserving farmland, tree-lined streets, significant open space parcels, access to water, community gardens, better access to the cemetery, and ensuring new development is well planned and has open space.

5 Conservation and Recreation Inventory

Open space in the City of Northampton inlcudes of farms, forests, parks, and recreation areas under public, non-profit and private ownership and management. This section provides a summary of lands that provide open space, wildlife habitat, agricultural and forest products, watershed protection, scenic landscapes and recreational opportunities with some level of protection from development. In general terms, 'open space' is defined as undeveloped land. In this plan, the focus is land that is valued by residents because of what it provides: actively managed farm and forestland; wildlife habitat; protection and recharge of groundwater; public access to recreational lands and trail systems; important plant communities; structures and landscapes that represent the community's heritage; flood control; and scenic value. The term 'natural resource' describes the biological and physical components of an ecosystem, such as air, surface and ground water, soil nutrients, vegetation, fisheries, and wildlife. Recreational facilities include open space, parks, and developed areas like playing fields and multi-use trails.

When open space is "protected," it is intended to remain undeveloped in perpetuity. For example, land can be owned by a state conservation agency, a not-for-profit conservation land trust, or the City through the Conservation Commission, or by less-than fee conservation or agricultural restrictions or easements.

A conservation restriction is a legally binding agreement between a landowner (grantor) and a public or non-profit holder (grantee). The grantor agrees to limit the use of his/her property by forfeiting interests in the land (development being one type of interest) for the purpose of protecting certain conservation values. Conservation restrictions typically run in perpetuity (all of them in Northampton are in perpetuity) and are recorded at the Registry of Deeds. Certain income, estate or real estate tax benefits may be available to the grantor of a conservation restriction.

Farm land with prime soils or soils of statewide importance may be eligible for enrollment in the state's Agricultural Preservation Restriction (APR) Program. The APR program purchases the development rights and attaches a restriction to the deed, which legally bars development, keeping land "permanently" available for agriculture.

The development of any parcel of land that is in the APR Program, protected with a conservation restriction, owned by a state conservation agency, or owned by a land trust or a city for conservation purposes, would require a vote by two thirds of the State Legislature as outlined in Article 97 of the Amendments to the Massachusetts State Constitution.

This "protection" conveyed by Article 97 does have its limits. The state legislature has voted to release this protection at the request of local communities,

so that conservation land can be used for schools, roads, economic development, or other public projects not related to resource protection.

Land owned by municipal water supply providers and other non-park, recreation commisison, or conservation commission agencies typically has some protection from development, but this protection is not permanent if there are no restrictions and the land was not purchased for park purposes (thereby subject to Article 97).

Unless there is a legal restriction attached to the deed or if the deed reads that the land was acquired expressly for water supply protection, the level of protection afforded these types of parcels varies depending on the policies of each community. In many cases, the City water district would be required to show the Massachusetts Department of Environmental Protection just cause for converting the use of the land. However, this is not an insurmountable hurdle.

Parcels enrolled in Massachusetts Chapter 61 tax abatement programs are "temporarily protected" from development. This program offers landowners reduced local property taxes in return for maintaining land in productive forestry, agricultural or recreational use for a period of time. These "chapter lands" provide many public benefits, from maintaining wildlife habitat and recreational open space to sustaining rural character, and local forest and farm-based economic activity. Another benefit of the Chapter 61 programs is that they offer cities the opportunity to protect land. When a parcel that has been enrolled in one of the chapter programs is proposed for conversion to a use that would make it ineligible for the program, the town is guaranteed a 120-day waiting period during which it can exercise its right of first refusal to purchase the property.

This section provides a detailed inventory open space and recreation land in the City of Northampton. Privately owned land provides many public benefits, but it is important to respect the property rights of landowners. While many landowners choose to keep their property in farms and forests, not all landowners allow public access.

NORTHAMPTON OPEN SPACE AREAS

Type of Open Space	Acres 2000	Acres 2010
Chapter 61	952	1241
Chapter 61A	2086	11960
Chapter 61B	1680	1156
Agricultural Preservation Restrictions	238	404
Conservation Areas	945	2685
Conservation Restrictions	83	623
City Parks and Recreation	250	300
State Protected by DAR, DCR, & DFW	364	548
Massachusetts Audubon Society	491	491
Northampton Water Supply	516	505
Recreation	N/A	67.7
School	N/A	357.2

Source: Northampton GIS-- exact comparisons are not possible because of different methods in classifing parcels

NOTE: There are 350 acres of APRs and CRs on public land that are also listed as state or conservation area ownership.

OVERVIEW

LEGEND TO MAPS

Feature

- certified vernal pool
- beaver deceiver
- bird blind
- boardwalk
- bridge
- cistern
- dam
- fence
- gate
- kiosk
- monument
- parking
- rocks
- sign
- trail
- trails

Open Space

- APR
- CONS&MAS
- CONSERVATION
- CR
- NORTHAMPTON
- PARK
- RECREATION
- RIGHT-OF-WAY
- PARK
- STATE and FEDERAL
- Water Supply
- PENDING

5.1: Permanently Protected

A. Conservation & Agriculture—Public & Non-Profit

The lands in this section are as close to permanently protected as possible. Municipal and state fee and less than fee interests listed here all require, in accordance with Article 97 of the Amendments to the Massachusetts Constitution, a two-thirds roll call vote of the state legislature. This section includes fee interests and less than fee interests held by federal, state, muncipal, and non-profit conservation groups.

CR#	Grantor	Holder	Acres	Name/Comments
CR# 1	Smith College	Mass Audubon Society		Arcadia Wildlife Sanctuary
CR# 2–8				Cancelled
CR#9	Mass Audubon Society	Pascommuck Cons. Trust Inc.	10.0	Arcadia Wildlife Sanctuary
CR#10	Commonwealth MA (DAR)	City	37.0	Adjacent & part of APR
CR#11	Millbank II Condominium	City	0.9	Historic Mill River
CR#12	Lathrop Community, Inc.	Conservation Commission	13.5	Broad Brook/Boggy Meadow
CR#13	Gothic Street Development Parternship	Recreation Commission	0.15	Common law easement (no state approval in time)
CR#14	Armand & Rosel LaPalme	City	88.0	Cancelled, (APR instead)
CR#15	Nancy Hughes	Conservation Commission	3.6	Broad Brook/Coles Meadow
CR#16	City of Northampton	Broad Brook Coalition	5.5	Braod Brook
CR#17	City of Northampton	Mass Audubon Society	38.0	LC 970010110
CR#18	City	Celico Partnership	11.7	
CR#19	Edward Sheldon III	Broad Brook Coalition	10.0	Recreation area
CR#20	Commonwealth MA (DCAM)	Conservation Commission	8.1	Meadows, Atwood Drive, O&S Partnership
CR#21	Elaine G. Boettcher	Conservation Commission	2.2	Protect wetland & wildlife
CR#22	City of Northampton	Mass Audubon Society	66.1	Meadows/Arcadia
CR#23	Gail Schramm, Jance Primm, Suzanne Russin, Carolyn Gray, & George Peppard	Conservation Commission	23.0	Park Hill Road, Parsons Brook, lies adjacent to APR/wildlife corridor
CR#24	Millbank II Condominium Trust	Conservation Commission	0.3	400' Mill River allow river restoration and trail
CR#25	Lathrop Community, Inc	Conservation Commission	11.2	Park Hill/Parsons Brook
CR#26	Sabra Partnership	Conservation Commission	3.1	Broad Brook/trail access
CR#27	TCB Hospital Hill, LLC	Conservation Commission	3.2	State Hospital/Village Hill
CR#28	Oak Ridge Road, LLC	Conservation Commission	38.0	The Oaks
CR#29	Joseph Kielec	Broad Brook Coalition		Sheldon Field addition
CR#30	Tofino Association, Inc.	Conservation Commission	10.3	Rocky Hill Cluster
CR#31	Seven Bravo Two, LLC	Conservation Commission	0.8	Conn. River, Airport, special permit
CR#32	Stephen & Heidi Robinson	Conservation Commission	4.5	Broad Brook/Coles Meadow Road

CR#	Grantor	Holder	Acres	Name/Comments
CR#33	Bridge Road, LLC	Recreation Commission/ Conservation Commission	4.6	Bear Hill subdivision
CR#34	Sweet Meadow Properties	Consrevation Commission	1.3	Reservoir Road
CR#35	John & Diane Clapp	Conservation Commission	20.0	Mineral Hills/Chesterfield Road
CR#36	Patrick Melnick (Beaver Brook)	Conservation Commission	41.0	Beaver Brook
CR#37	The Clarke School for the Deaf , Charles Douglas Hinckley, & Jennifer E. James	Conservation Commission	0.4	Round Hill
CR#38	Miriam Clapp	Conservation Commission	57.9	Mineral Hills
CR#39	Benjamin G. James & Oona Mia Coy	Conservation Commission	1.8	Meadows/Venturers Field Road
CR#40	John & Diane Clapp	Conservation Commission	35.7	Mineral Hills
CR#41	John & Diane Clapp	Conservation Commission	11.1	Mineral Hill addition
CR#42	Jane Hill	Conservation Commission	9.8	Roberts Meadows, Reservoir watershed
CR#43	Benjamin G. James & Oona Mia Coy	Conservation Commission	3.6	Meadows/Venturers Field Road
CR#44	Guyett & Anderson	Nonotuck Land Fund assigned to Northampton BPW	168.4	Priority wildlife habitat
CR#45	Joseph & Kira Jewitt	Conservation Commission	5.6	Parsons Brook, Westhampton Rd
CR#46	Robert Zimmerman	Conservation Commission	36.0	Broad Brook/N. Farms
Cons. Easement	Theodore and Evelyn Towne, Park Hill Estates	Conservation Commission	15+/-	Westhampton Road and Whittier Drive, Park Hill Estates
Cons. Easement	Trustees of Smith College	City of Northampton		Hospital Hill
Forest Legacy	Frank Anciporch	U.S. Forest Service		Fitzgerald Lake, Boggy Meadow Road

Inventory of Permanent Open Space Summary (listed alphabetically) • See full entries below for details • Grants & funding in entries below • ALL have permanent protection; No additional protection needed.	Use (public access on all EXCEPT private and water)	Owner & manager (if different)	Acres	Condition	Recreation potential	Zoning
408 Bridge Road	conservation	Cons. Com.	<1	good	poor	residential
64 Gothic Street	park	Private, Cons. Com. oversight	<1	good	poor	residential
Agnes Fox Playground	recreation	Rec. Com.	2	good	excellent	residential
Arcadia Wildlife Sanctuary	conservation	Mass Audubon	47	good	fair	floodplain
Arcanum Field Recreation Area	recreation	Rec. Com.	9	good	fair	residential
Barrett St. Marsh Conservation Area	conservation	Cons. Com.	26	good	fair	FFR
Bear Hill Recreation Area	recreation	Rec. Com.	3	poor	excellent	residential
Beaver Brook Greenway	conservation	Cons. Com.	48	good	fair	FFR
Brookwood Marsh Aquifer Protection Area	conservation	Cons. Com.	22	good	fair	FFR
Burts Pit Road CR	conservation	Private, Cons. Com oversight	2	good	poor	residential
Childs Park	park	Child's Park Association	40	excellent	fair	residential
Clarke School CR	conservation	Private, Cons. Com oversight	<1	excellent	poor	residential
Community Gardens	agriculture	Cons. Com.	8	good	fair	FFR
Connecticut River Greenway	conservation	Cons. Com.	142	good	excellent	FFR
David Musante Beach	recreation	Rec. Com.	11	good	excellent	residential
Edmund J. Lampron Memorial Park	park	City	1	good	excellent	residential
First Churches Park	park	City	<1	good	excellent	CBD
Fitzgerald Lake/Broad Brook Greenway	conservation	Cons. Com	746	good	excellent	FFR
Florence Conservation Area	conservation	Cons. Com.	4	good	excellent	FFR
Florence Recreation Fields	recreation	Rec. Com.	24	poor	excellent	residential
Halligan and Daley Historic Site	park	Rec. Com.	<1	good	fair	PV
Hospital Hill CR	conservation	Smith College, Cons. Com. oversight	20	good	fair	FFR
Ice Pond Conservation Area	conservation	Cons. Com.	25	good	fair	FFR
Look Memorial Park	park	City	140	good	excellent	residential
Maines Field Recreation Area	recreation	Rec. Com.	21	poor	excellent	residential
Manhan Conservation Area	conservation	Cons. Com.	1	good	poor	FFR
Manhan Rail Trail	recreation	City	6	excellent	fair	residential
Marble Brook Conservation Restriction	conservation	Private, Cons. Com oversight	169	good	poor	FFR
Mary Browns Dingle	conservation	Cons. Com.	2	good	poor	FFR
Meadows Conservation Area	conservation	Cons. Com.	134	good	poor	FFR
Mill River Greenway	conservation	Cons. Com.	181	good	excellent	FFR
Mineral Hills Conservation Area	conservation	Cons. Com.	384	good	fair	FFR

Inventory of Permanent Open Space Summary (listed alphabetically) • See full entries below for details • Grants & funding in entries below • ALL have permanent protection; No additional protection needed.	Use (public access on all EXCEPT private and water)	Owner & manager (if different)	Acres	Condition	Recreation potential	Zoning
Northampton State Hospital Agriculture Lands	agriculture	MA DAR	200	good	fair	FFR
Northampton Water Supply	water supply	City Water	505	good	fair	WSP
Norwottuck Rail Trail	recreation	City	25	excellent	fair	residential
Oaks Subdivision	conservation	Private, Cons. Com oversight	33	good	excellent	residential
Park Hill Road Restrictions (CR and APR)	agriculture	Private, Cons. Com oversight	262	good	poor	residential
Parsons Brook Conservation Area	conservation	Cons. Com.	28	good	fiar	FFR
Pulaski Park	park	City	1	poor	excellent	CDB
Rainbow Beach	conservation	MA DFW	81	good	poor	floodplain
Rainbow Beach Cons Area	conservation	Cons. Com.	16	good	poor	floodplain
Ray Ellerbrook Field	recreation	Rec. Com.	16	good	fair	FFR
Ridge Conservation Area	conservation	Cons. Com.	36	good	excellent	FFR
Roberts Meadow Conservation Area	conservation	Private, Cons. Com oversight	22	good	poor	FFR
Sawmill Hills Conservation Area	conservation	Cons. Com.	564	good	excellent	FFR
Sheldon Field Recreation Area	recreation	Rec. Com.	13	poor	excellent	floodplain
Silvio O. Conte National Fish and Wildlife Refuge	conservation	US F&WS	210	good	poor	floodplain
State Hospital Agricultural Land	agriculture	MA DAR	331	fair	excellent	FFR
Trinity Row Park	park	City	<1	good	poor	GB
Veterans Field Recreation Area	recreation	Rec. Com.	9	good	excellent	residential
West Farms Conservation Area	conservation	Cons. Com.	12	good	fair	FFR
West Farms Recreation Area	recreation	Rec. Com.	<1	good	fair	residential

Arcadia Wildlife Sanctuary 650 acres

Ownership: Massachusetts Audubon Society

Location: Connecticut River Ox-Bow

Acquisition history:

Date	Book, page or other	Description	Acres
	B12, p44	45-67	
11/1/1966	B1497, p25	45-10	
9/13/1968	B1538, p277	52-01	
5/17/1974	B1772, p199	45-10; 45-63; 45-65 (bridle path)	
4/17/1979	B2091, p126	38D-75	
1/14/1982	B2260, p100	45-10	
4/13/1986	B1880, p241	38D-75	
6/23/1988	B3199, p238	38D-75	
4/13/1986	B1880, p241	38D-73	
12/31/1987	B3114, p29	38D-77	
12/31/1987	B3114, p29	38D-70	
1/6/1988	B3316, p1	38D-70	
12/31/1987	B3114, p29	45-10	
1/23/2004	B7662, p85	From Mitchell G. Watras, Jr for $218,725	

Description:

Arcadia Wildlife Sanctuary has varied habitats, wetlands, and the last mile of the Mill River before it connects with the Connecticut River Oxbow. Arcadia offers environmental education, hiking (five+ miles of trails). It receives heavy use throughout the year. The former Easthampton Trolly Line was donated by Smith College to Mass. Audubon and is now part of Arcadia (Conservation Restriction on trolley line merged with fee ownership). Conservation Restriction on Map ID 38D, Parcel 70 held by Pascommuck Conservation Trust).

Barrett Street Marsh 24.7 acres

Ownership: City/Conservation Commission

Location: Barrett St. & bicycle path

Acquisition history:

Date	Book, page or other	Description	Acres
12/21/1976	B1939, p321	Transfer from City	
12/29/1978	B2075, p28	Private donations	
2/8/1990	B3518, p204 & 206	Land swap	
2/8/1990	PB165, p70		
12/31/1993	PB176, p133		
2/9/1994	B4420, p243	Donation in settlement of lawsuit of Carlon Dr.	4.978
2/10/1998	B5309, p206	Right of Way Easement from Carlon Dr.	

Permit history:

BARRETT STREET MARSH

Date	Permit History
1990/1991	Walkway permits (wetlands & building)
	Wetlands 246-114, Stop & Shop's responsibility to clean up trash

Partners: Formerly Barrett Brook Advisory Committee, currently none.

Description:

This meadow and wetland serve as important stormwater detention and filtration facilities, provides wildlife habitat, and provides nature viewing in an urban environment. The site is surrounded by heavily developed residential and commercial properties. A city drainage easement runs through the site. The area includes a right-of-way from Carlon Drive.

A 600-foot (375' Trap Rock Gravel/sone dust & 200' wooden boardwalk completed in 1992) wheelchair accessible walkway extends from the bikeway into the marsh. The Commission, Smith Vocational School, and volunteers built the boardwalk. The Jackson Street Parent Teacher Organization and the Community Development Block Grant provided the materials.

The Conservation Commission manages the property allow beaver activity while preventing flooding. Beaver deceiver pipes have been installed on several successive beaver dams, the most recent in 2010 with

Hampshire and Hampden Canal at Barrett Street Marsh

Community Preservation funding.

History: Barrett Street Marsh was originally part of a larger wetland system. In the early nineteenth century it was used for agricultural purposes. Ditches were put in place to dewater the marsh. In 1905 Northampton sewer commissioners diverted the flow of King Street Brook away from "the mouth of the State Street River." The Brook was diverted into what is known today as Barrett Street Marsh.

The history of the Barrett Street Marsh is well documented and shows that the entire area has been highly altered since the early 1800s, when transportation corridors began to be established nearby and development spread northward from the center of Northampton. The area now known as the Barrett Street Marsh was originally part of a much larger wetland system that extended to the east, having been severed from the larger system by development. Reportedly, the Barrett Street Marsh was used as agricultural land from the early 19th century, having been dewatered by a system of drainage ditches that were dug throughout the low-lying area.

The Hampshire and Hampden Canal (reorganized as the New Haven and Northampton Canal) was built through the Barrett Street Marsh (1829-1847). The canal changed the area drainage patterns and gave Northampton a permanent liability to maintain the waterway (something that does not happen from a natural flowing stream). This led to a lawsuit against the City for lack of maintenance over 180 years after the canal was abandoned (referred to in liability circles as a long liability tail). Human-built drainage was developed on the site to allow much of the site to be used as farmland. Portions of the site were farmed until the early to mid 1960s.

The main flowage into the marsh is a perennial stream known as King Street Brook that consists of drainage from the Round Hill/Prospect Street area. The brook enters the southern-most point of the marsh, through a culvert under the bike trail that runs along an abandoned railroad embankment. Until the early 1900s, King Street Brook did not flow into the Barrett Street Marsh but instead flowed in a more southeasterly direction towards State Street and the center of Northampton. As recorded at the Hampshire County Registry of Deeds (Book 596, Page 375), in 1905 the Northampton Sewer Commissioners voted to divert the flow of King Street Brook away from "the mouth of the State Street sewer," for the purposes of "public health and convenience". The brook was to be diverted to the "center of an old ditch" which then existed northeast of the railroad embankment and presumably ran through what is now known as the Barrett Street marsh. The City proceeded with the taking of a strip of land almost 1,800 feet long and 15 to 25 feet in width to encompass the old ditch and hence the brook along its diverted course to the Connecticut River. The ditch was thereafter known as the King Street Brook Diversion. Also in 1905, the City was granted an easement from the New York, New Haven, and Hartford Railroad Company to construct "a box culvert four feet deep by four feet wide suitable for carrying through the waters now running in King Street Brook, so-called" (HCRD, Bk 597, pg 202), which is the now-existing culvert under the bike trail.

The character of the King Street Brook Diversion was thus established almost one hundred years ago.

The configuration of the ditches within the Barrett Street Marsh at the time of the diversion is not known. Anecdotal information indicates that the marsh area was used for agricultural purposes into at least the 1970s. Aerial photographs from the 1960s and '70s clearly show the ongoing agricultural use and the diversion channel in it original (1905) location with a geometric array of ditches leading to the diversion from many areas of the marsh. In a photograph taken on April 20, 1971, the water within the diversion appears to be 8-10 feet in width, and the most upgradient half of the diversion channel within Barrett Street marsh appears to have been recently maintained prior to the photograph being taken.

Coincident with the advent of restrictive environmental regulations and changing attitudes regarding the value of wetland areas, maintenance of the diversion channel and system of ditches waned in the 1970s, and use of the land for agriculture altogether ceased over twenty years ago. The date of the last maintenance dredging of the King Street Brook Diversion is not known. While records of ditch construction and effectiveness are not available, considerable evolution of the marsh's hydrology has taken place in the recent past since the ditches were last maintained.

BROOKWOOD MARSH

Brookwood Marsh Conservation Area 28 acres

Ownership: City/Conservation Commission

Location: Ellington Rd, Crestview Dr, Sandy Hill Rd, Brookwood Dr., Indian Hill, & Florence Rd

Acquisition history:

Date	Book, page or other	Description	Acres
9/12/1986	PB141, p18	Survey of Indian Hill	7.065
3/21/1990	B3536, p85 & 95	Deed for Brookwood Marsh (for abatement of back taxes)	15
3/22/1990	B3535, p234	Indian Hill	
1990		Acquisition of Indian Hill via donation cluster	

Date	Book, page or other	Description	Acres
7/25/1994	B4521, p248B4521, p259B4531, p302B4539, p153	Deed for Brookwood Marsh, Gutowski donation	5

Permit history:

Date	Description
1992	Waterline Easement B3994, p162 for Brookwood Marsh
1992	Determination of Applicability & Fish & Wildlife permits for Brookwood Marsh

Description:

This parcel provides critical wetland habitat and filtration of pollutants. It also protects the City's drinking water aquifer (Zone III) and rich beaver activity.

Burt's Pit: The Gutowski's donated some of the richest wetlands and the original "Burt's Pit," formerly owned by the Northampton State Hospital and used for mining peat and other organic material for their gardens.

Brookwood Marsh: Norman Keedy d/b/a KV Homes was developing the land at the time the Massachusetts Wetlands Act was passed. His development was shut down by the City as soon as the wetlands regulations went into effect. In 1990, the City of Northampton acquired the 16 acre Brookwood Marsh, with a deed in lieu of foreclosure for back taxes, in an effort to preserve and restore critical wetlands habitat within the City. A portion of the land was filled in the 1970s when Ellington and Crestview were built, prior to the adoption of the Massachusetts Wetlands Protection Act. In 2001, the City restored an acre of wetlands by emoval of fill material and relocating a beaver dam further away from the surrounding residential homes. The invasive non-native plant Purple loosestrife has been out-competing native plants of higher wildlife value. The city released 16,000 Galerucella beetles in the northern section of the marsh in 2005.

Indian Hill: contains an attractive stream and protects the City's drinking water aquifer Zone 3.

Mary Brown's Dingle 1.56 acres

Ownership: City/Conservation Commission

Location: Glendale Ave, between Franklin St & Crescent St

Acquisition history:

Date	Book, page or other	Description	Acres
11/17/1983	B2407, p270	Donation from Mary Brown	1.56

Partners: None

Description:

This area is comprised of small trees and shrubs. It serves as a natural open space and bird habitat in a residential neighborhood. A City storm sewer easement runs through the middle of this area. Over the years, fill from abutting properties has altered this area.

Clark Street Well/Aquifer Area-- Water Supply 8.18 acres

Ownership: City, Department of Public Works

Location: Clark and Spring Streets

Acquisition history:

Date	Book, page or other	Description	Acres
9/27/1950	B1079, p73		
1/24/1952	B1110, p303		
5/28/1952	B1118, p275		

Description:

This parcel includes the Clark Street wellhead and much of the Zone I buffer zone.

Connecticut River Greenway (includes CR) 123.82 acres

Ownership: City/Conservation Commission

CR owned by City, land is private (part of airport)

Location: Damon Rd and River Road, Connecticut River

Acquisition history:

Date	Book, page or other	Description	Acres
4/30/1981	B2220, p339	James H. Elwell section: Deed (cost: $65,350; urban self-help $52,280; & LWCF $6,500)	100
7/5/2005	B8332, p130	Boundary line agreement	
	B832, p148	Seven Bravo Two Conservation restriction	3.82
	B8332, p162	Subordination agreement	
	PB29 & 204, p83		
	PB224, Paage 97	survey Ct River Greenway at Hatfield town line	
4/01/2011	B10516, P307	50% interest in land on Hatfield/Northampton town line ($8,000 CPA, $4,000 from donations)	20

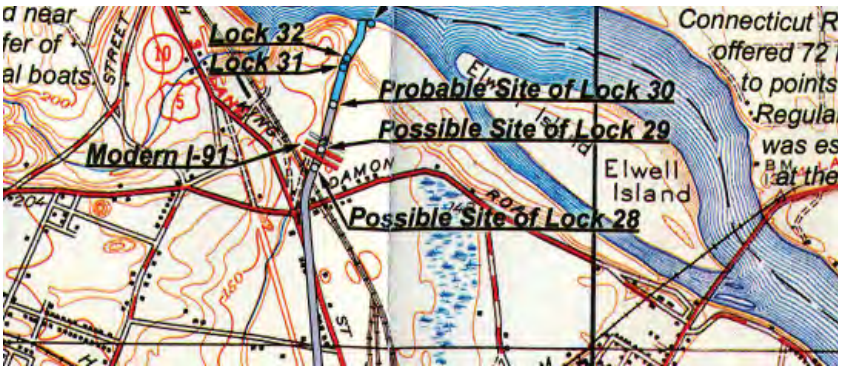
Signage: Land & Water Conservation Fund sign at Damon Road

Partners: expired Memorandum of Agreement with DCR for joint management at Elwell

Description:

Seven Bravo Two CR: abuts the Connecticut River. Property owner retains the right to build a dock.

Elwell Section: 60-acre Elwell Island and 40 acres of adjacent riverfront land. The island provides habitat for endangered floodplain plans and animals. The eastern edge of the island provides an excellent beach and is very heavily used by motor boaters (and even for unauthorized camping). A local



Hampshire and Hampden Canal at the Conn. River Greenway

CONN. RIVER GREENWAY/ELWELLL ISLAND

farmer, in accordance with a Farm Use License, utilizes approximately 15.5 acres of prime farmland on the mainland. The farmland has been organic since 2006. This property is managed in cooperation with the Department of Conservation and Recreation with a joint management agreement and in conjunction with the adjacent Greenways State Park.

Elwell Island has been growing from river sedimentation (accretion) at a faster rate than it has been eroding for over a century. According to the Daily Hampshire Gazette (7/24/1980), "In the early 1980s, what now is Elwell Island was nothing more than a sandbar. Then, in 1830, Levi Elwell...plant[ed] rocks and willow shoots on the sandbar... By 1904, the sandbar had grown to an island of 24 acres, and Levi's grandson, James Elwell, began farming the island, using a cable ferry to get his crops and equipment back and forth to the mainland."

Using historic maps and what scientists know in 1982 they discovered that the island grew 9.7' to 18.2'

per year from 1884 to 1939 and 12.3' per year from 1939 to 1977. It is likely that the island is now larger than its official 60 acres. New layers of silt are added each year, creating an extremely lush interior, but one in which trees have a difficult time colonizing in.

Northern Terminus: The Greenway also includes a 50% interest in land recently acquired on the Northampton/Hatfield town line. The city is currently working on acquiring the remaining 50% interest. The two existing Greenway holdings will be the anchor for a Connecticut River Greenway rail trail extending from Damon Road to Elm Court in Hatfield.

Lane Construction: Lane Construction has given the city a notice of intent do donate the land along the riverfor one of the key in-holdings in the Greenway. That land will be both a conservation area, with a portion carved out for a community boathouse.

Conte Fish & Wildlife National Refuge 230.38 acres

Ownership: USA, managed by USF&W

Location: Hockanum Rd, Mt. Tom Rd

Acquisition history:

Date	Book, page or other	Description	Acres
11/28/2006	B8961, p348	Parcel 4 (Hockanum Rd), donation from Joseph M. McNerney	19.52
2008	B9429, p236	Taking to City, donation	
11/16/2006		Site assessment by OTO	
6/19/2008	B9518, p66	Deed to USA ($25,000)	
10/19/2007	B9299, p242	Parcel 19B.1 (Hockanum Rd), includes 16.0 acres transfer from City to Valley Land Fund ($25,000)	197
	B5738, p221	Sheldon CR to Broad Brook Coalition	
8/17/2007	B9238, p229	Parcel 4a, taking to City ($13,860)	13.86
6/19/2008	B9518, p62	Deed to USA ($19,000)	
10/8/2008	B9615, p174	Parcel 4b ($9,000)	
10/9/2008	B9616, p97	Confirmatory deed from Wodicka ($9,000)	
		Eventual sale to USA Conte expected in 2009	

Description:

The Mill River fueled manufacturing during the industrial revolution. In 1936 and 1938, back-to-back floods turned the city streets into canals and caused a large amount of water damage. The U.S. Army Corps of Engineers took on a major flood control project from 1939 to 1940, cutting off the flow of the Mill River through downtown.

Fitzgerald Lake and Beaver/Broad Brook Greenway

890 acres

Includes related Conservation Restrictions

Ownership: City/Conservation Commission (land under CR is privately owned)

Location: North Farms Rd, Morningside Dr., Marian St, Boggy Meadow Rd, Haydenville Rd (Rt 9), & Leeds

Acquisition history:

FITZGERALD LAKE

Date	Book, page or other	Description	Acres
5/20/1977	B1951, p261	Fitzgerald Lake: Self-help ($72,825) & City ($72,826), Land & Water Conservation Fund covenants added in 1993	152
	B1993, p11	R-O-W to dam (may no longer be valid)	
5/8/1990	B3557, p148; PB166, p52	Pines Edge, land donations required by Pines Edge comprehensive permit, disclosure 1/1991	15.89
12/18/1994	B2521, p1	Marian St Section, self-help w/34% match donations from neighbors	11.85
3/13/1989	B3344, p284	Dorothy Burke donation- N. Farms Rd	
1/28/1993	B4138, p271	Richard Abuza bargain sale: Bargain discount ($33,200), Land & Water ($37,500) & City ($5,000)	86

Date	Book, page or other	Description	Acres
6/10/1993	B4223, p145	John A. Cimek section: City ($25,000), Broad Brook Coalition ($5,250) w/Land & Water Conservation Fund covenants	38
12/20/1995	B4796, p38	Wharburton Purchase	5.5
4/30/1998	B5360, p15	Swayze purchase: Broad Brook Coalition ($2,000); Wharton Trust ($6,000) & City (closing costs), approved by City Council 2/5/1998	10
	First American Title	Swayze: Title Insurance 20301162, w/City Clerk	
10/13/1994	B4570, p294, 298, 300, & 302	New England Telephone release, donation	
11/30/1994	B4595, P134	Cooke's Pasture, City ($39,540), self-help ($112,200), Broad Brook Coalition ($31,000, includes Wharton Trust $5,000) & Sweet Water Trust ($10,000)	161.1
	Commonwealth Land Title	Cookes Pasture title insurance on file with City Clerk	
2/9/1996	B4822, p184PB179, p98	Nancy Hughes donation, donation required by cluster special permit	8.876
	Lawyers Title Insurance Corp.	Title insurance policy 136-00-110653 w/City Clerk	
5/9/1996	B4880, p192 & 203 PB179, p235	Nancy Hughes CR, required by cluster special permit	3.481
12/19/2000	B6090, p202	Helen Kabat donation north of lake	17
1/15/2001	B6100, p313 & 320	Finn, "friendly" taking, City ($2,000), Broad Brook Coalition ($10,000)	15
1/22/2001	Land Court B18, p107	Paasch Flag Lot, donation required by flag lot permit; temporary right-of-way to Coles Meadow Rd also provided	3.074
10/5/2004	B8013, p326	Morin purchase, BBC ($3,560), City ($1,040)	5.75
11/27/2002	B6908, p173	Stoddard family donation, friendly taking	7.5
3/17/2003	B7097, p156	Confirmatory deed donation from Anita Stoddard Packar, Laurence Stoddard, George Barrett, Ruth B. Drury, Peter Hehey, Jason Charlton, & Monica Doyle Lynch; BBC ($500)	
6/29/2007	B9035, p312B9182, p5	Dryzgula friendly taking, north of lake	3.6
1/17/2008	B9383, p58	Sullivan purchase ($103,000 in back taxes) Broad Brook Greenway	3.9
7/12/2010	B10230, p205	Humprheys donation (possible trade land) with deed restriction, Broad Brook Greenway	0.5

2/20/1996	B4826, p170	Conservation Restriction to BBC	
	Commonwealth Land Title	Title insurance 165-686836 on file w/City Clerk	
6/19/2001	B6250, p72	Vaughn, "friendly" taking, BBC ($15,000)	17
	Land Court B17, p208	Mortgage release	
	Land Court B18, p107		
9/9/2009	B9948, p228 & PB221, p77	Special Permit and Survey--North King St.	12.08
	Deed B9961, p111	($75,000 including $20,000 CPA & $10,000 BBC)	
	First American Title	$75,000 title insurance policy, 5600050443	

	B9182, p5	Laverdiere confirmatory deed	
		Anciporch USFS Forest Legacy CR	
6/10/2003	B7253, p94	Sabra Pedestrian Easement ROW & CR	3
	B7407, p172	Conservation Restriction	
8/22/2003	B7407, p201	Related mortgage subordination, all as condition of special permit/subdivision approval	
5/18/2005	Decision B8181, p292;B205, p11;Eminent Domain Order of Taking B8265, p80	Michalski/Stewart section, purchase price $17,000-$15,000 from Broad Brook Coalition & entire amount went to pay off back taxes	33.5
11/2/2006	B8953, p349	Bereska Taking, ID 2-12	8.1
12/4/2006	B8967, p324	Confirmatory deed	
8/28/2006	B8854, p77	Unknown/Porter section, eminent domain of tax title	8.8
	B8688, p315B8688, p320	Private William Adams Memorial; was map ID 2-18	

BEAVER BROOK/BROAD BROOK GREENWAY

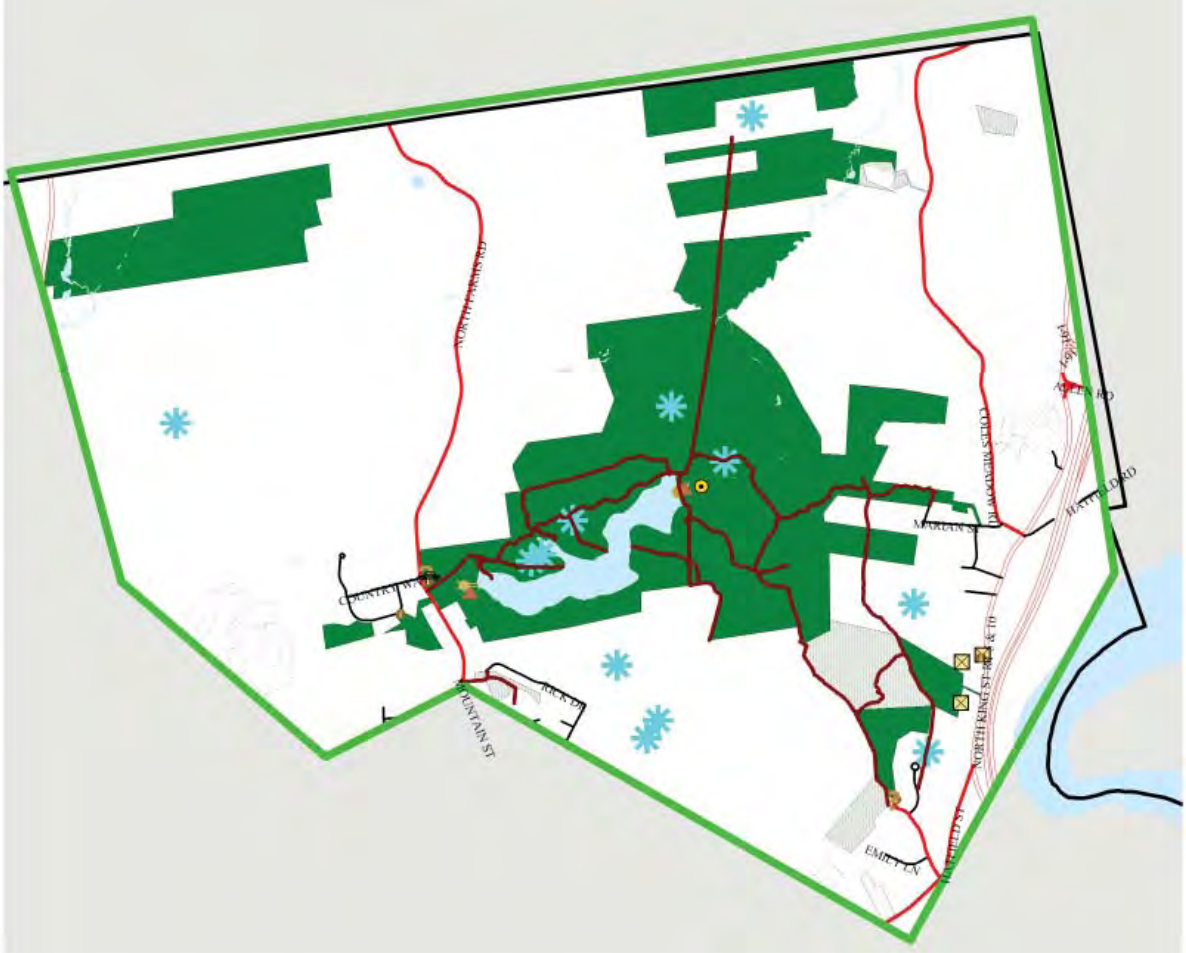
Date	Book, page or other	Description	Acres
01/27/2010	B10085, p232	Purchase from McLoughlin, Watson, Culver, Culver and Culver ($550,000: $364,000 LAND grant, $10,000 Broad Brook Coalition & $364,000 w/soft costs, from Community Preservation).	102
01/27/2010	B10085, p239	LAND grant agreement and permanent conditions	
01/27/2010	First American Title MAEOe-560057116	Title Insurance with $550,000 principal	
3/3/2011	B10493, p304	Purchase from the Girl Scouts ($23,000, $20,000 CPA and $4,000 BBC with soft costs)	23
3/3/2011	#5011400-0123453e	First American Title Owners Policy	

FITZGERALD LAKE CONSERVATION RESTRICTIONS

Date	Book, page or other	Description	Acres
3/25/1991	B3696, p9	CR, Lathrop (permit condition)	14
12/4/1995	B4785, p150	Conservation easement, Anciporch (held by USFS)	36
2/4/2005	B8155, p50	Lathrop, boundary line agreement	
2/4/2005	B8155, p56	Lathrop, partial bank release	
2/4/2005	PB152, p36	Lathrop, partial survey	
1/4/2006	B8579, p1	CR #32, Robinson donation for waived right-of-first-refusal	8.54
	PB208, p91	Robinson, survey	
6/30/2010	B10221, p100	Zimmerman CR ($18,000 CPA)	36

Permit history:

Date	Description
	Order of Conditions 246-224 (trails & dam, expired 4/1995)
	Certificate of Compliance 246-149 (road)
	Order of Conditions 246-322 (accessible trail & parking lot)



BEAVER AND BROAD BROOK

Date	Description
	Order of Conditions 246-325 (herbicide on dam)
	Order of Conditions for Cooke's Pasture (expired 6/1997)
7/6/1993	DigSafe, 93274641 (no buried cables by dam or old telephone line)

Partners: Memorandum of Agreement w/Broad Brook Coalition (BBC) for joint management (last amended 2010). BBC conducts routine maintenance of conservation area, including boardwalk maintenance, trail maintenance, & dam brush clearance.

Trails: Lake Trail, Hillside Trail, Old Telephone Line Trail, Boggy Meadow Rd, Cooke's Pasture Trail, Marian St Trail, & Halfway Brook Trail

Improvements: Parking lot & paved trail from parking lot to Broad Brook completed in 1996 for $19,977 ($3,500 from MA Lakes & Ponds Grant; $16,477 from CDBG Handicap Access)

Dam: Dam & access road to dam reconstructed in 1999 for $305,967 ($199,288 state self-help funds & $136,000 City funds)

Public Info: Fitzgerald Lake Conservation sign and other information have been installed at North Farms Rd and Cook Ave. Self-guided nature trail brochures are available at trail off of

North Farms Rd.

Wildlife: Otter & extensive number of turtles have been seen in lake. There is large amount of beaver activity in northern and eastern sections of conservation area. Great blue herons & winter wrens rely on site for critical habitat. Several rare species have been identified in wetlands bordering Lake & in Cookes Pasture. Elderberry Longhorn, or Elder Borer (Desmocerus palliates, large, showy, black & yellow beetle) and Wood Turtle (Clemmys insculpta) are two of state-listed species that have been identified at FLCA. Several vernal pools exist in conservation area.

ESA: Phase I Environmental Site Assessment at Beaver Brook by O'Reilly Talbot and Okun, with witnessing of removal of oil tank. No significant environmental problems. The seller demolished two homes on the property prior to the City taking title.

Description:

This is the largest city-owned conservation area in Northampton. At its core is the 40-acre Fitzgerald Lake, created by an earthen dam. The lake is surrounded by pine, hemlock, hardwood forest uplands, wooded wetlands, and meadows. Its wet and rocky setting offers excellent hiking trails, nature study, fishing, canoeing, and skating. It is one of the most diverse and richest ecological resources in Northampton. Fitzgerald Lake and Cookes Pasture contain rare plant and animal species.

Broad Brook flows into Fitzgerald Lake (created by damming the brook) and then out of the dam into, Cookes Pasture (where it becomes a large beaver meadow). Hunting is allowed only in the Abuza section, in the area north of the Hillside Trail and the west of the Beaver Trail (and then no within 200 feet of the trail). Trapping is not allowed.

The Beaver Brook/Broad Brook section includes Broad Brook along Route 9 on the west side of the property and the headwaters of Broad Brook on the east side. The Forest Stewardship Plan (prepared 2010) included in the management plan section of this plan provides more detail on the property.

A wheelchair accessible path from the parking lot to Fitzgerald Lake (120 feet of asphalt path, 360 feet of boardwalk, 60 feet of gravel, and a boardwalk dock/platform) was installed in 1993.

The Fitzgerald Lake Dam is classified as a low hazard dam, The City reconstructed the dam in 1998.

The old telephone right-of-way on the property, (formally quitclaimed in 1994) is now a trail.

The 1/2 acre Humphreys acquisition on Morningside Drive cannot be developed (other than for a septic system) but it may be used for trade land (see deed) to allow expansion of Fitzgerald Lake Cons. Area.

Lathrop land remains privately owned with no public access, but the conservation restriction prevents its development. The property protects sensitive stream and riparian environments from development. The Conservation Commission has the right to enforce restriction.

The Robinson CR is primarily intended to preserve Hatfield's water supply and Fitzgerald Lake area wildlife habitat. Parcel is landlocked, but the CR grants the City a right for defined walking trails on the property if the City ever acquires rights for a trail to the edge of the property.

The Anciporch conservation easement on forest and wetland has no public right of way. This parcel is key to the ecological protection of the Fitzgerald Lake Conservation Area. Although in a different drainage basin than most of the conservation area, it contains the headwaters of a stream that has caused serious flooding in the past and contains a large productive wetland.

The Zimmerman CR is on the west side of Broad Brook and does not include public access.

The Conservation Commission approved Broad Brook Coalition's Management Plan for Fitzgerald Lake Conservation Area. The full plan is available on the City's website (www.Northamptonma.gov/opd in the "public file cabinet"). The plan summary follows:

F*itzgerald Lake Conservation Area (FLCA), Northampton's largest conservation holding, contains a variety of habitats and, together with contiguous undeveloped land, supports a relatively wide diversity of wildlife species, including some species that are rare or endangered in the state. By maintaining the quality of habitat, especially the wetlands, residents of Northampton are preserving a piece of the natural heritage of the area and helping to maintain the complexity of an ecosystem. FLCA also provides an outstanding resource for wildlife viewing, environmental education, and fostering an appreciation of nature.*

Broad Brook Coalition (BBC), a nonprofit community organization, has a Memorandum of Understanding with the City of Northampton by which BBC carries out day-to-day management of FLCA. Prior to 1996, BBC's activities were performed as needed in response to specific problems. Since 1995, the BBC has created a series of management plans, each adopted byt he Conservation Commission, to guide BBC activities.

Goals and Objectives Summary (in no particular orderr)

I. Maintain and Enhance the Diversity and Integrity of Habitats and Species in the FLCA
- *A. Control invasive species and replant cleared areas with native species*
- *B. Maintain and enhance the diversity and integrity of shrublands found at Cooke's Pasture and South Pasture*
- *C. Maintain and enhance the diversity and integrity of forested uplands*
- *D. Manage recreational use and minimize damage to sensitive sites*
- *E. Protect the water quality in Fitzgerald Lake, Broad Brook, and adjacent wetlands and promote aquatic biodiversity*
- *F. Promote ecological research*
- *G. Protect and expand FLCA*

II. Encourage Education and Outreach
- *A. Provide interpretive materials*
- *B. Maintain nature trails*
- *C. Promote "Walks and Talks"*
- *D. Continue collaboration with organized groups*
- *E. Maintain wildlife blind*
- *F. Publish newsletter*

III. Provide Access for Recreational Uses that are Compatible with the Above Goals
- *A. Promote allowed activities on less-sensitive sites*
- *B. Promote handicapped access where possible*
- *C. Discourage types of uses that are destructive*
- *D. Provide for better enforcement of conservation area rules*
- *E. Promote and maintain hiking trails*
- *IV. Ensure a Steady Stream of Funding to Meet the Above Goals and Objectives*

The Forest Stewardship Plan for the 102.4 acre Beaver Brook/Broad Brook Conservation Area was completed in by Forester Michael Mauri. According to the Plan, the site includes a large wetlands complex adjacent to Route 9(Haydenville Road), the headwaters of Broad Brook, and significant areas of mature trees. Stands on the site include mature red oak and affiliated hardwoods, hemlock in the eastern section, and a mix of white pine, hemlock, and black locust in the western section. Access to the parcel from Haydenville Road is complicated by the streams and wetlands, which may explain why the area escaped cutting. The area was farmed until approximately WWII, and barbed wire fences and stone walls occur throughout the property. Two dilapidated farmhouses along Route 9 were torn down just prior to purchase. Landscaping in this area, along with traffic and other human interference, has introduced a variety of invasive species to the area, and there are pockets of significant problem areas where

native tree species are having trouble competing. This is most notable along the roadway, where black locust, Japanese Knotweed and bittersweet are very prevalent. The full plan is available on the City's website (www.Northamptonmag.gov/opd in the "public file cabinet"). The plan makes management recommendations:

Boundaries: Mark property boundaries using signs abd/or blazing and painting.

Trails: Consider allowing existing snowmobile trail to continue, establish an agreement or understanding with the trail maintainers

Access: Consider whether vehicle access/parking will be allowed and how unwanted uses will be prevented, or how/whether access will be blocked. Investigate the possibility of parking at the corrosion control facility.

Forest Habitat and Timber Management: Control non-native invasive plant species, at least curtail the bittersweet with hand tools so that native plants can have a better chance of becoming established. Additional controls could include selective herbicide use, mechanical mowing, and uprooting. Maintain and reclaim brushy habitat. Confirm the presence/absence of vernal pools

Florence/Garfield Conservation Area 4.097 acres

Ownership: City/Conservation Commission

Location: Garfield Ave.

Acquisition history:

Date	Book, page or other	Description	Acres
12/15/2005	B8557, p106	Montgomery friendly taking	
3/1/2006	B8632, p77	Montgomery confirmatory deed	
1/4/2010	B10067, p301; PB 222, p10-11	Deed from City to Northampton Conservation, part of settlement for former landfill & limited development project. Commission and supporting plans	4.097

Partners: None

Description:

DPW has a permanent right and responsibility to maintain the cap on the former landfill at the northerly end of Garfield Avenue, beyond the last home on the road. This limited development project includes the old landfill, five Habitat for Humanity affordable houses, and one market rate house lot.

The City purchased the parcel as a settlement of litigation around a former landfill on the site. The dump was privately owned in an old quarry, but in the early twentieth century the City allowed dumping on the site. With all responsible parties gone, the city was the only remainng potentially responsible party.

Ice Pond Conservation Area 22.2722 acres

Ownership: City/Conservation Commission

Location: Ice Pond Dr & Rt 66

Acquisition history:

Date	Book, page or other	Description	Acres
10/20/2003	B7534, p333	Deed, donation as permit condition for cluster subdivision	22.2722
10/20/2003	B7535, p1	Mortgage release	

Date	Permit Description
	State Hospital agricultural lands (protected by city-held APR)
	Ice Pond Conservation Area CR
	Pathways Co-Housing bike path (City-held right-of-way)

Meadows Conservation Area and CRs 133.4 acres

Ownership: City/Conservation Commission

CRs: by Conservation Commission, land privately owned

Mass Audubon Society Conservation Restriction on 103 acres

Location: Manhan Rail Trail Buffer: Easthampton Road/Route 10

Emerald Necklace: Crosspath Rd and Venturers' Field Rd

Montview Avenue section: Montview Ave and Venturers Field Road

Bleiman Donation: Manhan Rd, & Potash Rd.

Massachusetts Audubon: Old Springfield Road

Atwood Drive: Atwood Drive

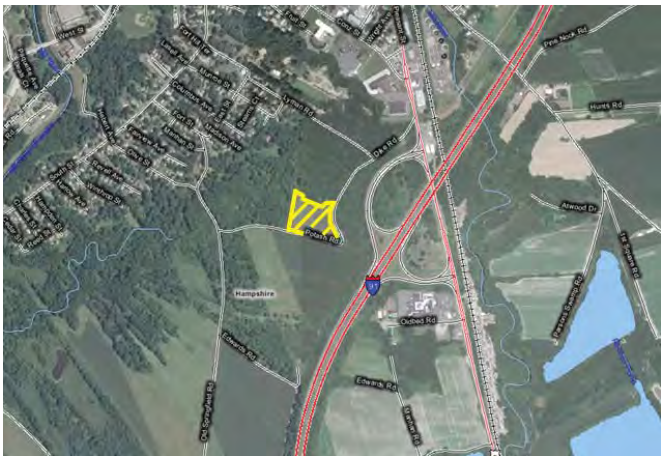
Acquisition history:

Date	Book, page or other	Description	Acres
6/24/1966	PB69, p1	Plan of "Manhan Meadow Lots" includes site formerly known as "R.H. Clapp Meadow Lot"	
4/3/1997	B5115, p113	Deed--Sparko: Self Help ($84,480) and Mass Audubon ($43,520)	38
	B5115, p127	CR- Sparko gives Mass Audubon managemenet rights	
	Ticor Title Insurance	22-2620-106-00000151 on file w/City Clerk	
9/22/1999	B5796, p82	CR retained by City when city surplused land	8.019
11/18/1999	B5842, p281	$1,000 by eminent domain	0.79
2/5/2001	B6120, p19	Deed-Kossakowski, 3 acres w/right-of-way	3
	PB188, p1	Plans	
	First American Title Insurance	100367887 on file w/City Clerk	
3/24/2000	B5905, p298	Montview donation	3.246
	PB186, p131		
	First American Title Insurance	20329816 on file w/City Clerk	
4/6/2001	B6167, p282	Taking: Burt	65
	B6192, p112	Confirmatory Deed-- Burk	
	B6192, p112	CR-- Burt, gives Mass Audubon management rights	
8/15/2007	B9234, p324	CR at Montview/Venturers Field Road (Town Farm) in consideration of access easement	2
	B9234, p339	Access easement (trade for CR)	
	PB215, p317	Survey of Montview/Venturers Field Rd CR	
2/23/2009	B9712, p317	Venturers Field Road CR, north of dike, e of road	3.56

Date	Book, page or other	Description	Acres
5/8/2009	B9801, p177	Hockanum Road (Rogers) in fee by city will be transferred with city holding APR only $30,358	2
8/24/2009	B9942, p188	Rita and Bruce Bleiman donation, with covenant to maintain field	9.95
	PB221, p67	Plans-Bleiman	

Partners: Bleiman: Grow Food Northampton manages fields (2010-2014).

MassAudubon: MassAudubon has full management rights (under the CR).



BLEIMAN DONATION

Description:

Most of Meadows Conservation Area (and related CRs) is within the 100-year flood plain of the Connecticut River, much of it with sensitive wetlands and prime farmland.

Manhan buffer: Protects the viewshed of the Manhan Rail Trail and a small portion of the New

BLEIMAN PARCEL SOILS

OVERVIEW OF MEADOWS

Haven and Northampton Canal.

Bleiman-- Historic Mill River Greenway: Includes floodplain forest and a portion of the former Mill River (now a certified vernal pool) on its northern and western sides and a five acre field the city has an obligation to maintain. Once access from Potash Rd and one from Manhan interrupt the hedgerow.

Soils are primarily Hadley Silt Loam, and Winooski Silt Loam, prime aricultural land. Abutting land is floodplain forest, vernal pools, and farmed fields. The closest residential neighborhoods are east of the property.

Property uses are limited to agriculture, conservation area and minimal agricluture infrastructure. Site limitations: (1) sensitive vernal pool; (2) property is all in the floodplain; (3) organic and/or reduced environmental footprint agricultural practices; (4) no public water supply or appropriate conditions for a well; (5) no electricity; (6) security limitations; and (7) the presence of many mosquitoes.

Floodplain restrictions dictate that structures are mostly not practical or possible, except for possibly a small shed, which may then present security concerns.

Hadley Silt Loam (1.8 acres, 36% of field) is a well-drained flood plain soil, with slopes 0-3%. Land Capability Class is a measure of the appropriateness of a soil type for particular human activities, including agriculture. Hadley Silt Loam measures a land capability class of 1, and is therefore highly suited for agricultural use.

Winooski Silt Loam (2.9 acres, 57% of field) is a moderately well drained floodplain soil, with slopes 0-3%. The land capability class is 2w, indicating that it is suitable for agriculture, but it has less than perfect drainage and may retain spring moisture longer than other soils, such as the Hadley Silt Loam.

Limerick Silt Loam (0.3 acres, 7% of field) is a poorly drained flood plain soil, with slopes 0-3%. The land is capability class 3w,indicating that it is less than suitable for agriculture. The depth to water table is 0-18 inches, and the drainage class is "poorly drained." It is worth noting that although Limerick soils make up only .3 acres of the site, the north side and northern-most two thirds of the east side of the site are bordered by wet Limerick Soils.

Recent agricultural uses include haying, plowing and cover cropping with rye. Comments from a recent site farmer indicated wet portions of the site can significantly impeded germination and cultivation of crops at certain times of year, although currently the site is established with a rye/grassy mixture without issue. More intensive cultivation of vegetable row crops or animals has not been part of the recent site history.

Access is currently limited to two overgrown entry points in the hedgerow. There is no signage upon approaching or entering the site, no designated parking, and no designated location for delivery of materials (such as compost) or supplies (such as farm tools and implements being delivered or retrieved). Existing access patterns consist of a grassy field road around the exterior of the field, running past each of the access points and along the inside of the hedgerow. Procedures and expectations for accessing the site by vehicle or other means are currently lacking.

Abutting roads and the surrounding woods and wetlands are frequent dumping sites. The dumping is of concern to neighbors and community members interested in site stewardship.

The Bleiman Property Agricultural Management Plan is a planning document designed to provide guidance for agricultural management of the Bleiman Donation property. The plan encompasses a 5 acre portion of a 9.95 acre property on the corners of Potash Rd. and Dike Rd.

The goals of this plan is are to:

- Provide analysis of agricultural site potential
- Highlight important factors for making agricultural use determinations, and recommend options for use
- Suggest land management practices
- Recommend elements of a lease agreement which support the practice of regenerative agriculture

Site characteristics include an isolated location, seasonal and non-seasonal access issues, and limited infrastructure. Water is a major theme onsite, including the presence of a mixture of wet and dry soils, the existence of a vernal pool, and the floodplain location, which corresponds with infrastructure restrictions, and some access issues.

The agricultural potential of the site is extensive based on the soil type, with the exception of some seasonally wet locations. Zoning and floodplain regulations, access issues, as well as city and community wishes all constrain the future intensity of site use, and entail the primary use restrictions.

The plan begins with an inventory of the site (see Section 5 of the Open Space & Recreation Plan), followed by agricultural use recommendations and recommendations on maintenance and infrastructure. Section II addresses potential site uses including: haying, row crops, grazing, composting, nursery, seed garden, productive perennial plantings, community garden plots, educational programming, farm incubator, farmstands and CSAs. Considerations about potential uses are offered as suggestions, and are not intended to outline one particular use for the site. It is recommended that the end users, minding site constraints, be the primary determinants of specific uses.

Acknowledging that this parcel is part of a larger interest by the City of Northampton and its residents to understand and encourage regenerative agriculture, the plan includes both suggestions finely narrowed

to the property in section II, "Agricultural Use Recommendations," and examples more broadly and contextually relevant to the property, and to the understanding of regenerative and civic agriculture in section III "Local Context: Cutting Edge Civic Agriculture." Civic Agriculture includes food and agricultural systems that sustain and strengthen farm families, local communities, and natural resources.

After analysis and community input, it is clear that the Bleiman property, with community and city involvement, can fit successfully into a growing and existing framework of civic agricultural properties in Northampton. Dedication to long term goals and development of assets including site ecological and soil health, and community investment in stewardship, are key pieces for long term success.

AGRICULTURAL USE RECOMMENDATIONS

Considerations for Choosing Agricultural Uses

What makes a site an excellent location for agriculture? What uses are appropriate for any given site? Agricultural sites range from dry-farmed seasonal crop fields without permanent infrastructure, power or utility access, and visited only a few days a year, to acres covered with greenhouses, fencing, barns, worker housing, storage, retail, and customer parking. Often, civic and community agriculture entails infrastructure and accommodation for incorporating a wide range of human and agricultural activities, such as educational and community buildings, permanent plantings and experimental or research-oriented agricultural practices.

Decisions about infrastructure are particularly crucial. Even in smaller scale agricultural or gardening enterprises, the presence of basic site infrastructure is a make or break situation for the success of the agricultural endeavor.

For the Bleiman property, site constraints dictate that less intensive uses are most appropriate. The site users will have to contend with the need for a low-impact, creative approach. The most determinative constraints are: (1) heavy, wet soils in some areas; (2) limited water storage and no irrigation; (3) limited infrastructure possibilities; and (4) limited access.

Decision Matrix

The decision matrix below shows how factors (1-4) above impact potential projects. It measures how site conditions relate to possible uses. A site condition can either be positive or negative for a potential use, or the condition may be not a meaningful factor. In a second step, each use is ranked by the strength of its regenerative impact on the site, and in the greater community.

Written analysis of these projects begins below. The matrix is intended to offer a method of project evaluation for the site, and can be expanded or changed to included new uses under consideration. It is only a useful method if matrix users understand the needs and impacts of each use. The discussion of particular recommended and not recommended uses in the next sections is meant to assist those who are choosing uses, by illuminating the necessary elements for each use to be successful, as well as potential pitfalls.

Agricultural Use Analysis and Recommendations

Recommended Uses

1. **Row crops, grazing or hay (lease to one farmer):** Site use by a farmer who maintains infrastructure elsewhere mitigates many of the infrastructure limitations onsite. In the case of vegetable row crops, since the farmer also farms elsewhere, crops may chosen as appropriate for a dry-farmed site and rotated effectively. In the case of hay, limited visits to the site are necessary.

With grazing, proper rotational grazing of small animals provides regenerative benefits such as improved pasture quality, and has a low site impact, with only limited, temporary infrastructure necessary, including fencing, and water via catchment.

2. **Community gardens:** Numerous smaller users are capable of using human or bike power to carry water, tools, and fertility to the site incrementally. This mitigates access issues. In addition, small scale water catchment, a small tool shed, and moderate compost piles are appropriately scaled solutions here.

3. **Perennial nursery, propagation garden, or seed garden:** A seed garden was one idea proposed by potential users. A seed garden would be an appropriate use: the relative isolation of the site would be an asset in seed saving due to the convenience of distance for avoiding cross-pollination. A nursery or propagation garden would also be appropriate. This is best executed with dedication to quality soil prep, and on-going watering needs, in order to grow quality transplants. Each of these undertakings provides opportunity for an educational garden open to visitors.

4. **Productive perennial planting (e.g.,** nuts, coppice, silvopasture, fruits, vegetables, herbs, medicinal & wild plants). Long-term plantings mitigate the water constraints onsite. A long term perennial design can easily accommodate for most water needs of the plants without the issue of constant water provisioning associated with annual plantings. In this case, it becomes essential that user maintain a longer term lease appropriate to the harvest timing of the crop, since the yields are not immediate. Coppice is an agroforestry system based on 1-25 year stump sprout harvest cycles. It can be easily mixed into vertically layered perennial system with other agricultural yields growing above or below, including fruits, nuts, edible greens, medicinal herbs, small grazing, etc.... Silvopasture is an agroforestry system that combines trees with forage and livestock production. The trees are managed for lumber, nut or fruit production, at the same time, provide shade and shelter for livestock and forage, reducing stress and sometimes increasing forage production.

5. **Educational programming of a shorter nature (less than three hours long):** Educational programming is a good addition many other site uses, such as a seed or nursery garden, or community garden plots. Publically-oriented signage for site elements is one example of compatible education. Educational programming of a longer nature is not a recommended site use, since more involved and lengthy educational offerings would require improved access, and infrastructure such as shelter and bathroom facilities.

6. **Small-scale composting, by hand tools or small tractor:** Composting is compatible with a wide variety of site conditions and other uses. In fact, it is almost a requirement for a regenerative site. It is by far the most common and well-understood method of adding organic matter, and increasing soil biological health.

Not Recommended Uses

7. **Retail (on-site) sales of agricultural products, including a CSA:** Farm stand or CSA-type operations typically require easy customer access and roadside exposure, as well as infrastructure for the washing, processing, distribution and sale of products, storage of farm equipment, and housing of farmers and/or workers.

8. **Farm incubator:** Successful farm incubators typically provide shared equipment and infrastructure, and in addition often provide access to a marketing outlet/location. Any potential farmer lessee would need to have access to infrastructure and marketing elsewhere. The site potential and constraints would make meeting the whole picture of farm needs unlikely. This does not indicate that small agricultural endeavors are not appropriate for the site, but rather that

expectations should be clear and tailored to site possibilities.

Regenerative Practices

Regenerative soil management practices balance nutrient cycles to conserve water and nutrients, increase soil organic matter, sequester carbon, and meet crop needs with site resources or with recaptured resources present locally. These practices also limit erosion and minimize impact on native ecosystems. In order to manage a site regeneratively, an understanding of the inputs needs of the agricultural endeavor are essential.

It is recommended that site stewards/users map nutrient cycles (water, carbon, nitrogen, phosphorus) as they relate to the site, and develop regenerative, closed-loop, self-sustaining cycles. What sources of water, organic matter, nitrogen, phosphorus, are available? Can you design closed loop systems that take advantage of these resources? Can you include recaptured organic matter present locally (such as leaves from landscapers), or captured water onsite?

In particular, regenerative issues point to the possibilities of whole farm systems with interconnected parts. For example, the Compost Utilization Trial (CUT) at Rodale Institute demonstrated that the use of composted manure with crop rotations in organic systems can result in carbon sequestration of up to 2,000 lbs/ac/year, a greater sequestration than side-by-side comparisons to non-manure compost or chemical fertilizers. Carbon sequestration is associated with the increase in stable soil organic matter (which is mostly carbon). This shows that incorporation of animals and crops into a whole farm system is one example of a regenerative loop that outperforms other options.

Which site projects to pursue depends finally upon the goals of users and, if more than one cotemporaneous use is desired, upon the synergy of various proposed uses. Synergistic uses are strongly recommended. Mutually supportive uses are an important component of regenerative agriculture. Single, monocultural uses do not demonstrate long term stability, or other self-sustaining characteristics of regenerative systems.

Cover Croping

Establishing a nitrogen fixing cover crop is a recommended next step. Plowing and sowing the cover crop may take place anytime between April and August.

Red clover, a short lived perennial, is recommended. Red clover prefers heavy, fertile soils of near-neutral pH. It can handle less-than-perfect drainage, acid soils and clays. It can even tolerate wet soil conditions but not prolonged flooding. Nitrogen yield averages are 100-110lb/acre per season.

Red clover seed rates are 11-14 lbs per acre. To establish red clover in the spring, because it is slow growing at first, and liable to leave the field at risk to weed growth, it is recommended that a nurse crop of oats at 1.5-2 bushes per acre be seeded with it. Clover inoculants should be mixed with the seed (unless clover has been grown in the field in the previous 3 years).

In the Northeast it is generally planted in spring and allowed to grow for a full year before incorporation. This allows one or more hay cuts or mowing before incorporation as a green manure. The clover should be mowed two or so times over the course of the season, at flowering (before seeding), to prevent developing clover seed as a field weed.[1]

Recommended Conditions of Lease

The following are suggested as additions to common lease elements to support regenerative agriculture.

- Stable or increasing soil organic matter, as measured by annual soil tests (biannual is sufficient after numerous years of similar practices), up to a 10% soil organic matter maximum.
- Stable or increasing soil nutrient levels. Except those shown by soil test to be in excess, which must shown to be stable or decreasing. Measured by annual soil tests (biannual is sufficient after numerous years of similar practices).
- Adherence to the NOP Organic Standards for the current year (sustainable practices beyond the terms of the NOP standards are encouraged, but this is set as a minimum).
- Maintain covered (not bare) soil at all times via the use of crops, cover crops, or mulch. Excluding possible 6 week at-a-time maximum pre-crop soil prep and/or summer bare fallow.
- Management of plants so they do not set seeds in the field. Including but not limited to: vegetable crops, pasture species, annual and perennial weeds, hedgerows and weedy field edges. Excluding those plants explicitly managed for seed saving purposes.
- Maintenance of the tree line to preserve the field for agricultural purposes, including the edge running along Potash Rd, which borders the driest and highest quality agricultural soil on site. However, possibly excluding wet edges and/or edges abutting the vernal pool area, which are determined better left aside from managed agriculture.

Maintenance and Infrastructure Recommendations

- Close Dike/Potash/Manhan Roads permanently so as to avoid troublesome access, dumping in the area, and safety issues where the road meets Pleasant Street.
- Construct permanent perimeter fencing and/or lay a hedge, which along with mobile solar electric fencing, will make seasonal rotational grazing for small animals an easy and practical site element.
- Utilize plastic covered low tunnels, cold frames, and other similar temporary solutions to season extension and crop care.
- Employ small-scale water catchment, for example from the shed roof, or in containers.
- Include on site other small scale agricultural infrastructure like that mentioned here, with the intention of supporting the success of site projects.
- Designate a strategic materials depot with easy entrance access for storage of leaves, cuttings and organic matter, and for the turning of compost piles by hand or small tractor.
- Design for key site development actions like the delivery of organic matter and other soil amendments or site additions by truck or tractor.
- Avoid truck/tractor travel to most areas of the site unless a lessee farmer/grower describes trucks or tractor access as central to production.

The MassAudubon Partnership: 103 acres were purchased by the City to preserve grassland bird habitat. Massachusetts Audubon Society at Arcadia holds a Conservation Restriction and is responsible for day-to-day management of the property. Arcadia census data for the grassland nesting species shows an increase in the numbers of Bobolinks and Savannah sparrows since the property was purchased. Peter Vickery, the Massachusetts Audubon ornithologist who manages its grassland bird project, reports that the Sparko piece provides good Meadowlark habitat. Mass. Audubon will be watching over the next several years to see if this or the other grassland species are able to establish themselves.

Arcadia is also conducting butterfly surveys. Butterflies appear to be less plentiful on these hayfields than expected. Arcadia is allowing their field on the north side and abutting the Sparko parcel to grow milkweed to encourage butterflies.

While flood plain forests are rare, Arcadia will manage the hayfields (and eventually other Massachusetts Audubon fields in Northampton now under cultivation) for grassland species. While other areas of the sanctuary have been allowed to grow up into brush, these fields are very wet and are better not cultivated and some "weedy" areas provide food and shelter for migrating species particularly in the fall. Arcadia's ecological management goal is to encourage native diversity.

While Mass. Audubon generally inventories land it acquires or manages, the hayfield is primarily non-native agricultural plants that have been cultivated for hay production. For that reason, we do not anticipate conducting a botanical inventory on this site at this time.

The "fields" may not appear the way a skilled farmer would be accustomed to seeing them or the way our aesthetic sense might expect to see them. The land in the meadows, owned and/or managed by Audubon, is increasingly being used by wildlife. Hay cutting is delayed until the birds complete their nesting cycle. The hay is not a prime sweet crop. Some bird species require thinner grasses for nesting sites. Arcadia staff will not feed the land to produce a more abundant crop of hay. Bare spots are just fine. Plants going to seed may be great for migrating species.

Arcadia conducts educational efforts to help people understand management practices for wildlife on land which was formerly devoted exclusively to agriculture.

The City of Northampton reserves the right to treat this area for mosquitoes.

Mill River Greenway 524.7 acres

Includes Bean/Allard APR, Florence Community Gardens, Beaver Brook, Northampton State Hospital, and Bleiman

Ownership: Fee interests conservation areas: City/Conservation Commission

Fee interest Bean/Allard APR and Community Gardens: Grow Food Northampton

Fee interests NSH: Mass. Dept. of Ag Resources, MassDevelopment, Smith College

Other Fee interests Valley Community Development Corp. and Housing Authority

APR: City and Mass. Dept. Ag. Resources

CR and Easement on non-city land (NSH, Beaver Brook, Smith College): City

NSH Management, 25 year lease, renewable 3 times to Smith Vocational School

Location: Mill River and historic Mill River from Haydenville town line to Arcadia Wildlife Sanctuary (Leeds, Florence, Bay State, NSH, downtown)

Acquisition history:

Date	Book, page or other	Description	Acres
1880s		NSH land to commonwealth in series of purchases	
6/19/1975	B1837, p222	Florence: donation by Vistron corporation	5.1
10/20/1975	B1855, p121	Right of way on private greenway off Ward Ave 31C-11	
1983	Mass Session Laws Chap. 568	Acts of 1983 ordered land protected and APR/CR	
1984		Care & Control NSH Ag. Land to Mass. DAR	
7/14/1989	B3407, p304PB162, p67	Bay State: donation by James Graham, Yankee Hill	
9/13/1989	PB163, p46 & 47	Survey of NSH agriculture land	
4/3/1990	PB163, p48	Survey of Historic Mill River Greenway	

Date	Book, page or other	Description	Acres
4/3/1990	B3541, p87	Donation parcel along Historic Mill River greenway	0.3
5/15/1990	B3561, p285	APR and ROW on entire NSH agriculture land	273.9
5/15/1990	B3568, p153	37 acre CR & public ROW on drumlin & along river (overlaps with APR)	
12/31/1997	PB183, p1	Survey of former Northampton State Hospital	
		Smith College Conservation Easement	20.1
2/4/2000	B5879, p156	Bay State: donation Cutlery Building Associates	1.73
	B2163, p236	Bay State: sewer easement	
3/29/2000	B5898, p39	Survey of CR on Mill River north of Village Hill	
3/29/2000	B5898, p39	CR on Mill River north of Village Hill	8.1
3/29/2001	PB186, p230	Leeds: donation by Myette	0.1
	Mortgage Release B6158, p40	Leeds: mortgage release	
12/3/2002	PB194, p63	Survey of Historic Mill River Greenway	
12/3/2002	B6914, p135 & 137	Historic Mill River Greenway	
12/10/2002	B6925, p302	Fee interest Mill River Parcel to Hospital Hill LLC	
3/16/2004	B7729, p130	Historical Mill River: donation by Steven Berlin-Chavez and Reginal Chavez-Berlin	1.44
8/28/2006	B8854, p82	Historical Mill River: eminent domain of tax title parcel	0.4
10/17/2006	B8915, p106	Easement: Housing Authority West Street/Mill River (condition of 7/20/06 permit, 10/16/06 NHA vote)	
2/21/2007	B9046, p28	Care & Control NSH opposite jail to DAR	36
4/26/2007	B9109, p58	Beaver Brook CR acquired through permit condition	40.95
2/9/2009	PB220, p26	Survey of Beaver Brook section	
12/11/2009	B10047, p233 and 237	Beaver Brook: Fee ownership + rail trail ROW. (Condition of permit.) Overlaps with Beaver Brook CR	25.44
4/28/2010	B10160, p233	Mill River Greenway, Bean Farm (donation related to permit condition)	1.184
4/30/2010	B10164, p119	Mill River Greenway, Leeds from Roman Catholic Church ($35,000 CPA & Rail Trail funding)	4.051
4/21/2010	PB222, p124	Beaver Brook, survey of Mill River Greenway from Roman Catholic Church	
8/10/2010	B10258, p240	Mill River Greenway, Bean Farm (donation related to permit condition)	3.532
12/1/2010	PB 224, p49	Survey of Bean Allard farms, including Mill River Greenway, related APR, and Florence Fields Recreation	
12/1/2010	B10392, p337	Bean Farm to Trust for Public Land	
12/1/2010	B10393, p23	Allard Farm to Trust for Public Land	
12/13/2010	B10406, p222	Mill River Greenway Bean/Allard purchase (CPA $236,000)	35.04
12/13/2010	First American Title #5011400-0082046e	Title Insurance Greenway at Bean/Allard to City Clerk	
12/13/2010	B10406, p259	Bean/Allard Grow Food Northampton APR (NOT fee)	121.02
12/13/2010	B10406, p289	Bean/Allard Grow Food APR Co-Holders Agreement	

Date	Book, page or other	Description	Acres
12/13/2010	First American Title # #5011400-0082185e	Title Insurance APR to City Clerk	
3/1/2011	Book 10492, Page 215	Lease (198 years) from Grow Food Northampton for organic community gardens and Mill River Greenway (land all part of the Bean Allard APR above)	17.405
3/1/2011	5011400-01234504e	First American Title Owner's Insurance Policy	

Partners: Bay State Section—informal w/Baystate Village Association

Leeds—Informal w/Leeds Civic Association

Florence Community Gardens-- Grow Food Northampton

Other Data: "Inventory of Mill River Corridor Discharge Sources" Elizabeth Farnsworth's Environmental Science Seminar, Smith College, 1999 and "The Mill River Revitalization Plan, Northampton, Massachusetts" Landscape Planning Studio, LARP, U. Mass, 1999.

Description: (see also entry under Norwottuck rail trail)

The Mill River was once an indispensable factor in the establishment of manufacturing in Northampton. The entire river is one of the unifiying themes of most of the historic settlements along the river, Leeds, Florence, Bay State, Northampton State Hospital, and downtown. The Mill River Greenway is discontinuous but the name reflects the City's goal of an enventual continuous greenway from the Haydenville town line to the Arcadia Wildlife Sanctuary.

Historic Mill River: In 1936 and in 1938 back-to-back floods turned downtown streets into canals, causing a large amount of water damage. The US Army Corps of Engineers (1939-1940) build a major flood control project to cut off the flow of the Mill River through downtown. The Mill River, including the by-pass channel in the vicinity of the Historic Mill River, is a degraded waterway in an urban setting, with impediments to fish passage and degraded instream habitat. Diversion of flow through the by-pass channel, construction of a dam and drop structure, and development along the banks of the former riverbed have harmed fisheries. The City is working with the Corps of Engineers to evaluate alternatives to restore a riverine migratory corridor to the historic Mill River and:

- Restore a riverine migratory corridor and open up high value habitat to aquatic species.
- Restore flow to the historic river channel, thereby recreating aquatic habitat.
- Enhance or restore riparian buffers.
- Increase recreational use of the river and increase public access to the river.
- Provide aesthetic improvement to the historic river channel.

The city has been acquiring land along the Historic Corridor. A right-of-way and conservation restriction was granted for the historic Mill River frontage adjoining Mill Bank II condominiums. Title to the original CR and easement were lost by foreclosure, but a new CR was granted in 2002.

The Bay State section is a thin but attractive parcel along the Mill River with a trail along the river. Parcel extends north from the north side of the Mill raceway to Maines Field. It does not contain any portion of the old raceway, where some debris was dumped by the former cutlery and possibly by other entities.

The Beaver Brook land contains rare species habitat. See also rail trail easement under rail trail entry and conservation restriction under conservation restrictions entry.

The Beaver Brook parcel would help allow an eventual restoration of the Historic Mill River in downtown and allow a trail access from Pleasant Street to Veterans' Field.

Within the Florence section, Vistron is a small isolated parcel on the Mill River with an intensive

MILL RIVER GREENWAY

amount of invasives. Yankee Hill is a steep hillside between the Mill River and the permanently protected agricultural lands at the former State Hospital land.

The Bean/Allard or Grow Food Northampton APR will be privately owned by Grow Food Northampton. The city will be leasing 17 acres for a Florence Community Gardens

The entire Northampton State Hospital agriculture land property has agricultural preservation restriction (APR) with a conservation easement and public right-of-way within 100 feet of Mill River and south of Burts Pit Road on the "drumlin" above 265 feet mean sea level. Northampton holds and enforces these restrictions. A rich wetland complex exists near the Mill River. Ground-nesting birds, including the Grasshopper Sparrow (listed as a special concern), nest in the spring and summer on the drumlin. The fields/woods edge provides excellent Bluebird habitat. U. Massachusetts Forestry and Wildlife coordianted controlled burns of the drumlin to maintain habitat and control multi-flora rose (last done c. 2000), with burning in August-September to avoide damage to ground-nesting birds. Smith Vocation should be careful not to overgraze this area. Cattle or sheep should be rotated through this area, or

another area should be used during the nesting season. Bunch grasses should be maintained at 4”-12”.

Woody vegetation along the hillsides, particularly the multi-flora rose, should be repeatedly cut and removed from the site. Alternatively, Scottish Highland cattle have been shown to be effective grazers on woody vegetation.

Additional ROW and conservation easements/restrictions have been placed on the land along the river north of Village Hill (MassDevelopment) and on Hospital Hill (Smith College sledding hill). In addition, the Northampton Housing Authority granted an easement along the Mill River at West Street and there are deed restrictions providing right-of-way exist in some of the properties along the eastside of the Mill River between Federal Street and the Smith College campus.

T**he Northampton State Hospital burial ground** is protected from development by a permanent agricultural-use restriction. The field should not be plowed to avoid disturbing the soil deflations and patches of low vegetation that are the only marks of the locations of the graves. A detailed inventory of the site was done in *Preservation Guidelines for Municipally Owned Historic Burial Grounds and Cemetaries,* with specific information about this site.

A 1958 bench and surrounding bushes were the first memorial commemorating the field as a burial ground and are an important part of the history of the cemetery. M.G..L. Chapter 272, Section 73 of the Massachusetts Laws and Regulations Protecting Burial Grounds require preservation of the bench or the bushes because they were built as a memorial. The Historical Commisson restored the bench c.2000.

Plaques could be mounted the bench stone supports to honor both the cemetary (1858-1921) with its 181 confirmed burials, the 413 potential burials, and past memorial efforts. The plaque could also note at least two burials in the woods across the road to the north and the fact that the boundaries of the cemetery have not been determined. It is important to preserve the present knowledge about the cemetery.

Any new memorial must avoid disturbing any graves in the cemetery. It is possible to erect a completely aboveground dry-laid stone monument such as a stone cairn that would not disturb the ground with a foundation. However, a memorial plaque could not be mounted on this unmortared monument. Because any mortared monument would require a foundation, its design would need to be reviewed by the Massachusetts Historical Commission, which would require an archaeological survey and/ or excavation to mitigate the impact of the foundation excavation on the burial ground. Erecting a sign would involve the least amount of excavation and archaeological investigation to prevent disturbance to burials. It is recommended that any memorial be placed near the road to minimize disturbance to burials.

The Northampton State Hospital Memorial Committee suggested the memorial could include material from old buildings at the Northampton State Hospital that are being torn down. The Community Builders and MassDevelopment, the master developers, have salvaged some materials from the state hospital demolition, including bricks and other materials.

It is strongly recommended that haying be conducted only when the ground is completely dry. The Department of Agricultural Resources agreed to draw up a regulation to this effect for the Smith Vocational School.

Further archaeological reconnaissance and subsurface testing such as resistivity testing are recommended to identify the boundaries of the cemetery and map the soil deflations and vegetation indicating burials. Further archaeological reconnaissance in the area might also locate small-unmarked gravestones of the types Mr. Mielke found on the burial ground in his childhood. Further documentary research is recommended to find the cemetery plot records and map that Mr. Mielke saw years ago at the Northampton State Hospital.

MINERAL HILLS

Mineral Hills Conservation Area and CR 326.6 acres

Ownership: City/Conservation Commission

Conservation Restriction: Private land, CR Joint Northampton and Westhampton

Location: West side Sylvester Rd, north side Turkey Hill, north & south side

CR: Turkey Hill Road on Westhampton side of town line

Acquisition history:

Date	Book, page or other	Description	Acres
10/12/1994	B4570, p97	LaPalme, bargain sale, City & neighborhood donations	85
4/7/1994	Title Insurance Policy	Filed w/City Clerk	
11/13/1995		Named Mineral Hills Conservation Area as requested by LaPalme	
9/30/1994	PB177, p164 & 167	Sylvester Rd	
	B4570, p102	Right-of-way to building lots	
12/27/1994	B4607, p172	APR	
		Drainage & utility easements of record	
12/11/2003	B7616, p95	Turkey Hill, donation	16.1
	PB198, p23	Survey of Mineral Hills	
		Disclosures filed DSPO	
	PB211, p12	Survey for Turkey Hill Rd parcel south of Turkey Hill	
1/12/2007	B9009, p36	Turkey Hill $685,000 (Self-help, City, Wharton Trust, Highland Communities Initiative, & $200,000 in community fundraising)	120
	First American Title Insurance Company	102758222	
	B9013, p31	Walking easement between Turkey Hill section & LaPalme section	
	B9013, p35	Mortgage subordinations	
		Authorization in City Council resolution recorded w/ Turkey Hill section	
12/26/2006	B8990, p33	CR in Westhampton- joint ownership Westhampton (primary enforcer) and Northampton (backup role)	29.4
	PB147, p58	Plans--CR and Turkey Hill	
2/9/2009	B9700, p64	Turkey Hill Rd, Bosworth purchase	15
5/9/2008	PB218, p38	Kohl survey purchase	
6/4/2008	Warranty Deed, B9503, p293	Purchase, self-help & CPA ($900,000)	60.6 fee plus 11.53 CR
	B9503, p296	Self-help agreement	
	First American Titlle	Title insurance for Kohl addition, 106544301	
7/18/2008	B9547, p40	Wilhelm/Mineral Hills Trust	15.1
3/10/2009	PB220, p46	Survey of all of Mineral Hills	
5/31/2011	Book 10559, Page 138	Skibiski purchase, Turkey Hill Road	32.1

Date	Book, page or other	Description	Acres
5/31/2011	First American Title	Title insurance for Skibiski 5011400-0158781e	

Date	Permit Description
	Special permit for reduction of frontage for building lots, B4570, p93
	Sylvester Rd driveway Wetlands Permit, B4570, p87

Description:

A diverse piece of conservation property consisting of wooded uplands, wetlands, and a small field in active agriculture. A small parking lot is on the Sylvester Road side of the parcel.

The Mineral Hills Conservation Area is one of Northampton's natural resource gems. The undeveloped, contiguous woodland contains numerous important habitat areas, supports a wide diversity of wildlife species and provides a variety of recreation opportunities for the citizens of Northampton. Furthermore, the natural amenities in this area have attracted and inspired many past and present and have become a part of the City of Northampton's cultural fabric. Famous writer and Northampton native Brian Kitely aptly captures the spirit of the conservation land in his journal 1852: The Sage of Mineral Hill:

> *…Northampton below from Mineral Hill is as remote as the Northwest Passage. We live on what we find, the dog and me-service berries in June, tart strawberries, carrots that taste of metal. What is any man's discourse to me, if I am not sensible of something in it as steady and cheery as the creak of crickets? In it the woods must be relieved against the sky. Men tire me when I am not constantly greeted and refreshed as by the flux of sparkling streams. Surely joy is the condition of life.*

By maintaining the quality of the conservation land and habitat, especially the forested uplands, wetlands, and vernal pools, the City of Northampton is preserving a piece of the natural heritage of the Pioneer Valley and helping to protect a relatively undisturbed complex ecosystem in the foothills of the Berkshires. And, by providing and encouraging outdoor recreational opportunities, the City of Northampton is actively promoting the link between parks and recreation and improved mental, physical and societal health of individuals and the community.

Any property acquired with LAND Grant funds is open for us by all citizens of the Commonwealth, and that no major alteration of this property, or changes in the proposed uses can take place without the prior approval of the secretary of the Executive Office of Energy and Environmental Affairs, and possibly the General Court. Therefore, the Mineral Hills Conservation Area will be permanently protected against conversion to another use, or disposal by the city through:

- The covenants entered into by the City as conditions of the grant offer
- The provisions of Article 97 of the Commonwealth of Massachusetts Constitution
- The LAND Project Agreement, which is adjunct to the deed

Northampton Conservation Commission owned properties are considered permanently protected open space parcels. Any disposal of Conservation Commission owned properties, including easements and less than fee interests, would require Conservation Commission and City Council approval and, in accordance with Article 97 of the Commonwealth of Massachusetts Constitution, a two-thirds roll call vote of the state legislature. Any disposition of Article 97 property also requires the filing of an Environmental Notification Form with the Massachusetts Environmental Policy Act Office, as approved by the Secretary of the Executive Office of Environmental Affairs.

Also, the 87-acre Middle Connector Section added to the Mineral Hills Conservation Area in 2008 is

subject to the Self-Help Project Agreement. Any sale or conversion of this land would require: approval by the Massachusetts Executive Office of Energy and Environmental Affairs, Division of Conservation Services, and the replacement of any converted land with land of equal or greater monetary value, and conservation utility.

In addition to the work of numerous municipal boards and departments, the Executive Office of Energy and Environmental Affairs Division of Conservation Services LAND Grant Program has granted $470,000 of funding for the acquisition of the three parcel, 87-acre open space addition to the Mineral Hills Conservation Area. Three hundred fifty thousand dollars were granted through Community Preservation Act funds, $15,000 was provided by the City of Northampton, and over $134,000 was raised through community donations. Also, the Broad Brook Coalition, Nonotuck Land Trust and Ward 6 Association have provided strong support for the broader project.

The spring 2008 acquisition of three parcels totaling eighty-seven acres is the key connection toward creating an ecologically sustainable and contiguous Mineral Hills Conservation Area in Northampton and Westhampton. The three new parcels are labeled 2008 Conservation Restriction (CR), Middle Connector Section and Northwestern Section.

76 acres of the 87-acre open space acquisitions was purchased in fee and permanently protected; a Conservation Restriction will protect the remaining eleven acres. The Middle Connector Section consists of sixty-one acres to be purchased in fee. The Northwestern Section consists of fifteen acres to be purchased in fee. And, the 2008 Conservation Restriction (CR) area, located adjacent to the LaPalme Section, was protected by a Conservation Restriction. The Conservation Restriction does not allow public access (see Mineral Hills Conservation Area Section Map).

The 30 acre purchase from Skibiski in 2011 on Turkey Hill Road on the border with Westhampton makes the conservation area continuous from Sylvester Road to Westhampton. This section of land includes the High Street Walking Club trail from Turkey Hill Road to Skibiski Summit, marked by Michael Muri using a Forest Stewardship implementation grant and built by the Friends of Mineral Hills management partner.

All of the outer property boundaries of the Mineral Hills Conservation Area were blazed in 2011 by Northeast Survey, with all property corners photographed and the photos on the City's public file cabinet website. This work was done with Forest Stewardship implementation grant funds as well.

Forests have been identified as one of the City's most important renewable natural resources in the City of Northampton Open Space and Recreation Plan 2005-2010. The Mineral Hills Conservation Area consists of a forested landscape ripe with natural resources. The diverse forest matrix provides a complex environment of interacting plant and wildlife biodiversity. Babbling brooks flow from the hilltops to the wetlands below and vernal pools can be found teeming with life during the spring and fall.

To qualify the ecological richness, the Northampton Conservation Commission hired accomplished naturalist Laurie Sanders to produce an ecological assessment of Northampton Conservation Commission properties and abutting sensitive lands. The report entitled "Rediscovering Northampton, the Natural History of City- Owned Lands," included the following analyses of the Mineral Hills Conservation Area:

"MINERAL HILLS AND THE ORCHID SWAMP"

The Mineral Hills hills are comprised of hidden wetlands, steep cliffs, narrow ravines, forgotten ponds, floodplain forest fragments and several square miles of undeveloped, forested uplands with a wide variety of habitats and rare plants and at least one vernal pool. The nearby swamp is relatively undisturbed and is contiguous with hundreds of acres of undeveloped land to the north. The area is botanically rich, with many

rarities and a unique combination of habitat types.

Mineral Hills forested slopes are covered with hemlock (Tsuga canadensis) and mixed hardwoods. On the western side, broad slabs of lichen-covered bedrock and rocky outcrops offer impressive views into Westhampton and beyond. In these rocky, open sections, soil is only found in narrow crevices and shallow depressions where it supports half a dozen of the hardiest, most drought tolerant plants in our area: red cedar (Juniperus virginiana), blue curls (Trichostema dichotomum), Pennsylvania sedge (Carex pensylvanica), little bluestem (Andropogon scoparius) and several species of panic grass (Panicum spp.). Among the most notable botanical finds on these rocky barrens are two little ferns, rusty woodsia (Woodsia ilvensis) and ebony fern (Asplenium platyneuron), both rarely encountered inside Northampton's borders.

A little further to the north, the outcrops are smaller and more scattered, the soils are deeper and there is a dramatic and abrupt change in the vegetation. But the change is not only in terms of what's there and what's not. This place has a look and feel unlike any other in Northampton. Almost park-like in its appearance, the forest here is a mix of stunted hop hornbeams (Ostrya virginiana), hazelnuts (Corylus cornuta), hickories (Carya sp.) and red oaks (Quercus rubra). Below them is a thick carpet of Pennsylvania sedge and occasional grasses. In the springtime, isolated bunches of wild columbine (Aquilegia canadensis) and early saxifrage (Saxifraga virginiensis) blossom along seepy rock crevices, and at the end of summer, the slopes are graced with the bright pink blooms of wild basil (Satureja vulgaris) and the yellow tops of three different types of goldenrod (Solidago arguta; S. Bicolor; S. caesia). The origin of this anamolous patch of forest was probably a fire, but whatever the cause, the result is aesthetically very pleasing.

Above this section, the slope ends and the hilltop has a gentle up and down topography, characterized by numerous outcrops, small depressions but generally level ground. The composition of the canopy trees shifts again. Chestnut oak (Quercus prinus), red oak, and black oak (Q. velutina) are the three most common overstory species, but red maple (Acer rubrum) and hickories (Carya spp.) are also fairly common. In the understory, the ground is covered with an irregular patchwork of low-bush blueberries (Vaccinium vacillans; V. angustifolium), huckleberry (Gaylussacia baccata) and near the north end of the hill, acres of mountain laurel (Kalmia latifolia). Herb-free expanses are not uncommon, but in other areas you can find wild sarsaparilla (Aralia nudicaulis), wintergreen (Gaultheria procumbens) and plenty of Pennsylvania sedge. Among the more unusual plants in sunny, rocky areas along the summit are bristly sarsaparilla (Aralia hispida) and pale corydalis (Corydalis sempervirens). Some of the greatest diversity found on Mineral Hill is in the primitive group known as lichens. A lichen is actually a unique combination of two separate organisms, an alga and a fungus, which have evolved together and are now inextricably linked, i.e. one cannot survive without the other. On the top of Mineral Hill, you can easily find more than a dozen different lichens growing on the rocks and tree trunks.

The summit and the western slope are also great places to find sign of turkey, deer and rabbit. Chickadees, robins, tufted titmice and juncos flit through the open canopy, and the "check please" and warble of the scarlet tanager, the police whistle of the great crested flycatcher and the "here me, see me, watch me" tease of the red-eyed vireo are three of the most common summertime songs.

On the eastern side of Mineral Hills, the forest changes again. Unlike the western slope huge, fractured rocks and a small talus slope characterize this half. The piled up rocks create hundreds of nooks and cavities that are used as denning sites by porcupines, raccoons, red fox and coyotes. In addition, the aspect and moisture levels create conditions that support a very different assemblage of plants. In the sunniest patches, one finds several plants known from only one or two locations in Northampton: tick trefoil (Desmodium paniculatum), mountain mint (Pycnanthemum incanum), a native hawthorn (Crataegus sp.) and four-leaved milkweed (Asclepius quadrifolia). Nearby, in moister soil, grow four other Northampton rarities which are known only from Mineral Hill: woodland agrimony (Agrimonia striata) with its tiny yellow blossoms, herb robert (Geranium robertianum) with its redolent foliage, waxy meadow rue (Thalictrum revolutum) with its bluish-gray stems, and the lacy fronds of fragile fern (Cystopteris fragilis). In addition to these, the slope is also covered

with great masses of white snakeroot (Eupatorium rugosum), clusters of wild sarsaparilla, panicled dogwood (Cornus racemosa), round-leaved dogwood (Cornus rugosa), and in the rocky soils, marginal fern (Dryopteris marginalis) and polypody (Polypodium virginianum). Because of the rocks, the overstory is spotty. It consists of a mix of hardwoods, primarily linden (Tilea americana), pignut hickory (Cornus ovata), sugar maple (Acer saccharum), red oak and black birch (Betula lenta). Near the base of the slope, the moist, shaded soils support striped maple (Acer pensylvanica) and a rich diversity of herbs, including horse balm (Collinsonia canadensis), downy yellow violets (Viola pubescens), red trillium (Trillium erectum), round-lobed hepatica (Hepatica americana), solomon's seal (Polygonatum pubescens), false solomon's seal (Smilacina racemosa) and rattlesnake plantain (Goodyera pubescens). At least six different ferns are also found near the toe of the slope: Christmas fern (Polystichum acrostichoides), lady fern (Athyrium felix-femina), marginal fern, maidenhair fern (Adiantum pedatum), New York fern (Thelypteris novaeboracensis) and an occasional rattlesnake fern (Botrychium virginiana).

Moving downslope from the talus, the grade is gentle and few rocks are exposed. The overstory species remain the same, but the understory species change. Now, witch hazel

(Hamamelis virginiana), maple-leaved viburnum (Viburnum acerifolium) and beaked hazelnut are common. The herb layer is well developed, and includes, among the more unusual plants two that lack chlorophyll: squawroot (Conopholis americana) and autumn coralroot (Corallorhiza maculata). Squawroot, which grows in clusters of four to ten, parasitizes beech and oak roots for its carbohydrate energy. The pine cone-shaped plants blossom in early spring, but their withered, reddish-brown stalks don't decompose until the following spring. The other chlorophyll-free plant is autumn coralroot, an orchid, which relies on fungal mycelium to obtain its energy and nutrients. Widely scattered in Northampton, autumn coralroot is most often found in rich, moist woodlands, especially along streams or near the base of boulders. Another plant known in Northampton from this slope alone is ovate-leaved ragwort (Senecio obovatus). Unlike its more familiar relative golden ragwort (S. aureus), this plant does not grow in wetlands but instead on well-drained, wooded slopes.

On this eastern slope, not far from the base of the talus, is the seepy swamp covered with thick, soft layers of saturated sphagnum moss and muck. Mini-upland islands support yellow birch (Betula lutea), red maple, black ash (Fraxinus nigra), tupelo (Nyssa sylvatica), and lots of hemlock. As you explore, you must duck and maneuver around clusters of winterberry (Ilex verticillata), spicebush (Lindera benzoin), witherod (Viburnum lentago) and mountain laurel.

At least three orchids are found in this swamp. Early coralroot (Corallorhiza trifida), a diminutive, yellowish-green orchid, blossoms in early May. One month later, purple-fringed orchid (Platanthera grandiflora) begins to bloom. Up to two feet in height and with a three-inch flower spike composed of dozens of lavender blossoms, this unmistakable orchid is one of New England's most beautiful wildflowers. The last of the three to bloom is the green wood orchid (Platanthera clavellata). Also small and with greenish-white flowers, it grows in sphagnum mats and is easily missed.

In early spring, this large swamp fills with rainwater and snowmelt. Underlain by the 350 million year old schists and gneisses that compose the surrounding hills, this depression is a likely breeding spot for four-toed salamanders, currently listed as special concern in the state and so far, unknown from Northampton.

There is minimal human impact on the Mineral Hills Conservation Area. There is an established network of trails for hiking, and an unfinished portion of Turkey Hill road. Manh of the traills follow ridgelines and offer picturesque views of distant summits. One trail follows the perimeter of an abandoned rock quarry with exposed rock faces and unique vantage points of the Holyoke Range.

Mineral Hills Forest Stewardship Plan: In 2010, Michael Mauri completed a forest stewardship plan, with funding for a forest stewardship grant the city received. The full plan is available at the city's website

(www.northamptonma.gov/opd, click on public file cabinet). The plan is summarized as follows:

The site includes a former rock quarry, hilltops and slopes, vernal pools and wetland complexes with beaver ponds. Stands on the site include mature mixed-oak, hardwood mix and hemlock, with mixtures of pignut hickory, sugar maple, black and paper birch, and dwarf forest. Hardwood areas of the property contain a thick understory, including witch hazel, mountain laurel, lowbush blueberry and huckleberry. Wetland areas include sphagnum moss, ferns, and poison ivy. Portions of the property have been selectively cut in the past, and many of the parcels comprising the Area have been cut-off within the past 100 years. Invasive species are prevalent throughout much of the Area. The property was acquired piecemeal, in parcels ranging from 2 to 120 acres in size. Because of this, the area as a whole lacks a complete, connecting trail system. The Area has two main access points; a parking area on Sylvester Road, and a small pull-off at the end of the maintained segment of Turkey Hill Road. However, the parking lot is adjacent to a large wetland complex, making access to the Area difficult and unpleasant, and creating conflicts between hikers and breeding amphibians. Turkey Hill Road provides access to the gravel pit and trails along hills, but does not connect to the eastern portion of the property, and in some cases unnecessarily leaves the property.

Suggested Management-Trails:
Create a safe, enjoyable, sustainable hiking system. There are good pieces of a trail system in place. These pieces can be connected and some cases upgraded or re-routed to better deal with water problems.
Make sure trails can be maintained so that hikers do not brush against vegetation or need to walk in tall vegetation so that chances of hikers picking up ticks are reduced.
Fix trails so that water does not run down them.
Create connector trails and re-route a main trail so that it stays on the property.
Wheeled off-road vehicles should not be used on trails
A boardwalk, though costly and difficult to maintain, may be the best way to get from the Sylvester Road parking area to the rest of the property.

Suggested Management-Access:
Consider ways to connect through the wetland from the Sylvester Road parking area.
Designate a parking area at the end of Turkey Hill Road
Place a no-parking sign near the dam next to Turkey Hill Road.
Log for forest-habitat, timber, and trails management
Control non-native invasive plant species: Eradicate Japanese knotweed and bittersweet and multiflora rose so that native plants could have a better chance of becoming established.
Confirm the presence/absence of vernal pools

Parson's Brook Conservation Area 27.603 acres

Ownership: City/Conservation Commission

Location: The Plantations subdivision

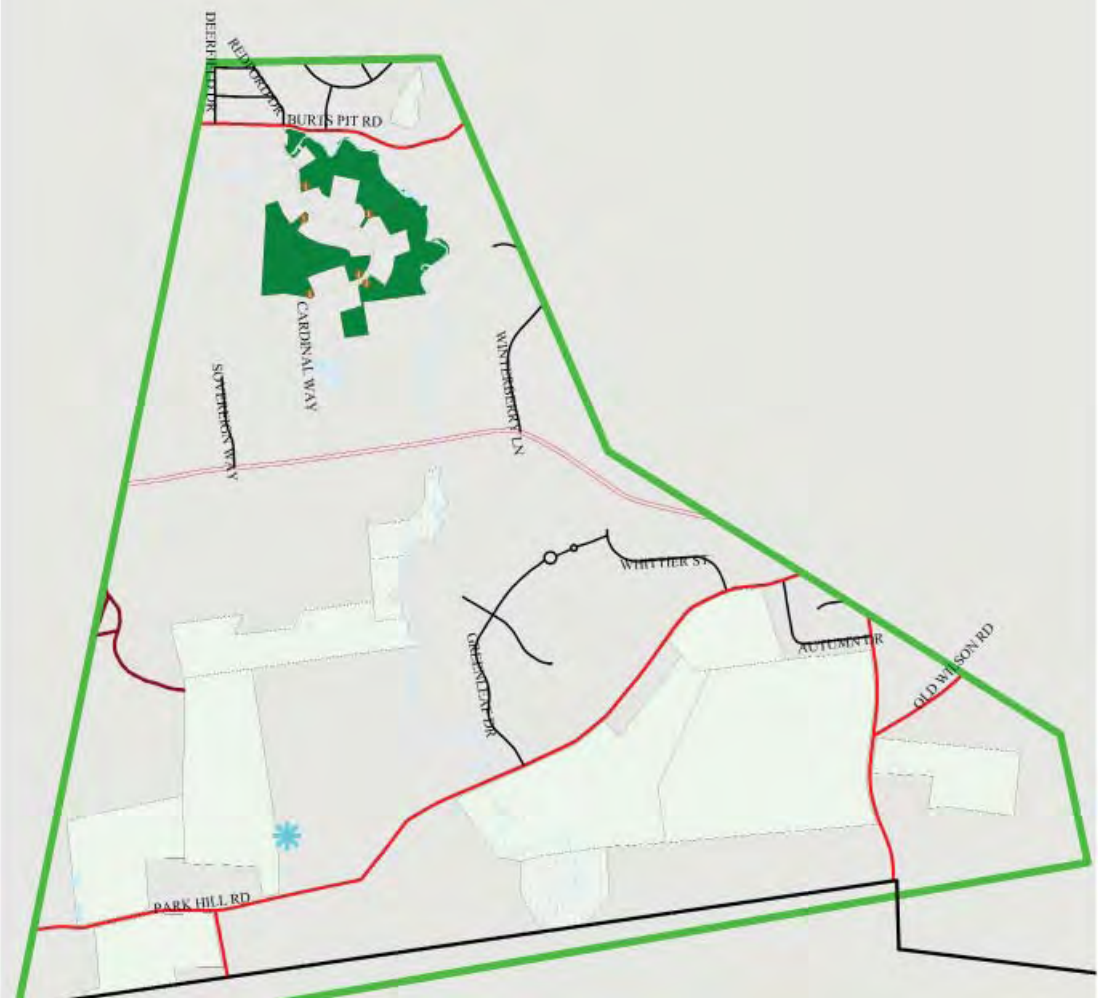
Acquisition history:

Date	Book, page or other	Description	Acres
6/20/2002		Council Resolution	
7/2/2002	B6703, p294	Condition of Cluster Permit	
3/10/2008	Right-of-way B9415, p180		

Partners: None

Description:

OVERVIEW OF PARK HILL/PARSON'S BROOK CONSERVATION AREA



Small conservation area with opportunity for walking trails and includes frontage on Parsons Brook.

Rainbow Beach/Shepard's Island 101 acres

Ownership: **City Rainbow Beach:** City/Conservation Commission

State Rainbow Beach and Shepard's Island: Mass. Division of Fisheries and Wildlife

Location: Rainbow Rd, Connecticut River

Acquisition history:

Partners: Memorandum of Agreement with the Division of Fisheries and Wildlife.

Acquisition history:

Date	Book, page or other	Description	Acres
4/11/1974	B1766, p44	State Shepard's Island, parcel 33-30	15
7/28/1977	B1966, p321	City Rainbow Beach (Self-Help funds)	55
7/19/1989	B3410, p194	State Rainbow Beach, parcel 33-33	30.87
7/19/1989	PB159, p97	Survey of State Rainbow Beach	

Description:

State Rainbow Beach: This is the northerly most section of the Rainbow Beach complex. It is managed primarily for endangered species by the Natural Heritage and Endangered Species Program.

City Rainbow Beach: This is the middle section. It includes a heavily used beach. It is managed by a cooperative agreement with the State Division of Fisheries and Wildlife. A conservation area covered with river bottomland hardwoods and a narrow beach area of river sediment deposits. This area is located along the Connecticut River and receives moderately heavy summer use (swimming and unauthorized camping) by motor boaters. This area is used for nature study and the floodplain forest and beach provide habitat for endangered plant and animal species. The City-owned Rainbow Beach is slowly growing from river deposition. Mean accretion (deposition minus erosion) is 15 to 18 square feet per year (Anderson, Anthony. 1973. Vegetation Patterns and Fluvial Processes on a Connecticut River point bar. B.A. Thesis, Amherst College; Doherty, Adrian, Jr., 1974. Stratigraphy and Geomorphology of the Rainbow Beach Point Bar, BA Thesis, Amherst College). (Sheppards Island is also growing, but the state owned Rainbow Beach appears to have more erosion then deposition).

State Shepard's Island: Former island, now a penisula, on south side of complex. Wildlife habitat.

To prevent illegal use, the Division of Fisheries and Wildlife gated Young Rainbow Road (with private property owner permission).

Reservoir Complex

Ownership: City, Department of Public Works

Location: Various hill towns

Description:

Parcels include the reservoirs and much of the watershed lands. It is a site with future potential.

Roberts Hill Watershed Conservation Area and CR 22.3 acres

Ownership: City/Conservation Commission

CR owned by City, land privately owned

Location: Kennedy Rd and Audubon Road, Leeds

Acquisition history:

Date	Book, page or other	Description	Acres
11/19/2004	B8068, p162	Deed-Lot 2, Kennedy Rd-City Council 11/24/2004 (donation)	12.56
11/12/2004	B8062, p89	Deed Lot 4, Kenneydy Rd-City Council 11/4/2004 (permit condition)	
	PB 202, p24	Survey of Lot 2 and 4, Kennedy Road	
3/2/2009	PB220, p63	Survey of Hill Audubon Road CR	
3/2/2009	B9773, p30	Hill CR on Audubon Road (donated as permit condition)	9.75

Partners: Leeds Civic Association (informal arrangement)

Description:

Includes uplands, wetlands, and a tributary of the Leeds Reservoir.

Acquisition history:

Roberts Reservoir 57 acres

Ownership: City, Department of Public Works

Location: Upper Leeds and Roberts Meadow Reservoirs and watershed

Description:

Land includes two off-line emergency reservoirs and watershed.

Saw Mill Hills Conservation Area (includes Roberts Hill) 661 acres

Ownership: City/Conservation Commission

Location: Avis Circle, Ryan Rd, Spring St, Chesterfield Rd, Mill River, Old Shepherd Rd, South Main St, Dimock Rd, Reservoir Rd, Kennedy Rd, & Leeds

Acquisition history:

Date	Book, page or other	Description	Acres
10/20/1995	B4759, p148	Saw Mill Hills Avis Circle, Towne donation with Avis Circle subdivision	23.96
	Laywers Title Insurance	Avis Circle Owner's policy, #13600110645	
11/28/1995	B4781, p109	Saw Mill Hills: Towne purchase mortgage release	
7/13/1995	PB178, 223	Saw Mill Hills Plan	
2/9/1996	B4822, p182	Saw Mill Hills Agreement	
1/5/2000	PB186, p97	Plan- Saw Mill Hills	
3/13/2000	B5899, p311	Saw Mill Hills Donation with Avis Circle subdivision	16.103
	First American Title Insurance	Owner's policy, #20325612	
5/26/2000	B5945, p231	Saw Mill Hills Cluster permit (Sienkiewicz 88 acres plus right-of-way)	
6/9/2000	PB187, p25	Plan--Saw Mill Hills	
7/7/2000	B5979, p75	Order of Taking, Saw Mill Hills Ryan Rd ROW and Sienkiewicz purchase/cluster ($15,000 City and $5,000 Wharton Trust)	88
	B5984, p206	Saw Mill Hills Sienkiewicz purchase	
7/14/2000	B5984, p203	Confirmatory deed for Ryan Rd ROW Saw Mill Hills	
12/2001	B6137, p308	Hawthorne taking Saw Mill Hills	44.742
3/21/2002	B6641, p1 & 11	Curran taking Saw Mill Hills	
12/27/2006	B8991, p221	Off Ryan Rd, Blobel Section- Saw Mill Hills	22
	B8991, p226	$17,600-- Saw Mill Hills	
1/15/2000	B5864, p246	Chesterfield Road, New Harmony donation	28.079
8/1/2000	Land Court B18, p65	New Harmony donation- Saw Mill Hils	3.93
3/29/2006	B4851, p252	Easement, right-of-way, donation in lieu of c. 61B right-of-first-refusal- Saw Mill Hills/Roberts Hill link	
12/2001	B6492, p1	Golden Drive, Donavan taking Saw Mill Hills	13
1/4/2002	B6491, p334B6576, p83	Fungaroli taking Saw Mill Hills	18.74

Date	Book, page or other	Description	Acres
11/23/2004	B8075, p165	Boyle donation Saw Mill Hills	17
2/9/2007	B9035, p317	Sylvester Road, Jeep-Eater/Phone Line Parcel	55
1/23/2009	B9686, p204	Sylvester Rd, Ryan Rd, Mielke purchase	11.144
5/8/2009	B9801, p183	Houle purchase ($11,804 taking) Saw Mill Hills	17
9/1/2009	B9953, p187	Justin West purchase ($18,000) Saw Mill Hills	18
	PB221, p34	Plans- Justin West, Saw Mill Hills	
2/26/1976	B1840, p162B1874, p21	Roberts Hill, self-help, City (1976), land swap (1981)	96
3/15/1977	B1939, p323	Roberts Hill	
3/31/1982	B2265, p190 (except for B2217, p99)	Roberts Hill: Chesterfield Road land swap	
	PB171, p51	Plans: Roberts Hill	
11/4/1991	B3821, p50	Roberts Hill Overlook, eminent domain (1991)	8.128
	PB172, p32	Plans: Roberts Hill Overlook	
6/1/1992	B3963, p250	Roberts Hill Trail to Reservoir Road (Escrow for taking of Roberts Hill to be released 11/1994, Ledger Land Acquisition Account), bargain sale acquisition (5/29/1992)	
	PB173, p119	Roberts Hill Plans	
12/18/2006	B8983, p250	Roberts Hill Conservation Restriction donation in return for City, waiving Chapter 61 right-of-first refusal	0.6
	B8983, p262	Mortgage subordination for Roberts Hill CR	
	PB211, p93	Survey of Roberts Hill CR	
5/27/2011	B10558, p237 and p243	Sawmill Hills Realty Trust deed-in-lieu of tax title foreclosure and purchase for back taxes with CPA funds (two deeds)	22

Partners: **Saw Mill Hills** Informal "Friends of the Saw Mill Hills"

Roberts Hill: Leeds Civic

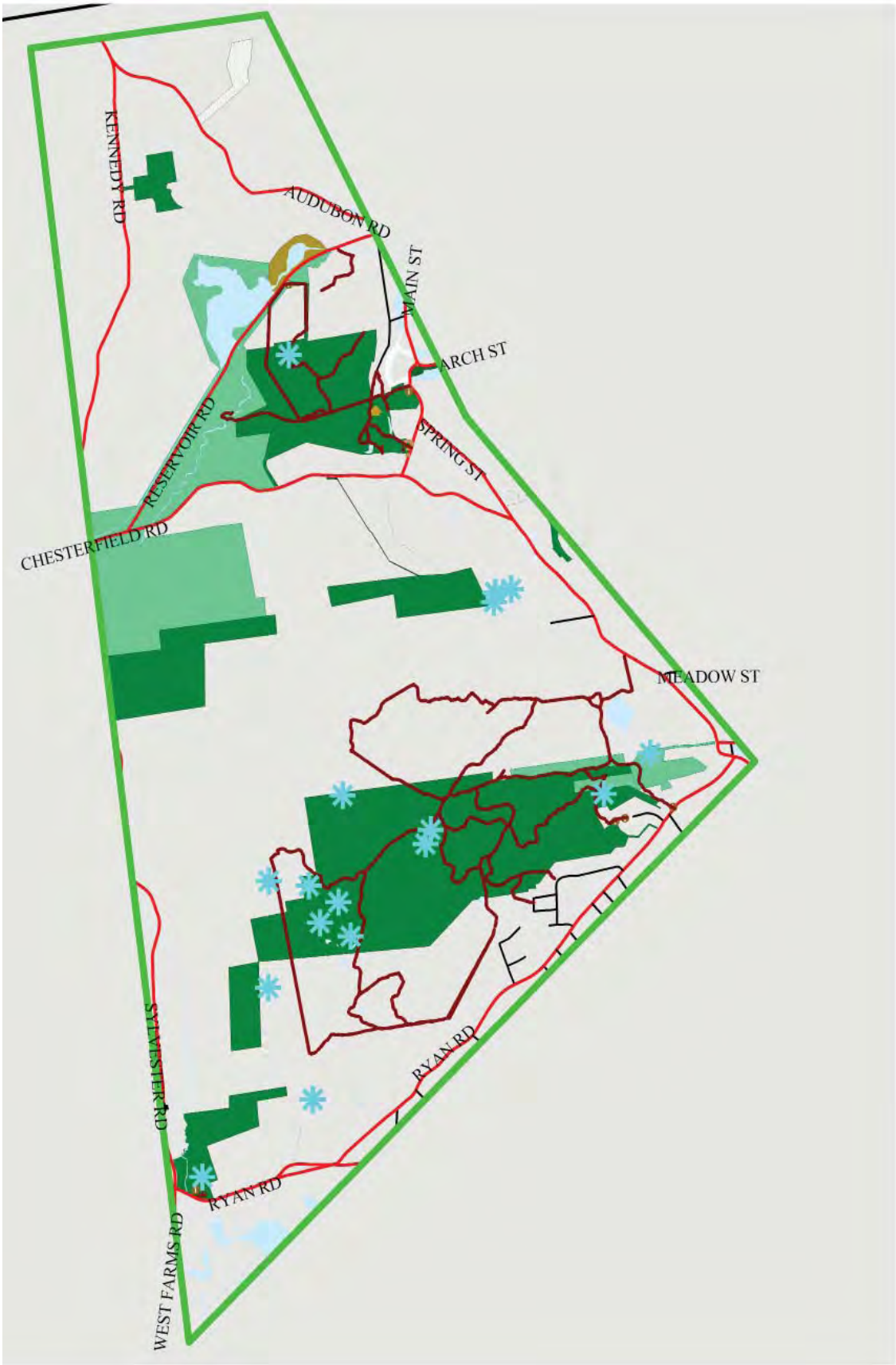
Description:

Saw Mill Hills includes wooded land within Zone II and III of the City's drinking water aquifer, containing rich vernal pools (see Vernal Pools and Rediscovering Northampton). The conservation area includes a right-of-way to Avis Circle and provides access to an eventual trail system through the Saw Mill Hills, possibly as part of a significantly expanded Saw Mill Hills Conservation Area. The Right-of-way from Chesterfield Road provides access to a detached section of Saw Mill Hills Conservation Area. A Right-of-Way from Spring Street provides additional access. A Forest Stewardship Plan has been prepared for a portion of this area (see management section).

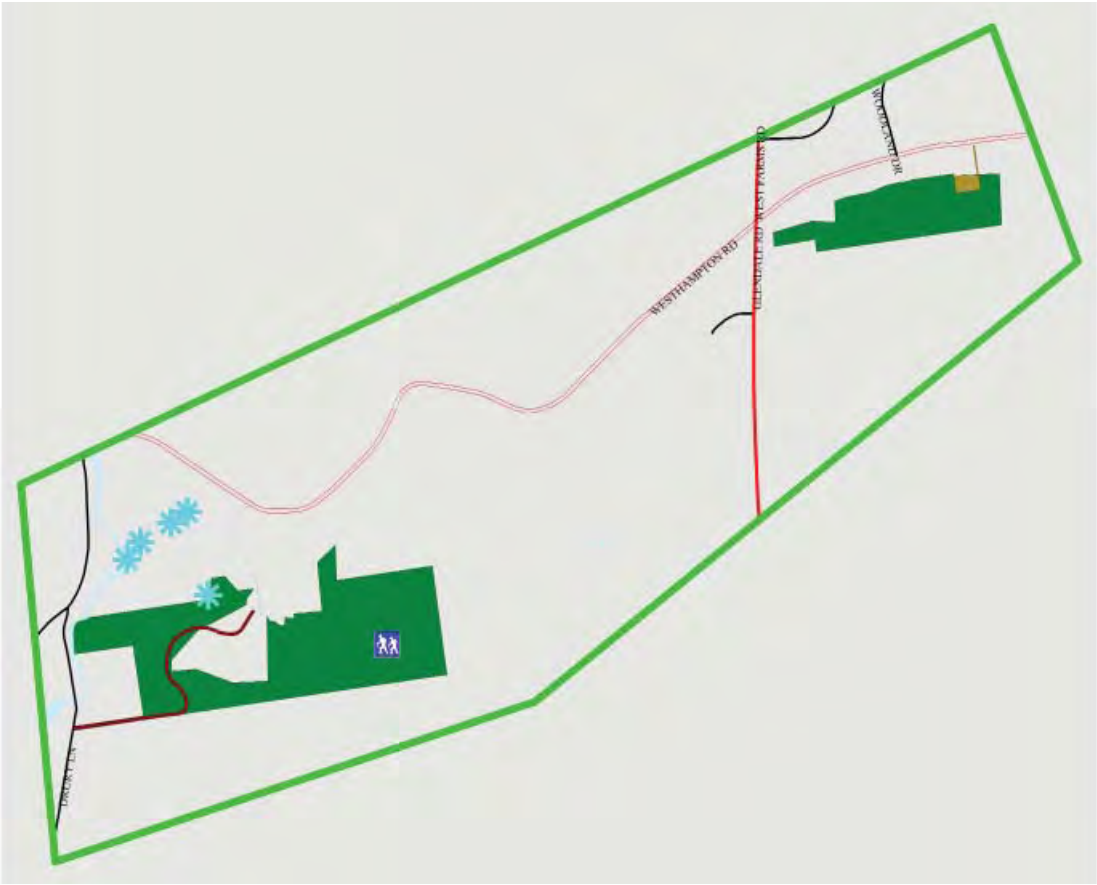
Blobel section: Key portion of wildlife corridor connecting Saw Mill Hills with Parsons Brook and with Mineral Hills. DPW holds a reservation from Article 97 that allows them to develop a water tank on the property on not more than five acres of the site within the next couple of years if they repay the Conservation Fund all of the funds used to purchase the parcel.

Saw Mill Forest Stewardship Plan: Michael Mauri completed a forest stewardship plan, with

SAW MILL HILLS



OVERVIEW OF WEST FARMS CONSERVATION AREA



funding for a forest stewardship grant the city received. The full plan is available at the city's website (www.northamptonma.gov/opd, click on public file cabinet). The plan is summarized as follows:

Recreation-Stand 1 has an open understory, frequent rock outcrops, and rolling terrain, the parcel is well suited to recreational activities such as hiking, snowshoeing and cross-country skiing.

Recreation-Stand 2 has a view from atop the steep embankment and the likelihood of seeing wildlife is high, so a trail on the property should skirt along the edge.

Recreation-Stand 3 is the approximate route of the 20' wide right-of-way at the end of Avis Circle. Stand locations are shown on the map attached to the Forest Stewardship Plan in the Sawmill Hills file

Wildlife-Stand 1 has an abundant acorn crop that supports wildlife. Some thinning of suppressed trees would increase the acorn production and improve the long-term health of residual trees. However, the low value of the trees to be removed as firewood would probably preclude this type of work, unless it was incidental to projects on adjacent lands.

Wildlife-Stand 2 has a good example of natural and rapid regrowth replacing the early successional stage of forest growth, consisting of seedlings, sprouts and shrubs, with pole-sized trees. This is good for timber growing, but it is bad for species that depend on this type of ephemeral habitat. Revisiting this stand every five years to cut back all trees (shrubs can be left) is the best way to maintain a young forest habitat.

Forestry-Stand 1 has white pines in the midstory tht could be developed by thinning, as described above, but also by removing a greater number of trees. The same economic restrictions would likely apply. Ideally, the pine trees would be professionally pruned following the thinning to grow pine of the highest value. If the opportunity arises, it might be worth growing pine in this fashion on about five acres, more by way of demonstration than a serious timber growing operation.

Forestry-Stand 2 is a productive site is well suited to growing timber, but its the small size makes this unfeasible. This area should be controlled for invasive exotic shrubs. Successful control usually involves pulling (for smaller shrubs), or cutting and applying herbicide to the remains.

The driveway into Roberts Hill should not be repaired and Roberts Hill should remain closed to vehicles.

The Roberts Hill section includes a large wooded hill includes cliffs with spectacular views overlooking the Leeds Reservoir (Roberts Hill Overlook, purchased 1991), large amounts of upland forest, and frontage on the Mill River, Water Street, Main Street, Chesterfield Road, and Reservoir Road. It has two small ponds, a stream and a diverse forest. It provides a linkage between the Leeds Reservoir Watershed and swimming area and the Mill River and Look Memorial Park. In 1986, the area was selectively cut to promote and create preferred wildlife habitats. There are several foot trails on the property. The use of the area is moderate. Snowmobiles are permitted only on marked trails approved for use by the Conservation Commission.

Howard's Ice Pond Dam (DCR No. 2-8-214-8) is classified by the DCR Office of Dam Safety as a "low hazard" dam. The City repaired the dam and spillways in 1999, using City funds and Department of Conservation and Recreation Lakes and Ponds funds. The Department of Conservation and Recreation awarded $8,000 in grant funds and the City of Northampton paid the remaining $8,700. A total of $13,500 was used for construction and the remaining $3,200 was used for design, inspection and permits. On January 14, 2004, the Office of Dam Safety determined that the dam is no longer under DCR jurisdiction under MGL C. 253 s 44-48, as amended in 2002, meaning that there are no on-going reporting requirements, as long as the dam continues to be properly maintained.

Spring Street Well/Aquifer Area 31.56 acres

Ownership: City, Department of Public Works

Location:

Acquisition history:

Date	Book, page or other	Description	Acres
6/19/1952	PB40, p65		
10/15/1952	PB41, p55		
11/6/1990	PB168, p106		
12/31/1990	B3667, p67	As well as previous takings and purchases	
1991		Disclosure	

Description:

Parcels include the Spring Street wellhead and much of the Department of Environmental Protection aquifer Zone I. It also contains a small part of Zone II. The parcel serves as water supply protection.

West Farms/The Ridge Conservation Areas 55.4 acres

Ownership: City/Conservation Commission

Location: Off Glendale Rd, Westhampton Rd (Rt 66), Ridge View Rd, & Drury Ln

Acquisition history:

Taking purchase as part of limited development/landfill buffer; paid by CDBG (affordable housing and cluster related open spaces) and Landfill enterprise (landfill buffer)

Date	Book, page or other	Description	Acres
3/2/2001	B6137, p317	West Farms/Route 66 initial taking	
3/2/2001	B6137, p327	West Farms initial confirmatory deed	
		West Farms market rate lot sold (City retains one lot)	
4/8/2003	B7133, p23	Comprehensive permit	
4/8/2003	PB195, p98		
5/23/2003	B7241, p206	West Farms Surplus parcel to Nancy L. Kingsley	
6/2/2003	B7231, p15	West Farms Surplus parcel to Leona V. Pakutinski	
6/2/2003	B7231, p19	West Farms Surplus parcel to Maris and Peter Ludwig	
6/2/2003	B7231, p1	West Farms Surplus parcel to Donald & Norma Sadusky	
6/23/2003	B7271, p216	West Farms transfer to the Conservation Commission	
6/27/2003	B7282, p237	West Farms Surplus parcel to Darleen/Edward LaFond	
7/28/2003	B7347, p320	West Farms affordable housing to Habitat for Humanity with septic system easement	
5/25/2005	B8273, p166	West Farms recreation parcel to Recreation Commission	
5/31/2005	B8281, p88	Deed-The Ridge, as condition of subdivision approval	
	PB205, p71-86, 205	Plans-The Ridge	
	PB205, p75-77	Plans- The Ridge Survey of conservation area	
12/9/2005	B8550, p220	City Council resolution authorizing transfer	

Partners: None

Description:

West Farms is undeveloped land with a simple trail from Glendale Road to the Recreation Area off Route 66.

The Ridge section of West Farms includes walking trails that will eventually be linked to abutting property. Developer is responsible for building the trails with the City through the Office of Planning and Development, retaining the right to extend the trail to the easterly property boundary. Subject to City of Northampton, holding the right to build multi-use trail across the property (which is consistent with the City Transportation Plan).

Bear Hill Recreation Area

Ownership: Bridge Road LLC

Location: Bridge Rd on west side of JFK Middle School

Acquisition history:

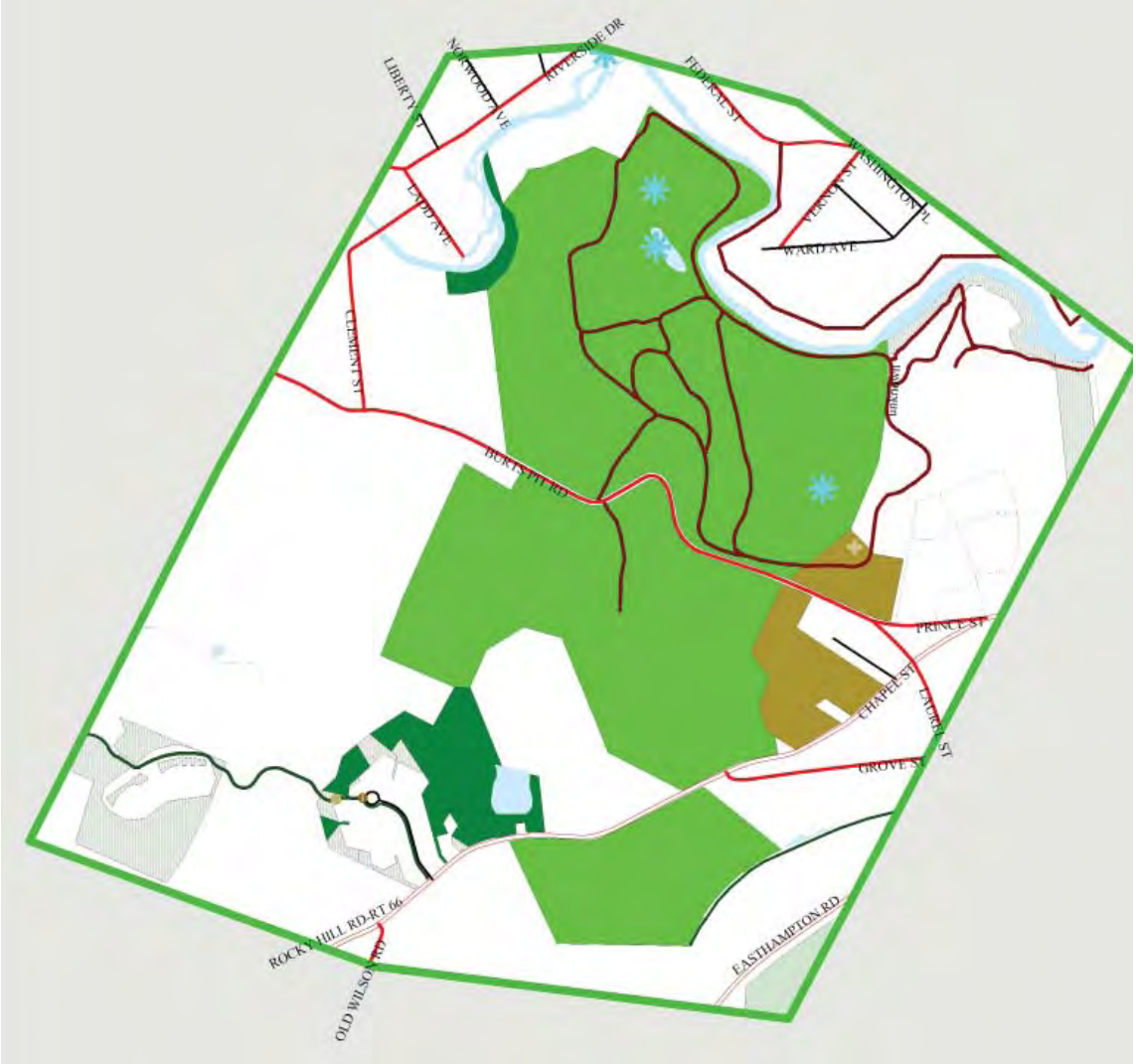
Date	Book, page or other	Description	Acres
7/12/2006	B8791, p28	Related to permit condition for Bear Hill	
	PB211, p51		

Description:

Common space managed and controlled by the Northampton Conservation Commission. Active recreation open space managed and controlled by the Northampton Recreation Commission.

Property provides recreation field, sledding hill, and undisturbed natural space. It surrounds the Bear Hill

STATE HOSPITAL/MILL RIVER



Estates housing project.

Ward Six Easements and Restrictions 2.26acres

Ownership: Fee: Private

CR: Conservation Commission

Location: Off Woods Rd & Burts Pit Rd and Between Dunphy Dr and Westhampton Rd.

Acquisition history:

Date	Book, page or other	Description	Acres
7/12/2000		CR off Woods Road and Burts Pit Rd retained by City when parcel surplused by city.	2.16
6/9/2003	B7245, p275	Right of way easement for trail from Dunphy Drive to Westhampton Rd (permit condition 4/30/2003)	0.1
	PB196, p10	Survey of Right-of-Way	

Ice Pond Conservation Area Conservation Restriction 3.2 acres

Ownership: Fee: Private (various lot owners)

Protection: Conservation restriction, City of Northampton through its Conservation Commission

Location: Westhampton Rd (Rt 66) & Ice Pond Dr

Acquisition history:

Date	Book, page or other	Description	Acres
10/9/2003	B7581, p214	Mortgage subordination	
11/3/2003	B7581, p183	Donation as condition of cluster special permit & subdivision	

Description:

Discontinuous holdings fill some of the gaps in the abutting Ice Pond Conservation Area. The public has full rights to cross property, and the Conservation Commission has full rights to build trails without restriction.

Mineral Hills/Marble Brook Conservation Restrictions 292.8 acres

Ownership: Private: John & Diana Clapp (55.79 acres); Miriam L. Clapp (57.922 acres); Joanne Bessett (11.11 acres); Christine & George Guyette, Elizabeth & Garry Anderson (168 acres)

Protection: Clapp & Bessett CR City of Northampton through Conservation Commission

Guyette & Anderson CR: City of Northampton through Board of Public Works

Location: Chesterfield Rd & Turkey Hill Rd

Acquisition history:

Date	Book, page or other	Description	Acres
12/11/2006	B8976, p111	John & Diana Clapp—consideration $18,000 ($10,185 Nonotuck Land Fund, $7,815 City for Chapter 61 tax Rollback)	20
	B8976, p128	Mortgage subordination of John & Diana Clapp	
	PB215, p82	Survey of John & Diana Clapp CR	
8/17/2007	B9237, p297	CR #40, $27,500 Nonotuck Land Fund, $4,000 City of Northampton	35.79
	B9237, p312	Mortgage subordination of John & Diana Clapp	
6/27/2007	B9177, p253	Miriam L. Clapp—$52,129 from contributions & previous grants on hand	57.922
	B5454, p218	Fee interest in parcel remains w/Miriam Clapp	
6/4/2008	B9503, p298	Kohl CR--$40,000 (self-help & CPA)	
	PB218, p38	Kohl Survey	
	B9503, p296	Kohl self-help agreement	

Date	Book, page or other	Description	Acres
4/14/2010	B10147, p238	Christine & George Guyette, Elizabeth & Garry Anderson to Nonotuck Land Fund—consideration $134,720 ($118,600 from Community Preservation Act)	168
4/14/2010	B10147, p255	Assignment of Guyette/Anderson CR to City of Northampton Board of Public Works	

Description:

Public access is allowed freely on the Miriam Clapp CR. Very limited public access is allowed by the John and Diane Clapp CR. Conservation Commission regulations should prohibit public access on the John and Dianne Clapp CR because public access on the Miriam Clapp CR has less impact on farming and on the Clapp family.

The Marble Brook (Guyette/Anderson) conservation restriction is north of Chesterfield Road. No public access. Nonotuck Land Fund reserves right to lead public hikes.

The Oaks Conservation Restriction & Right of Way 30.28 acres

Ownership: Private

Protection: Easement, City of Northampton

Location: Burts Pit Road

Acquisition history:

Date	Book, page or other	Description	Acres
8/3/2007	B9222, p337	CR	
8/3/2007	B9222, p355	Mortgage subordination	

Description:

Public access allowed. The City has right to develop walking trails anywhere in conservation restriction. The City also has the rights to develop a bike path within the trail easement area. Please see the Conservation Restriction for more information.

Park Hill/Parson's Brook Conservation Restrictions 227 acres

Ownership: Fee: Private—no public access

Protection: Lathrop, Gray/Peppard, & Jewett/Pinkham—Conservation restrictions, City

Kidder & Micka—Agricultural protection restrictions, jointly by City & Massachusetts Department of Agricultural Resources

Location: Park Hill Rd, Westhampton Rd, & Florence Rd

Acquisition history:

Date	Book, page or other	Description	Acres
2/16/1979	Plan Book 110, p65-66	Survey of Towne Conservation Easement-- Whittier Street and Westhampton Road	
2/16/1979	Book 2082, p84	Conservation Easement, Towne	15+
		APR, Adams by Department of Agricultural Resources	72
3/3/1986	B2685, p193 & 196	APR, Kidder	47
3/23/1990	B3535, p323	Kidder	
8/5/1998	B5449, p275	APR, Valley Land Fund & City ($450,500)	38
6/24/2000	B5964, p254	Assignment VLF to OFA, Department of Agricultural Resources purchased Valley Land Funds interest ($408,450)	
12/22/2000	B6093, p296	APR, Gray/Peppard (donation)	30
	PB187, p253	Survey, Gray/Peppard	

Date	Book, page or other	Description	Acres
	B6093, p305	Mortgage, Gray/Peppard	
	B6093, p317	Restrictions, APR & Deed to Gray/Peppard	
1/5/2001	B6100, p298	Gray/Peppard, deed & mortgage release, $225,000	
2/1/2001	B6119, p264	APR, Assignment of co-holding to Department of Agricultural Resources	
	B6117, p265	Affidavit & appraisal	
12/20/2001	B6472, p277	CR, Gray/Peppard, et al (donation)	23.203
	PB190, p114	Survey, Gray/Peppard, et al	
2/4/2005	B8155, p57	Lathrop, non-financial consideration (boundary line agreement elsewhere)	11.215
	PB204, p22	Survey, Lathrop	
4/21/2010	PB10153, p116	CR #45, Jewett and Pinkham (permit condition)	5.722

Abuts: Abuts additional acreage in Easthampton

Round Hill Conservation Restriction 15,000 square feet

Ownership: Private

Protection: Conservation restriction

Location:

Acquisition history:

Date	Book, page or other	Description	Acres
8/15/2007	B9234, p343	CR	
	B9235, p1	Subordination	
	PB214, p7		

Rocky Hill Cohousing Conservation Restriction 10.27 acres

Ownership: Rocky Hill Cohousing (see separate trail easement)

Protection: Conservation restriction, City

Location: Off Florence Rd

Acquisition history:

Date	Book, page or other	Description	Acres
11/29/2004	B8082, p261	Donation as condition of cluster subdivision approval	
	B8082, p274	With subordination	
	B8166, p227	Conservation deed restriction on lot 8	

Abuts: Pathways Cohousing trail easement

B: Parks and Recreation—Public

Properties acquired for park and recreation purposes are considered permanently protected properties.

They can be sold with City Council and, in accordance with Article 97 of the Constitution of the Commonwealth of Massachusetts, state legislature approval. Some of the recreation areas listed below may have been purchased for non-recreation uses and then converted to recreation areas. These areas would not have the protection provided by Article 97 of the Constitution.

Agnes Fox Field Recreation Area 1.61 acres

Ownership: City

Management: Recreation Commission

Maintenance: DPW, Recreation Division

Location: State St, Church St

Acquisition history:

Date	Book, page or other	Description	Acres
5/17/1995	B1195, p81	Deed from Bishop of Roman Catholic Church. Property reverts to Church if no longer used for recreation.	

Equipment: Grassed play area, basketball court, restroom building, playground equipment

Description:

The grassed play area covers a large part of the site. This area is heavily used by local residents.

Aquatic & Family Center

Ownership:

Management: Recreation Commission

Maintenance:

Location: JFK Middle School, Bridge Road

Equipment: Public Indoor pool, tennis courts, basketball

Description:

Arcanum Field Recreation Area 8.49 acres

Ownership: City

Management: Recreation Commission

Maintenance: DPW, Recreation Division

Location: Bridge Rd, N. Farms Rd, & Mountain St

Acquisition history:

Date	Book, page or other	Description	Acres
7/25/1957	B1252, p404	Urban self-help project agreement B	

Equipment: 2 ball diamonds, soccer field, field house, all-purpose paved area used for basketball, street hockey, soccer, dances, playground equipment, Safety Village

Description:

Arcanum is a heavily used year-round recreational area.

Childs Park 30 acres

Ownership: Childs Park Foundation, Inc.

Location: North Elm St, Woodlawn Ave, Prospect St

Acquisition history:

Date	Book, page or other	Description	Acres
1951	B1103, p147		

Description:

This heavily used park is located close to downtown and densely populated residential areas. It is beautifully landscaped (trees, shrubs, flowers, rose garden) and has a scenic drive winding through it. There are two large open spaces as well as a large wooded area. There are no picnic or garbage facilities at this site. Except for running, most active sports are prohibited.

Childs City Park

Ownership: City, School Committee

Location: Elm St & North Elm St (near Northampton High School)

Acquisition history:

Date	Book, page or other	Description	Acres
		Will of Annie Childs, Article Fifth	
8/21/2008		City Council Resolution on management of park	

Description:

Small, triangle shaped island between High School and Elm Street. This is owned by the City and is separate from the privately owned Childs Park across Elm Street.

Community Gardens, Northampton State Hospital 8.086 acres

Ownership: City (acquired by Parks & Recreation, subject to Article 97)

Management: Northampton Recreation Commission

Maintenance: DPW, Recreation Division

Location: Burts Pit Rd

Acquisition history:

Date	Book, page or other	Description	Acres
1994	Ch. 86 & 307	The acts of 1994, Parcel G, Northampton State Hospital	
12/9/1998	B5558, p13	Parcel G, Northampton State Hospital	
	PB183, p1		

Description:

Heavily used community garden. Site does not have rich agricultural soils, but soils have been worked as gardens for many years (being part of the State Hospital operation prior to becoming a community garden). They provide excellent gardening space. Although most gardeners who request plots can be accommodated, the best plots go very quickly. An easement retained by the Commonwealth would allow the right of access across the community gardens but only in a location approved by the City.

Connecticut River Greenway--Elwell State Park 3.2 acres

Ownership: Massachusetts Department of Conservation Resources

Location: Damon Rd, Bates St, & Woodmont Rd

Acquisition history:

Date	Book, page or other	Description	Acres
8/30/37	B926, p285	Parcel 25A-16	0.872
9/18/1978	B2055, p145	Parcel 25A-14	1.347
1/12/1968	PB92, p64	Survey of what became Elwell State Park	
3/25/1985	B2546, p132	Parcel 25A-168,	0.055
12/22/1987	B3109, p88	Land lease from Hampshire County to Commonwealth of Massachusetts	
9/15/1988	B3255, p311	Parcel 25A-17, order of taking of parcel land situated on corner of Bridge St and Damon Rd	0
6/18/1992		City Council approval of state eminent domain taking of Cichy parcel	0.5

Description:

Includes boathouse, wheelchair accessible dock on the Connecticut River, parking lot, access to the Norwottuck Rail Trail, and access to the Trail's most spectacular feature, the bridge across the Connecticut River.

Florence Fields Recreation Area 24.4 acres

Ownership: Fee: City of Northampton, through the Recreation Commission

Location: Meadow Street, Florence

Acquisition history:

Date	Book, page or other	Description	Acres
12/1/2010	PB224, p49	Survey of Florence Fields Recreation Area and entire Bean Allard Mill River Greenway	

Date	Book, page or other	Description	Acres
12/13/2010	B10406, p229	Acquired from Trust for Public Land $560,000-- city 34%, PARC grant 66%	24.4
12/13/2010	B10406, p235	PARC Agreement for Florence Fields	
12/13/2010	First American Title # #5011400-0082159e	Title Insurance for Florence Fields (to City Clerk)	

Gothic Street Pocket Park 0.15 acres

Ownership: Fee: Gothic Street Condominium Association

Easement: Northampton Recreation Commission

Location: Gothic St

Acquisition history:

Date	Book, page or other	Description	Acres
1/27/1993	B4137, p116	CR	
	Doc #93-02065		
		Special permit to Gothic St Development Partnership	

Description:

Recreation Easement allows public to pass through as well as passive recreation during daylight hours. Recreation Commission has no responsibilities except enforcement.

Halligan-Daley Historical Park, Northampton State Hospital 0.5 acres

Ownership: Northampton Recreation Commission (subject to Article 97)

Management: Recreation Commission & St. Patrick's Association

Maintenance: DPW, Recreation Division, & St. Patrick's Association

Location: Prince St, Rt 66

Acquisition history:

Date	Book, page or other	Description	Acres
1994		Acts of 1994	
12/9/1998	B5558, p19		

Look Park 157 acres

Ownership: City (acquired for Parks & Recreation, subject to Article 97)

Management: Trustees of Frank Newhall Look Memorial Park

Maintenance:

Location: Rt 9, Mill River

Acquisition history:

Date	Book, page or other	Description	Acres
6/4/1928	B846, p532	Original grant	
11/20/1973	B1745, p309	RR acquisition	

Funding: Core park donated with endowment

Federal Land & Water Conservation Fund (#25-00188 Look Park Comfort Station, #25-00304 & 00326 Look Park Improvements Phase I & II)

Property subject to MA Article 97 & Federal FLWCF Act 6(f)

Description:

Look Park is a gift to the City from Mrs. Fannie Burr Look, who donated the land and development funds. She also started a trust fund to maintain the park. Today, it is a beautiful large park maintained under the guidance of trustees and funded by entrance fees and an endowment. There are numerous facilities, including natural land and water areas; picnicking facilities; six tennis courts; many play fields for baseball, volleyball, football, softball, basketball and shuffleboard; train rides; food stands; and marked trails. Other activities available are paddleboats, cross-country skiing, ice-skating, band concerts and theater productions. Some equipment may be rented at the site—lockers, drinking water and bike racks are available. This area receives very heavy recreational use (regional) throughout the year.

The Garden House at Look Park is the area's premier community and banquet facility, providing superior accommodations for public and private parties, meetings, and community events. Located in one of New England's finest parks, the Garden House stands on the site of the former Look Park pool building, a nostalgic Northampton landmark built in 1930. The restoration of the building, now unsurpassed in comfort and convenience, keeps faith with the Mission style architecture of the earlier period.

Main Street Streetscape Park — 2,328 square feet

Ownership: City

Easement: First Church of Christ in Northampton (for area in front of church)

Management: First Church for Easement I, City for art kiosk

Maintenance:

Location: Main St at Main St & Center St intersection

Acquisition history:

Date	Book, page or other	Description	Acres
12/27/2002	PB195, p26	Boundary Line Agreement Plan	
10/9/2003	B7562, p117	First Church Boundary Line Agreement	
9/10/2004	B7983, p205	First Church Boundary Line Agreement (II)	
	PB202, p21	First Church Boundary Agreement Plan	

Description:

This small but heavily used park includes the City's art kiosk installation, which is maintained by the City, and a lawn in front of the First Churches, which is maintained by the Church but for which the public has the right to use.

Maine's Field Recreation Area — 14.47 acres

Ownership: City

Management: Recreation Commission

Maintenance: DPW, Recreation Division

Location: Riverside Dr, Bay State

Acquisition history:

Date	Book, page or other	Description	Acres
	B778, p177		

Equipment: Lighted ball diamond, two sand volleyball courts, restroom building, storage building, pavilion with tables, paved parking, & playground equipment

Description:

This partially wooded recreation area borders the Mill River. It receives extremely heavy spring, summer, and fall usage by residents citywide. This area is subject to heavy spring floods.

David B. Musante, Jr. Beach 7.46 acres

Ownership: City-DPW, Water Division

Management:

Maintenance:

Location: Reservoir Rd

Acquisition history:

Funding 1989–1991 capital improvements: City ($62,000), CDBG for handicap accessibility ($10,000), MA Urban Self Help Program (1989 award--$152,800), & Federal Land & Water Conservation Funds (1988 award—Project #25-00387 for beach, reservoir, & dam improvements--$200,000)---Property subject to Federal FLWCF Act 6(f)

Description:

Lower Roberts Reservoir or Leeds Reservoir serves as a public swimming area. The former water supply reservoir was converted to a recreation area (1991) with a swimming area, beach, picnic area, parking lot, and restrooms. A trail into Roberts Hill Conservation Area starts from this recreation are**a.**

Nagle Downtown Walkway 2.5 acres

Ownership: Recreation Commission

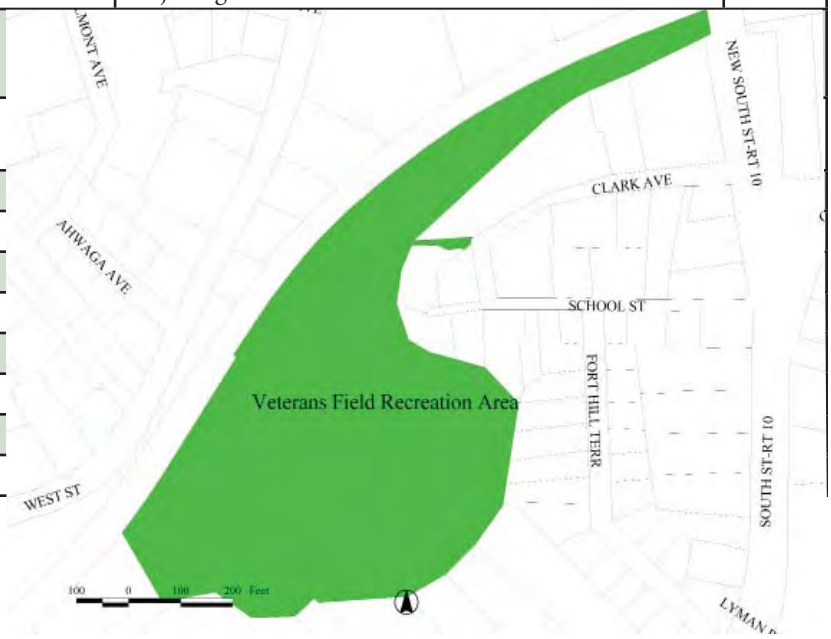
Management:

Maintenance:

Location: Between Main St & Old South St parking lot

Acquisition history:

Date	Book, page or other	Description	Acres
6/28/1985	B2582, p243	Entire walkway	
	PB134, p96		
10/21/1985	B2634, p331	Project agreements	
	B3752, p40		
5/15/1990	B3561, p271		
	PB166, p89		
5/15/1990	B3561, p275		
	PB167, p121-123		
5/15/1990	B3561, p279		
7/5/1991	B3752, p35		
7/5/1991	B3752, p31		
	PB171, p36		
11/27/1991	B3834, p265		



Signage: "A Cooperative Conservation Project Between the Northampton Recreation Commission and the Commonwealth of Massachusetts"

Description:

Portion of the Manhan Rail Trail from Hampton Avenue parking lot to Main Street on the former railroad right-of-way. Site is adjacent to the Historic Mill River for the walkway's western end. A small park east of Pleasant Street is maintained by the Gleasons in return for a right-of-way across the park to their building. Hampton Court holds a right-of-way across the Hampden Avenue Parking Lot and in

return, maintains the walkway from Pleasant Street to the parking lot. The Strong Block is responsible for snow clearance from the Depot parking lot to Main Streert.

Pulaski Park (formally Main Street City Park) 1 acre

Ownership: City (acquired for Parks & Recreation, subject to Article 97)

Management:

Maintenance: DPW

Location: Main St, New South St

Acquisition history:

Date	Book, page or other	Description	Acres
1893	B457, p21-25	Edward H.R. Lyman with reversion clause	
1905	PB593, p51	Plan	
1906	B603, p319	J.B. O'Donnell	
8/22/1906	PB593, p33	Plan	
1908	B632, p333-335 & 429	Edward H.R. Lyman	

Description:

A small rectangular park with memorials, benches, and paths for sitting and strolling, this site is located in the heart of downtown Northampton helps define downtown. It receives heavy citywide use.

History:

1904 Main Street City Park proposed.

1906 Contributions of over $27,000 to purchase Prindle and Holley properties for park.

1906 Aldermen authorized purchase of said Holley and Prindle properties for Park purposes. Holley and Prindle parcels on Main Street ordered to be taken in fee by City for use as public park.

1907 Funds transferred ($4,963) to Park Commissioners for development of Main Street Park.

1907 Protest by owners of Holley and Prindle properties.

1907 Architect Joseph Gabringer of New York selected for park plans. Plan of Park. Designed to provide an appearance of being much larger, the perspective being so arranged, so that the walks are laid out with that intention. At intervals, beside curved walks, concrete seats will be placed in shrubbery where people can spend moments near others but practically shut off from them by dense shrubbery, hence undisturbed.

1907 Work started. Prindle House moved.

1908 Settlement of claims of former owners of Holley and Prindle sites.

1908 Conditional transfer of land in rear of Academy of Music by estate of Edward H. R. Lyman. Must be devoted exclusively for public park or reversion to heirs of Edward H. R. Lyman.

1911 Purchase of Prindle property for use as public park in conjunction with Holley parcel.

1934 Letter opposing taking Main Street Public Park for high school site.

1954 Opposition to taking any part of Park for off-street parking.

1958 Letters to Gazette opposing plan of taking part of Main Street City Park for off-street parking.

1958 Plan of off-street parking withdrawn at City Council Meeting.

197# Pulaski Park Renovation $47,200. Design and plans: Huntley Associates.

Sheldon Field Recreation Area 12.848 acres

Ownership: Northampton Recreation Commission (Subject to Article 97 and two CRs)

Protection: **Two** Conservation Restrictions: Broad Brook Coalition to be transferred to Meadow City Conservation Coalition (2011)

Management: Recreation Commission

Maintenance: DPW, Recreation Division

Location: Bridge St, Old Ferry Rd

Acquisition history:

Date	Book, page or other	Description	Acres
	B601, p132	Historical F Field record	
	B1034, p521	Former lease, interests merged w/purchase	
	PB200, p40	Survey plan	
7/15/1999	B5738, p233	Sheldon deed	10.16
	B5738, p221	Sheldon CR to Broad Brook Coalition (BBC)	
10/28/2004	B8042, p203-204	Kielec Deed	2.688
	B8042, p190	Kielec CR to BBC (Life Estate Release)	
5/9/2008	PB217, p101; PB218, p37	Jasinski donation survey	
5/12/2008	B9482, p193	Jasinski deed, consideration: farm lease	1.654

Equipment: Four ball diamonds, two basketball courts/overflow parking, storage and restroom building, playground and joint recreation/park-and-ride parking w/bicycle lockers.

Description:

Heavily used recreation area.

Ray Ellerbrook Fields 5 acres

Ownership: City

Management: Recreation Commission

Maintenance: DPW, Recreation Division

Location: Burts Pit Road

Acquisition history: Legislation transfering the property to the City, followed by a transfer docuemnt from the state. Parcel is for general city use and is not permanently protected as open space. **(Note: Listed in permanently protected section of the plan because we hope to extend protection for most of the field in the near future.)**

Description: Multiuse fields, softball

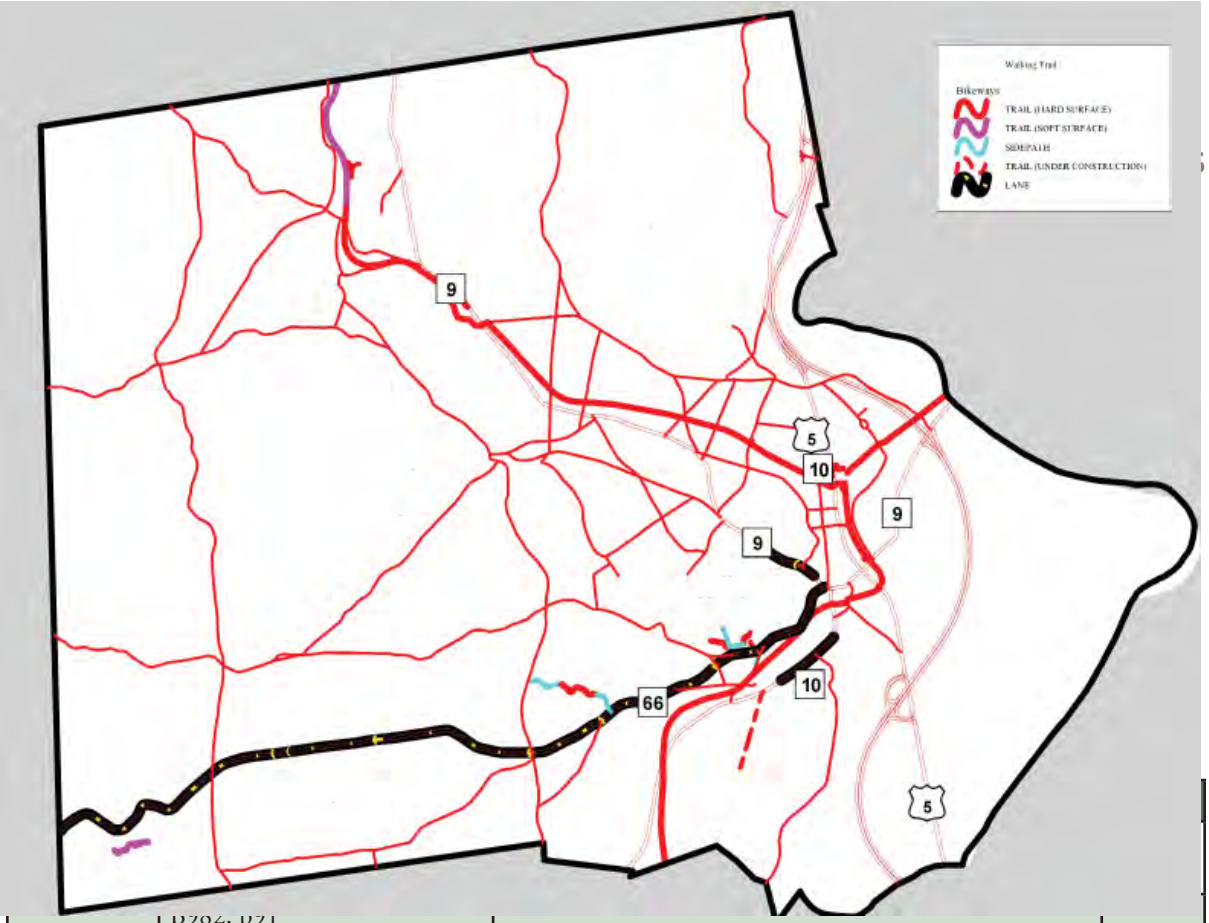
Trinity Row 0.5 acres

Ownership:

Management:

Maintenance: **RAIL TRAILS IN NORTHAMPTON**

Location: Main Street, Florence



	B982, p91		
	B1034, p320		
	B1036, p478-480		
		Land & Water Conservation Fund agreement	

Equipment: Baseball diamond, all-purpose paved area for basketball & street hockey, soccer field, restroom building (rehabilitated in 1998), unpaved parking area, playground equipment, & new drainage, skateboard park, & fields (2007).

Description:

This recreation area is heavily used year-round by leagues and by residents.

D: Rail Trails

Manhan Rail Trail in Northampton — 3.4 miles

Ownership: National Grid, City of Northampton (Nagle walkway & NSH Parcel on Earle St), & Commonwealth of Massachusetts (Registry of Deeds)

Easement: City of Northampton

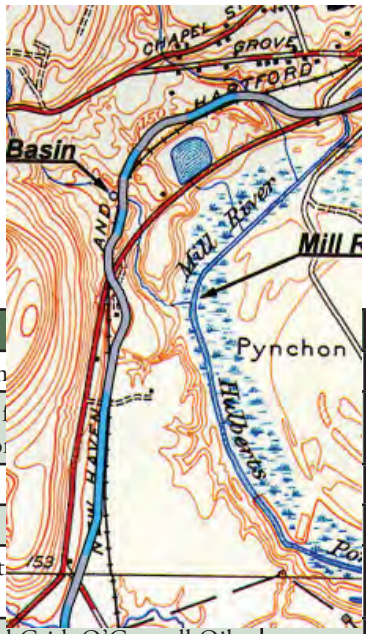
Location: King St (near State St) to Main St (downtown section)

Main St to Old South St (Nagle section)

Round House parking lot (downtown section, parking lot)

New South to box culvert south of Earle St (State Hospital Parcel B4)

Registry of Deeds off ramp



Hampshire and Hampden Canal at Manhan Rail Trail

Acquisition history:

Date	Book, page or other	Description	
6/27/1997	B5144, p152	Donation from Hampshire Coun	
12/9/1998	B5558, p19	NSH Earle St parcel (22,839 SF to Commonwealth if not used fo	
3/9/2002	PB191, p83-110	State St. to Easthampton	
5/31/2002	B6661, p92	Downtown	
2/4/2004	B7675, p182	Master deed of Strong Block—St for some maintenance of trail	
8/11/2005	B8388, p8	Earle/Grove taking from National Grid, O'Connell Oil, Bay State Gas Company	
10/26/2005	B8492, p105	Earle/Grove confirmatory deed from O'Connell Oil	
10/26/2005	B8942, p108	Earle/Grove sewer easement under Manhan Trail to O'Connell Oil	
11/7/2006	B8940, p175	Searle's Confirmatory Deed ($3,895.50)	
5/15/2007	B9128, p260	King Street $1,085 taking	44.48
8/17/2007	B9238, p237	Housing Authority to City (portion of Round House parking lot & related land for Manhan Rail Trail)	
5/6/2008	B9476, p49	Long/Fisher Deed at Route 10 ($3,300)	
5/13/2009	B9806, p150	Taking south of Earle St to Easthampton town line	
5/13/2009	B9806, p157	Confirmatory deed $1.00 Mass Electric (CPA funded check #282898)	
5/13/2009	B9806, p162	Confirmatory deed from Frank N. Fournier	
5/13/2009	B9806, p165	Surplus land to New England Power	
5/13/2009	B9808, p170	Easement Reservation for rail trail	
6/15/2009	B9591, p33	Confirmatory deed from Massachusetts Audubon	
5/27/10	B10186, p159	Bike path and access ramp completed	

Description:

The former Hampshire and Hampden Canal (reorganized as the New Haven and Northampton Canal) was abandoned in 1847 and much of the right-of-way was redeveloped as a railroad. The Manhan Rail Trail follows this historic right of way from a point mid-way between Earle Street and Route 10 to a point midway between Route 10.

The Manhan Rail Trail from Earle Street to the Easthampton City line includes $100,000 of Community Preservation Act assistantce ($1.00 for right-of-way from MA Electric and remainder for design and local construction costs).

Strong Block Condominium is responsible for maintaining paved paths and snow removal from Main Street to Union Station, including the stairs from Main Street and Strong Avenue, and not encroaching

on the park behind the building.

Manhan Rail Trail Spur—Florence Road Spur 48,529 square feet

Ownership: Pathways CoHousing Condominiums & Rocky Hill CoHousing Condominiums (both fee)

Right-of-way: Northampton Conservation Commission

Location: Rocky Hill CoHousing (Florence Road) & Pathways CoHousing (Ice Pond)

Acquisition history:

Date	Book, page or other	Description	Feet
8/5/2004	B7962, p177	Pathways CoHousing (Ice Pond), Order of Taking	24,529
10/14/2004	B8023, p144	Confirmatory deed	
11/29/2004	B8082, p258	Rocky Hill (Florence Rd)	24,000
11/29/2004	B8082, p274	Rocky Hill subordination	

Description:

This parcel is 0.6 miles long and serves as a right-of-way for the portion of the bike path that connects Florence Road, Rocky Hill CoHousing, Pathways CoHousing, Ice Pond Drive, and Route 66.

Norwottuck Rail Trail (City) 8 acres/5 miles

Ownership: Mass Electric; City of Northampton (Jackson St ramp); WJG Realty Trust (Stop & Shop); Coolidge Northampton, LLC (Walgreens); Beaver Brook Nominee Trust (spur to Grove Ave, Leeds)

Right-of-way: City of Northampton

Location: State St to Bridge Rd (Francis P. Ryan section), Bridge Rd to Williamsburg Town Line (Leeds section), Grove Ave to railroad bed (Grove Ave/Beaver Brook spur), State St to King St (Stop & Shop easement), King St to railroad (Walgreens easement)

Acquisition history:

Date	Book, page or other	Description	Acres
5/3/1982	B2274, p282	Francis P. Ryan section	
5/22/2009	PB220, p91	Jackson St ramp	
5/22/2009	PB220, p89-90	Related Safe Routes to School	
5/27/2009	B9823, p35	Jackson St ramp, taking Mass Electric	
5/27/2009	B9823, p35	Jackson St ramp, taking Polachek	
6/9/2009	B9843, p331	Jackson St ramp, confirmatory deed Polachek	
2004	PB200, p27	Leeds section	
6/23/2005	B8314, p46	Taking	
5/13/2009	B9806, p180 & 183	Confirmatory, Mass Electric	
5/22/2009	PB220, p92	Route 9/Bridge Roundabout & bicycle access	
6/2/2009	B9833, p202	Confirmatory, Francis & Linda Sweeney	
4/6/2007	B9109, p48	Beaver Brook to Grove Ave right-of-way	
	LC7, p70	Land Court certified of title 713, Stop & Shop spur	

Date	Book, page or other	Description	Acres
8/14/2008	PB219, p23	Walgreens spur	
10/1/2008	B9610, p210	Walgreens spur (as traffic mitigation)	
7/8/2009	PB221, p13	Rail trail by Megan O'Brien property	
	PB223, p50	Survey of Farkas Property, Williamsburg	
7/2/2010	B10225, p180	Deed from Laurie Farkas, Williamsburg	
10/8/2010	B 10329, p 57 & 62	Farkas propetty to Williiamsburg. City retains easement	

Description:

The Norwottuck Rail Trail through the Jackson Street ramp includes Community Preservation Act assistance ($4,000.00) for right-of-way from Massachusetts Electric and the remainder for design, soft costs, and non-participating construction costs.

Norwottuck Rail Trail (State) 6 acres

Ownership: Massachusetts Department of Conservation Resources

Location: Damon Rd

Acquisition history:

Date	Book, page or other	Description	Acres
2/6/1985	B2546, p132	Parcel 25A-166	6.01
2/6/1985	B2546, p132	Parcel 25A-167	0

Description:

The Norwottuck Rail Trail extends from Woodmont Road in Northampton to Amherst. It provides a major recreation and transportation route from non-motorized vehicles, especially for those in wheelchairs and for pedestrians. It links to the UMass bikeway in Amherst and will eventually link to the Northampton rail trail network.

5.2: Non-Permanently Protected

Bridge Street School

Ownership: City

Management: School Department

Location:

Equipment: Outdoor: basketball court, some swings

Description:

This elementary school site offers limited outdoor recreational facilities. It is used heavily throughout the school year by the school and neighborhood residents.

Burts Pit Road Recreation Area, Parcel C — 15.49 acres

Ownership: City of Northampton (acquired for general City use)

Location:

Acquisition history:

Date	Book, page or other	Description	Acres
1994	Chapters 86 & 307	Acts of 1994	
12/9/1998	B5558, p19		

Description:

This is a former cornfield to be used as a recreation area. It has two softball fields and one soccer field. The

property is not dedicated to recreation use and could be converted to other uses (e.g., future elementary school site and/or fire sub-station) if those are ever needed to accommodate new growth in this area of the town.

Clear Falls Recreation Center 73 acres

Ownership: Private (use by membership only)

Location: Drury Ln

Description:

Located in the extreme southwest corner of Northampton, this recreation area offers swimming, picnicking, and nature trails for hiking. It also has a field house, snack bar, and picnicking shelters. With a moderate level of use, this area attracts residents from throughout the region. As of 2005, the property was currently on the market for sale.

Driving Range

Ownership: Private

Location: Haydenville Rd

Description:

A practice driving range for golf, this facility receives medium summer use by residents throughout the region. It also has a snack bar. As a commercial facility, a fee is required for admission.

Robert K. Finn Ryan Road School 18.2 acres

Ownership: City

Management: School Department (building use), Recreation Department (field use)

Location: Ryan Rd

Equipment: Outdoor: playground, five ball diamonds, soccer field, skating area

Indoor: gymnasium with six basketball hoops, four volleyball nets; locker rooms w/ shower facilities

Bike racks, drinking water, first aid facilities

Description:

Both indoor and outdoor facilities are available on this 15-acre school site that receives medium-heavy, year-round school, neighborhood, and citywide use. The rear wooded area could be utilized for some form of outdoor recreation or nature education.

Florence Community Center (former Florence Grammar School) 2.5 acres

Ownership: City

Management: School Department, leased to Property Committee

Location:

Equipment: Outdoor: limited playground, blacktop play area

Description:

This former grammar school (closed in 1992) is now a City alternative high school with some of the inside space serving as a community center.

Hampshire YMCA 4.3 acres

Ownership: YMCA (use by membership or fees)

Location: Massoit St

Description:

This facility is utilized on a region-wide basis. It offers racquetball, basketball, volleyball, and swimming (two pools). It has a sauna, steam room, and fitness center. It is used heavily year-round.

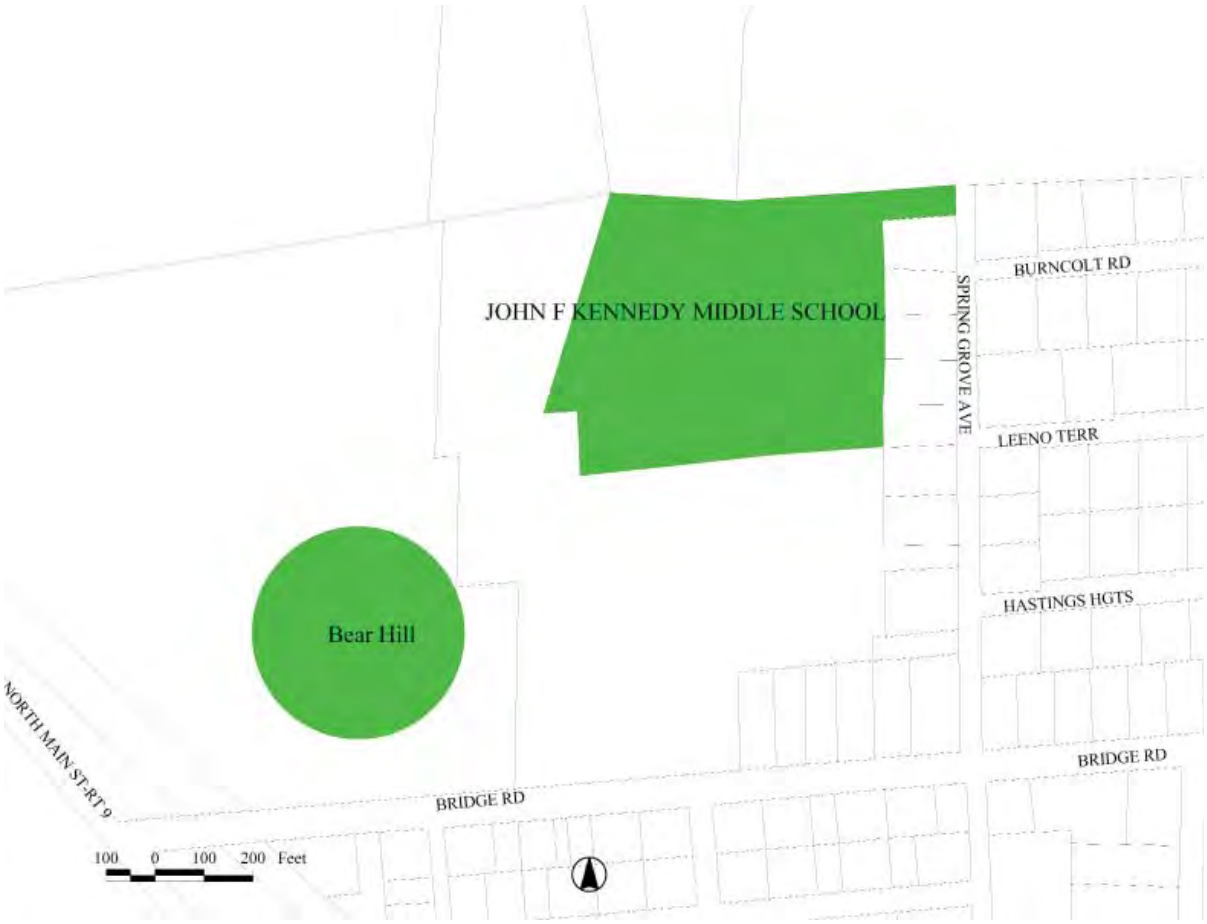
Keyes Field

Ownership: Florence Savings Bank

Location: Keyes St at Northampton Bike Path

Acquisition history:

Date	Book, page or other	Description	Acres
3/8/2000	B5906, p326	Declaration of Open Space Restriction	



Description:

This field is protected by the covenants, "as open space with reasonable access to the public for passive use and enjoyment under reasonable conditions."

Jackson Street School 7.2 acres

Ownership: City

Management: School Department (building use), Recreation Department (field use)

Location:

Equipment: Outdoor: extensive playground equipment, two ball diamonds, one soccer/football field, one touch football field, two basketball courts

Indoor: gymnasium with six basketball hoops, gymnastics equipment, bleachers for 175 people

Parking, bike racks, showers, drinking water, supervision, first aid facilities

Description:

This elementary school site offers both indoor and outdoor recreational facilities that are heavily used by the school and the neighborhood. The site also offers the City's first "adventure playground" (wooden play apparatus), constructed by volunteers. The wooded area on site could possibly provide outdoor education or nature study activities.

JFK Middle School 15 acres

Ownership: City

Management: School Department (building use), Recreation Department (field use)

Location: Florence St, Leeds

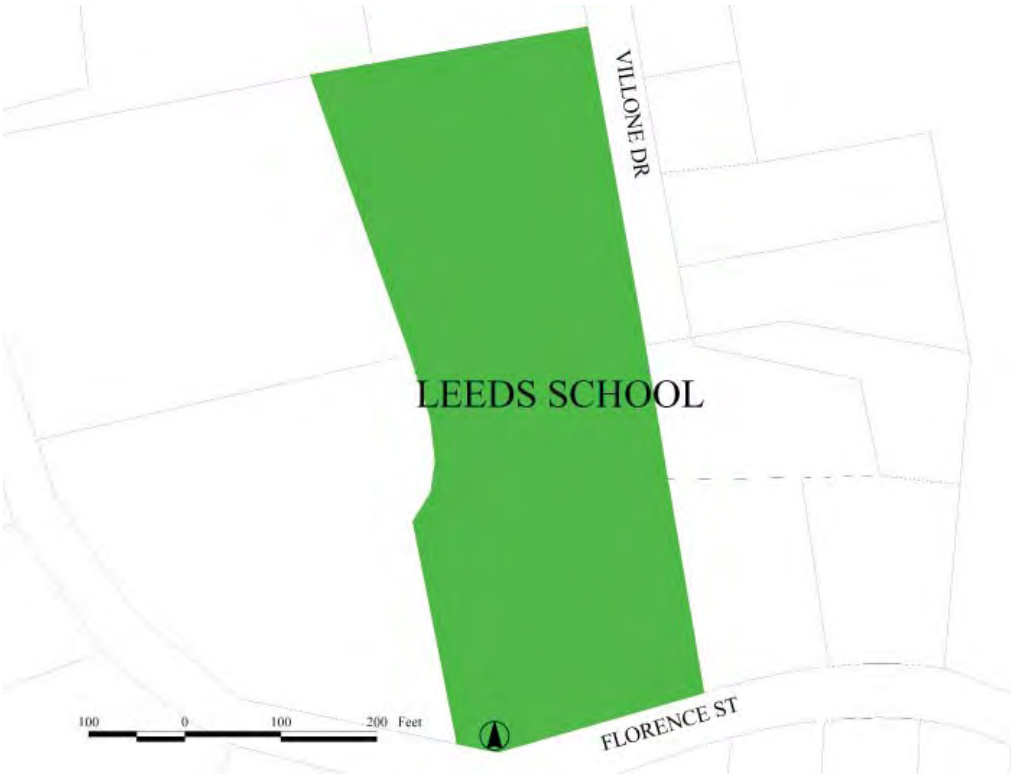
Equipment: Outdoor: two ball diamonds, three soccer fields, football field

Indoor: gymnasium, six basketball hoops, two volleyball nets

Bike racks, showers, drinking water, supervision, first aid

Description:

Heavily used primarily by the school, this site contains both indoor and outdoor facilities. The facilities are in generally good condition; however, recurring problems with neighbors have limited the use of this site.



Edmond J. Lampron Memorial Park

See Bridge Street School above for map

Ownership: City

Maintenance: DPW

Location:

Description:

A small, ornamental triangle of about one-acre, this site is used for strolling and sitting. It is located in

front of the Bridge Street School. Benches are located onsite. This is a medium use park.

Leeds Memorial 1.6 acres

Ownership: City

Maintenance: DPW

Location: Florence St, opposite Leeds School

Description:

A small, grassed area, this site contains memorials. It is used by Leeds residents. This park has a memorial, but it is not appropriate for additional memorials. However, benches would increase its potential for use.

Leeds School 9.3 acres

Ownership: City

Management: School Department (building use), Recreation Department (field use)

Location: Florence St, Leeds

Equipment: Outdoor: playground, ball diamond, skating area, soccer field

Indoor: gymnasium with two basketball hoops, two volleyball nets, pull-up bars; auditorium

Parking, bike racks, supervision, first aid facilities

Description:

This 9.3-acre site contains both indoor and outdoor recreational facilities. It is used year-round by the school, local neighborhoods, and residents city-wide. This site is large enough to be redesigned to accommodate other types of field layouts, although some site work would be necessary due to sloping terrain.

Northampton Community Music Center (formerly South Street School)

Ownership: City

Management: Northampton Community Music Center

Location: Florence St, Leeds

Description:

This former elementary school is now used by the Music Center for music education. The parcel includes a small tot lot and access from South Street to the adjoining Veterans Field Recreation Area.

Northampton Country Club

Ownership: Private

Location: Main St, Leeds

Description:

This private golf club offers its members a nine-hole golf course, swimming pool, and clubhouse. The

establishment receives medium use during the golfing season by residents throughout the region.

Northampton High School 23 acres

Ownership: City

Management: School Department (building use), Recreation Department (field use)

Location:

Equipment: Outdoor: playground, two storage buildings, three ball diamonds, soccer field, field hockey field, two grassed gym fields, track, lacrosse field, bleachers, concession stand

Indoor: gymnasium, universal gym, bleachers, basketball hoops, auditorium

Description:

This large school site offers both indoor and outdoor recreational facilities. It is used heavily by the school (physical education and interscholastic sports) and by residents citywide. Outdoor facilities are used very heavily in the spring, summer, and fall, depending on the sport season. Ramps and special toilet facilities are available for the handicapped. A small triangular, grassed area is located directly across from the High School. It serves as an informal park, although there are no facilities.

Northampton Revolver Club 34.3 acres

Ownership: Northampton Revolver Club, Inc

Location: Ryan Rd

Description:

The Club offers indoor and outdoor target shooting facilities to members from throughout the region.

Oxbow Marina 56.1 acres

Ownership: Private

Location: Island Rd, CT; Oxbow River

Description:

The Marina is a commercial facility, offering boat rentals, storage, and mooring facilities; tennis, swimming, and horseshoes. Utilized on a region wide basis, this facility receives heavy summer use. Fees are charged. The Marina allows one of Northampton's soccer leagues to use their fields during the summer.

Peoples Institute 1.5 acres

Ownership: Peoples Institute

Location: Gothic Street

Description:

This facility offers arts and crafts classes, educational programs, and summer day camps for elementary age children. The facility includes a dance floor and an outdoor pool. Fees are charged.

Pine Grove Golf Course 132.3 acres

Ownership: Private

Location: Old Wilson Rd

Description:

With an 18-hole golf course and field house, this facility is open to members as well as non-members for a fee. Level of use is medium to heavy throughout the golf season. It also offers cross-country skiing in the winter. The facility has a regional-use population.

Smith College Mill River, Paradise Pond, Arboretum, and Athletic Fields

Ownership: Smith College

Location: Smith College, Mill River, West St

Description:

This recreational area is part of the Smith College campus and receives heavy use by both students and area residents (with permission). Facilities include playfields, track and field, tennis courts, rowboats, and ice-skating. It includes a heavily used foot trail from Paradise Pond to the northern edge of Smith College, along Mill River. The trail then continues to Ward Avenue and Federal Street.

Smith School V.A. Parcel/Forestry Studies 182.1 acres

Ownership: City/Smith Vocational School

Location: Haydenville Rd

Acquisition history:

Date	Book, page or other	Description	Acres
3/4/1958	B1267, p217		
4/30/1987	B2961, p193		

Description:

The Smith Vocational School for Forestry Studies uses this large wooded site. The site contains an informal trail that could be used to link to a proposed northern corridor trail. It also contains land that could allow an extention of that trail to Route 9. It has been suggested in the past that part of this property be used for a future high school site and some of it for affordable housing. Others have indicated a desire to keep this as permanent open space for use by the Smith School.

Smith Vocational and Agricultural High School 78.9 acres

Ownership: City/ Truesses of Smith Vocational School

Recreation Department manages tennis courts and fields

Location: Locust St

Acquisition history:

Date	Book, page or other	Description	Acres
12/22/1845	Box 249, #2	Will of Oliver Smith	
12/22/1905	B601, p287	Deed	

Equipment: Outdoor: eight tennis courts, soccer field, two ball fields (in construction by students)

Indoor: gymnasium, universal gym, six basketball hoops

Description:

This site contains the Smith Vocational School, the original core farm, tennis courts, and recreation fields. It also contains a public farm trail.

This site is used heavily by the school for physical education classes and interscholastic sports and by residents citywide throughout the school year. With a two-acre field area and indoor facility, it offers both outdoor and indoor recreational activities. There are handicap accessible facilities. There is also a large wetland on the south side of the property. The land immediately west of the developed part of the Smith Vocational School campus is currently used for agriculture (primarily grazing land with a farm trail constructed in 1993).

South Main Street and Berkshire Terrace

Ownership: City

Maintenance: DPW

Location:

Description:

This is a small, grassed corner lot with no facilities.

Trinity Row 0.5 acres

Ownership: City

Maintenance: DPW

Location: Florence

Description:

This is an ornamental, open space street park, containing a foundation and various memorials. This site receives light, year-round, local neighborhood use. Benches could increase its potential for use.

Tri-County Fairgrounds 42 acres

Ownership: Hampshire, Franklin, & Hampden Agricultural Society

Location: Old Ferry Rd, Fair Rd, Bridge St

Description:

The Fairgrounds receive heavily regional use during the fair and racing season. This facility contains an exhibition area, race track (horse), baseball field, playfields, picnic area, and a field house.

Former Vernon Street School

Ownership: City

Management:

Location:

Equipment:

Description:

This is a former school that includes playground equipment used by the surrounding neighborhoods.

VFW Memorial

Ownership: City

Location: Center of Florence

Description:

A small park with a fountain and memorial. It is lightly used by Florence residents.

5.3: Preservation and Historical Restrictions

Academy of Music

Ownership: City

Protection: Preservation Restriction Agreement

Location: Main St

Acquisition history:

Date	Book, page or other	Description	Acres
10/10/1986	B2826, p49		

David Ruggles Center

Ownership: Committee for Northampton, Inc

Protection: Preservation Restriction Agreement

Location: 225 Nonotuck St, Unit D (Map ID: ____)

Acquisition history:

Date	Book, page or other	Description	Acres
8/28/2009	B9948, p215	$15,000 in CPA funds for PR & project	

Hatfield Street School

Ownership: Private

Protection: Preservation Restriction Agreement (City has right to enforce)

Location: 52 Hatfield St

Acquisition history:

Date	Book, page or other	Description	Acres
10/22/2002	B6843, p211		

The Manse

Ownership: Private

Protection: Preservation Restriction Agreement (Stewards of the Manse has right to enforce)

Location: 54 Prospect St

Acquisition history:

Date	Book, page or other	Description	Acres
	B3198, p91	Preservation Restriction held by Stewards of the Manse	

Masonic Street Fire Station

Ownership: Private (Media Education Foundation)

Protection: Preservation Restriction Agreement (City has right to enforce)

Location: 60 Masonic St

Acquisition history:

Date	Book, page or other	Description	Acres
6/28/2002	B6696, P48	Deed with City retained Preservation Restriction	
4/10/2007	B9093, P205	Reference to Preservation Restriction	
7/25/2002	B6724, P42	Reference to Preservation Restriction- back building	

West Farms Chapel

Ownership: Private

Protection: Preservation Restriction Agreement (City has right to enforce)

Location: West Farms Rd

Acquisition history:

Date	Book, page or other	Description	Acres
6/29/1987	B3007, p250-252		

5.4: Affordable Housing Restrictions & Limited Developments

34 Barrett Street

Ownership: Private-- Prevent, Inc (found in 10/14/2003 letter)

Protection:

Expiration: 49 years from 2/19/1998-2/19/2047

Enforcement: Northampton & Prevent, Inc/Honor Court on subrecipient agreement #218-98

# of units: 7-8 program participants of Prevent, Inc/Honor Court (subrecipient agreement on 2/27/1998, #218-98)

Location: 34 Barrett St

Acquisition history:

Date	Book, page or other	Description	Acres
5/8/1997	B5109, p340	Quit claim deed	
2/19/1998	Contract #218-98	Loan for rehab. of single family home. Terms: must be used to provide direct benefit to persons of low & moderate income for 49 years (CDBG Assistance)	
3/24/1998	B5326, p195	2nd mortgage	
		Subordination agreement	
9/7/2003	B7490, p189	Loan repaid, discharge	

575 Bridge Road (The Gables and formerly Brickyard Hollow)

Ownership: Private (#215-96, see #3 of agreement) was Valley CDC/HAP

Protection: Permanently affordable "through a mechanism approved by the Northampton Housing Partnership" (#215-96, #2 of agreement); for people earning 80% of median income

Expiration:

Enforcement: City/HAP/Valley CDC/HUD (found in Deed Rider, 6/25/1998)

# of units: 1 (1 unit, 3 bedroom, single family) (#215-96 on 4/4/1996)

Location: 575 Bridge Rd

Parcel ID:

Acquisition history:

Date	Book, page or other	Description	Acres
4/4/1996	Contract #215-96	Grant for acquisition to Valley CDC for $25,000	

36 Bedford Terrace/74 State Street

Ownership: Smith College **to O'Connel Development**

Protection: 99 years (8/17/2005)

Expiration: 8/17/2104

Enforcement: City

# of units: 26; 14 affordable at 60% Area Median Income (AMI), 10 at 80% AMI, 2 at market rate

Location: 36 Bedford Terrace

Acquisition history:

Date	Book, page or other	Description	Acres
6/4/2007	B9149, p259	Restrictive covenant for affordable housing	

82 Bridge Street

Ownership: Valley CDC

Protection:

Expiration:

Enforcement: Valley CDC

# of units: 15 unit-SRO housing (Valley CDC letter, 10/10/2000), units are rentals, according to FY98 Audit by Valley CDC

Location: 82 Bridge St

Acquisition history:

Date	Book, page or other	Description	Acres
		Subordination and Intercreditor Agreement	
4/22/1990	Contract #193-90	Grant to Valley CDC for down payment for $25,000	
5/20/1990	Contract #207-90	Grant to Valley CDC for acquisition for $12,500Terms: no payments due. If property is still used as SRO after date of execution, loan shall be forgiven in its entirety	
9/6/1990	Contract #75-91	Loan to Valley CDC for acquisition for $25,000Terms: 1st payment to be made 6 years from execution; subsequent payments annually in amount of $25,000 or 50% of residual receipts for prior fiscal year	
9/14/1990	B3620, p20	Mortgage	
8/6/1991	B3772, p78	Conditional grant secured by mortgage	

72–74 Barrett Street (72 Barrett Street, #213), Coachlite Condo

Ownership: Private (sold to tenant according to 6/14/2002 letter)-- was Valley CDC

Protection: Could be sold to person earning 50% of median (#92-94) or rented long-term affordability; later sold to tenant earning 54% of median income

Expiration:

Enforcement: Valley CDC/City (#92-94)

# of units: 1 (according to 6/17/2002 letter from Valley CDC)

Location: 72-72 Barrett St

Acquisition history:

Date	Book, page or other	Description	Acres
10/6/1993	Contract #92-94	Grant to Valley CDC for acquisition of one bedroom unit (13A) for $6,000	

Cottage Kitchen (see 17 North Maple Street)

75 Forbes Avenue (see 68 Vernon Street)

37 Franklin Street

Shelter for Battered Women (confidential location & references)

Garfield Avenue Limited Project—Habitat for Humanity

Ownership: Private (was Habitat for Humanity)

Protection: Affordability Deed restriction (homes under construction, restriction not yet closed)

Expiration:

Enforcement: City, Habitat for Humanity

# of units: 5 affordable units plus one market rate single family lot sold by City

Location: Garfield Ave (formerly 39 Verona St)

Parcel ID:

Acquisition history:

Date	Book, page or other	Description	Acres
6/20/1995	B4685, p81	Quitclaim deed with Katherine Georgianna	
3/1/2006	B8632, p77	Confirmatory deed with Joanne Montgomery	
1/4/2010	B10067, p326	Deed	
1/4/2010	B10068, p1	Affordable Housing Regulatory Agreement	
1/4/2010	B10068, p34	Agreement Regarding Garfield Ave Extension	

Description:

This was originally planned as a Northampton Area Community Land Trust project (CDBG loan deposit repaid and CDBG grant for consulting costs). The finding of hazardous materials ended that project.

The City purchased the property with City and CDBG funds as a settlement for any involvement with hazardous materials (the City had permitted this as a dump site in the 1800s). It is developing this site as a limited development project with conservation land and affordable housing.

66 Green Street—New Units at West Street due to Smith Construction

Ownership:

Protection:

Expiration:

Enforcement:

# of units: SRO Housing

Location: 66 Green St

Acquisition history:

Date	Book, page or other	Description	Acres
3/6/1988	Contract #182-89, 182-89-1Mortgage B3644, p322	Loan to HER, Inc for acquisition for $25,000	
3/6/1989	Contract #181-89	Grant to HER, Inc for acquisition for $25,000	
12/5/1990	Contract #141-91, 141-91-1	Loan to HER, Inc for bridge loan for $7,000	
12/5/1990	Contract #142-91	Grant to HER, Inc for interim staffing for $2,650	
7/31/1991	B3772, p280	Subordination agreement	
7/31/1991	B3772, p294	Subordination agreement	
5/14/1996	Contract #141-91, 141-91-1	Loan forgiven	
3/5/1997	Contract #259-97	Grant to HER, Inc for emergency sewer repairs for $5,000	
1/24/2007	Contract #182-89, 182-89-1B9029, p39	Loan forgiven	

27 Hooker Avenue

Ownership: NACLT **then VCDC**

Protection: 3 units at 80% of median income (8/20/1992 application)

Expiration:

Enforcement: NACLT owns land, "owners will be low income families." "The NACLT will continue to own the land and lease it to the families." (9/14/1992 application for financing)

# of units: 3 units (one of which is handicap accessible, according to Memorandum of Understanding on 12/4/1992)

Location: 27 Hooker Ave

Acquisition history:

Date	Book, page or other	Description	Acres
12/1/1992	Contract #132-93	Grant to NALCT for acquisition and pre-development for $30,000	

Ice Pond

Ownership: **Six** Private single homes (was TCB Hospital Hill)

Protection: At or below 80% of median income (#246-03, p3), 99 years of affordability

Expiration:

Enforcement: Northampton, TCB Hospital Hill (#246-03)

# of units: 6 homes, 2 of which shall include accessory apartments (#246-03 grant agreement)

Location: Ice Pond Dr (includes #31, #32, #67, #71)

Acquisition history:

Date	Book, page or other	Description	Acres
		Deed Rider	
6/3/2003	Contract #246-03	Grant to TCB Hospital Hill, LLC for acquisition of 6 residential buildings for $35,000	
7/13/2004	B7900, p85	Lot 1	
6/21/2004	B7863, P170	Lot 25	
12/10/2004	B8097, p119	Lot 5, #31 Ice Pond Drive	
11/3/2004	B8051, p299	Lot 20, #32 Ice Pond Drive	
8/16/2004	B7950, p145	Lot 12, #67 Ice Pond Drive	
8/10/2004	B7941, p203	Lot 13, #71 Ice Pond Drive	

Country Lane Estates (formerly Meadowbrook)

Ownership: Rental (#156-05, p2)

Protection: 40 years for 209 of units earning less than 60% of median and 13 units earning less than 50% of median (#156-05)

Expiration: 12/28/2044

Enforcement: City, Preservation of Affordable Housing, LLC (#156-05, p3)

# of units: 252 units rental housing (222 units affordable)

Location: Bridge Rd

Acquisition history:

Date	Book, page or other	Description	Acres
12/28/2004	Contract #156-05	Grant to Preservation of Affordable Housing for acquisition for $100,000Terms: 40 years affordability for 209 units for households earning less than 60% of area median income & 13 units for households earning less than 50% of area median	
2/2/2005	B8153, p240	Promissory Note, Assignment of Note & Mortgage, Sewer easement	

Millbank II/Michaelman Avenue

Ownership: Valley CDC

Protection: 60% of median

Expiration:

Enforcement: City, Valley CDC

# of units: 24 rental units

Location: 18/79 Michaelman Ave, adjacent to 79 Michaelman Ave

Acquisition history:

Date	Book, page or other	Description	Acres
	#78-03		
4/12/1991	Contract #218-91	Grant to Valley CDC for pre-development costs for $20,000	
4/22/1991	Contract #218-91-1	Grant to Valley CDC for increase of total contract amount to $50,000 for $30,000	
3/25/1993	Contract #218-91-2	Grant to Valley CDC for increase total contract amount to $100,000 for $50,000	
3/24/1994	Contract #218-91-3	Grant to Valley CDC for wording change paragraph 2	

1–3 North Main Street, Florence

Ownership: Rentals Valley VCDC

Protection: Initial 40 years—25% units 50% median income; 75% units 80% median; subsequent 10 years—80% income

Expiration: 10/27/2053

Enforcement: City, Valley CDC

# of units: Minimum 17 units SRO housing (#223-03-2)

Location: 1-3 North Main St, Florence

Acquisition history:

Date	Book, page or other	Description	Acres
4/30/2003	Contract #223-03	Loan to Valley CDC for interim operating expenses for $35,000Terms: must maintain 20 SRO units as follows:Initial term: 25% (5 units) affordable to persons at/below 50% of area median income; 75% (15 units) affordable to persons at/below 80% of area median income for 50 yearsSubsequent term: 100% (20 units) affordable to persons at/or below 80% of area median income for 10 years	
10/27/2003	Contract #223-03, Amendment No. 1	Loan to Valley CDC for installation of new roof for $9,574.50	
6/7/2004	Contract #223-03, Amendment No. 2	Loan to Valley CDC for bridge loan for acquisition for $145,000	
1/8/2005	B8146, p237	Agreement	

65–67 North Main Street, Florence

Ownership: Units sold—discharged to homebuyers

Protection:

Expiration:

Enforcement:

# of units:

Location: 65-67 North Main St, Florence

Parcel ID:

Acquisition history:

Date	Book, page or other	Description	Acres
4/11/1997	Contract #274-97B5099, p321	Loan to Valley CDC for acquisition for $20,000Mortgage	
4/11/1997	Contract #275-97	Grant to Valley CDC for acquisition for $40,000	
9/15/1997	B5199, p142	Subordination of mortgage	
6/14/2001	B6244, p151, 166	Subordination agreement, Quitclaim deed, Deed Rider	

16 North Maple Street, Florence (The Maples)

Ownership: Valley CDC

Protection:

Expiration:

Enforcement: City, Valley CDC

# of units: 11 rentals (Daily Hampshire Gazette 12/16/1992, SRO Housing fact sheet)

Location: 16 North Maple St, Florence

Acquisition history:

Date	Book, page or other	Description	Acres
1/17/1992	#171-92	Grant to Valley CDC for acquisition for $95,000	
3/25/1992	Contract #207-92-1	Loan to Valley CDC for bridge loan soft costs for $8,624	
6/5/1997	Contract #207-92-1	Loan paid	

17 North Maple Street, Florence (Cottage Kitchen)—The Florence Inn

Ownership: Service Net, Inc

Protection: Permanently affordable units (#2 in agreement) for homeless or at risk of homelessness (2/24/1995 Loan Agreement (#206-95)

Expiration:

Enforcement: HUD funded section 8 program

# of units: 14 (affordable units—SRO Housing)

Location: 17 North Maple St, Florence

Acquisition history:

Date	Book, page or other	Description	Acres
6/27/1994	Contract #24-95	Grant to Valley Programs for acquisition for $25,000	
8/3/1994	Contract #72-95	Loan to Service Net, Inc for acquisition for $75,000Terms: remaining balance of $15,000 to be repaid at annual rate of $1,000 per year beginning 1/1/2011Must be repaid if property is sold or converted to use other than SRO	
2/24/1995	Contract #206-95	Loan to Service Net, Inc for interim management costs for $3,000	
1/30/1996	Contract #206-95	Paid	
8/28/1996	Contract #72-95, Contract #72-95-1A	Forgiven, $37,900	

Paradise Pond Apartments (155 West Street)

Ownership: **Northampton Housing Authority owns,** HAP, Inc long term ground lease

Protection: 99 years affordability according to subrecipient agreement #188-04

Expiration: 4/22/2103

Enforcement: City, HAP, DCHD

# of units: 12-unit family rental housing

Location: 155 West St

Acquisition history:

Date	Book, page or other	Description	Acres
4/22/2004	Contract #188-04	Loan to HAP, Inc for architectural design & project construction for $44,000 ($112,500 total amount)	

Date	Book, page or other	Description	Acres
8/27/2004	Contract #188-04, Amendment No. 1	Loan to HAP, Inc for increase amount of initial contract for $68,500	
8/23/2005	B8404, p187	Mortgage w/Paradise Pond, LLCLessor's Estoppel Certificate & Agreement w/NHA	
		Easement from Smith College for access	
		Easement from Housing Authority for public access along reiver	

96 Pleasant Street (The Lorraine)

Ownership:

Agency: HAP

Protection: Duration that Section 8 Moderate Rehabilitation rental subsidies—min. of 20 units must be maintained at 50% or below of median income; project shall continue to seek Section 8 subsidies. W/o Section 8, minimum of 20 units at 80% or below median and half at/below 50%

Expiration:

Enforcement: City, HAP

# of units: 28 units SRO Housing (#176-00

Location: 96 Pleasant St

Acquisition history:

Date	Book, page or other	Description	Acres
6/30/1990	Contract #3-91	Loan to Wickles for rehab loan $25,000 (foreclosure on property b/c loan not repaid)	
12/17/1999	Contract #176-00	Loan to HAP for acquisition for $170,000	
3/20/2000	B5902, p234	Promissory note	

109 Ryan Road

Ownership: Private **was** PV Habitat for Humanity

Protection: 50 years (5/13/2004 Deed Rider)

Expiration: 5/13/2054

Enforcement: PV Habitat

# of units: 2 (condo units 109A & 109B)

Location: 109 Ryan Rd

Acquisition history:

Date	Book, page or other	Description	Acres
7/14/2000	B5984, p203	Confirmatory deed ($45,000) for full payment to Pauline Sienkiewicz for damages for Taking by Eminent Domain	

Date	Book, page or other	Description	Acres
2/21/2001		Loan to PV Habitat for Humanity, Inc for City transfer of property valued at $57,500 for affordable housing for two income eligible families	
4/30/2001	B6197, p22	Mortgage ($57,500), forgive in 50 years from date of signing (see mortgage)	
5/13/2004	B7801, p124	Unit deed ($64,980) for unit 109A, Chamnan Koy Tan & Huy Kean Tan	
5/13/2004	B7801, p149	Unit deed ($46,455) for unit 109B, Thomas Paul Goldscheider	

Ryan Road Limited Project—Habitat for Humanity

Ownership: Private (was Habitat for Humanity)

Protection: Affordability Deed restriction

Expiration: 5/13/2054

Enforcement: City, PV Habitat

# of units: 2 affordable units

Location: 109A & 109B Ryan Rd

Acquisition history:

Date	Book, page or other	Description	Acres
5/13/2004	B7801, p124, p130	109A Ryan Rd	
5/13/2004	B7801, p149, p155	109B Ryan Rd	

Description:

The City initiated a limited development project that created two affordable units (built by Habitat for Humanity) and 80 acres of open space, now part of the Saw Mills Conservation Area.

46–48 School Street

Ownership: Valley School Street, LLC, VCDC as managing partner

Protection: 99 years for all 8 units (affordability must be at/below 80% of median income, #150-08)

Expiration:

Enforcement: City, VCDC

# of units: 8 (1 of 3-bedroom; 1 of 2-bedroom, 3 of 1-bedroom, 3 studio units) (#150-08 subrecipient agreement)

Location: 46-48 School St

Acquisition history:

Date	Book, page or other	Description	Acres
3/15/1994	Contract #191-94	Grant to Valley CDC for acquisition for $45,000	
4/29/1994	Contract #215-94	Grant to NACLT for acquisition of land for $25,000	

22–34 South Street

Ownership: New South St Limited Partnership

Protection: **Tax Credit, city held restriction**

Expiration:

Enforcement: New South St Limited Partnership, MA Housing Investment Corp, Valley CDC, Community Economic Development Assistance Corp, DHCD, HAP (according to Sponspor Agreement Loan, 11/15/2006)

# of units: 18 units, rental

Location: 22-34 South St

Acquisition history:

Date	Book, page or other	Description	Acres
3/26/1996	Contract #193-96	Loan to Valley CDC for tenant relocation costs during renovation for $50,000Terms: repayment no later than 12/31/2015 or upon repayment from New South St Limited Partnership (Contract #193-96, Amendment No. 1)	
11/15/1993	Contract #131-94	Grant to Valley CDC for acquisition for $50,000	

237 South Street

Ownership: **Private (was** NACLT, then VCDC)

Expiration:

Enforcement: **VCDC**

# of units: 2 (duplex—Unit A, 2 bedrooms; Unit B, 3 bedrooms)

Location: 237 South St

Acquisition history:

Date	Book, page or other	Description	Acres
6/5/1990		Grant to NACLT for acquisition for $13,048.93 for development of affordable housing	
	PB174, p248	Survey of property	
7/31/1990	B3598, p164	Deed, option for purchase of land and ground lease (B136, 1)	
	B4136, p38	Master deed	
4/1/1991	Contract #215-91	Grant to NACLT for pre-development for $11,500	
1/29/1992	Contract #183-92, No. 1 & 2	Loan to NACLT for capital costs for $11,900Paid: March 1993	
4/1993		Grant to NACLT for excavating (emergency grant) for $3,500	

145 Spring Street

Ownership:

Protection:

Expiration:

Enforcement:

# of units:

Location: 145 Spring St

Acquisition history:

Date	Book, page or other	Description	Acres
3/18/1997	Contract #266-97	Grant to Northampton Housing Authority for renovation of property for $40,000	

74 State Street (see 36 Bedford Terrace)

Straw Avenue Housing

Ownership: **Servicenet**

Protection: **Deed Restriction**

Expiration:

Enforcement:

# of units:

Location: Straw Ave

Acquisition history:

Date	Book, page or other	Description	Acres
6/2/2008	B9501, p347	Deed to the Friends	
6/2/2008	B9502, p6	Affordable housing restriction	
6/2/2008	B9502, p14	Recapture agreement	
6/2/2008	B9502, p18	Deed to ServiceNet	

18 Summer Street

Ownership:

Protection:

Expiration: 9/19/2047

Enforcement:

# of units: Sober SRO Housing

Location: 18 Summer St

Acquisition history:

Date	Book, page or other	Description	Acres
5/30/1996	Contract #256-96	Grant to Alliance for Sober Living for acquisition for $50,000Terms: if sold, transferred, or otherwise conveyed to unqualified buyer, grant must be repaid	

Date	Book, page or other	Description	Acres
8/21/1996	B4956, p98	Mortgage	
10/27/1997	Contract #135-98	Grant to Alliance for Sober Living for replacement of heating system for $5,830	
9/19/1998	Contract #73-99a, #73-99b	Loan to Alliance for Sober Living for structural repairs for $23,707 (not full expended?)Terms: w/n 49 years or if property is transferred or no longer provides direct benefit to low/mod income persons	
10/1/1998	B5499, p237	Mortgage and promissory note	
4/12/2001	Contract #285-01	Grant to Alliance for Sober Living for structural reinforcement w/n basement, installation of key & lock system, & installation of replacement windows & exterior door for $14,300 (not fully expended?)	

Turkey Hill Road (317A and 317B)

Ownership: Private (was Equity Builders, since sold)

Protection: 30 years (under right of refusal/recapture)

Expiration: 11/24/2034

Enforcement: City

# of units: 2

Location: Turkey Hill Rd

Acquisition history:

Date	Book, page or other	Description	Acres
8/17/2001	Contract #97-02, #97-02, No. 1	Loan to Thomas Fortier & Trist Metcalfe for pre-development (construction of 2 duplex residential units) for $48,500 (not fully expended?)Discharged: 12/11/2003 as part of closing w/Equity Builders	
10/2/2001	B6380, p167	Promissory note & mortgage	
10/29/2003	Contract #98-04	Loan to Equity Builders Realty, LLC for acquisition & construction for $37,500Discharged: 11/26/2004	
12/11/2003	B7616, p114	Promissory note & mortgage	
4/7/2004	Contract #171-04	Grant to Valley CDC for marketing & buyer selection of units for $8,540	
11/24/2004	B8079, p317	Unit A Deed Rider	
11/24/2004	B8079, p206	Unit B Deed Rider	

Valley Inn—209 Locust Street

Ownership: Douglas P. Ferrante/Skyline Design

Protection: Homeless mentally ill, at/below 80% AMI (letter to Mayor Higgins, 9/27/2002); 20 years affordability according to subrecipient agreement on 10/1/2002 (#144-03)

Expiration: 10/1/2022

Enforcement: City

# of units: 14 individuals

Location: 209 Locust St

Acquisition history:

Date	Book, page or other	Description	Acres
		Promissory note, construction agreement & restriction	
10/1/2002	Contract #144-03	$54,000 Loan to Skyline Design/Doug Ferrante	

39 Verona Street (see Garfield Avenue/39 Verona Street)

68/70 Vernon Street and 75 Forbes Avenue

Ownership: Private

Agency: PV Habitat for Humanity

Protection: 25-50% median income (according to 8/31/1998 PVHFH proposal)

Expiration: 7/25/2052

Enforcement: PVHFH

# of units: 2 units

Location: 68/70 Vernon St, 75 Forbes Ave

Acquisition history:

Date	Book, page or other	Description	Acres
12/1996		Cold Springs Environmental Consultants, Inc for historical 21E site assessment ($950)	
1/10/2000	Contract #178-00B7821, p36 (discharged)	Loan to Habitat for Humanity for move & rehabilitation of 2 family home for $100,000Discharged: 7/25/2004	
1/11/2000	B5867, p81	Promissory note & mortgage	
7/25/2002	Contract #133-03	$50,000 Loan to Macaye A. Santos (68 Vernon St) for condo purchase Terms: reduction of loan amount by 2% each calendar year w/loan being forgiven in 50 years unless sold to "non-income eligible" homebuyer	
9/30/2002	B6807, p126	Promissory note & mortgage	
3/7/2004	Contract #48-04	$50,000 Loan to Sylvia & Ernest Jerry Johnson for condo purchase. Terms: reduction of loan amount by 2% each calendar year w/loan being forgiven in 50 years unless sold to "non-income eligible" homebuyer	
4/26/2004	B7770, p247	Promissory note & mortgage	

Village at Hospital Hill

Ownership:

Agency: TCB

Protection: 17 of units affordable for people earning 60% of median income, 5 of units affordable to people earning 50% of median income, according to "Rental Phase II"

Expiration:

Enforcement: City, TCB

# of units: 33 units (phase I, rentals, 75% affordable to people earning less than 80% of median income, 40 years)

Location: Village Hill Rd

Acquisition history:

Date	Book, page or other	Description	Acres
4/27/2005	Grant #B-05-SP-MA-0121	Economic Development Initiative (EDI) Grant for redevelopment of blighted land for $198,400	

5 Walnut Street

Ownership: Private

Protection: 15 years

Expiration:

Enforcement: DHCD, VCDC

# of units: 2 units (1 rental, 1 ownership)

Location: 5 Walnut St

Acquisition history:

Date	Book, page or other	Description	Acres
		Quitclaim deed	
5/2/1997	Contract #289-97	Grant to Valley CDC for acquisition for $60,000Funds returned w/interest to HUD 1/28/1998	

135–137 West Street (see Paradise Pond Apartments)

Westhampton Road

Ownership: Private **(was** Pioneer Valley Habitat for Humanity)

Protection: 50 years from signage of each of deed riders (signed bet. 10/18/2006 & 8/30/2007)—to people earning 30-50% of median income

Expiration: Unit 840A—1/3/2057; Unit 840B—10/18/2056; Unit 340C—8/30/2057; Unit 840D; Unit 840E—8/16/2057; Unit 840F—5/25/2057

Enforcement: City

# of units: 6 units

Location: 840 (A-F) Westhampton Rd

Acquisition history:

Date	Book, page or other	Description	Acres
3/2/2001	B6137, p317	Order of Taking	
7/28/2003	B7347, p320	Quitclaim deed w/Pioneer Valley Habitat	

Date	Book, page or other	Description	Acres
12/9/2004	B8118, p172	Corrective deed w/Pioneer Valley Habitat	

Westhampton Road Limited Project—Habitat for Humanity

Ownership: Private

Agency: Habitat for Humanity

Protection: Affordability Deed restriction (homes under construction, restriction not yet closed)

Expiration:

Enforcement: City, Habitat for Humanity

# of units: 6 affordable units (1 market rate single family lot sold by City)

Location: Westhampton Rd

Acquisition history:

Date	Book, page or other	Description	Acres
3/3/2001	B6137, p317, p327	Taking & confirmatory deed to City	
4/8/2003	PB195, p98	Plan	
7/28/2003	B7347, p320	Deed	
12/29/2004	B8118, p172	Corrective deed, Westhampton Rd	
10/26/2006	B8925, p246	840B Westhampton Rd Deed Rider, West Farms	
1/5/2007	B9002, p78	840A Westhampton Rd Deed Rider, West Farms	

Description:

The City initiated a limited development project, creating six affordable units (built by Habitat for Humanity), one market rate lot sold to defray project costs, a landfill buffer, a future market rate building lot site, and 16 acres of open space, now part of West Farms Conservation Area.

5.5: Development Agreements

200–206 King Street

Ownership: Private

Protection: Permanent Development Agreement

Enforcement: City

Location: 200-206 King St

Acquisition history:

Date	Book, page or other	Description	Acres
9/9/2004	B7982, p197		

Description:

The property owner agreed to limit users to prevent those incompatible with a residential neighborhood

and that new buildings will be a minimum of two stories, with the upper floors only be used for housing as long as the City maintai**ns the property as GB or HB.**

North King Street

Ownership: Private

Protection: Permanent Development Agreement

Enforcement: City

Location: North King St.

Acquisition history:

Date	Book, page or other	Description	Acres
10/14/1960	B1337, p407	Deed	
3/4/2005	B8180, p119	Development agreement	

Description:

Pproperty owner agreed to fund $150,000 to allow the City to make certain transportation improvements if the City rezones the property to HB, which the City did in March 2005.

5.6: Drainage Easements

Microcal, LLC

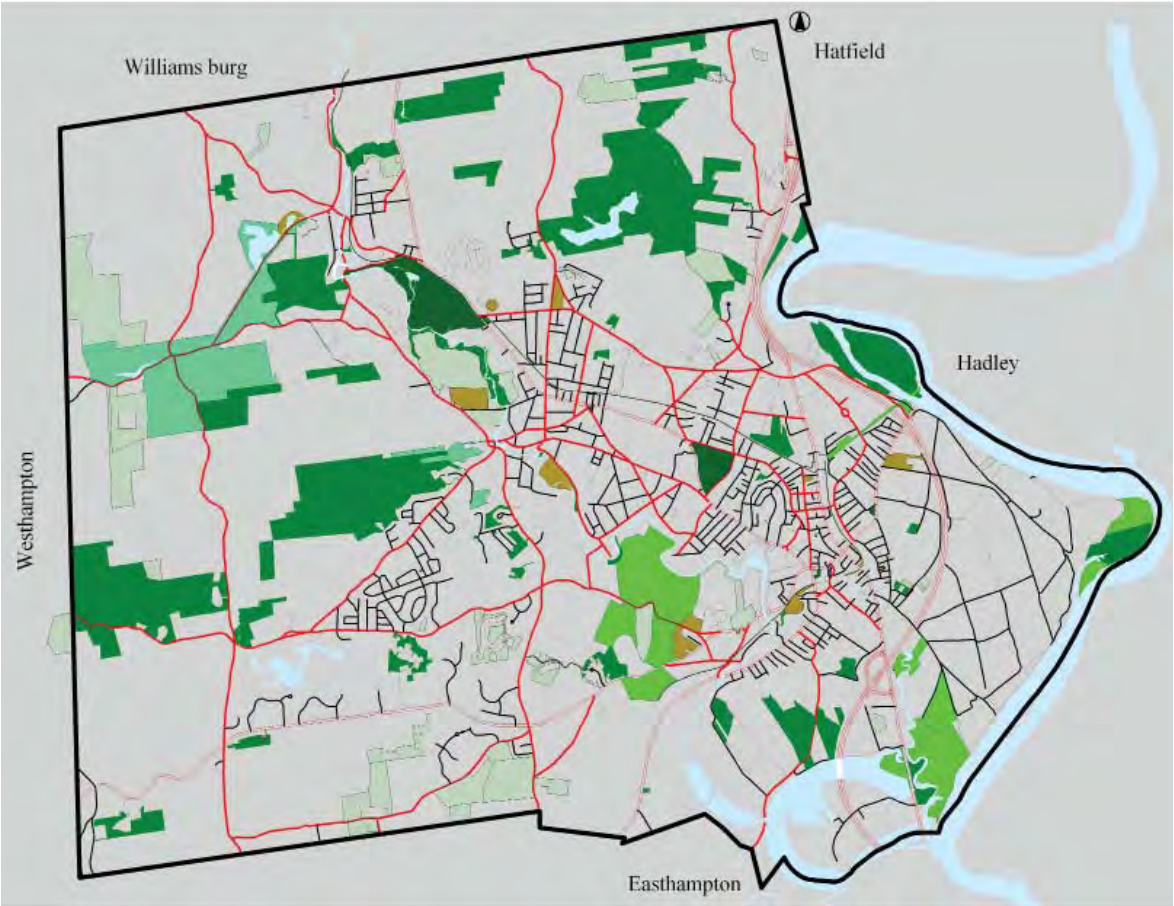
Ownership: Private

Enforcement: City, Board of Public Works

Location: 22 Industrial Drive East

Acquisition history:

Date	Book, page or other	Description	Acres
10/10/2007	B9291, p7	Site plan decision	
12/14/2007	B9349, p103	Easement agreement	



Open Space Inventory

6 Community Vision

As desccribed in more detail in the Introduction section this plan, this plan builds on earlier *Open Space and Recreation Plans* (1975, 1980, 1985, 1989, 1994, 2000, and 2005), other plans, and the *Sustainable Northampton Comprehensive Plan* (2008).

Statement of Open Space and Recreation Goals

Northampton is endowed with a diverse natural and cultural environment, which provides scenic vistas, opportunity for passive and active recreation, and a wide variety of plant and animal habitats, including habitats for rare and endangered species. Northampton residents want to preserve and enhance these resources, but they also acknowledge that resources are limited and that open space and recreation goals are sometimes in conflict with other community goals. Major goals are to:

- Preserve the City's most ecologically valuable and intact ecological areas
- Provide Northampton residents with a wide variety of active and passive recreation opportunities
- Manage conservation and recreation lands well and minimize environmental harm
- Help encourage healthy life styles through active and passive recreation
- Encourage alternative transportation through and for active and passive recreation
- Use open space to address other city needs identified in the open space plan
- Honor places where history comes alive in the landscape
- Improve public awareness of all of these open space and recreation resources

7 Analysis of Needs

Resource Protection, Community, and Management Needs

For much of the past two decades, the City was acquiring and permanently protecting 100± acres of open space annually, in fee or by easement. Since the Community Preservation Act was implemented, that figure has gone up to 150± acres a year. Still, as Northampton has developed in recent years, residents have recognized that the existing open space is being lost and that permanent protection of open space and recreation lands is needed more than ever.

During numerous public meetings and hearings and meetings with city boards and officials, the Planning Board, Conservation Commission, and Recreation Commission have consistently heard concerns that important open space and recreation needs are not being met.

The Conservation Commission, Recreation Commission and Planning Board, working through the public planning process, have identified the following, as Northampton's most pressing open space and recreation needs:

1. Passive recreation opportunities throughout the city, and especially at the new Florence Fields Recreation Area.
2. Linkage and augmentation of open space parcels, to provide for passive recreation and wildlife movement between large natural habitat areas.
3. Protection of vistas and "viewsheds."
4. Acquisition for permanent protection of a range of critical and natural plant and animal habitats, including:
    - Wetlands
    - Rare or endangered species habitat
    - Riparian lands along the Connecticut, Mill, and Manhan Rivers and other rivers and major streams
5. Preservation of open space parcels that help define Northampton's character, including parcels at the "entrances" to the city and parcels that limit the expansion of development into previously rural areas.
6. Protection of farmland, forestland, and the rural character of outlying areas.
7. Protection of Northampton's drinking water supply watershed and aquifer lands and of Hatfield's aquifer.
8. Encouraging or requiring that development is sensitive to ecological resources, vistas, and open space.

9. Limited improvements, including improvements to make some conservation areas handicap accessible.
10. Fishing and informal swimming opportunities in conservation areas and throughout the City.
11. Permanent protection of Smith Vocational agricultural and forestry lands and of undeveloped lands at the Veterans Administration Hospital and the County Long Term Care Facility.
12. Protection of key parcels in the last remaining large undeveloped areas of town – Broad Brook and Beaver Brook Watersheds, Marble Brook Watershed, Saw Mill Hills, Mineral Hills, and the Meadowss
13. To the extent resources allow, improvement of recreation area facilities and provision of access for residents with disabilities, especially rest rooms, at existing recreation areas.
14. A wider diversity of recreation facilities, especially indoor facilities
15. Better maintenance of recreational areas.
16. Develop more multi-use trails, bike paths, bike lanes, bike routes and bike linkages to provide access to active and passive recreation and to create a healthy lifestyle and provide an alternative to single-occupancy vehicles.
17. Permanent protection for current and future recreation and park areas.
18. Provide additional recreation opportunities wherever possible.

The Northampton Committee on Disabilities have identified the following as the most critical recreation and park needs:

1. Expand multi-use trails to provide additional accessible recreation opportunities and link different existing trails (including a new tunnel under the active rail line).
2. Investigate lighting on multi-use trails in key locations.
3. Investigate emergeny alert boxes on trails in key locations.

2006 Statewide Comprehensive Outdoor Recreation Plan (SCORP)

The Massachusetts Executive Office of Energy and Environmental Affairs publishes the *Statewide Comprehensive Outdoor Recreation Plan (SCORP)* to identify critical recreation needs, based on available facilities, current and future demand, and user surveys. This profile of needs are used by communities for planning and when applying for grants under the Land and Water Conservation Fund and state LAND and PARC programs.

Regional needs are useful as indicators, not as specific and absolute predictors. The intent was not to create a set of imperatives but to supply communities with statewide and regional data that should be considered and perhaps modified by particular local needs.

At both the state and the regional level, the SCORP identifies unmet needs for trail-based activities, especially non-motorized uses such as walking, bicycling, and cross-country skiing, various types of field sports, and water-based activities, especially swimming.

As part of our focus on environmental justice populations, we also not difference in needs among ethnic groups, especially specific needs around field sports and active recreation. Given our increased focus on how recreation can encourage a healthy lifestyle, this focus on active recreation in especially important.

Finally, we noted the slightly different needs for people with disabilities. Northampton has made enormous progress in creating accessible playground structures and multi-use trails, but we continue to seek to address all passive and recreation needs.

These needs, and the entire SCORP, was considered

in creating this plan. In addition, the SCORP is consulted for every city LAND and PARC grant application.

Northampton Recreation and Conservation Needs

With limited resources, maintenance of existing municipal facilities has become a challenge. We are exploring new partnerships with leagues and user groups to address the challenges.

1. To the extent resources allow, the City should maintain exisiting facilities.
2. All recreation areas should be owned by the Recreation Commission.
3. The City should continue to cooperate with Look Park and non-municipal recreation providers to meet Northampton's receation needs.
4. The City should continue to meet the special recreation needs of the elderly, environmental justice populations, and the needs of those with disabilities.

Northampton Resource Protection Needs

There are significant threats to natural resources, plant and animal habitat, and the environmental health of the City.

1. Permanent protection of critical habitat and linkage of open space parcels.
2. Permanent protection of critical and highly-productive habitat, including wetlands, rare or endangered species habitat, wildlife corridors, and riparian corridors.
3. Permanent protection of a range of natural habitat types, including riparian (riverfront) habitat, farmland and forest, and perennial and vernal pools.
4. Permanent protection of Northampton, Easthampton and Hatfield's drinking water supply watershed and aquifer land.
5. Ensuring protection of resources that cross political boundaries by working with neighboring communities, governments, state and regional agencies and nonprofit organizations.

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS OUTDOORS 2006
STATEWIDE COMPREHENSIVE
OUTDOOR RECREATION PLAN

8 Goals and Objectives

The following are policies, objectives, and actions that were adopted by the Northampton Planning Board in the Vision and Consistency Analysis of the *Sustainable Northampton Comprehensive Plan*, adopted in 2008. These goals and public sentiment generally were determined from an extensive public participation process. The city mailed a survey was sent to every single residential address in the city as part of the annual City Census and evaluated those results. The city held dozens of public sessions and several public forums, including one specifically targeted for environmental justice populations and used three separate outside consultants (AIA SDAT, Walt Cudnohufsky, and the Cecil Group to ensure that the city accurately judged community values and goals.

All of these goals shown have some impact on open-space and recreation. Some have more impact than others, and they are all repeated here for the sake of completion. *Sustainable Northampton* has other goals and objectives that are not relevent and are not repeated here.

Listed in no particular order:

Land Use and Development

Goal LU-1: Direct changes and improvements in accordance with the Future Land Use Map

1. Before developing rural areas, and after allowing for green space within densely developed areas, encourage infill development of vacant and underutilized land in and around downtown and in existing denser developed areas. This includes places such as village centers or areas that are currently zoned and targeted for development, such as the Business Park.

2. Locate housing within walking distances along safe paths, or with bicycle access, to and from eighborhood commercial areas, parks and recreation, schools, and public transportation.

Goal LU-2: Create and preserve high quality, built environments in the downtown and village

centers

1. Add parks, greenspace and appropriate agriculture on city-owned land or on larger infill development parcels where possible, to keep urban and village centers attractive.

2. Encourage and create incentives to enable well-designed and desired development to occur in downtown and other more densely developed locations or in targeted growth zones. These incentives hould also work to maintain the distinctions and historic precedents that define those areas.

3. Define and support a critical mass of retail, cultural, and office space.

Goal LU-3: Maintain a distinction between rural areas, residential neighborhoods, and urban areas

1. Housing projects that are built in rural areas should be cluster development types, leaving more open and, with designs that allow for a variety of housing options.

2. Preserve the character of rural areas through preservation of large undeveloped tracts, vistas, and armland.

4. Implement ideas for maximizing density on small lots.

6. Create Northampton neighborhoods that provide pedestrian scales, connections to goods and services, and connections to multiple modes of travel.

7. Ensure that zoning and land use regulations encourage mixed-use, multi-family development projects that are in keeping with high quality design and a character that transitions into the surrounding neighborhood.

8. Ensure that expansion of commercial parcels into residential areas coincides with road infrastructure improvements that enhance the value of the abutting residential uses and improve neighborhood character.

Goal LU-4: Preserve and encourage agricultural uses in designated areas, such as the Meadows

1. Maintain the primarily open and agricultural nature of the Meadows as it exists, with no new residential lots and no significant increase in residential density.

2. Continue to allow flooding of the Meadows for restoration of the soils for farming, and preserve the floodplain storage capacity of the Meadows as a means to prevent other areas and neighborhoods from flooding.

3. Support the economic viability of farming within the City, preserving scenic, ecological, and nvironmental benefits for the City as whole. The City should support farming through allocation of esources and infrastructure investments.

Energy, Environment and Climate Protection

Goal EEC-1: Reduce community's and City's energy

demand and natural resource consumption

The City's objectives emphasize education and promotion of "green" policies. Actions will be taken to promote awareness on both public and private levels including increases in energy efficiency, encouragement of green development, use of energy from renewable sources, a campaign for the purchase of local goods, waste management reform, and the reconstitution of a Transportation Commission. Waste management, transportation, and locally produced products relate directly to the open space plan as reforms in these areas will reduce impact on and enhance surrounding landscape.

Goal EEC-2: Reduce emissions of greenhouse gases (GHG)

Positive effects on open space will be realized through reforms in transportation, future land use concerning vehicular traffic, and public awareness of strategies for lessening emissions.

Goal EEC-3: Protect valuable and sensitive ecological resources (land, air, water, habitat, plants, & animals)

1. Prioritize and preserve quality wetlands by encouraging development in densely populated areas and in clusters.

2. Protect and conserve water supplies (drinking, surface, groundwater, recharge areas, aquifers) and ontinue to enforce groundwater protection regulations.

3. Conserve wetlands with programs to ensure no net loss of total wetlands (existing area of approximately 3,000 acres).

4. Preserve floodplains for flood storage and, where appropriate, habitat values.

5. Preserve existing forests, floodplains, wetlands, and agricultural soils of high ecological value.

6. Protect rare and endangered plants and animals and important wildlife corridors.

7. Improve the quality and appearance of the public water supply.

8. Recognize that the protection of environmental resources will improve the quality of life and the value of property in the City.

9. Minimize the loss of tree canopy throughout the City and increase tree canopy in urbanized areas to maintain a higher quality environment in all areas.

Goal EEC-4: Minimize the impacts of infrastructure systems on environmental resources

1. Implement regulations that include measures for soil erosion and sediment control.

2. Encourage and enforce low impact development designs.

3. Develop an inventory of roadways and facilities in environmentally sensitive areas and reduce the use of and, salts or other de-icing chemicals for their maintenance.

4. Reuse brownfield sites.

Goal EEC-5: Safeguard and improve the quality of the City's surface waters to ensure use for safe public swimming, recreational fishing activities, boating, and drinking

1. Ensure landside land alterations do not adversely impact surface waters.

2. Ensure waterfront property owners comply with regulations and upgrade environmental control equipment.

3. Ensure safe, high quality, recreational waters are available to all residents.

4. Protect quality of backup drinking water supply located in City reservoir. .

Open Space and Recreation

Goal OS-1: Maximize use of the City's open space and recreation areas

1. Determine carrying capacity of facilities and match it with population growth and demographics.

2. Maximize use of recreational space with affordable and quality programs for youth.

3. Make capital improvements and enhance maintenance of recreation facilities.

4. Provide open space and recreation opportunities for individuals of all ages, socioeconomic levels, and physical abilities now and for future generations. .

Goal OS-2: Expand open space and recreation areas

1. Acquire land for recreation, conservation and open space needs, preservation of plant and animal abitat, protection of scenic vistas, public enjoyment, and to enhance the character and sustainability of the community.

2. Preserve and expand City holdings of open space and wild lands, and open land in developed areas, ncluding densely developed areas.

3. Use open space and recreation to ensure that the urban and village centers are attractive places to live, work, and visit.

4. Make more natural areas available for public use as long as watershed land access does not threaten

water supplies.

5. Acquire land and build facilities to meet the needs for adult and youth athletic and recreation and school teams.

Goal OS-3: Preserve natural and cultural resources and the environment

1. Preserve the character of rural areas, farms, forests, and rivers.

2. Manage conservation properties to restore plant and animal habitats.

3. Preserve the environment and cultural and natural resources through land and easements and regulation changes.

4. Protect important ecological resources, including surface and groundwater resources, plant ommunities, and wildlife habitat.

5. Preserve ecological linkages and wildlife corridors, especially water-based linkages.

6. Have the City take a lead in protecting architectural and cultural history.

7. Consistently apply the criteria for preservation of the environment and resources across all neighborhoods and areas.

Goal OS-4: Provide open space connections between public spaces

1. Identify 'greenway' and 'blueway' connections that could provide pedestrian, bicycle, and boat access between open space areas.

2. Use the connections to also link business areas where they can support the pedestrian/biking connections.

3. Improve connections to open spaces for all individuals so they are universally accessible. - Operate with sound and explicit

standards, guidelines, criteria, and

administrative procedures.

Heritage and Historic Resources

Goal HR-1: Protect and preserve the City's heritage resources

1. Educate and inform decision makers and the community about heritage resources.

2. Protect the heritage resources from degradation or destruction by public or private actions or inactions.

Goal H-1: Create new housing

1. Provide developers with options that allow them to build at higher densities in return for creating more affordable housing units.

2. Utilize green and sustainable design funding opportunities for affordable housing.

3. Expand the range of options for detached housing, such as cottage housing development to increase density in designated locations.

Goal H-2: Preserve and sustain existing affordable housing

1. Preserve existing rental housing stock to facilitate availability and price stability.

2. Create a climate of support, within all departments of City government, for landlords who are participating, or who could participate, in a partnership to preserve "marketrate affordable" units as rental units.

3. Identify the present affordable housing at risk (e.g. "expiring use" and rentals that might be converted to condominiums) and work with property owners and others to identify and secure funding sources to preserve the units as affordable.

4. Sustain and improve existing SRO units.

5. Develop ways to sustain and build the Affordable Housing Trust Fund.

6. Sustain and expand housing rehabilitation programs.

9 Seven-Year Action Plan

The City, through the boards adopting and endorsing this plan, has identified the following actions to address the goals and needs outlined in this plan. This action plan includes actions that would be desirable over the next seven years, even though many will not realistically be completed because of the availability of resources.

All actions are consistent with the City's committment to fully comply with Title IX, American with Disabilities Act, Section 504 of the Rehabilitation Act, and the Massachusetts Architectural Access Board.

Prioritizing Objectives

Primary Objectives

Plans and needs evolve over time. The objectives set forth below help staff and the relevant boards to establish annual priorities and consider whether any changes to the entire plan are necessary.

The primary objectives for conservation are based on protection of natural resources, creating greenway networks and linkages of open spaces and trails, and maintaining the landscape and character of the City. The specific criteria used to evaluate sites for conservation (whether in public ownership or private ownership with less-than fee restrictions) include:

- Agricultural features such as open fields, prime agricultural soils, scenic views of agricultural property, active agricultural use, historical agricultural uses, and agricultural structures (e.g., barns).
- Location of the parcel in relationship to other protected land; including other land owned by the City, the Commonwealth, or non-government organizations (e.g., land trusts).
- Ability to contribute to needed civic space near village centers or adjacent recreational areas.
- Ability to serve environmental justice populations or under-served areas.
- Proximity to valuable environmental resources, including drinking water sources, wetlands, ponds, lakes, streams, steep slopes, unique geological features, significant vegetative and wildlife habitat or wildlife corridors (especially habitat for rare or endangered species).

The primary objectives for recreation are based on protecting community health and character, providing high quality recreation opportunities, especially for underserved areas and populations, and improving accessibility to existing recreation areas. The specific criteria used to evaluate sites for recreation include the following:

- Opportunities for new or expanded connections to existing trail networks

for alternative transportation, walking, hiking, biking, cross-country skiing, and other recreational opportunities.

- Public access to water, including recreational access to the waterfront.
- Opportunity for a safe, useable, and accessible park and recreation space.
- Opporutnity for affordable and accessible spectator and participatory events.

Secondary Objectives

Private landowners, land trusts, developers, and other partners may approach the City of Northampton with conservation or recreation opportunities that have not been identified as primary objectives above. These opportunities can be incorporated into life estates, bargain sales, charitable donations, and large-scale developments. These projects may have regional significance: provide access to special or unique natural and cultural resources; have potential as multi-use corridors; provide recreational opportunities and access to key amenities or destinations such as parks, downtown areas, stores, office parks, and schools; protect and possibly enhance an area that encompasses a unique and/or representative biologic community; have local/regional support; e.g. project is listed as a priority on regional transportation and/or recreation plans.

Seven-Year Action Plan

The City has identified 13 broad categories of open space, recreation, and multi-use trail actions.

Conservation Management

Well managed conservation areas.

Resources to fund: City ordinary maintenance, City staff time, volunteer labor, Northampton Conservation fund endowenment income, recreation trails grants, other compative grants and fundraising, and, for eligible projects, community preservation act funds.

Timing: On-going over entire plan period.

This can be acheived through five subactions:

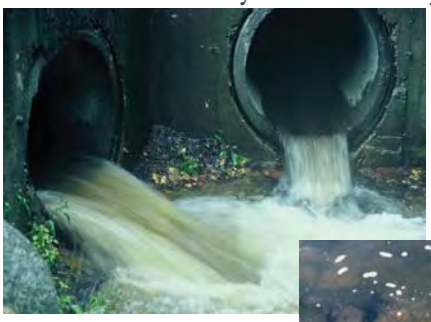
1. **Maintain conservation areas to preserve natural systems and make areas available for visitors, including those with disabilities**. Maintain trails, walk property boundaries annually, and maintain facilities and improvements in all conservation areas (see map for facilities that need to maintained).

Lease agriculture fields at Conservation Areas:

- Conn River Greenway (Damon Road)
- Meadows: Three parcels:
  - Potash/Manhan
  - Montview Ave
  - Cross Path Road
- Mineral Hills (Sylvester Road)

2. **Remove exotic invasive plants**. The removal of exotic and invasive plants is important because these organisms take the place and resources of local wildlife. This is the one are where the city has lost ground because of the aggressive nature of exotics. Broad Brook Coalition and Mass Audubon have provided the best City success stories in this area.

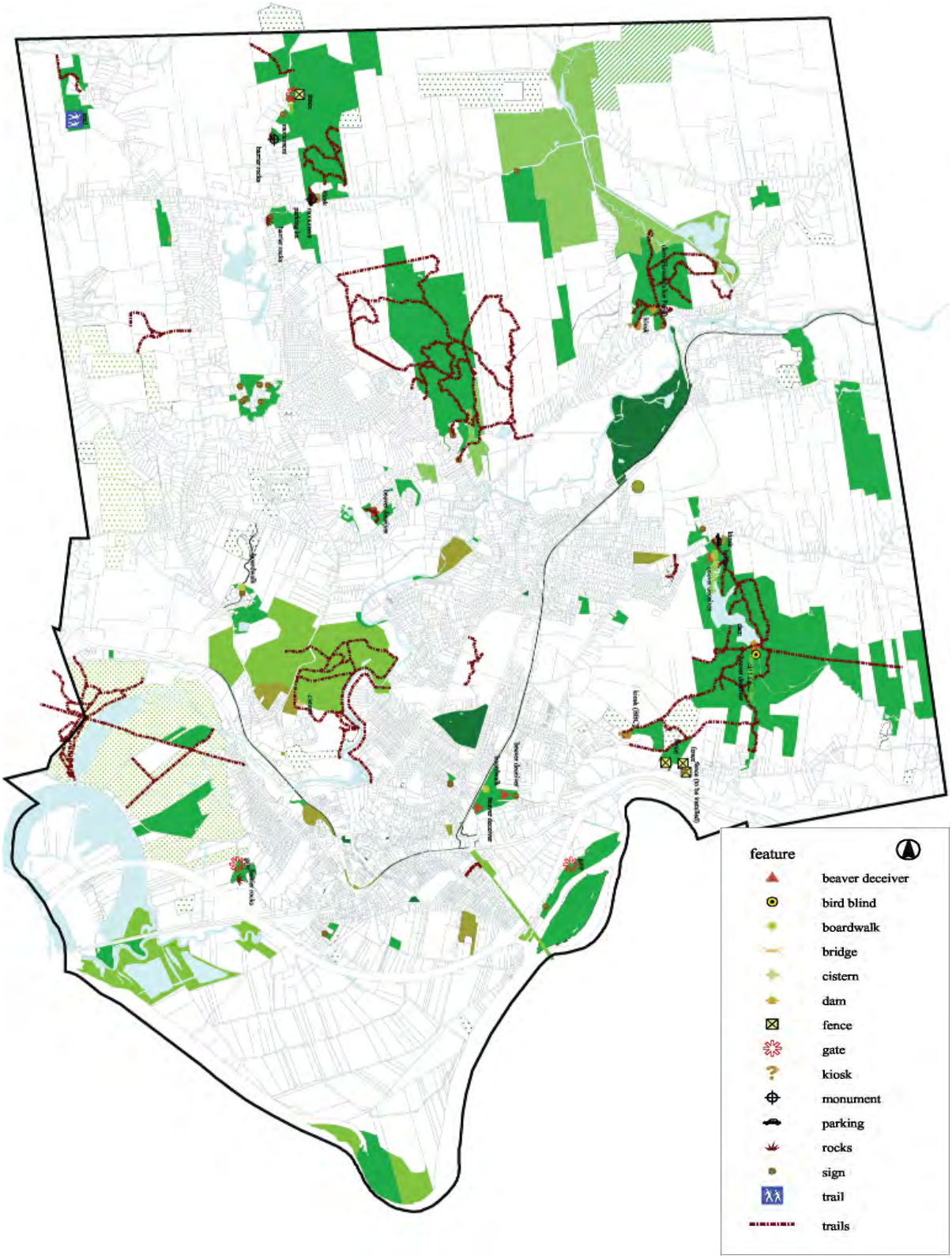
3. **Restore natural systems**. The City has



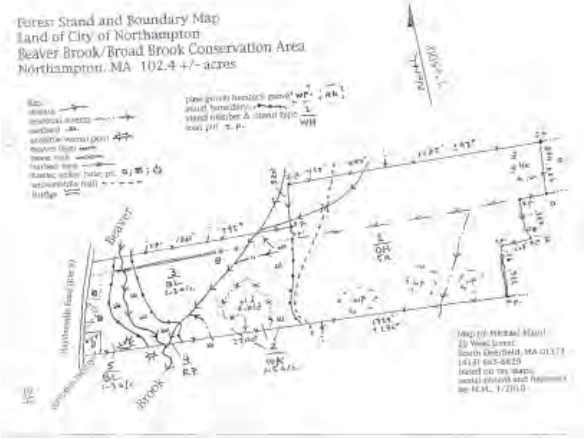
been successful in several areas, most recently in restoring one acre of historically filled wetlands at Brookwood Marsh. Current opportunties include restoring historically filled wetlands at Montview Avenue and Saw Mill Hills conservation areas.

4. **Document existing conditions**. Expand the City's rich inventory to add data on invasives, opportunties for restoration, and human history.

CITY OF NORTHAMPTON CONSERVATION AREA IMPROVEMENTS



Beaver Brook Snowmobile Trail



5. **Identify places for fishing, hunting, snowmobiling, off-road vehicles, horseback riding, and mountain bicycling.** The city provides some opportunities for each of these activities, but some populations in the city may be underserved. The top priority should be resource protection, which will severely limit ORV, and the second priority is identifying responsible user groups who will ensure that different activities can co-exist. For example, the City allows snowmobiling on one trail at Beaver Brook and allows ORV on a rock ledge at the Saw Mill Hills Conservation Area. In both cases the City has a responsible partner who works to prevent any abuse or misuse.

Conservation Acquisitions of Intact Ecological Areas

25% of Northampton, consisting of the most ecologically valuble and intact areas, should eventually be preserved. Preservation should be prioritized on ecological values and on contribution to the City's broader land use goals. Land preservation may be done by Conservation Commission ownership of land (fee-simple), or of conservation restrictions and agriculture preservation restrictions (less-than-fee). Ownership is generally prioritized because it provides management rights and appropriate public access, but less-than-fee preservation is appropriate in many cases, especially as a buffer between conservation land and private land.

Resources to fund: LAND Grant, Land and Water Conservation Fund, Community Preservation Act funds, city funds (bonding), foundation grants, community fundraising, abutter contributions, limited development proceeds, US Fish and Wildlife Service small grant program and other state and federal grant funds.

Timing: On-going over entire plan period with 150 to 200 acres of land acquired per year in all conservation categories.

Preservation of land makes sense when the primary conservation objectives identified above are met, but especially as follows:

Broad and Beaver Brook Watersheds

Expand preservation along the Broad Brook and Beaver Brook watersheds (which includes Fitzgerald Lake) filing in the gaps and missing teeth in preserved land and especially prioritizing land along and adjacent to waterways, the watershed of Hatfield's drinking water acquifer, and the potential for connecting trails.

Broad Brook Coalition is the city's primary partner for this effort, with Leeds Civic a key partner in Leeds.

Mill River and Historic Mill River Greenway

Expand efforts to preserve greenway along the entire length of the Mill River, including the Historic Mill River through downtown Northampton, key tributaries and vistas near the river, and the Northampton State Hospital area adjacent to the river. This is the historical industrial and population heart of the city and one of the most valuable ecological resources in the city.

Leeds Civic is a partner for this effort in Leeds. The new Mill River Greenway Initiative, formed in 2009 with the goals of restoring ecosystems, preserving natural resources, documenting historic sites, can be a new partner for this effort. They are looking at the entire watershed, from Ashfield to the Connecticut River. The group's ultimate objective is to create a Greenway that will include historic information about the pre-diversion River through downtown, role in the City's history, and provide linkages between different parts of Northampton.

Saw Mill Hills (including Roberts Hill)

Expand preservation along the Saw Mill Hills, which extend from the Williamsburg town line south through Roberts Hill and the Saw Mill Hills and largely end at Ryan Road. Connecting all of the gaps and missing teeth, acquiring all of the ridge and the vernal pools and buffers to the vernal pools is the the top priority.

Leeds Civic, the Friends of the Saw Mill Hills, and potentially the Ward Six Association can be partners for this project.

Mineral Hills (including Marble Brook)

Expand preservation along the Mineral Hills and Marble Brook complex, which extend from the Williamsburg town line south to Easthampton. Connecting gaps and missing teeth, acquiring all of the ridge and the vernal pools and buffers to the vernal pools is the the top priority.

Leeds Civic, the newly formed Friends of the Mineral Hills, and potentially the Ward Six Association can be partners for this project.

Southern Tier: West Farms, Park Hill Road, Burts Pit and Parsons Brook

Preserve land to provide ecological and human connection between protected land at the Mineral Hills to West Farms, Park Hill Road, Parsons Brook, and Burts Pit. These seaminlgy disperate parcels of conservation and restricted land are connected ecologically and can be better connected along waterways (for wildlife) and high points (for human trails).

Possible partners include the Ward Six Association.

Connecticut River Greenway, Conte Wildlife Refuge and Arcadia Wildlife

Ecologically this entire corridor along the Connecticut River and the adjacent floodplain is extremely important. Priorities for preservation are the greenway from the Coolidge Bridge to Hatfield, the area immediately adjacent to existing protected holdings at the Conte National Fish and Wildlife Preserve and the Aracadia Wildlife Sanctuary. Generally, farmland above the ten year floodplain that is not rich in wetlands should be mainainted as active farmland and not acquired for conservation land. Agriculture preservation restrictions are more appropriate for the farmland outside of the ten-year floodplain and much of it within the ten-year floodplain.

Partners include Massachusetts Audubon Society, US Fish and Wildlife Service, Mass Fish and Game, Mass Conservation and Recreation, and the Ward Three Association.

Conservation Acquisitions to Enhance Neighborhoods and Urban Areas

Urban and village centers and their dense walkable neighborhoods should be located within 4/10ths of a mile of conservation or park land. Not every parcel of land should be preserved, and *Sustainable Northampton* identifies that certain areas may be appropriate for more development, but every walkable and dense neighborhood should have open space available within an easy walk.

Resources to fund: LAND Grant,

Land and Water Conservation Fund, Community Preservation Act funds, city funds (bonding), foundation grants, community fundraising, abutter contributions, limited development proceeds, US Fish and Wildlife Service small grant program and other state and federal grant funds.

Timing: On-going over entire plan period with 100 to 200 acres of land acquired per year in all conservation categories.

Rivers and trails

The best opportunities for urban conservation are along the Mill River, the Historic Mill River, and any current or potential rail trail or multi-use trails.

Other urban tracts

There are also various ecologically rich and diverse parcels in and adjacent to dense and urban neigborhoods. This does not include every vacant tract of land but key parcels identified as such to serve this critical need.

Complementary efforts

This effort can complement other efforts to create parks, recreation, and rail trails in these same neighborhoods, all of which create opportuntiies for open space.

Agriculture Acquisition

Farmland should be generally be preserved in Northampton, especially the rich fertile soil in and adjacent to our floodplains. This effort is critical to our local economy, our history and values, and to provide a healthy living environment.

Resources to fund: LAND Grant, Land and Water Conservation Fund, Community Preservation Act funds, city funds (bonding), Massachusetts Agricultural Preservation Restriction funding, foundation grants, community fundraising, abutter contributions, limited development proceeds, US Fish and Wildlife Service small grant program and other state and federal grant funds.

Timing: On-going over entire plan period with 100 to 200 acres of land acquired per year in all conservation categories.

Farmland preservation efforts fall in four general categories:

APRs: Farms at Risk of Development

Most of the farmland at greatest risk of development in Northampton has already been lost to development or is already permenantly preserved. There are a few farms left that could be developed. The City should work with the farmers and the Massachusetts Department of Agricultural Resources to work to put Agricultural Preservation Restrictions (APRs) on these parcels.

APRs are transactions in which a farmer sells the development rights on open space while retaining the land itself for farming. They prevent the land from being developed and allow the farmer to build equity.

APRs: Other farmland

The state is reluctant to fund APRs on land with little development value, such as the Meadows--Connecticut River Floodplain. Unfortunetely, this land is at some risk of conversion to non-farm uses, even if it is never developed. The City should develop a locally funded APR program to purchase APRs on key parcels that are not eligible for state APRs.

Farmland in Conservation Areas

Generally, farmland is best left in private ownership (farmer or farming non-governmental organization). When farmland is included in larger portions of conservation land, however, the city should still preserve this farmland and then lease it to farmers for productive use.

Community Gardens

There is strong and partially unmet demand for community gardens, which are a great way to grow food locally while getting residents back in touch with the land and their food. The City should expand community garden opportunities.

Enhance Farmer Viability

Ensuring that farming is a viable occupation is as important as preserving farmland to encourage locally grown and healthy food. The state has been helpeful through their farm viability program and the City has helped by adjusting rents at our famland to meet current market conditions.

Resources to fund: Keep Farming Program, Community Preservation Act funds, foundation grants, community fundraising, other state and federal grant funds.

Timing: Keep Farming program planning over next two years and then identify more detailed action plan.

There are a host of local actions, from identifying regulatory barriers to local opportunities for local food in our schools and our community that can help local farmers. The Planning Board and Agriculture Commission have endorsed Northampton participating in the Keep Farming planning process to work with farmers to identify how to best enhance farming in Northampton.

Recreation Acquisition

Having sufficient land for active recreation is critical to helping create healthy lifestyles. The 2010 purchase of the 24 acre Florence Fields Recreation Area on Meadow Street (at close to the geographic center of the City) helps the City build the land base necessary to meet its recreation needs for the future.

Resources to fund: PARC Grant, Land and Water Conservation Fund, Community Preservation Act funds, city funds (espeically bonding), foundation grants, community fundraising, abutter contributions, limited development proceeds, other state and federal grant funds.

Timing: As opportunities arise, probably 2012-2014.

Three additional actions will help ensure enough recreation land for future generations.

Expand Sheldon Field

There is some land available adjacent to Sheldon Field that should be added to Sheldon Field. Some is currently owned byt he City and leased to a farmer and some is currently privately held. A small amount of land would allow this area to reach the critical mass to serve multiple recreation needs.

Ellerbrook Recreation Area to Recreation Com.

The Ray Ellerbrook Recreation Area, formerly known as Parcel C at the Northampton State Hospital, was given by the state legislature to the City, not to the Recreation Commisison, and as such is not permanently preserved under Article 97 of the Amendments to the State Constitution and not eligible for PARC grant funding. The property, except for a small piece on Route 66 to meet future fire substation needs, should be transfered for permanent recreation use to the Recreation Commission.

Other Recreation Opportunties

In addition to the sites that have been identified, there may be opportunities for clusters of one or two playing fields in different neighborhoods and as additions to existing

recreation and school sites. None of these areas would create the multi-purpose and multi-field opportunities of Florence Fields, but can help meet neighborhood and school reecreation needs.

Recreation Improvements

The City has slowly been rehabilating fields, adding a parking lot at Sheldon Field, redeveloping most of Veterans' Field, and redeveloping all of Arcanum Field in the past decade. Six broad categories of new actions are needed, as described below in more detail.

Resources to fund: PARC Grant, Land and Water Conservation Fund, Community Preservation Act funds, city funds (espeically bonding), foundataion grants, community fundraising, abutter contributions, other state and federal grant funds.

Timing: Florence Recreation Fields 2011-2014, Look Park 2012-2015, Pulaski Park 2012-2014, and others as resources allow..

Florence Recreation Fields

In 2010, the City closed on the new Florence Fields, on Meadow Street in Florence. PARC and CPA funding is available for the start of construction in 2011, with the development of an eventual seven fields to be developed in 2012 and beyond dependent on funding. Developing the entire recreation area, consistent with the 2010 Berkshire Design Master Plan, is the top recreation priority for the City.

Complete Veterans Field

Veterans Field was mostly rehabilitated recently, with the addition of the new skateboard park. The final step, the development of the southerly end of the site, is of critical importance for recreation. Located downtown, this is the most urban recreation opportunity in the City.

Rehabilitate and Expand Sheldon Field

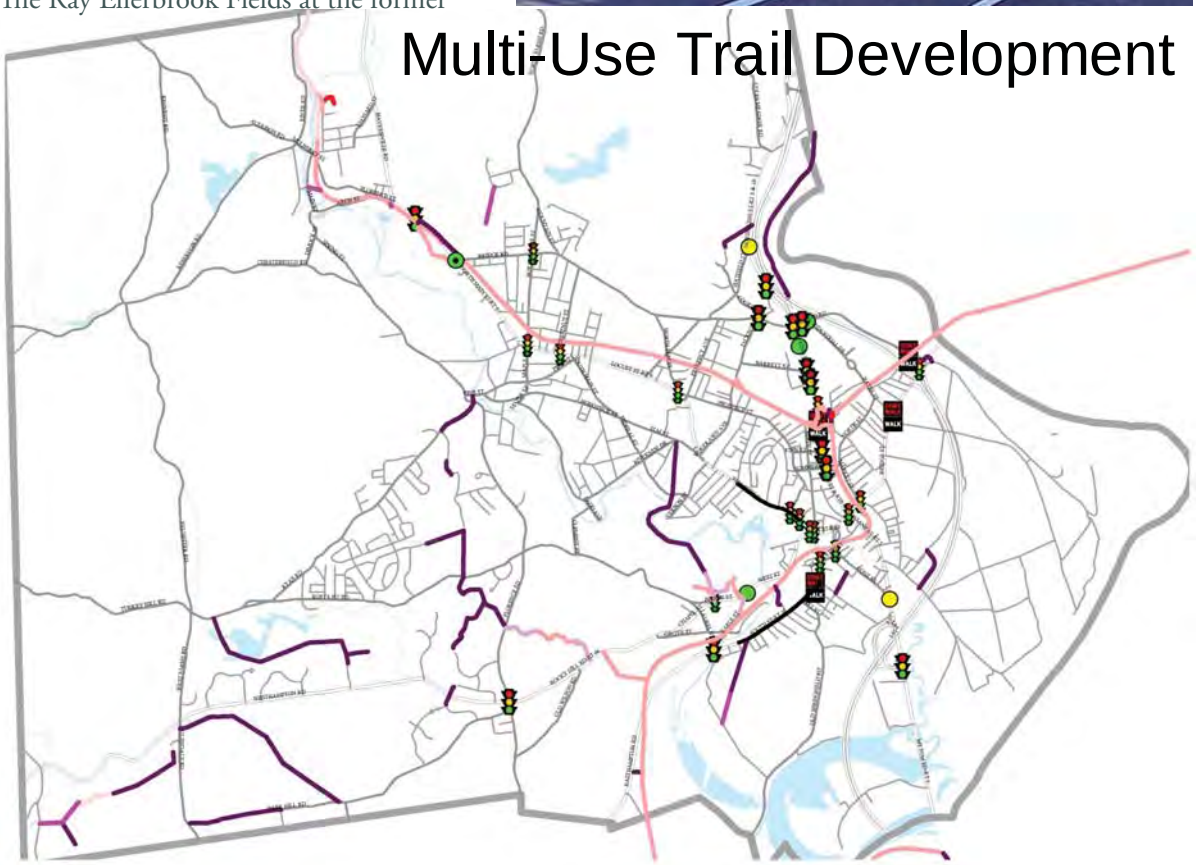
Sheldon Field had some minor rehabilitation in recent years, with the addition of a dual purpose parking lot (recreation and park-and-ride) and new basketball courts, but the field is aging and will need a major rehabilation soon. A lease to a farmer for a newly acquired portion of the field will expire in a few years, creating a perfect opportunity to expand and rehabilitate the site.

Maines Field

Maines Field had some improvements made a few years ago to allow the field to better withstand periodic flooding of the Mill River and reduce the damage to the field and the environment. The fields would certainly benefit from a major overhaul.

Ray Ellerbrook Fields

The Ray Ellerbrook Fields at the former



Measuring EASY Access to Trails

Most people walk 1/4 mile (~4.3 minutes) to reach their destination before they travel using other means. We assume that a cyclist would be willing to travel the same amount of time, or about 0.75 miles (1,200 meters), to reach a trail. This is consistent with a Minneapolis/St Paul study.

The distance a cyclist is willing to travel , however, varies based on road impedance (e.g., ease of passage, safety) and have been measured by Bicycle Level of Service (BLOS) evaluations. This can be interpreted as a cyclist's perception of traffic conditions and a road's geometry. PVPC validated the BLOS model in a two-month regional survey of 900 miles of roadway (1997).

We used an Easy Access Zone model, we will weigh the coefficient based on the BLOS score. The higher BLOS score is, the lower the distance that a cyclist would be willing to travel. Roads with good BLOS are more bike-friendly and therefore, cyclists would like to travel further than 1200 m. Conversely, poor scores mean a road is less bike-friendly and therefore a cyclist might to travel only for a very short distance.

We can use then use these weighted distances, once we calcualte them, to figure out how many people livie within easy access of a multi-use trail or proposed trail. (by Ma Thida, Smith College 2010.)

Northampton State Hospital are the City's most recent recreation area. There may be some additional opportunities for creation of additional fields, but the ownership (see recreation acquisition section) must be resolved first. This relatively small project would provide more opportunties in one of the fastest growing sections of the city.

Capital improvements other areas

Other recreation areas can use smaller capital improvements to serve new recreation needs and make investments to minimize environmental footprint (especially as it relates to stormwater).

Connecticut River Boathouse

Over the past four decades, the Connecticut River has been cleaned up and its use has increased. The City and its state, federal, and NGO partners have protected key parcels along the river. The City coordinates a five-town river channel marker program to make powerboat use safer. The river, however, remains inaccessible to many.

Improved access for human-powered craft and a permanent community boathouse are needed. Connecticut River canoe and kayak use is steady and rowing use is increasing. Rowing is now the largest sport at Northampton High School.

With the help of Northampton Youth and Community Rowing (NYCR), a grant arranged by Represenative Peter Kocot, the generosity of Berkshire Design and Lane Construction, the City has identified a permanent boathouse/park site at the Lane property north of River Run.

Developing a riverfront park with docks, access to the New Haven Northampton Canal site, and eventually a boathouse, will get more people to the water.

Potential partners: Mass. Dept. of Conservation and Recreation, NYCR, the Northampton High Rowing Program, and Smith College.

Resources to fund: LAND Grant, Land and Water Conservation Fund, Community Preservation Act funds, city funds (espeically bonding), foundataion grants, community fundraising, direct state appropriation, limited development proceeds, and other state and federal grant funds.

Timing: 2012 to 2017 as funding is available.

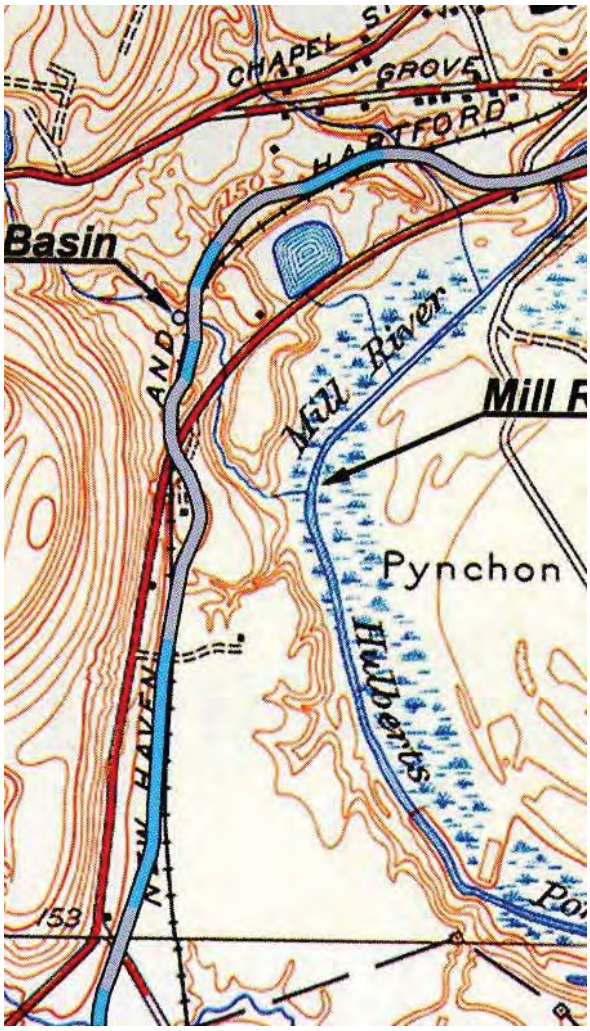
Multi-Use Trails

Northampton is increasingly becoming the mecca for multi-use trail users. With the doubling of the length of rail trails in Northampton in 2009-2010, the city has become the hub for a rail trail system that will eventually extend from Northampton north to Turners Falls, east to Boston, and south to New Haven.

The trails having been serving recreation uses for many years, but with the growth in the network

New Haven & Northampton Canal

Now: Manhan Rail Trail



they are now increasingly being used for all uses, including journey to work, play, and shopping. This decreases, even if only marginally, vehicular traffic, improves healthy lifestyles, and creates a transportation route far less expensive to tax payers than roads and highways.

The City's objective is to make 75% of the city easily accessible to trail systems. This would be done through additional trails, improved access to neighborhoods as multi-use spurs, standalone "short-cuts," and bicycle lanes for that last mile.

Resources to fund: LAND Grant, Land and Water Conservation Fund, Community Preservation Act funds, city funds (espeically bonding), Northampton Bikes Endowement Fund, foundataion grants, community fundraising, abutter contributions, limited development proceeds, and other state and federal grant funds.

Timing: On-going over entire plan period with at least one clear evidence of progress each year.

The city has identified at several projects to advance. Some of these are likely in the next two years, and some are going to be a decade or more in the development, depending on the level of resources available.

Connect the Norwottuck Rail Trails

The city's Norwottuck Rail Trail extends from the Pan Am Railroad west to Haydenville. The state Norwottuck Rail Trail extends east from the railroad to U. Mass and Belchertown.

In 2011, the City will build an off ramp from the Manhan Rail Trail at North Street. This will serve the surrounding neighborhoods and provide a safe on-road connection between the two trails.

In 2012, the State has committed to build a tunnel under the railroad tracks, which the city will eventually own, to directly connect the City and state Norwottuck Rail Trails.

Connecticut River Greemway trail to Hatfield

Extending a trail 1.5 miles from Damon Road or 1.3 miles from River Run Access Road to Elm Court in Hatfield would dramatically open up multi-use trail opportunities. It would connect a new town to the growing rail trail network and provide easy access to Hatfield's safe back roads for Northampton bicyclists. It would also be a spectatular trail with great Connecticut River vistas and it would be anchored by the south by the new greenway community boathouse park and on the north by the Connecticut River Greenway parcel with frontage on the river.

Manhan Rail Trail spur to west and north

The current Manhan Rail Trail spur (Ice Pond to Florence Road) currently does not connect to anything. As the name implies, however, it should connect to the Manhan Rail Trail, probably a few hundred feet west of Route 10.

The trail should also eventually extend westerly and northwesterly to the Woods Road/Ryan Road neighborhood. Once in that neighborhood, on-street bicycling is safe. There are opportunties to

extend this future trail north to Pine Street.

In addition, at the Oaks, there is an opportunity for the trail, using a combination of off-road and on-road routes, to eventually extend to Loudville Road.

Village Hill spur

In 2011, Hospital Hill Development LLC will extend a multi-use trail from the Manhan Rail Trail on Earle Street into the north campus of Village Hill (the former Northampton State Hospital), where it will connect with an existing short Village Hill trail.

As the Village Hill development proceeds, the developers will eventually extend a trail around the north campus to the northerly side of the north campus.

With special state legislation, there may eventually be an opportunity to extend this trail north across the City's right of way on the state hospital agricultural lands, across the Mill River, and to the Northampton High School.

If this trail becomes impossible, the City should examine other opportunities to connect the Manhan Rail Trail spur to Clement Street and Baystate to provide an alternative north-south trail. The City's planned right-of-way at 400 Burts Pit Road may help, but impacts on property owners and wetlands need to be examined before any decisions are made.

Neighborhood Connections and Spurs

There are several opportunities for relatively short spurs (although sometimes very complicated

projects) that can bring in neighborhoods that are close to a rail trail but can't acdess it. This includes:

1. A staircase ramp from the Norwottuck Rail Trail to Look Restaurant.

2. A ramp from the Norwottuck Rail Trail to the VA Hospital signal, hopefully in conjunction with a VA Park and Ride Lot.

3. A connection from the VA to the Norwottuck Rail Trail on the east side of Route 9.

4. A spur from JFK Middle School to Morningside Drive.

5. An access ramp from South Street to the Manhan Rail Trail using Hebert Avenue.

6. An access ramp in Haydenville to provide a northerly terminus of the Norwottuck Rail Trail.

Accessibiliy Improvements

The Northampton Committee on Disabilities identified multi-use trails as providing the best opportunities for improved accessibility. Specifically:

1. Extend the network, as described above, to expand accessibility.

2. Investigate lighting on trails, especially in a few key areas.

3. Investigate the potential for emergency alerts/ call boxes on the trail in a few key locations.

Pavement to Parks

Pavement to Parks would reclaim developed areas that might best be used as parks or restoration of natural systems. Very few sites are appropriate, but the effect on those sites can be dramatic.

Resources to fund: LAND Grant, Land and Water Conservation Fund, Community Preservation Act funds, city funds (espeically bonding), foundataion grants, community fundraising, transportation improvement funds, abutter contributions, limited development proceeds, and other state and federal

grant funds.

Timing: City Hall Park 2011-2013, other parks to follow as resources allow.

The potential list is certainly longer than the few sites we have already identified (below).

Historic Mill River at Pleasant Street.

As the City works to eventally take over Pleasant Street from Holyoke Street to Conz Street, there is a very valuable redevleopment and urban park amenity at the trianagle formed between Wright Avenue, Hockanum Road, and Pleasant Street.

Ideally, land would be saved for an eventual right-angle Hockanum Road/Pleasant Street intersection or roundabout, a mixed-use building on the southeast corner of that intersection, and a mixed use building at the northeast intersection of Wright Avenue and Pleasant Street, with an urban park between the two mixed use buildings serving as an entryway to downtown and as an introduction to the joys of the historic Mill River at Pleasant Street.

City Hall Park

A very small park in front of City Hall would create signficant aesthetic, safety, and park opportunities. Reclaiming some land from Main Street and Crafts Avenue, which are unsafe for pedestrians because they are too wide, can solve traffic safety challenges and fill a deficient in downtown parks.

Such an urban park, if well designed with careful attention to layout, landscaping, seating, and people-watching can become one of those places of the heart that residents cherish.

Historic Wetland Restorations

At the Meadows Conservation Area- Montview Section, wetlands have been historically filled and a stream piped. There may be an opportuntiy for a partial restoration that can make the area more interesting for visitors and more ecolocgically valuable.

At the Industrial Park, many wetlands areas where historically filled. There may be an opportunity to mitigate these impacts and spur economic development by creating a new or restored wetlands within the Industrial Drive traffic cicle.

Heritage Landscapes

Northampton has an rich 355 year history that is honored in written histories and building preservation. There has been less emphasis, however, on the living and outdoor landscapes, especially cemetaries, historically signicant landscapes, and historical farms and other working landscapes.

The Northampton State Hospital National Register listing includes the landscape that supported the hospital, the Historical Commisison restored the memorial bench that marks an otherwise unmarked cemetary at the Northampton State Hospital, and several conservation areas deliberatly maintain a memory of previous land uses (stone walls, building foundations, etc).

Resources to fund: Community Preservation Act funds, foundataion grants, community fundraising, abutter contributions, and other state and federal grant funds.

Timing: Planning 2011-2013, implemenation thereafter.

There are several actions to expand past efforts.

Bridge Street Cemetery

Bridge Street Cemetery is the city's oldest European-focused cemetery and should be listed on the National Register, either by itself or as part of an expanded downtown register district.

Working Landscape

At least one working landscape should be honored, at the very least with plaques and possibly with a National Register Nomination. The Historical Commission has suggested so nominating the historic farmland off Meadow Street in Florence.

Improved Public Awareness

It is imporant to improve public awareness of open space, recreation, and multi-use trail opportunities. We have a responsibility to ensure that the public is aware of resources in the community.

Resources to fund: Staff time, intern time, forest stewardship implementation grants, recreation trails grants, small foundataion grants, community fundraising, and other state and federal grant funds.

Timing: New Haven and Northampton Canal Greenway and rail trail signs in 2011, other efforts thereafter at a rate of one per year.

New methods of outreach include:

Increase Natural and Historical Interpretation

Three efforts can improve public awareness of natural and historic resources. First, working with Laurie Sanders to revise her "Rediscovering Northampton," which was written under a grant-funded contract with the City almost 20 years ago and still remains one of the most user-friendly summarizes of conservation area. In addition, installing

Second, use interns and volunteers to collect additional data on human history of different open space to add to revisions of this plan to document for future generations.

Third, create interpretive signs at a few key areas to document the New Haven and Northampton Canal and the rich history of the farmland at Florence Fields Recreation Area.

Reachout to share recreation resources

First, include information on all conservation and multi-use trails with next City Recreation Department mailing.

Second, develop Google Mashups of all recreation, conservation and rail trail resources in the City.

Finally, develop wayfinding signage program for multi-use trails in the city.

Other Future Actions

Other needs will be identified over time and will be assessed on their merits. Efforts for these projects will be staff time, intern time, and volunteer time until the projects are further along.

For example, during the development of this plan, we received a request from a City Councilor to explore the interest and feasibility in developing a dog park where dogs are allowed off leash within an enclose area. The City is not prepared to move forward on this time, but would be potentially if a management partner was formed who was willing to be the lead partner in such an effort

Northampton does not have a dog park. The Northampton State Hospital is the biggest single off-leash walking area in the city, in part because it is a spectacular site and in part because state leash laws do not apply on state land. Many people refer to this site informally, although incorrectly, as the "Dog Park."

Dog parks typically develop in urban areas where the density of people is enough to financially and socially support a dog park. Since Northampton residents have good places to walk their dogs on or off leash (State Hospital, the Meadows, Look Park, Manhan and Norwottuck Rail Trails, and other open space and undeveloped parcels), Northampton has less of a need than many communities.

To help us do an assessment, we solicited the community, through the media, City Councilors, and other boards, to complete a non-random survey. Respondents are self-selected, in part based on their strong passions on this issue. The goal was not to create a survey that is representative of the community but to identify interests and demand. Based on our review of the information, we made the following findings:

1. There is interest, but only limited interest, in a dog park.
2. To reach the critical mass needed for a dog park to thrive, it needs to be located within a mile of Northampton and/or Florence centers.

3. Given resource, the only possible City role would be providing land and possibly initial infrastructure (CPA, grants, and contributions). Operational costs would need to be donated (with labor or cash).
4. Next steps require a user group that wants to partner with the city and do leg work.

Survey Findings (sample size 234, with 229 from Northampton, and 62% owning a dog):

74% of respondents supported a new dog park where dogs could safely play off leash. 18% said no while 7% didn't have a strong opinion. Some people, among both supporters and opponents, indicated that a dog park should not be a priority for public funds. There were complaints about owners not cleaning up dog droppings and about running free without fenced enclosures. Some supporters and opponents suggested a dog park could reduce these problems.

Respondents walk their dog at the Northampton State Hospital (64), in their neighborhoods (55), on private property (16), along the Mill River and Smith College (15) and on rail trails (12).

Respondents suggested possible dog park locations: Northampton State Hospital (16), close to Downtown (13), at Look Park (9), at the Bean and Allard Farm (7), at another small park (6), near the river (5), at Veterans Field (4) and Childs Park (4).

Maintenance is the biggest concern of all respondents. Parking, overuse, security, public cost, cleanliness, aggressive dogs, fencing, and irresponsible pet owners were all issues.

Capitial Funding

The City relies on the following for capital funding:
Federal Land and Water Conservation Fund
Federal/State Transporation Improvement program
State PARC grant program
State LAND grant program
State APR program
Federal Recreation Trails grant program
Federal Forest Stewardship
Federal CDBG program
Foundation grants
Northampton Community Preservation Act
Northampton Capital Improvements
Fundraising
Community and NGO partners
Donations of land
Regulatory exactions
Life estates
Limited development cross-subsidies

Primary Objectives for Conservation and Recreation	Actions	Responsible Board/Group
Preserve areas in Northampton Business Park.	Preserve open space related to proposed Northampton Business Park (e.g., 50% of site) as a wildlife corridor between the Massachusetts Audubon's Arcadia Wildlife Sanctuary and the Northampton State Hospital farmland.	Mayor City Council Economic Development Coordinator
Expand and protect Mineral Hills Conservation Area.	Preserve land in Northampont and Westhampton.	Planning Office Conservation Commission Town of Westhampton
Preserve buffer along Marble Brook Corridor.	Preserve wide buffer of land along Marble Brook, in Leeds.	Planning Office Department of Public Works
Preserve Flood Plain Areas.	Preserve parcels along historic Mill River, Connecticut River, Oxbow, and current and historic confluences, especially highly productive wetlands and floodplains.	Planning Board Conservation Commission

Primary Objectives for Conservation and Recreation	Actions	Responsible Board/Group
Provide greenways between protected areas and along wildlife corridors.	Proactive planning and land acquisition with CRs, easements, and linkages.	Planning Office Conservation Commission
Protect vistas and scenic viewsheds, including hilltops and ridgelines, views from roads, conservation areas, and parks.	Revise open space residential development zoning, adopt zoning to protect sensitive and scenic resources.	Planning Office Planning Board
Obtain CRs or APRs for important parcels not currently in permanent protection.	Attempt to acquire conservation or agricultural restrictions to protect agricultural land at Smith Vocational School farmland and forest land. Acquire conservation restrictions on DPW water supply lands if the Commonwealth funds.	Planning Office Smith Voc DPW/BPW
Maintain ecological inventory data about conservation parcels and City in general.	Update Laurie Sanders' Rediscovering Northampton natural areas inventory. Improve base line data on new and existing conservation parcels.	Planning Office Conservation Commission
Improve and revisit long-range funding strategies for property acquisition and maintenance.	Build and increase acquisition and maintenance endowments through collaborative efforts.	Recreation Commission Conservation Commission Planning Office Conservation partners
Protect community health and character by preserving small recreation locations important to Northampton's neighborhoods.	Work with neighborhoods to identify key parcels of neighborhood interest as a special place or a local treasure.	Conservation Commission Conservation partners
Employ variety of land protection techniques to maximize pro-active land preservation in City.	Use limited development and other means, in cooperation with landowners and developers, to preserve large parcels of land that the city does not otherwise have the resources to preserve.	Planning Office
Participate in regional coordination of open space protection.	Conservation Commission should meet with Conservation Commissions and Open Space Committees in neighboring towns to discuss possible joint projects.	Conservation Commission Planning Office

Primary Objectives for Conservation and Recreation	Actions	Responsible Board/Group
Protect areas along Broad Brook.	Preserve uplands and wetlands north and east of Fitzgerald Lake Conservation Area along Broad Brook.	Planning Office Conservation Commission
Expand and protect Roberts Hill Conservation Area.	Preserve unused power line right-of-way at Roberts Hill Conservation Area should from Mass. Electric Company. Wooded land abutting Roberts Hill Conservation Area on its north side.	Planning Office Conservation Planner
Expand and protect West Farms Conservation Area Park Hill Road.	Facilitate development of conservation areas, conservation restrictions, and agricultural preservation restrictions in meadows and in Park Hill section of Northampton. This area contains some of best non-floodplain farmland in Northampton and wonderful vistas. Much of it has already been preserved, but there are critical gaps, especially gap between existing Park Hill Road APR and CR land and existing West Farms Conservation Area on Route 66. Purchase land for open space corridor from West Farms Conservation Area to existing Park Hill Road Conservation Restriction and Agriculture Preservation Restriction Cluster.	Planning Office Conservation Commission
Expand Route 66, Glendale Road and Loudville Road area.	Acquire conservation land in area bounded by Rte. 66, Glendale Rd, and Loudville Rd.	Planning Office Conservation Commission
Protect views along Rail Trail Areas.	Protect viewshed along rail-trails and proposed rail trail and bike paths to ensure that rural or otherwise attractive areas remain attractive to users.	Planning Board
Expand and protect Turkey Hill.	Preserve land in Turkey Hill section of City (between Route 66 and Turkey Hill Road) that can eventually link to Mineral Hills Conservation Area	Planning Office Conservation Commission
Provide recreation opportunities in new locations.	Encourage developers to provide for recreation needs in new cluster subdivisions, planned unit developments, and business parks.	Recreation Commission Planning Board Planning Office
Provide high quality passive recreation opportunities, especially in areas not otherwise served.	Acquire parcel of land for a future recreation area on site with relatively low development costs. Ideally new site should be in area not already well served by recreation areas, such as southwest quarter of town.	Recreation Commission Conservation Commission

Primary Objectives for Conservation and Recreation	Actions	Responsible Board/Group
As part of future Manhan rail trail linkage, build bridge connecting State Hospital parcel off Federal Street with bulk of State Hospital property.	Acquire needed approvals and permits locally, from DAR, Commonwealth of Massachusetts, and possible legislative approval. Continue neighborhood outreach. First neighborhood meeting was held in 1996. Update bridge costs and design. Preliminary plans for bridge completed in 1996 by Tighe & Bond; estimated 1996 cost $200,000. Design for bridge that spans the annual flood zone and ensures that bridge could withstand any floodwater it might encounter.	Planning Office
Expand and protect State Hospital Area.	Acquire agricultural preservation restriction on Gateway Vistas and Hayfields parcel at Northampton State Hospital (parcel D), with land to be owned by Department of Agricultural Resources. (See the Planning Board's 1993 Northampton State Hospital Plan.) (1994 legislation authorizes. Cons. Com. voted 9/12/94 to accept.) Transfer expected in late 2005.	Planning Office
Expand and protect Fitzgerald Lake Conservation Area.	Acquire land between Fitzgerald Lake Conservation Area and both Mary Jane Lane and Cooke Avenue; Acquire woodland and wetlands abutting Pines Edge section of the Fitzgerald Lake Conservation Area, on its north side. (USFS purchase of conservation restrictions from Anciporch protects a parcel. Conservation Commission is still interested in acquiring remainder interest or trail right-of-way.)	Planning Office Conservation Commission
Expand and protect Mill River Corridor.	Acquire conservation land in floodplain area between Yankee Hill Conservation Area, Northampton State Hospital Agricultural land APR and Mill River.	Planning Office
Expand and protect Saw Mill Hills Conservation Area.	Preserve 500+ acre conservation area covering the ridgeline, wetlands and vernal pools in Saw Mill Hills and land for trail system through Saw Mill Hills.	Planning Office Conservation Commission

Primary Objectives for Conservation and Recreation	Actions	Responsible Board/Group
Plan for expansion of current recreation areas.	Acquire western portion of City's surplus Oak Street property, to create buffer along bike path and serve other future recreation needs. Acquire undeveloped land abutting Sheldon Field to allow for additional recreation opportunities.	Recreation Commission
Improve accessibility to Maines Field.	Improvements should include those described in this plan, 504 Handicap Accessibility Self-Evaluation, and Americans with Disabilities Act Transition Plan.	Recreation Commission Department of Public Works
Redesign and improve Veterans Field.	Project is ongoing and should be completed.	Recreation Commission
Improve safety in key spots along existing rail trails.	Work with Department of Conservation and Recreation to insure that Norwottuck Rail Trail is eventually placed in a tunnel or bridge where it crosses Damon Road.	Planning Office
Provide for co-existence of beavers.	Work with Department of Environmental Protection and the Division of Fisheries and Wildlife to restore wetlands and to implement best management practices.	Planning Office

Conservation Area Management

All conservation areas should be managed to protect the parcels in their natural state. Management actions are limited to those that restore parcels to their natural state, improve wildlife habitat, or provide for generally non-consumptive enjoyment of conservation areas.

Specifically, the management issues identified in the Conservation and Recreation Inventory section of this plan should be considered and advanced.

Conservation Commission properties, easements, and restrictions should be inspected at least yearly:

1. All property lines should be walked and inspected for encroachment and violations of the restrictions.
2. All trails should be inspected for trail maintenance needs and marked as needed.
3. All trash should be cleaned up.
4. All wooden and metal signs should be inspected and repaired or replaced as needed.
5. The Commission should avoid the burden of making brochures for each conservation area, and instead, maintain all necessary information on the City's web site. A single map should be produced, containing pertinent information about all the conservation areas. If a volunteer group would like to create a brochure on their own, the Commission should review it for accuracy, and if appropriate, endorse the brochure.
6. The Commission should continually update its ecological assessments of conservation areas and other properties of high conservation value. Properties should be evaluated for potential habitat improvement or restoration and vernal

pools should be identified and state certified.

7. Signs with conservation area rules should be posted around the edge of properties.
8. Implement management recommendations below to the extent resources allow.

Managed by the Smith Vocational Agricultural

Management of Parks and Recreation

All recreation areas should be managed to ensure long-term active recreation. The DPW maintains all recreation areas and parks, while the school department maintains schools sites. Maintenance for recreation areas includes:

1. Mowing grass.
2. Turf management, including lime striping.
3. Equipment, sign, building and restroom maintenance.
5. Trash removal.
6. Monitoring agreements where others are responsible for maintenance of Recreation properties (e.g., Nagle Walkway).

10 Public Comments

The Open Space, Recreation, and Multi-Use Trail Plan was written in an iterative process and comments were incorporated into the plan. All comments were either incorporated, or compromises where found, or concerns were noted so that they are part of the public agenda moving forward.

In addition to written comments (that follow in this section) verbal comments recieved at public forum were:

1. Be sensitive to the needs of farming and agriculture and conflicts with recreation.

2. Provide opportunities for hunting, fishing, ORV, and snowmobiles.

3. Prohibit ORV and snowmobiles on conservation land.

4. Create a metric of how much pristine (e.g., non-working landscapes and non-recreation) land should be preserved.

5. Create a metric of how accessible open space should be to people living in dense urban neighborhoods.

6. Prioritize rail trail and multi-use trail projects and think about how trails connect to the overall transporation system.

7. Preserve more open space.

8. Be cautious about taking land off the tax roles and consider the impact on municipal fiscal stability.

We received written comments from the following, all of which are attached:

Planning Board

Conservation Commission

Recreation Commission

City Council (City Council Resolution)

Agriculture Commission

Historical Commission

Transporation and Parking Commission

Committee on Disabilities

Pioneer Valley Planning Commission

Also attached is the Commonwealth's approval:

Executive Office of Energy and Environmental Affiars

PLANNING AND DEVELOPMENT • CITY OF NORTHAMPTON
planning • conservation • zoning • northampton GIS • historic • community preservation • central business architecture
413-587-1266

December 9, 2010

Wayne Feiden, FAICP
Director of Planning and Development
210 Main Street, Room 11
Northampton, MA 01060

Dear Wayne:

I am pleased to inform you that on October 28, 2010 the Planning Board voted unanimously to adopt the 2011-2017 ***Northampton Open Space, Recreation, and Multi-Use Trail Plan***. The Planning Board has adopted the plan both as the city's open space and recreation plan **and** as an element of the city's comprehensive plan.

The plan, as adopted, incorporates the comments that the Planning Board made at earlier meetings. As such, we have no additional comments on the plan.

The Planning Board understands that some additional editorial changes will be made to complete the plan and address to comments from other reviewers. None of these changes are substantive and we do not expect the plan to come back to the board.

Sincerely,

Stephen Gilson, Chair
Planning Board

City Hall • 210 Main Street, Room 11 • Northampton, MA 01060 • www.NorthamptonMa.gov • Fax 413-587-1264
original printed on recycled paper

PLANNING AND DEVELOPMENT · CITY OF NORTHAMPTON

City Hall · 210 Main Street, Room 11 · Northampton, MA 01060-3198 · (413) 587-1266 · Fax: 587-1264

Wayne Feiden, Director

www.NorthamptonMa.gov

December 13, 2010

Wayne Feiden, FAICP
Director of Planning and Development
210 Main Street, Room 11
Northampton, MA 01060

Dear Wayne:

On October 28, 2010, the Conservation Commission voted unanimously to approve the 2011-2017 ***Northampton Open Space, Recreation, and Multi-Use Trail Plan***. The Commission appreciated that the updated Plan contains benchmark goals for open space protection, both within the city as a whole, and surrounding dense neighborhoods. Commission members also supported the grouping of protected land into larger complexes and corridors to reflect ecology and habitat.

The Commissions comments during the development of the Plan have been incorporated into the documents text, tables and maps, and we understand that additional edits and additions will be made to reflect the suggestions of other boards and commissions. If these are not substantial, the Plan will not require additional Conservation Commission review.

Thank you,

Kevin Lake, Chair
Northampton Conservation Commission

ANN-MARIE MOGGIO
DIRECTOR OF RECREATION

EILEEN WRIGHT
PRINCIPAL CLERK

CHRIS KOSTEK
SENIOR CLERK

NORTHAMPTON RECREATION
DEPARTMENT

SHELBY MICHNA
ASSISTANT DIRECTOR

KATHY WESTON
RECREATION SUPERVISOR

ERIN KETTLEDON
RECREATION SUPERVISOR

ESTHER RALSTON
AQUATIC SUPERVISOR

December 20, 2010

Wayne Feiden, FAICP
Director of Planning and Development
210 Main Street, Room 11
Northampton, MA 01060

Dear Wayne:

The Northampton Recreation Commission voted unanimously on November 1, 2010 to adopt the 2011-2017 ***Northampton Open Space, Recreation, and Multi-Use Plan***. The Recreation Commission is happy to approve this plan as the city's open space and recreation plan for the next seven years.

The plan incorporates the comments that the Recreation Commission made at several review sessions. As such, we have no additional comments on the plan.

The Recreation Commission understands that some additional editorial changes will be made to complete the plan and address the comments from other reviewers. None of these changes are substantive and we do not expect the plan to come back to the board.

Sincerely,

Thomas Parent, Chair
Recreation Commission

90 Locust Street, Northampton, MA 01060
phone 413-587-1040 fax 413-587-1044
www.northamptonma.gov/recreation

CITY OF NORTHAMPTON

MASSACHUSETTS

In City Council, November 4, 2010

Upon the recommendation of Office of Planning and Development

Ordered, that

WHEREAS, The *2011-2017 Open Space, Recreation & Multi-Use Trail Plan* is a blueprint for city open space, recreation, and multi-use trails actions and policies and creates a 13 point action plan:

1. Manage conservation lands to preserve natural systems and be user friendly
2. Preserve the City's most ecologically valuable and intact ecological areas
3. Preserve conservation land to connect neighborhoods and urban areas
4. Preserve farmland
5. Support agricultural operations to ensure farmers for farmland
6. Ensure adequate land for active recreation
7. Improve recreation areas to serve active recreation needs
8. Create a mixed-use Connecticut River waterfront park and boathouse
9. Maintain existing recreation areas
10. Develop multi-use trails for easy public access
11. Reclaim pavement for parks as appropriate
12. Honor places where history comes alive in the landscape
13. Improve public awareness of all of these open space and recreation resources

WHEREAS, The plan will be adopted or endorsed by:

- Agriculture Commission
- Conservation Commission
- Historical Commission
- Planning Board
- Recreation Commission
- Transportation and Parking Commission

WHEREAS, City Council endorsement and adoption endorsement of this plan indicates support for the plan, the extensive public participation, and the collaborative efforts of six city citizen boards; and

WHEREAS, Endorsement and adoption by City Council does **not** create any obligations to the city and does **not** imply agreement with each recommendation;

NOW, THEREFORE BE IT ORDERED,

City Council endorses and adopts the *2011-2017 Open Space, Recreation & Multi-Use Trail Plan.*

In City Council, December 2, 2010
Passed First Reading on a Voice Vote of 9 Yes, O No

Attest: Mary L. Midura, **Clerk of Council**

In City Council, December 16, 2010
Passed Second Reading on a Roll Call Vote of 8 Yes, O No, 1 Absent
(Councilor Carney Absent)

Attest: Mary L. Midura, **Clerk of Council**

Approved: Mary Clare Higgins, Mayor
Rules suspended, passed two readings and enrolled.

I hereby certify that the above Order passed the Northampton City Council on December 16, 2010.

Her Honor Mayor Mary Clare Higgins approved the Order on December 16, 2010.

Attest: Mary L. Midura **Clerk of Council**

PLANNING AND DEVELOPMENT • CITY OF NORTHAMPTON
planning • conservation • zoning • northampton GIS • historic • community preservation • central business architecture
413-587-1266

December 13, 2010

Wayne Feiden, FAICP
Director of Planning and Development
210 Main Street, Room 11
Northampton, MA 01060

Dear Wayne:

On December 13, 2010 the Agriculture Commission voted unanimously to endorse the 2011-2017 ***Northampton Open Space, Recreation, and Multi-Use Trail Plan***. The Agriculture Commission's review and endorsement was focused on the agricultural aspects of the plan.

The plan emphasizes that in order for farming to be sustainable it needs to be economically viable. To this end, we want to urge consideration of three issues:

1. Do not develop multi-use trails in Meadows. Multi-use trails can create conflicts with farming, especially in the Meadows where farmers are already under pressure from disrespectful visitors.
2. Other than farmland within conservation areas, be very cautious about developing any trails adjacent to farmland. Again, the goal is to prevent conflicting land uses.
3. Consider how to prevent off-leash dog walking in the Meadows in areas where off-leash dogs can and does damage crops. Farmland is for crops, not dogs.

The Agriculture Commission understands that some additional editorial changes will be made to complete the plan and address to comments from other reviewers. None of these changes are substantive and we do not expect the plan to come back to the board.

Sincerely,

John Omasta

John Omasta, Chair
Agriculture Commission

NORTHAMPTON HISTORICAL COMMISSION
CITY HALL 210 MAIN STREET NORTHAMPTON, MASSACHUSETTS 01060

CITY HALL
William Fenno Pratt
Architect, 1849

December 9, 2010

Wayne Feiden, FAICP
Director of Planning and Development
210 Main Street, Room 11
Northampton, MA 01060

Dear Wayne:

On October 27, 2010, the Historical Commission voted unanimously to endorse the 2011-2017 ***Northampton Open Space, Recreation, and Multi-Use Trail Plan***. The Historical Commission is endorsing the entire plan, but our focus was, not surprisingly, on the historical elements of the plan.

We understand that the plan incorporates the comments that the Historical Commission made. We have no additional comments on the plan.

The Historical Commission understands that some additional editorial changes will be made to complete the plan and to address comments from other reviewers. If none of these changes are substantive we do not expect the plan to come back to the Commission.

Sincerely,

Barbara B. Blumenthal

Barbara B. Blumenthal, Chair
Northampton Historical Commission

TRANSPORTATION AND PARKING COMMISSION
City of Northampton

City Hall, 210 Main Street
Northampton, MA 01060-3199
(413) 587-1249 Fax: (413) 587-1275

December 9, 2010

Wayne Feiden, FAICP
Director of Planning and Development
210 Main Street, Room 11
Northampton, MA 01060

Dear Wayne:

On November 16, 2010, the Northampton Transportation and Parking Commission voted unanimously to endorse the 2011-2017 ***Northampton Open Space, Recreation, and Multi-Use Trail Plan***. The Transportation and Parking Commission's endorsement focused on the multi-use trail planning aspects of the plan.

The plan incorporates the comments that the Transportation and Parking Commission and its Bicycle and Pedestrian Subcommittee made at several review sessions. As such, we have no additional comments on the plan.

The Transportation and Parking Commission understands that some additional editorial changes will be made to complete the plan and address to comments from other reviewers. *None of these changes are* substantive and we do not expect the plan to come back to the board.

Sincerely,

Maureen Carney, Chair
Transportation and Parking Commission

Northampton Committee on Disabilities
67 Conz Street
Northampton, MA 01060
Phone:413-587-1228 Fax:413-587-1233

December 13, 2010

Wayne Feiden, FAICP
Director of Planning and Development
210 Main Street, Room 11
Northampton, MA 01060

Dear Wayne:

On November 16, 2010, the Northampton Committee on Disabilities voted unanimously to approve the 2011-2017 ***Northampton Open Space, Recreation, and Multi-Use Trail Plan***. The Committee had several comments about trails in Northampton, including continued need to expand the accessible trail network, and investigating the possibility of additional lights and emergency call boxes in key locations. The Committee appreciated that these comments were able to be incorporated into the Plan. The Committee's approval also extends to the Americans with Disabilities Act inventory included in the Plan as an appendix. It is helpful to have a single document that identifies both the accessibility strengths and weaknesses of all of Northampton's conservation and recreation areas.

Thank you,

Patricia A. Shaughnessy

Patricia A. Shaughnessy
ADA Coordinator
City of Northampton

Catalyst for Regional Progress
PVPC
Timothy W. Brennan, Executive Director

December 15, 2011

Wayne Feiden
Director of Planning and Development
City of Northampton
210 Main Street, Room 11
Northampton, MA 01060

RE: Northampton 2011-2017 Open Space, Recreation, and Multi-Use Trail Plan

Dear Mr. Feiden:

The Pioneer Valley Planning Commission has reviewed draft Northampton 2011-2017 Open Space, Recreation, and Multi-Use Trail Plan. The PVPC supports the City's wise stewardship and permanent protection of its natural, cultural and recreational resources as a strategy to promote vibrant urban centers and economic development. The goals and objectives of the Plan are also consistent with Valley Vision 2, our regional land use plan.

Northampton is recognized regionally as a leader in its effort to utilize innovative means including creative land use policy and partnerships, rather than acquisition, to preserve open space and address unmet recreational needs of the community. These efforts include consideration of Environmental Justice populations. Planning for minority groups has factored into the placement of public areas so as to provide equal opportunity.

As noted in the Plan, upgrading and extending water and sewer lines outside of the currently developed areas to proposed locations for commercial or light development may not be feasible due to the high costs involved. Upgrades of existing water and sewer lines may encourage infill development for greater concentrations of commercial, industrial and large scale residential uses near current village centers, and may limit larger scale development in agricultural and environmentally sensitive areas.

Of the cities extensive list of open space and recreational resources, only six open space areas are listed in fair or poor condition. The Plan addresses possible improvements to these areas and gives land management and access the important consideration it deserves. Last, the PVPC commends the Action Plan for its recognition of diverse community planning efforts needed to support the identified goals for open space and recreation, including preservation, land management, sustainable markets and economic viability, and accessibility. The implementation of this Action Plan will result in a "greener", more vibrant urban community. Thank you for the opportunity to comment.

RECEIVED
DEC 17 2010
DEPT OF PLANNING
NORTHAMPTON, MA 01060

Sincerely,

Timothy Brennan, Executive Director

cc: Debin Bruce, PVPC Commissioner
Mayor Mary Clare Higgins, City of Northampton

Pioneer Valley Planning Commission 60 Congress Street - Floor 1, Springfield, MA 01104-3419
phone 413.781.6045 *fax* 413.732.2593 *TTY* 413.781.7168 www.pvpc.org

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

Richard K. Sullivan, Jr.
SECRETARY

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

June 23, 2011

Wayne Feiden
Planning and Development
210 Main Street, Room 11
Northampton, MA 01060

Re: Open Space and Recreation Plan

Dear Mr. Feiden:

Thank you for submitting Northampton'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 Northampton to participate in DCS grant rounds through March 2018.

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

A ADA Self-Evaluation Report

The City of Northampton's goal is to increase handicap accessibility at park, recreation, and conservation lands. In the short term, the goal is to increase the variety of accessible facilities and to provide disabled populations with the same range of recreational opportunities available to the general population. It is Northampton's goal to fully comply with Section 504 of the Rehabilitation Act of 1973, as amended, as well as the Americans with Disabilities Act and the Massachusetts Architectural Access Board standards.

The ADA Access Self-Evaluation document was drafted by the Office of Planning and Development with the assistance of the Mayor's Committee on Disabilities, the Recreation Commission, and the Conservation Commission. The Committee on Disabilities, an organization representing and including people with disabilities persons, provided input. The Committee on Disabilities is charged with studying the needs of individuals with disabilities in the community in relation to housing, employment, public assembly, transportation, education, health, recreation and other relevant matters, and is an active advocate for the integration of people with disabilities in all phases of community life.

Part I: Administrative Requirements:

Designation of an ADA Coordinator: The Director of the Northampton Council on Aging is designated by Ordinance as the Director of the Northampton Council on Aging. The ADA Coordinator also serves as the staff support to the Northampton Committee on Disabilities.

Grievance Procedures: Northampton has a single grievance procedure that provides for "prompt and equitable resolution of complaints alleging any violation of state and federal laws protecting individuals from discrimination." The complete Non-Discrimination and Grievance Procedure can be found below.

Public Notification Requirement: In accordance with ADA and 504 requirements, Northampton notifies the public of its non-discrimination policies, and all job advertisements include an EOE clause. The City's full non-discrimination policy is part of its Grievance Procedures, and can be provided in alternative formats.

Part II: Program Accessibility

Facility Inventory: A facility inventory of all areas under the control of the recreation department and Conservation Commission is provided in Table A1 below.

Transition Plan: The City completed a full ADA transition plan in 1992, updated in 1995. Although the City is working to improve handicap accessibility, additional steps are needed to make all park, recreation, and conservation facilities accessible to people with disabilities.

All of the goals for ADA improvements identified in the 2005-2010 Open Space and Recreation Plan have been fully implemented:

- A ten year development plan for the continuation of the Nagel Walkway to the existing bicycle network with a connection along King Street. The Entire Nagel Walkway will eventually become handicap accessible.
- The development of a handicap accessible ramp near the Jackson Street School to connect with existing bicycle paths. Currently, the grade is too steep to accommodate wheelchair use and children on bicycles.
- Developing a handicap accessible project at Veteran's Field with grant money.

The following goals are established for the next seven years:

- Additional fully accessible multi-use trails to serve 75% of the population (up from the current 65%).
- Additional fully accessible access ramps to multi-use trails to shorten the distance between trails and origins/destinations.
- More granite and slate blocks along multi-use and walking trails to provide resting points for those with difficulties walking without a break.
- Improved pedestrian friendly and fully accessible streets to provide the link between homes and conservation and recreation area.

5. Development of accessible recreation opportunities at the soon to be developed Florence Fields Recreation Area.

Northampton Committee on Disabilities
67 Conz Street
Northampton, MA 01060
Phone:413-587-1228 Fax:413-587-1233

December 13, 2010

To Whom It May Concern:

The City of Northampton has in effect a Policy of Non-Discrimination and Grievance Procedure, Number 200-2 and put in to effect on February 1, 1998 and revised on August 2, 2010. The Human Resources Director serves as the City's Affirmative Action/Equal Opportunity (AA/EO) Manager.

A copy of this policy is attached.

If additional information is required please contact me at 413-587-1231 or the Human Resources Director at 413-587-1257

Sincerely,

Patricia A. Shaughnessy

Patricia A. Shaughnessy

ADA Coordinator

City of Northampton

City of Northampton, Massachusetts

Human Resources Department

POLICY & PROCEDURE NUMBER 200-2

Effective Date: 2/1/98
Revision Date: 8/2/2010

POLICY OF NON-DISCRIMINATION & GRIEVANCE PROCEDURE

POLICY:

This is to notify all persons that it is the policy of the City of Northampton to refrain from discriminating against any person because of her/his race, color, religious creed, national origin, gender, sexual orientation, age, ancestry, disability, genetics or marital status in the provision of, or access to, services, employment and activities.

This is in accordance with all applicable federal and state law, including, but not limited to, Section 504 of the Rehabilitation Act of 1973, as amended, the Americans with Disabilities Act, as amended, the Civil Rights Act of 1964, as amended, Article 114 of the Massachusetts Constitution, Chapters 151B, GL 272, (sections 92, 98, and 98A), GL 149 (sections 24A and 105A) of the Massachusetts General Laws and Executive order 452.

Glenda G. Stoddard, Human Resources Director, shall administer compliance with the law and regulations.

For further information about our policies and grievance procedures for the resolution of complaints contact the City's Affirmative Action/Equal Opportunity (AA/EO) Manager:

Glenda G. Stoddard, Human Resources Director
240 Main Street
Northampton, MA 01060
(413) 587-1258

PROCEDURE:

The City of Northampton has adopted an informal grievance procedure providing for prompt and equitable resolution of complaints alleging any violation of state and federal laws and regulations protecting individuals from discrimination pursuant to this policy. The laws and regulations may be examined in the Human Resources Department office in coordination with the above named individual. This person has been designated to coordinate the efforts of the organization to comply with the regulations.

1. Where possible, a complaint should state the name and address of the person filing it, a brief description of the alleged action prohibited by the laws and regulations, and the date it allegedly occurred.

2. A complaint should be filed in the City's Human Resources Department within a reasonable amount of time (no more than thirty [30] days) after the person filing the complaint becomes aware of the action alleged to be prohibited by the laws or regulations.

3. The AA/EO Manager or his/her designee shall investigate the complaint to determine its validity. These rules contemplate an informal but thorough investigations. All grievant parties will be given an opportunity to submit evidence relevant to the complaint.

4. The AA/EO Manager or his/her designee shall issue a written decision determining the validity of the complaint no later than thirty [30] days after its receipt and issue a corrective action plan where necessary.

5. The AA/EO Manager or his/her designee shall maintain the files and records relating to complaints filed hereunder.

6. The right of a person to the prompt and equitable resolution of a complaint filed hereunder shall not be impaired by the person's pursuit of other remedies, such as the filing of a complaint with the Massachusetts Commission Against Discrimination and/or any other state or federal agency or any state or federal court.

7. These rules shall be liberally construed to protect the substantial rights of interested persons and assure compliance with the law and regulations.

APPROVED:

Mary Clare Higgins
Mayor

Glenda G. Stoddard
Human Resources Director

Revision History:
3/6/98

A1. Recreation Areas

FACILITY INVENTORY

			LOCATION														
ACTIVITY	EQUIPMENT	NOTES	Agnes Fox Field	Arcanum Field	Childs City Park	Community Gardens	Halligan-Daley Historical Park	JFK Middle School	Look Park	Main Street Park	Maine's Field	Musante, Jr. Beach	Nagle Walkway	Northampton High School	Pulaski Park	Sheldon Field	Veterans Memorial Field
Picnic Facilities	Access	All facilities (tables, benches, grills, trash cans, picnic shelters, etc.) are adjacent to accessible paths & open spaces	no trash cans	☑		N/A		N/A	☑		☑	☑	☑	☑	N/A	N/A	☑
	Tables & Benches	Back & arm rests	no	no							☑	no arm	☑	no arm			N/A
		Adequate number	6	☑					☑		☑	☑	☑	☑			
	Grills	Height of cooking surface	N/A	N/A								N/A	N/A	N/A			
	Picnic Shelters	Near accessible water fountains, trash can, restroom, parking, etc.	N/A	☑					☑		☑	☑	☑	N/A			
Trails		Surface material	N/A	mixed		N/A		N/A			☑	☑	☑	☑	some	☑	☑
		Dimensions		3' min							☑	☑	☑	☑	☑	☑	☑
		Rails		N/A							N/A	☑	☑	☑	☑	☑	N/A
		Signage (for visually impaired)		N/A							N/A	☑	☑	no	☑	no	N/A
Swimming Facilities	Pools & Beaches	Location from accessible path to pool/into water	N/A	N/A		N/A	N/A	☑			N/A	☑	N/A	N/A	N/A	N/A	N/A
		Location from accessible parking						☑				☑					
		Safety features, i.e. warning for visually impaired						☑				☑					
		Handrails						☑				☑					
		Shade provided						☑				☑					
Play Areas (tot lots)	All Play Equipment	Same experience provided to all	2 slides	slides		N/A	N/A	N/A			☑	N/A	N/A	☑	☑	☑	no
	Access Routes	Located adjacent to accessible paths	☑	☑					☑		☑			☑	☑	☑	☑
		Enough space between equipment for wheelchairs	☑	☑					☑		☑			☑	☑	☑	
Game Areas	Access Routes	Located adjacent to accessible paths	☑	☑		N/A	N/A	☑	☑		☑	N/A	N/A	N/A	☑	far edge	☑
		Berm cuts onto courts	☑	☑				☑	☑		☑				☑	☑	some
	Equipment	Height & dimensions	☑	☑				☑			N/A				☑	☑	☑
		Spectator seating	☑	☑				☑			N/A				☑	☑	☑
Fishing Facilities & Boat Docks	Access Routes	Located adjacent to accessible paths	N/A	N/A		N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Handrails															
	Equipment	Arm rests, bait shelves, & fish cleaning tables															
		Handrails															
Programming & Services	Are special programs at your facilities available (i.e. swimming lessons, hikes, etc.)?		no	no		N/A		☑			N/A	N/A	N/A	N/A	N/A	no	no
	Information available in alternative formats, i.e. for visually impaired		no	no				?								no	no
	Process to request interpretive services, (i.e. sign language interpreter) for meetings		no	no				?								no	no

PARKING

Total Spaces	Required Accessible Spaces
Up to 25	1 space
26–50	2 spaces
51–75	3 spaces
76–100	4 spaces
101–150	5 spaces
151–200	6 spaces
201–300	7 spaces
301–400	8 spaces
401–500	9 spaces

Specification for Accessible Spaces	LOCATION														
	Agnes Fox Field	Arcanum Field	Childs City Park	Community Gardens	Halligan-Daley Historical Park	JFK Middle School	Look Park	Main Street Streetscape Park	Maine's Field	David B. Musante, Jr. Beach	Nagle Downtown Walkway	Northampton High School	Pulaski Park	Sheldon Field	Veterans Memorial Field
Number of spaces/accessible spaces	9		None	None		☑			N/A	☑	N/A	☑	N/A	60/3	0
Accessible space located closest to accessible entrance	no	☑		↓		☑			↓	☑	↓	☑	↓	☑	N/A
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft	no	☑				☑				☑		☑		☑	↓
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	☑	☑				☑				☑		☑		☑	
Van space—minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle	no	1				☑				☑		☑		☑	
Sign with international symbol of accessibility at each space or pair of spaces, must be min. 5 ft, max. 8 ft to top of sign	no	on ground				☑				☑		☑		☑	
Surface evenly paved or hard-packed (no cracks)	☑	☑				☑				☑		☑		☑	
Surface slope less than 1:20, 5%	☑	☑				☑				☑		☑		☑	
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present	no	☑				☑				☑		☑		☑	
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, & textured or painted yellow	not yellow	not yellow				☑				☑		☑		☑	

RAMPS

Specification	LOCATION														
	Agnes Fox Field	Arcanum Field	Childs City Park	Community Gardens	Halligan-Daley Historical Park	JFK Middle School	Look Park	Main Street Streetscape Park	Maine's Field	David B. Musante, Jr. Beach	Nagle Downtown Walkway	Northampton High School	Pulaski Park	Sheldon Field	Veterans Memorial Field
Slope maximum 1:12	N/A	N/A		N/A		None	☑		N/A	☑	☑	☑	☑	☑	N/A
Minimum width 4 ft between handrails	↓	↓		↓		↓	☑		↓	☑	☑	☑	☑	☑	↓
Handrails on both sides if ramp is no longer than 6 ft							☑			☑	☑	☑	☑	N/A	
Handrails at 34" & 19" from ramp surface							☑			☑	☑	☑	☑	↓	
Handrails extend 12" beyond top & bottom							☑			☑	☑	☑	☑		
Handgrip oval or round & smooth surface							☑			☑	☑	☑	☑		
Handgrip diameter between $1^1/_4$" & 2"							☑			☑	☑	☑	☑		
Clearance of $1^1/_2$" between wall & wall rail							☑			☑	☑	☑	☑		
Non-slip surface							☑			☑	☑	☑	☑	☑	
Level platforms (4 ft X 4 ft) at every 30 ft, at top, at bottom, at change of direction							☑			☑	☑	☑	☑	☑	

SITE ACCESS, PATH OF TRAVEL, ENTRANCES

Specification	LOCATION														
	Agnes Fox Field	Arcanum Field	Childs City Park	Community Gardens	Halligan-Daley Historical Park	JFK Middle School	Look Park	Main Street Streetscape Park	Maine's Field	David B. Musante, Jr. Beach	Nagle Downtown Walkway	Northampton High School	Pulaski Park	Sheldon Field	Veterans Memorial Field
Site Access															
Accessible path of travel from passenger disembarking area & parking area to accessible entrance	no	☑		☑		☑	☑		N/A	☑	☑	☑	☑	☑	☑
Disembarking area at accessible entrance	no	☑		☑		☑	☑		☑	☑	☑	☑	☑	☑	☑
Surface evenly paved or hard-packed	☑	☑		☑		☑	☑		☑	☑	☑	☑	some	☑	☑
No ponding of water	☑	☑		☑		☑	☑		☑	☑	☑	☑	behind	☑	☑
Path of Travel															
Path does not require use of stairs	☑	☑		☑		☑			☑	☑	☑	☑	☑	☑	☑
Path is stable, firm & slip resistant	☑	☑		☑		☑	☑		☑	☑	☑	☑	☑	☑	☑
3 ft wide minimum	☑	☑		☑		☑	☑		☑	☑	☑	☑	☑	☑	☑
Slope maximum 1:20 (5%) & maximum cross pitch is 2% (1:50)	☑			☑		☑	☑		☑	☑	☑	☑	☑	☑	☑
Continuous common surface, no changes in level greater than $^1/_2$"	☑	☑		☑		☑	☑		☑	☑	☑	☑	☑	☑	☑
Any objects protruding onto pathway must be detected by person with visual disability, using cane	☑	☑		☑		☑	☑		☑	☑	☑	☑	☑	☑	☑
Objects protruding more than 4" from wall must be within 27" of ground, or higher than 80"	☑	☑		☑		☑	☑		☑	☑	☑	☑	☑	☑	☑
Curb on pathway must have curb cuts at drives, parking, & drop-offs	☑	☑		☑		☑	☑		☑	☑	☑	☑	☑	☑	☑
Entrances															
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, & NOT be service entrance	☑	N/A		N/A	N/A				N/A	☑	N/A	☑	N/A	not marked	no signs
Level space extending 5 ft from door, interior & exterior of entrance doors	N/A					☑				☑		☑		N/A	N/A
Minimum 32" clear width opening (i.e. 36" door with standard hinge)						☑				☑		☑			
At least 18" clear floor area on latch, pull side of door						☑				☑		☑			
Door handle no higher than 48" & operable with closed fist						☑				☑		☑			
Vestibule is 4 ft plus width of door swinging into space						☑				☑		☑			
Entrance(s) on level that makes elevators accessible						☑				N/A		☑			
Door mats less than $^1/_2$" thick are securely fastened						☑				N/A		☑			
Door mats more than $^1/_2$" thick are recessed						☑				N/A		☑			
Grates in path of travel have openings of $^1/_2$" maximum						☑				N/A		☑			
Signs at non-accessible entrance(s) indicate direction to accessible entrance						☑				no		☑			
Emergency egress—alarms with flashing lights & audible signals, sufficiently lighted						☑				N/A		☑			

STAIRS AND DOORS

Specification	LOCATION														
	Agnes Fox Field	Arcanum Field	Childs City Park	Community Gardens	Halligan-Daley Historical Park	JFK Middle School	Look Park	Main Street Streetscape Park	Maine's Field	David B. Musante, Jr. Beach	Nagle Downtown Walkway	Northampton High School	Pulaski Park	Sheldon Field	Veterans Memorial Field
Stairs															
No open risers	N/A	N/A		N/A		☑			N/A	☑	N/A	☑	☑	☑	N/A
Nosings not projecting	↓	↓		↓		☑			↓	☑	↓	☑	☑	☑	↓
Treads no less than 11" wide						☑				☑		☑	☑	☑	
Handrails on both sides						☑				☑		☑	☑	☑	
Handrails 34"–38" above tread						☑				☑		☑	☑	☑	
Handrail extends minimum of 1 ft beyond top & bottom riser (if no safety hazard & space permits)						☑				☑		☑	☑	☑	
Handgrip oval or round, has a smooth surface, & has diamter between $1^1/_4$" & $1^1/_2$"						☑				☑		☑	☑	☑	
$1^1/_2$ clearance between wall & handrail						☑				☑		☑	☑	☑	
Doors															
Minimum 32" clear opening	☑	N/A		N/A	N/A	☑			N/A	☑	N/A	☑	N/A	N/A	only door leads to rest-room.
At least 18" clear floor space on pull side of door	☑	↓		↓	↓	☑			↓	☑	↓	☑	↓	↓	
Closing speed minimum 3 seconds to within 3" of latch	N/A					☑				☑		☑			
Maximum pressure 5 pounds interior doors	N/A					☑				☑		☑			
Threshold maximum 1/2" high, beveled on both sides	N/A					☑				☑		☑			
Hardware operable with closed fist (no conventional door knobs or thumb latch devices)	☑					☑				☑		☑			N/A
Hardware minimum 36", maximum 48" above floor	☑					☑				☑		☑			↓
Clear, level floor space extends out 5 ft from both sides of door	☑					☑				☑		☑			
Door adjacent to revolving door is accessible & unlocked	N/A					☑				☑		3			
Doors opening into hazardous area have hardware that is knurled or roughened	N/A					☑				☑		☑			

RESTROOMS—also see DOORS AND VESTIBULES

Specification	LOCATION														
	Agnes Fox Field	Arcanum Field	Childs City Park	Community Gardens	Halligan-Daley Historical Park	JFK Middle School	Look Park	Main Street Streetscape Park	Maine's Field	David B. Musante, Jr. Beach	Nagle Downtown Walkway	Northampton High School	Pulaski Park	Sheldon Field	Veterans Memorial Field
5 ft turning space measured 12" from floor	☑	☑		N/A	N/A	☑			☑	☑	N/A	☑	N/A	N/A	N/A
At least one sink:															
Clear floor space of 30" by 48" to allow forward approach	N/A	☑		N/A	N/A	☑			☑	☑	N/A	☑	N/A	N/A	N/A
Mounted without pedestal or legs, height 34" to top of rim	↓	☑		↓	↓	☑			☑	☑	↓	☑	↓	↓	↓
Extends at least 22" from wall		☑				☑			☑	☑		☑			
Open knee space minimum 19" deep, 30" width, & 27" high		☑				☑			☑	☑		☑			
Cover exposed pipes with insulation		incomp				☑			☑	☑		☑			
Faucets operable with closed fist (lever or spring activated handle)		☑				☑			☑	☑		☑			
At least one stall:															
Accessible to person using wheelchair at 60" wide by 72" deep	N/A	N/A		N/A	N/A	☑			no	☑	N/A	☑	N/A	N/A	N/A
Stall door is 36" wide, swings out, is self-closing, & has a pull latch	↓	N/A		↓	↓	☑			no	☑	↓	☑	↓	↓	↓
Lock on stall door is operable with closed fist & is 32" above floor		☑				☑			no	☑		☑			
Coat hook is 54" high						☑			☑	☑		☑			
Toilet															
18" from center to nearest side wall	N/A	☑		N/A	N/A	☑			☑	☑	N/A	☑	N/A	N/A	N/A
42" minimum clear space from center to farthest wall or fixture	↓	☑		↓	↓	☑			☑	☑	↓	☑	↓	↓	↓
Top of seat 17"–19" above floor		☑				☑			☑	☑		☑			
Grab Bars															
On back & side wall closest to toilet	N/A	☑		N/A	N/A	☑			N/A	☑	N/A	☑	N/A	N/A	N/A
11/4" diameter	↓	☑		↓	↓	☑			↓	☑	↓	☑	↓	↓	↓
11/2" clearance to wall		☑				☑				☑		☑			
Located 30" above & parallel to floor		35"				☑				☑		☑			
Acid-etched or roughened surface		☑				☑				☑		☑			
42" long		☑				☑				☑		☑			
Fixtures															
Toilet paper dispenser is 24" above floor	N/A	☑		N/A	N/A	☑			☑	☑	N/A	☑	N/A	N/A	N/A
One mirror set maximum 38" to bottom (if tilted 42")	↓	no mirror		↓	↓	☑			none	none	↓	☑	↓	↓	↓
Dispensers (towel, soap, etc.) at least one of each, maximum 42" above floor		no towel				☑			☑	☑		☑			

FLOORS, DRINKING FOUNTAINS, TELEPHONES

	LOCATION														
Specification	Agnes Fox Field	Arcanum Field	Childs City Park	Community Gardens	Halligan-Daley Historical Park	JFK Middle School	Look Park	Main Street Streetscape Park	Maine's Field	David B. Musante, Jr. Beach	Nagle Downtown Walkway	Northampton High School	Pulaski Park	Sheldon Field	Veterans Memorial Field
Floors															
Non-slip surface	N/A	☑		N/A		☑			N/A	☑	N/A	☑	N/A	N/A	N/A
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored						☑				no		☑			
Corridor width minimum is 3 ft		☑				☑				☑		☑			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into path of travel from height of 27" to 80" above floor		☑				☑				☑		☑			
Drinking Fountains															
Spouts no higher than 36" from floor to outlet	N/A	36" 44"		N/A		☑			N/A	N/A	N/A	☑	N/A	N/A	N/A
Hand operated push button or level controls		☑				☑						☑			
Spouts located near front with stream of water as parallel to front as possible		☑				☑						☑			
If recessed, recess minimum 30" width & no deeper than depth of fountain		☑				☑						☑			
If no clear knee space underneath, clear floor space 30" X 48" to allow parallel approach		☑				☑						☑			
Telephones															
Highest operating part maximum of 54" aboe floor	N/A	N/A		N/A		☑			N/A	None	N/A	☑	N/A	N/A	N/A
Access within 12" of phone, 30" high by 30" wide						☑						☑			
Adjustable volume control on headset so identified						base						☑			
Signs, Signals, and Switches															
Switches, Controls, and Signs															
Switches & controls for light, heat, ventilation, windows, fire alarms, thermostats, etc. must be minimum of 36" & maximum of 48" above floor for forward reach, maximum of 54" for side reach	N/A	N/A		N/A		☑			N/A	N/A	N/A	☑	N/A	N/A	N/A
Electrical outlets centered no lower than 18" above floor						☑						☑			
Warning signals must be visual as well as audible						☑						☑			
Signs															
Mounting height must be 60" to centerline of sign	☑	☑		N/A		☑			☑	☑	☑	☑	☑	☑	☑
Within 18" of door jamb or recessed	☑	☑				☑			☑	☑	☑	☑	☑	☑	☑
Letters & numbers at least 11/4" high	☑	☑				☑			☑	☑	☑	☑	☑	☑	no
Letters & numbers raised .03"	☑	☑				☑			☑	☑	☑	☑	☑	☑	☑
Letters & numbers contrast with background color	☑	☑				☑			☑	☑	☑	☑	☑	☑	☑

Specification	LOCATION														
	Agnes Fox Field	Arcanum Field	Childs City Park	Community Gardens	Halligan-Daley Historical Park	JFK Middle School	Look Park	Main Street Streetscape Park	Maine's Field	David B. Musante, Jr. Beach	Nagle Downtown Walkway	Northampton High School	Pulaski Park	Sheldon Field	Veterans Memorial Field
Swimming Pools—accessibility can be via ramp, lifting device, or transfer area															
Ramp at least 34" wide with non-slip surface extending into shallow end, slope not exceeding 1:6 with handrails on both sides	N/A	N/A		N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lifting device						☑									
Transfer area 18" above path of travel & minimum of 18" wide						☑									
Unobstructed path of travel not less than 48" wide around pool						☑									
Non-slip surface						☑									
Shower Rooms—Showers must accomodate both wheel-in and transfer use															
Stalls 36" by 60" minimum, with 36" door opening	N/A	N/A		N/A	N/A	☑			N/A	N/A	N/A	N/A	N/A	N/A	N/A
Floors are pitched to drain stall at corner farthest from entrance						☑									
Floors are non-slip surface						☑									
Controls operate by single lever with pressure balance mixing valve						☑									
Controls located on center wall adjacent to hinged seat						☑									
Shower heads attached to flexible metal hose						no hose									
Shower heads attached to wall mounting adjustable from 42" to 72" above floor						☑									
Seat is hinged & padded & at least 16" deep, folds upward, securely attached to side wall, height is 18" to top of seat, & at least 24" long						no pad									
Soap trays without handhold features unless they can support 250 pounds						none									
2 grab bars are provided, one 30" & one 48" long, or one continuous "L" shaped bar						☑									
Grab bars are placed horizontally at 36" above floor line						☑									
Picnicking															
Minimum of 5% of total tables must be accessible with clear space under table top not less than 30" wide & 19" deep per seating space & not less than 27" clear from ground to underside of table An additional 29" clear space (totaling 48") must extend beyond 19" clear space under table to provide access	☑	no		☑		N/A	☑		☑	☑	N/A	3 tables, no access	N/A	no tables	no tables
For tables without toe clearance, knee space under table must be at least 28" high, 30" wide, & 24" deep		no		☑			☑		☑	☑		N/A		N/A	N/A
Top of table no higher than 32" above ground	☑	☑		☑			☑		☑	☑					
Surface of clear ground space under & around table must be stable, firm & slip-resistant, & evenly graded with maximum slope of 2% in all directions	☑	☑		☑			☑		☑	on grass					
Accessible tables, grills, & fire rings must have clear ground space of at least 36" around perimeter	N/A	N/A		☑			☑		☑	N/A					

A2. Conservation & Agricultural Areas

FACILITY INVENTORY

			LOCATION																
ACTIVITY	EQUIPMENT	NOTES	Barrett Street Marsh	Brookwood Marsh	Mary Brown's Dingle	CT River/James H. Elwell	Fitzgerald Lake/ Beaver & Broad Brook	Florence/Garfield	Ice Pond	Manhan Rail Trail Buffer	Meadows	Mill River Greenway	Mineral Hills	Mineral Hills/Turkey Hills CR	Parson's Brook	Rainbow Beach	Roberts Hill Watershed	Saw Mill Hills	West Farms
Picnic Facilities	Not applicable		None	None	None	5, access				None	None	None	None			None	2, access	None	
Trails		Surface material	Paved, CS, BW	Earthen	None	Paved	Paved, BW, earthen		Paved Aluni. Bridge	None		None	Some Gravel trails			None	Dirt	None	
		Dimensions	6' to 5' wide	N/A			9" wide		6' to 4' wide				3'-8' wide				Narrow, uphill		
		Rails	None	N/A		None	One section		N/A				N/A				None		
		Signage (for visually impaired)	None			None	None		N/A				N/A				None		
Swimming Facilities	Not applicable		None	None	None	None	None		N/A	None	None	None	None			None	None	None	
Play Areas (tot lots)	Not applicable		None	None	None	None	None		N/A	None	None	None	None			None	None	None	
Game Areas:	Not applicable		None	None	None	None	None		N/A	None	None	None	None			None	None	None	
Fishing Facilities & Boat Docks	Access Routes	Located adjacent to accessible paths	None	None	None	☑	None		N/A	None	None	None	None			None	None	None	
		Handrails				No on dock, but on ramp to dock													
	Equipment (informal only, no improvements)	Arm rests, bait shelves, & fish cleaning tables				None													
		Handrails				☑													
Programming & Services	Information available in alternative formats, i.e. for visually impaired		None	None	None	None	No			N/A	None	None				None	None	None	
	Process to request interpretive services, (i.e. sign language interpreter) for meetings						Self-guided hike			N/A									

CS crushed stone

BW wooden boardwalk

PARKING

Specification for Accessible Spaces	Barrett Street Marsh	Brookwood Marsh	Mary Brown's Dingle	CT River/James H. Elwell	Fitzgerald Lake/ Beaver & Broad Brook	Florence/Garfield	Ice Pond	Manhan Rail Trail Buffer	Meadows	Mill River Greenway	Mineral Hills	Mineral Hills/Turkey Hills CR	Parson's Brook	Rainbow Beach	Roberts Hill Watershed	Saw Mill Hills	West Farms
	LOCATION																
Number of spaces/accessible spaces	None	None		/2	/1		N/A	None			no marked spaces			None	/2		
Accessible space located closest to accessible entrance				☑	☑										☑		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft				N/A	N/A										N/A		
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle				☑	☑										No		
Van space—minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle				☑	☑										☑		
Sign with intl. symbol of accessibility at each space or pair of spaces, min. 5 ft, max. 8 ft to top				☑	☑										☑		
Sign minimum 5 ft, maximum 8 ft to top of sign				☑	☑										☑		
Surface evenly paved or hard-packed (no cracks)				☑	☑										☑		
Surface slope less than 1:20, 5%				☑	☑										☑		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present				N/A	N/A										N/A		
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, & textured or painted yellow				N/A	N/A										N/A		

Total Spaces	Required Accessible Spaces
Up to 25	1 space
26–50	2 spaces
51–75	3 spaces
76–100	4 spaces
101–150	5 spaces
151–200	6 spaces
201–300	7 spaces
301–400	8 spaces
401–500	9 spaces

RAMPS

Specification	Barrett Street Marsh	Brookwood Marsh	Mary Brown's Dingle	CT River/James H. Elwell	Fitzgerald Lake/Beaver & Broad Brook	Florence/Garfield	Ice Pond	Manhan Rail Trail Buffer	Meadows	Mill River Greenway	Mineral Hills	Mineral Hills/Turkey Hills CR	Parson's Brook	Rainbow Beach	Roberts Hill Watershed	Saw Mill Hills	West Farms
	LOCATION																
Slope maximum 1:12	☑	None	☑		☑		N/A	None	None	None	N/A			None	None	None	
Minimum width 4 ft between handrails	☑		☑		☑												
Handrails on both sides if ramp is no longer than 6 ft	☑		☑		☑												
Handrails at 34" & 19" from ramp surface	☑		No		No												
Handrails extend 12" beyond top & bottom	☑		No		No												
Handgrip oval or round & smooth surface	☑		☑		☑												
Handgrip diameter between $1^1/_4$" & 2"	☑		☑		☑												
Clearance of $1^1/_2$" between wall & wall rail	☑		☑		N/A												
Non-slip surface	☑		☑		No												
Level platforms (4 ft X 4 ft) at every 30 ft, at top, at bottom, at change of direction	☑		☑		☑												

SITE ACCESS, PATH OF TRAVEL, ENTRANCES

	LOCATION																
Specification	Barrett Street Marsh	Brookwood Marsh	Mary Brown's Dingle	CT River/James H. Elwell	Fitzgerald Lake/ Beaver & Broad Brook	Florence/Garfield	Ice Pond	Manhan Rail Trail Buffer	Meadows	Mill River Greenway	Mineral Hills	Mineral Hills/Turkey Hills CR	Parson's Brook	Rainbow Beach	Roberts Hill Watershed	Saw Mill Hills	West Farms
Site Access																	
Accessible path of travel from passenger disembarking area & parking area to accessible entrance	☑	N/A		☑	☑		☑	None	None	None	N/A			None		None	
Disembarking area at accessible entrance	☑			☑	☑		☑										
Surface evenly paved or hard-packed	☑			☑	☑		☑										
No ponding of water	☑			☑	☑		☑										
Path of Travel																	
Path does not require use of stairs	☑	N/A		☑	☑		☑	None	None	None	N/A			None		None	
Path is stable, firm & slip resistant	☑			☑	☑		☑										
3 ft wide minimum	☑			☑	☑		☑										
Slope maximum 1:20 (5%) & maximum cross pitch is 2% (1:50)	☑			☑	☑		☑										
Continuous common surface, no changes in level greater than $^1/_2$"	☑			☑	☑		☑										
Any objects protruding onto pathway must be detected by person with visual disability, using cane	☑			☑	☑		☑										
Objects protruding more than 4" from wall must be within 27" of ground, or higher than 80"	☑			N/A	N/A		☑										
Curb on pathway must have curb cuts at drives, parking, & drop-offs	☑			N/A	N/A		☑										
Entrances (not applicable)																	

STAIRS AND DOORS (not applicable)

RESTROOMS—also see DOORS AND VESTIBULES (not applicable)

FLOORS, DRINKING FOUNTAINS, TELEPHONES (not applicable)

SWIMMING POOLS, SHOWER ROOMS, & PICNICKING (not applicable)

11 References

Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP)

City of Northampton Department of Public Works Water Quality Report, 2005

United States Department of Agriculture. Natural Resources Conservation Service, soil survey

U.S. Bureau of the Census. Census 2000 Population Data and census estiamtes.

Ryan, R., D. Bacon et al. The Connecticut River Watershed Action Plan for the Massachusetts Section of the Watershed. 2002.

MassGIS statewide GIS and related attribute data.

The following are attached by reference:

"Americans With Disabilities Act (ADA) Transition Plan, City of Northampton,"

"Rediscovering Northampton, The Natural History of City-Owned Conservation Areas," 1993

"Sustainable Northampton Comprehensive Plan"

"Broad Brook Coalition's Management Plan for the Fitzgerald Lake Conservation Area"

City of Northampton Code of Ordinances

City of Northampton

Office of Planning and Development

210 Main Street, Rm. 11, City Hall
Northampton, MA 01060
www.northamptonma.gov/opd/