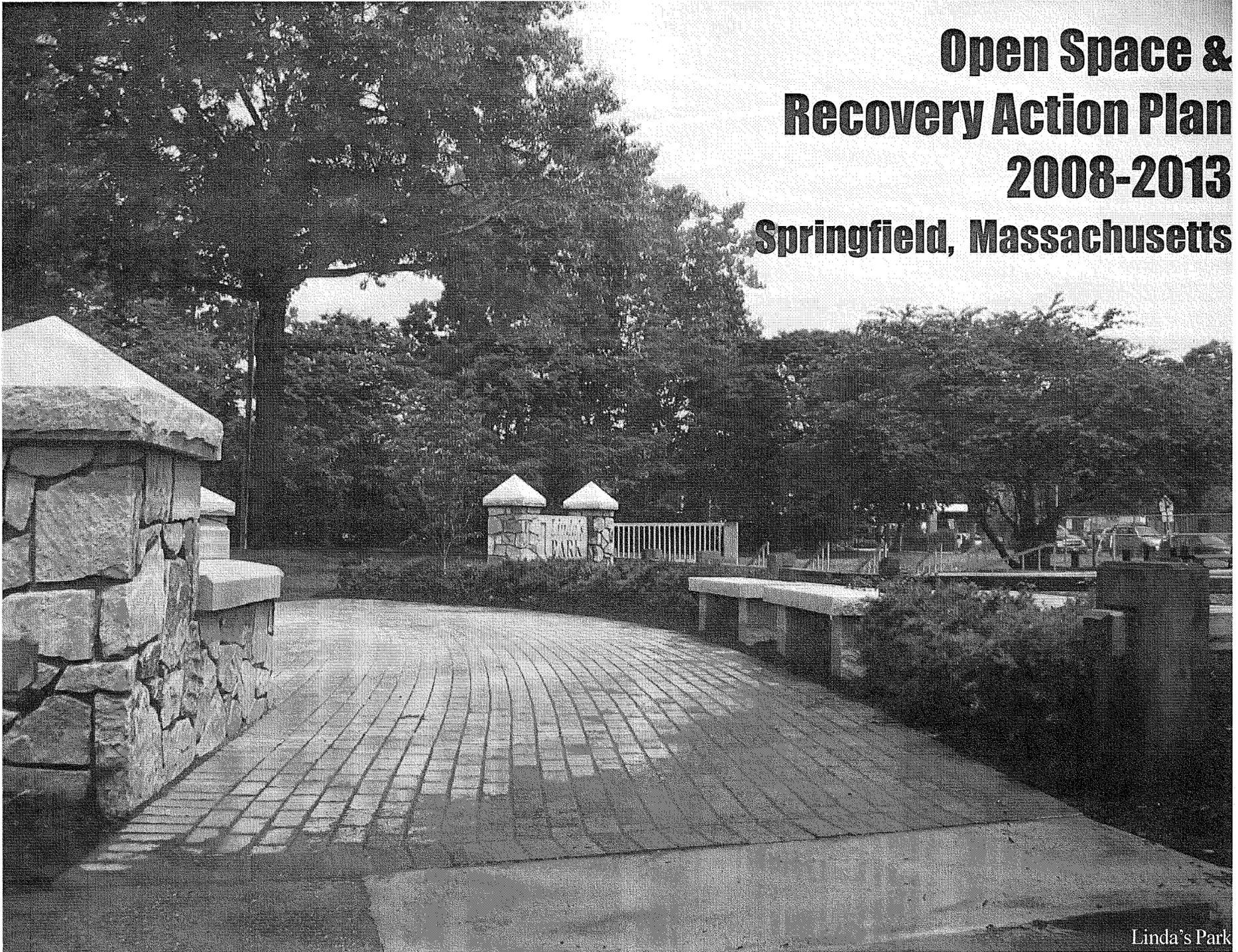


**Open Space &
Recovery Action Plan
2008-2013
Springfield, Massachusetts**



Linda's Park



THE CITY OF SPRINGFIELD, MASSACHUSETTS

MAYOR DOMENIC J. SARNO

HOME OF THE NATIONAL BASKETBALL HALL OF FAME

January 7, 2009

Ian Bowles, Secretary
Executive Office of Energy & Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: 2008-2013 Open Space & Recovery Action Plan

Dear: Secretary Bowles:

On behalf of the City of Springfield, I am pleased to submit to your office the 2008-2013 Open Space & Recovery Action Plan. This is the city's official plan of action for the comprehensive renewal and preservation of our parks and open spaces.

As with the previous plans, Springfield continues its commitment to the preservation and revitalization of one of its most important assets, its parks and open spaces. These critical assets continue to provide the citizens of Springfield with opportunities for both passive and active recreation within the large urban community. I strongly believe that these environmental treasures enhance and contribute to a better quality of life for all of Springfield's residents. In order to achieve the goals laid out in this plan, it is essential that Springfield continues its partnership with your agency.

The 2008-2013 Open Space & Recovery Action Plan sets forth a very ambitious schedule for projects. The projects listed in the plan range from updating and the addition of new equipment for city parks, renovating current park facilities and upgrading handicapped accessibility to the acquisition and long-term management of the city's numerous conservation areas.

As always, the successful implementation of this plan can only be accomplished with the continued assistance and cooperation of the Executive Office of Energy and Environmental Affairs. It is my goal that with your agency's help, Springfield will continue its commitment to the preservation of its open spaces well into the 21st century.

Sincerely,

Domenic J. Sarno
Mayor

OPEN SPACE AND RECOVERY ACTION PLAN UPDATE

for the period

AUGUST 31, 2008 - SEPTEMBER 1, 2013

SPRINGFIELD, MASSACHUSETTS

Domenic J. Sarno, Mayor

Springfield Planning Board

Kerry L. Dietz, *Chair*
Rico Daniele (*Park Commission Rep.*)
Barbara Footit (*Board Clerk*)
John J. Fitzgerald (*Public Works Rep.*)
Geraldine Gardiner
Christopher McDonald
Michael Rancitelli
Ben Swan Jr.
Norma I. Villanueva (*Vice Chair*)

Office of Planning & Economic Development

Plan Preparation:

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Carolyn Jackson, Principal Clerk

This plan was prepared by the Office of Planning & Economic Development in accordance with the planning requirements for the grant programs administered by the Massachusetts Executive Office of Environmental Affairs, Division of Conservation Services. It was adopted by the Springfield Planning Board on November 19, 2008.

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Plan Summary



Monument to Deacon Samuel Chapin, Circa 1880's

SECTION 1: PLAN SUMMARY

The five-year program of open space improvements presented in this report contains the following key elements:

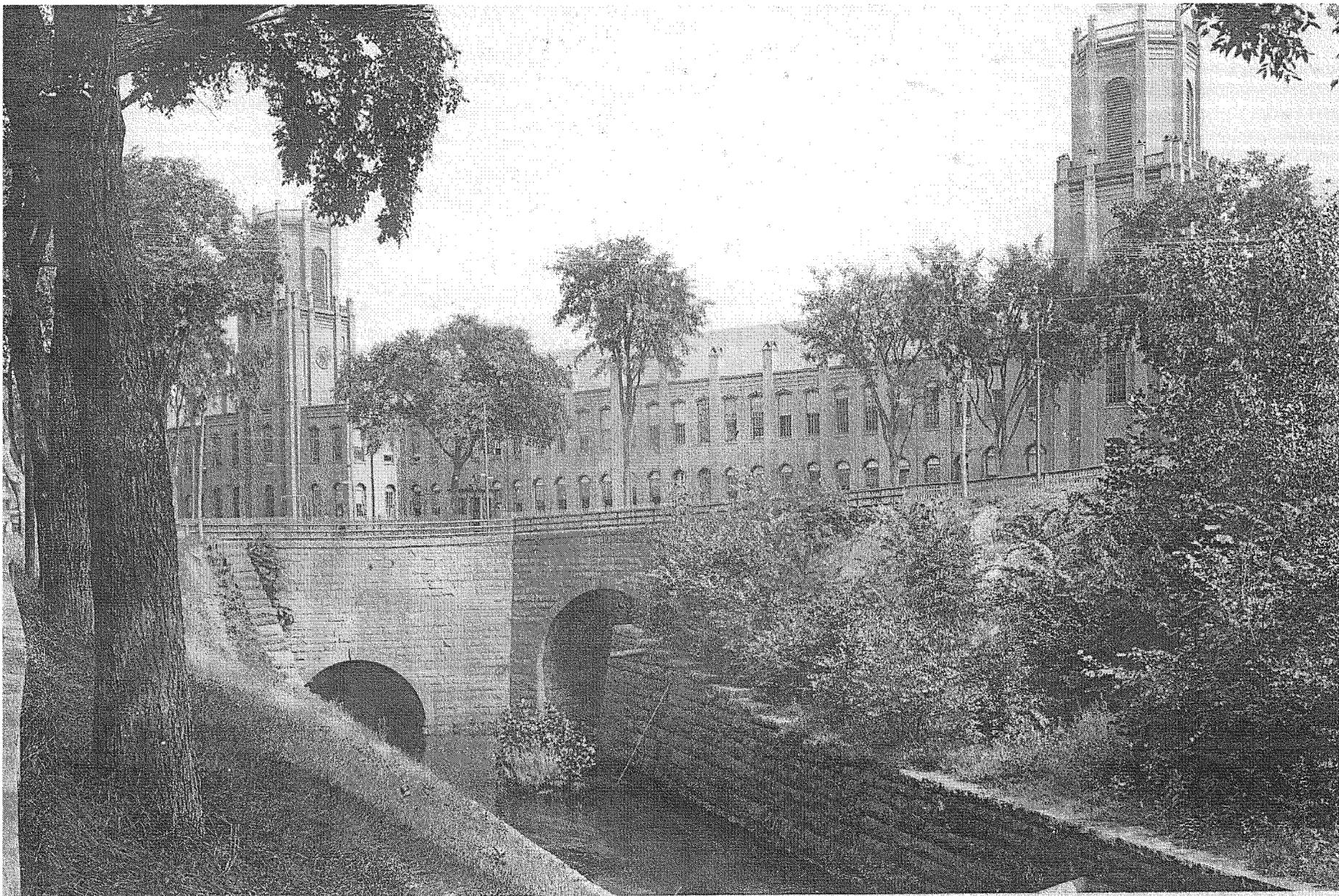
- Continued restoration of several parks and playgrounds with emphasis on high-use facilities in densely populated neighborhoods.
- Continued implementation of the Forest Park Master Plan.
- A continuation of the lakes and ponds restoration program.
- Continued modernization of Park Department facilities and replacement of obsolete maintenance equipment.
- Conservation Commission acquisition of land with wetland or wildlife value.
- Implementation of programs that will promote recreational use of the Connecticut River.
- Initiation of programs that will promote recreational uses of the Connecticut River Walk and Bikeway as well as planning for connections from the River Walk to existing recreational facilities and other destinations.

As with the previous three plans, this plan also is an ambitious one, that expands on the concept that a well maintained system of parks, playgrounds and natural areas play a vital role in the quality of urban life.

Recent projects, such as the Connecticut River Bikeway, as well as the continuous updating of all open areas will require federal and state governments to extend financial support for a variety of programs.



Introduction



U.S. Armory-Watershops, Circa 1880's

SECTION 2: INTRODUCTION

A. Purpose of Plan

The Open Space Plan for FY 08 through FY 13 sets forth a comprehensive park and conservation improvement program for the benefit of the citizens of Springfield. It establishes a framework for guiding city expenditures in the ensuing five years and identifies potential federal and state funding sources for proposed activities. Approval of the Plan, by the Massachusetts Executive Office of Energy and Environmental Energy Affairs, Division of Conservation Services, establishes eligibility for financial support from federal and state agencies for a wide range of park and conservation programs.

The Plan updates an open space plan prepared in 2002 and components of programs first proposed in the earlier plans are scheduled in the current plan. Projects such as improvements to Forest Park, the city's largest and most heavily used park, and the pond and lakes restoration program, are on-going projects that date back to the early 1980's. These are long term projects with scopes that go beyond any one Five Year Open Space Plan.

All recommendations within this plan can only proceed with support from local, state and federal agencies and the citizens of Springfield.

B. Planning Process and Public Participation

The Office of Planning & Economic Development: The Office of Planning & Economic Development is the central planning agency of the city. As such, it provides planning services and overall plan coordination for a number of other city departments. Neighborhood planners maintain a continuous dialog with the neighborhood councils and civic groups to ensure input during the planning process.

Plan coordination is an ongoing function of the Office of Planning & Economic Development related to its responsibility of preparing and

maintaining a comprehensive plan for the development of the city. With respect to open space and recreation planning, coordination is achieved in a number of ways. A member of the Park Commission serves on the Planning Board and both the Historical and Riverfront Development Commissions are staffed by Office of Planning & Economic Development personnel. Moreover, the Office of Planning & Economic Development has traditionally provided planning services for both the Department of Parks, Buildings & Recreation Management and Conservation Commission and accordingly, assumed the lead role in plan preparation and coordination of the 1985, 1992, 1997, 2002 and 2008 Open Space Plans.

The Department of Parks, Buildings & Recreation Management:

The Department of Parks, Buildings & Recreation Management has an annual budget of approximately \$20 million dollars and has a full-time staff of 150 employees, supplemented by 280 seasonal lifeguards, recreation leaders and laborers. A commission consisting of five members appointed by the Mayor serves as the policy-making body for the department.

The mission of the Springfield Park and Recreation Department is to provide:

- space and facilities for leisure time activities;
- programming that is creative and stimulating; and,
- leadership and coordination of neighborhood sponsored activities.

The provision of neighborhood level programming receives the most emphasis by the department, and attendance figures indicate that these efforts are successful. Highest use levels occur at those facilities which serve low income and minority neighborhoods. Arts and crafts, roller skating, bicycling, picnics, swimming, track and field, and athletic contests are examples of playground activities that are offered. (See Appendix I)

The Recreational Division operates special programs for the elderly, the

handicapped and the disadvantaged. The Springfield Golden Age Club functions for the benefit of the city's elderly. Anyone over 62 (age 50 for the sightless) may join the club. There are 14 drop in centers around the city operated by the club, with the headquarters located at 1600 East Columbus Avenue. The drop-in center is open to members and nonmembers alike. In cooperation with Home Care Corporation, hot meals are provided at nominal cost. All in all, the Golden Age Club offers the elderly many opportunities for recreation and companionship, as well as assistance in meeting basic needs for food and health care.

The Recreation Division also offers a variety of programs for the physically and mentally handicapped from ages three to twenty-one. Special recreation programs are offered at four locations and staffed by individuals who are trained in therapeutic recreation. The programs include crafts, swimming, adaptive activities, cooking, trips, and special events, and are open to both residents and nonresidents. Many activities are designed to provide carry-over skills that can facilitate independence in self-care.

General park maintenance, along with maintenance of all park buildings and equipment, is the responsibility of the Maintenance Division. The Department also has a Forestry and Horticulture Division responsible for the horticultural exhibits, the park greenhouse, a tree nursery and maintenance of all city trees. Two golf courses and a skating rink are also operated by the Department of Parks, Buildings & Recreation Management.

The Conservation Commission: In February 1960, the Springfield Common Council and Board of Alderman voted to accept Chapter 40, Section 8C of the General Laws authorizing establishment of a Conservation Commission "for the promotion and development of the natural resources and for the protection of the water resources" of the city. Under the provisions of the law, the Commission may acquire land by gift, purchase, grant, bequest, devise or lease, or take land by eminent domain, provided such taking is approved by a two-thirds vote of the City Council. Land acquired by the Commission remains essentially in its natural state, except for trail and plant identification signs. All conservation land is open to the general public for

passive recreation and educational use.

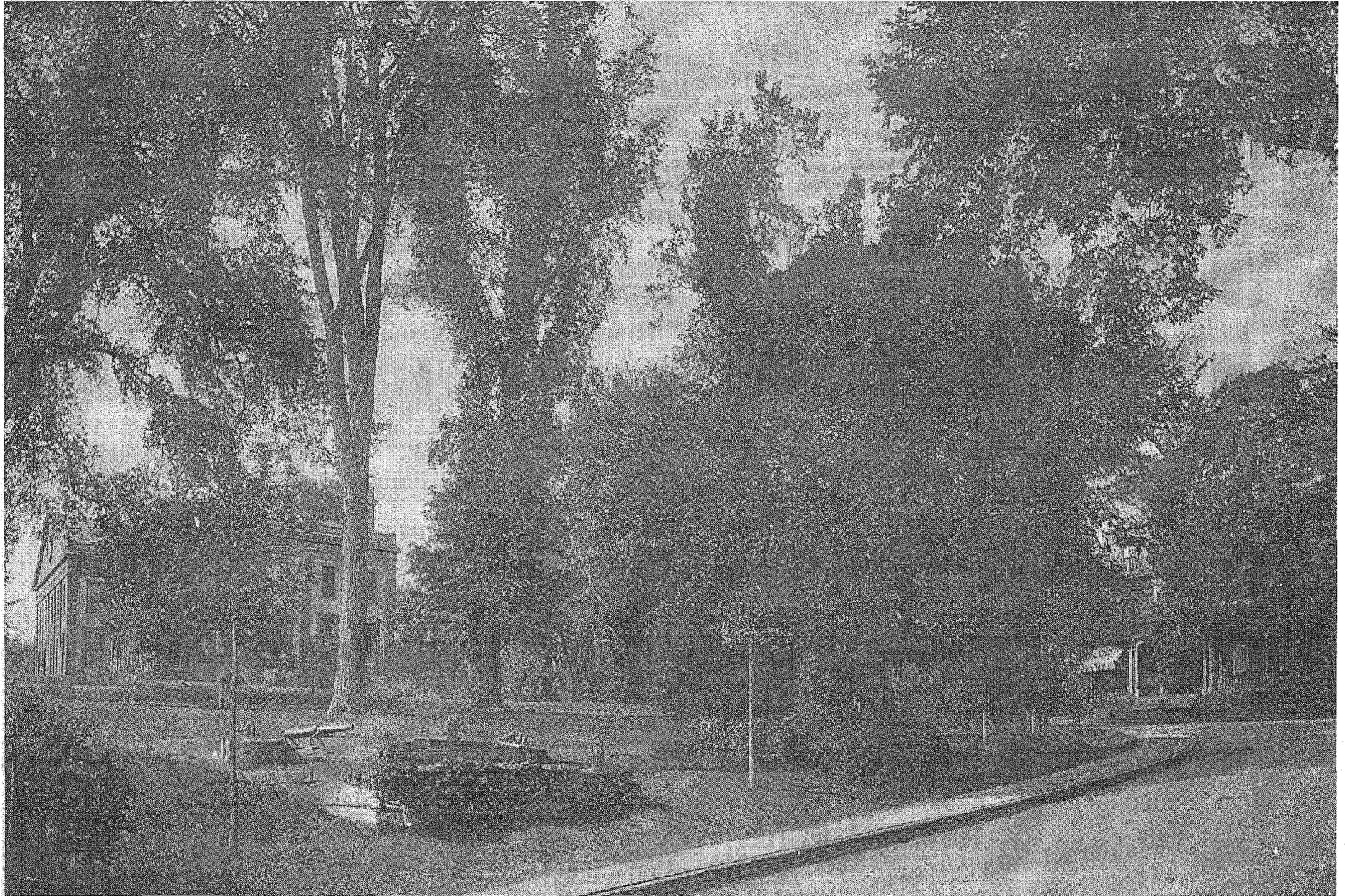
The Commission adopted an updated land acquisition program in February of 1984 which has served as a basis for the recommendations contained in the 1985, 1992, 1997 and 2002 Open Space Plans. Due to the lack of financial resources to carry out the land acquisition program, it has had to rely on donations of land to supplement its inventory of protected land. This revised plan will focus on improving management of land already acquired.

In addition to its land acquisition program, the Conservation Commission has the ongoing responsibility of enforcing MGL Chapter 131s. 40, the Wetlands Protection Act. The Commission is composed of seven members appointed by the Mayor.

Public Participation: In order to elicit public input on important policy issues, a copy of the draft open space plan was posted on the city's website including a form to provide comments. In addition to the copy posted online, public comments were solicited at a Planning Board hearing, Conservation Commission hearing, and Parks Commission hearing, and copies were distributed to various organizations for review, prior to final editing and submission to the Executive Office of Environmental Affairs and the National Park Service.

As with the previous three Open Space Plans, if this plan is to be effective, it must represent the desires of the citizens of Springfield. Public comment has been sought during the preparation of the plan, and further comments or suggestions on any aspect of this plan are welcome, as it evolves over the next several years. Public comment is also urged as various recommendations in the plan are acted upon by the City.

Community Setting



View from Main Gate-United States Arsenal, Circa 1880's

SECTION 3: COMMUNITY SETTING

A. Regional Context

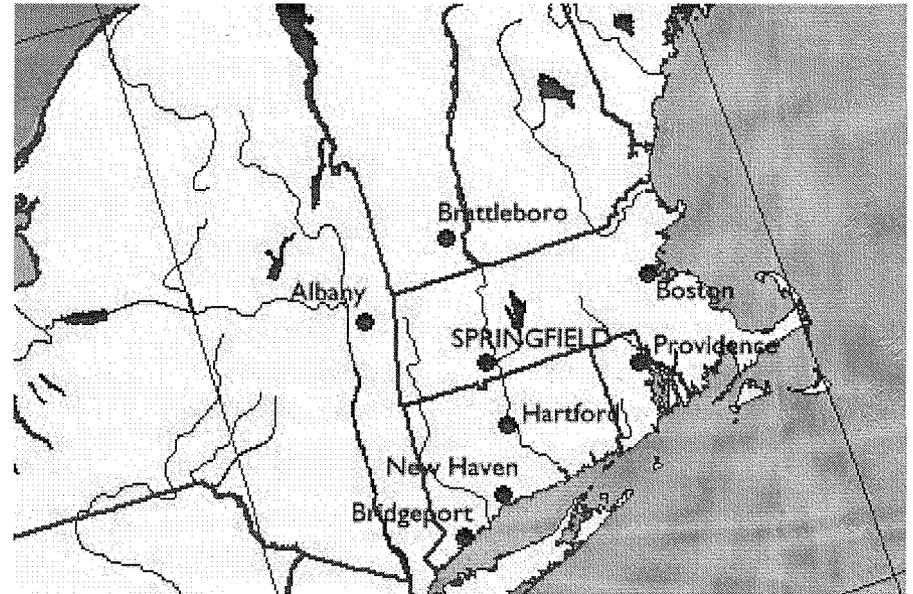
The City of Springfield is located in southwestern Massachusetts in the scenic Connecticut River Valley. It is a city of 152,082 inhabitants and the center of a metropolitan area of more than 500,000 people. Springfield is bordered on the north by the City of Chicopee (population 54,653) and the Town of Ludlow (21,209); on the east by the town of Wilbraham (13,473); on the south by the towns of East Longmeadow (14,100) and Longmeadow (15,633); and, across the Connecticut River on the west by the cities of Agawam (28,144) and West Springfield (27,899).

The Connecticut River, which flows north to south through the Pioneer Valley, is one of New England's major waterways. It originates near the Canadian border, and its drainage basin of 11,250 square miles includes portions of Quebec, New Hampshire, Vermont, Massachusetts, and Connecticut. At the Memorial Bridge in Springfield, it has drained 9,102 square miles. In 1997, this 410 mile long river was designated as one of 14 American Heritage Rivers. The American Heritage Rivers initiative is an innovative response to help river communities seek federal assistance and other resources to meet some tough challenges. Without any new regulations on private property owners, state, local and tribal governments, the American Heritage Rivers initiative is about making more efficient and effective use of existing federal resources, cutting red-tape, and lending a helping hand.

The Connecticut River has had a profound impact on the development of Springfield and the surrounding region. It served as an important transportation route into interior New England for early settlers and traders and later provided a source of power for manufacturing.

Today, Springfield is the major urban center for employment, culture, commerce and government in Western Massachusetts. With a

land area of 31.7 square miles, it has an average density of about 5,000 persons per square mile.



B. History of the Community

Springfield was founded in 1636 by William Pynchon of the Massachusetts Bay Company. He chose the site for his new settlement because of its proximity to the Connecticut River and the huge population of beaver living along its shores. The settlement was incorporated as a town in 1641 and named after Pynchon's birthplace in England.

Springfield's isolation and inaccessibility determined its selection in 1777 as the site for an arsenal and munitions storehouse. It was felt that Springfield was not vulnerable to attack from war vessels because the river became shallow downriver from the Springfield settlement. After the war's end, President George Washington and Congress approved establishment of the nation's first Federal Armory in Springfield.

At first, Springfield grew slowly, reaching a population of only 1,574 by

1790. However, the creation of the armory in 1794 had a dramatic impact on the community, with an increase of newcomers, including immigrants, coming here to fill job slots. The 19th century ushered in a sizable expansion of industry along the banks of the Connecticut River. Springfield became an important rail junction when several key lines were laid linking Springfield with other northeastern cities. By 1840, the seeds of a new manufacturing village at Indian Orchard were sown, with water power from the Chicopee River attracting large textile operations. In 1852, Springfield was incorporated as a city and established a municipal government with a mayor, board of alderman, and common council.

The city experienced an economic boom during the Civil War as employment at the Armory increased from 200 to 2,600. By 1870 Springfield's "sandy un-improvable pine barrens" were transformed into its first suburban planned residential development, known as the McKnight District. Besides laying out streets and cutting up parcels for Victorian residences, the plan called for the creation of green terraces, parks and fountains, all surviving today. This was repeated in the evolution of another suburban neighborhood in Forest Park Heights after the 1890's.

Rapid and diversified industrial growth occurred during the late 19th century with the production of textiles, tools, bicycles and railroad cars in addition to small arms. The nation's first automobile was manufactured in Springfield by the brothers Charles and Frank Duryea. Another Springfield invention was the gas powered motorcycle produced by George Hendee in 1902.

With some of Springfield's working class neighborhoods becoming extremely congested and lacking any significant open recreational space, a few visionary citizens donated land in 1883 onward to create Forest Park, a multi-purpose recreational area of over 735 acres. From this time until the early 20th century, smaller playgrounds and parks were set aside throughout Springfield.

An era of prosperity followed the turn of the century. The population more than doubled between 1900 and 1930, increasing

from 62,059 to 149,900. Business and industry flourished and several firms, including Massachusetts Mutual Life Insurance, Westinghouse, Fiberloid (Monsanto), Diamond Match, Wason Car Works and American Bosch, built new facilities. Many of the buildings which still form an important part of the city's architectural fabric were constructed during this period and, in 1923, the city issued its first master plan. Forest Park was connected to downtown by streetcar and was a popular place for Sunday outings.

The depression of the 1930's caused Springfield to lose jobs and population. Not until World War II did the economy recover. The Armory ran three shifts, employing more workers than it ever had, and military contracts boosted employment in other Springfield firms.

Easy credit in the post-war era spurred low density, auto-oriented development which by the early 1970's had consumed most of the woodland and agricultural fields in the eastern half of the city. The dominance of the automobile continued through the 1970's as two interstate highways were completed through Springfield. While the population of Springfield declined by more than 20,000 residents between 1960 and 1980, the population of suburban communities skyrocketed.

Although a surge of downtown office and housing construction occurred in the mid-1980's, the economic downturn affecting all of New England slowed new development. This placed new fiscal constraints on the city's ability to preserve the remaining natural wetlands of ecological value, and maintain and restore the city's many parks that were set aside for public enjoyment in previous decades. In the late 1990's however, the City of Springfield had seen a new surge in housing development. A number of new subdivisions have been constructed throughout the city and more are planned. This upturn in housing can be attributed to the real estate market and low interest rates.

C. Population Characteristics

Population Trends: The U.S. Census Bureau recorded a 2000 population of 152,082 for Springfield. This represents a decrease of 4,901 persons during the 1990-2000 inter-censal period. Between 1960 and 1980 Springfield experienced a loss of more than 20,000 residents due to the suburbs and a declining birth rate. Although there was an increase in population projected for the City of Springfield in 2000, the trends for suburban living and the reduction of multi-family housing stock has attributed to the loss.

Only modest gains are forecast for the future. Based on current trends, an increase of less than 4,000 persons is forecast for Springfield during the next three decades. These projections may, of course, be modified by changing social and economic factors which cannot be anticipated at this time.

Population Change		
Year	Population	Population Change
1950	162,399	-----
1960	174,463	+12,845 (+7.4%)
1970	163,905	-10,586 (-6.1%)
1980	152,319	-11,586 (-7.1%)
1990	156,983	+4,664 (+3.1%)
2000	152,082	-4,901 (-3.2%)
Projections		
2010	158,668	+5,783 (+4%)
2020	160,914	+2,246 (+1.4%)

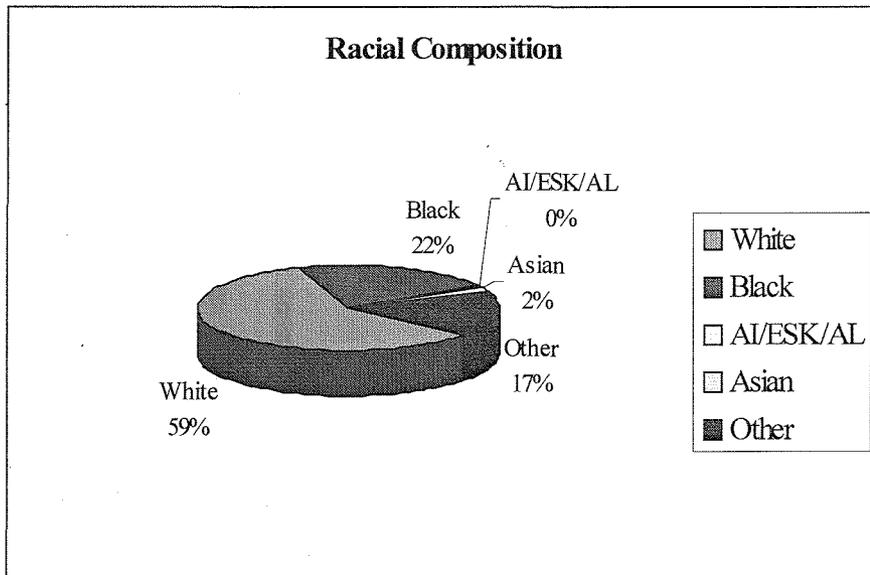
Percentage of Population Change: 1990-2000	
City of Springfield	-3%
Hampden County	Less than a 1% change
Massachusetts	+5.5%
United States	+13.1%

Minority Group Population: The number of Black and Hispanic residents in the population continues to increase and the proportion of youth in these minority groups is greater than their proportion in the population as a whole. Springfield's Black residents, numbering 31,960 constituted 21 percent of the city's 2000 population.

Minority Population Increase: 1990-2000		
Black	31,960	6%
American Indian/Eskimo/Aleut	569	41%
Asian	2,916	44%
Other	25,016	31%
Hispanic	41,343	36%

Although small in number, Asians were again the fastest growing racial group, growing from 1,636 in 1990 to 2,916 in 2000. This is a 44% increase in the Asian population.

Again, the Hispanic community showed a dramatic increase in population between 1990 and 2000, nearly doubling in size from 26,588 to 41,343.



(It should be noted that Hispanics do not constitute a separate racial group as the accompanying chart portrays.) While Black and Hispanic residents are still concentrated in densely settled inner-city neighborhoods, 2000 census data show a greater degree of minority group dispersion than in previous census years.

Age Structure of the Population: Springfield's median age increased from 29.2 years in 1980 to 30.6 years in 1990 to 31.9 in 2000. During the 1980's, the population experienced significant increases in the number of children under five years old and in the 25-44 age group. Corresponding losses occurred for persons 15-24 and 45-64. All other age categories remained relatively constant, including persons 65 and older.

The population density, particularly the density of the youth population, is an important factor in planning for park facilities and recreation programs. Both the Black and Hispanic populations have a significantly lower median age than the white non-Hispanic population, and a high percentage of the minority population is under 18.

The distribution of the youth population among Springfield's

neighborhoods is shown in the table on the following page and also depicted by census tract on the map, "2000 Population Under 18". Neighborhoods with a much higher percentage of youth than average include Old Hill, Memorial Square, McKnight, Bay, and Six Corners, all with high minority populations. Other areas with a concentrated youth population include Indian Orchard and portions of East Forest Park and Forest Park.

Age and Sex of Population			
Age	Male	Female	Total
Under 5 years	5,824	5,782	11,606
5 to 9	6,604	6,341	12,945
10 to 14	6,452	6,052	12,504
15 to 19	6,306	6,037	12,343
20 to 24	5,837	6,186	12,023
25 to 34	9,997	11,249	21,246
35 to 44	10,359	11,502	21,861
45 to 54	8,175	9,495	17,670
55 to 59	2,839	3,398	6,237
60 to 64	2,102	2,639	4,741
65 to 74	3,898	5,347	9,245
75 to 84	2,743	4,572	7,315
85 years and over	666	1,680	2,346
Total	71,802	80,280	152,082

Economic Analysis: Springfield serves as the commercial, financial and cultural center of the Lower Pioneer Valley region. Although its economic base is diversified, there has been a marked shift away from manufacturing in recent years. According to the Massachusetts Executive Office of Labor and Workforce, the number of manufacturing jobs in Springfield declined from 19,915 in 1980 to 11,972 in 1988, a loss of

Youth Population by Neighborhood

Neighborhood	Total Population	18 and Over	Under 18	Percent Under 18
Bay	4,346	2,837	1,509	34.7%
Boston Road	3,969	2,909	1,060	26.7%
Brightwood	3,947	2,358	1,589	40.2%
East Forest Park	10,613	8,187	2,426	22.9%
East Springfield	7,071	5,191	1,880	26.5%
Forest Park	25,882	18,334	7,548	29.2%
Indian Orchard	8,311	5,892	2,419	29.1%
Liberty Heights	15,649	11,232	4,417	28.2%
McKnight	4,780	3,152	1,628	34%
Memorial Square	5,886	3,598	2,288	38.9%
Metro Center	7,173	5,632	1,541	21.5%
Old Hill	4,557	2,768	1,789	39.3%
Pine Point	10,245	7,093	3,152	30.8%
Six Corners	5,717	3,753	1,964	29.1%
Sixteen Acres	22,680	17,191	5,489	24.2%
South End	4,077	2,726	1,351	33.1%
Upper Hill	7,179	5,202	1,977	27.5%
Total	152,082	108,055	44,027	29%

7,943 jobs or 40 percent of all manufacturing employment. This trend continued in the 1990's from a total of 11,505 in 1989 to 7,768 in 2000. This is a total loss of 3,737 jobs or 32% of all manufacturing employment. There have again been losses in manufacturing jobs over the past few years, down to 4,622 jobs in 2006, or a loss of 40.5% of the remaining manufacturing employment. However, the unemployment rate in Springfield dropped significantly from a high of 11.8% in 1991 to 4.4% in 2000. It has increased to 7.8% in 2007 as the statewide unemployment rate has also risen to 4.9% from its low of 2.6% in 2000. This suggests that while Springfield's job market follows the statewide market, there is still a larger unemployment rate in the city when compared with other areas.

Major Employers: City of Springfield	
	Employees
1. Baystate Medical Center	8,772
2. MassMutual Life Insurance Co.	4,230
3. U.S. Postal Service	2,267
4. Sisters of Providence Health Systems	2,200
5. Big Y Supermarkets	1,002
6. Springfield Republican	700
7. Smith & Wesson	587
8. Springfield College	560
9. Solutia, Inc.	504
10. Western New England College	420

Census data show Springfield lagging in income compared to the region or the state and with a higher percentage of its residents living below the poverty level.

This data suggests a heavy reliance on public facilities for recreation by a large segment of Springfield's population. In low income neighborhoods, the city's parks and playgrounds are a primary outlet for recreational activity.

	Median Household Income	Percent Below Poverty Level
Massachusetts	\$50,502	9.3%
Hampden County	\$39,718	14.7%
Springfield	\$30,417	23.1%

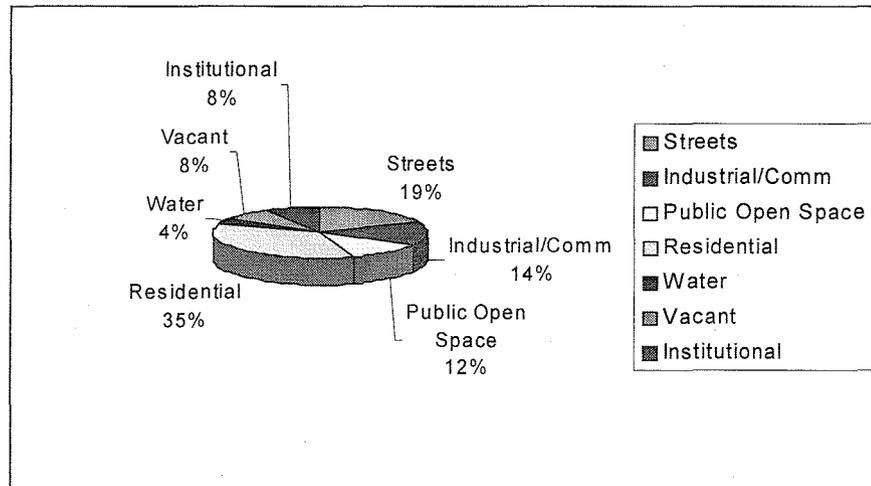
D. Growth and Development Patterns

Patterns and Trends: Springfield's Central Business District (CBD) is on the banks of the Connecticut River on the western boundary of the city. It was here that the founders of the city established a trading center in the days when the river served as an important transportation route. Within approximately two miles of the downtown, most of the residential development is multi-family. Densities gradually diminish outward from the CBD and much of the eastern half of the city is occupied by single-family homes. One exception is the Indian Orchard neighborhood in the northeastern corner of the city. It developed as a physically separate community and in many respects duplicates the features of the city as a whole with a small mixed-use center surrounded by high density residential use.

Industrial development is concentrated in the East Springfield neighborhood on several hundred acres of industrial park land, although lesser amounts of industry are found along the Chicopee River and along the major railroad corridors. There are no agricultural uses remaining in

the city.

In general terms, Springfield can be described as a predominantly residential city with development densities decreasing from west to east.



Transportation Networks: Springfield's parks and conservation areas are readily accessible via an extensive system of streets and highways and a public transit network.

Two interstate highways, I-91 and I-291, as well as several major intra-city arterials, provide direct connections from residential areas to many of the city's major parks. The extent of the local street system can be seen on the Open Space Map.

Several of the larger parks, including Forest Park, Van Horn Park and Blunt Park, have internal roadways maintained by the Department of Parks and Recreation. Off-street parking areas have been constructed in community parks where organized activities draw participants and spectators from beyond neighborhood boundaries. Beginning in June 1992, vehicle access to Forest Park was regulated and an entry fee was initiated. Vehicle entry fees have also been established at Five Mile Pond Park and Blunt Park.

Public transportation in Springfield, and twenty-two surrounding

communities, is sponsored by the Pioneer Valley Transit Authority (PVTA). The PVTA provides bus service through operating contracts with private carriers using federal and state subsidies to offset operating deficits.

The principal carrier in Transit Express, Inc., which controls a fleet of over 130 buses and transports an annual ridership in excess of six million in the immediate Springfield area.

Transit Express operates eleven "figure eight" routes, all of which originate in downtown Springfield and extend outward to various residential neighborhoods. Some of the runs reach into suburban communities. This network allows riders to transfer from one route to another at their common junction in downtown, providing access to all parts of the city. Service is available six days a week, Monday through Saturday, generally from 5 PM to 9 PM, with headways varying from 10 to 30 minutes. One other company under contract to PVTA, Peter Pan Bus Company, operates routes in less densely populated portions of Springfield and provides intercity express service within the region.

In addition to fixed route service, PVTA provides para-transit services for the elderly, handicapped and low income groups. Doorstep services are provided on an on-call basis, and para-transit vehicles are generally equipped with hydraulic lifts to accommodate wheelchairs.

Overall, transit services are adequate to meet the demands of the recreational traveler. Several parks, including the city's three largest and its only outdoor swimming area at Five Mile Pond, are directly on transit routes. Para-transit service is available for attendees of the Recreation Division's activities for the elderly and handicapped.

Springfield Water and Sewer Commission: The Springfield Water and Sewer Commission was organized on June 7, 1996 by a vote of the Springfield City Council in accordance with Massachusetts General Laws, Chapter 40N. The governing body is a three member commission appointed by the Mayor of the City of Springfield and approved by the City Council. The commissioners are responsible for establishing the policies and procedures for efficient water and sewer operations.

The Water and Sewer commission is currently staffed by 150 individuals who transferred to the commission on March 28, 1997 from the previous municipal water and sewer departments. Commission employees and operations are administered by the Executive Director. The commission is not a department of the City of Springfield, however, they work closely with city departments to provide ratepayers with the best possible water and wastewater services.

Drinking water originates at Borden Brook and Cobble Mountain Reservoirs, in the towns of Blandford and Granville. This water is filtered and disinfected at the West Parish Filters Treatment Plant in Westfield, and stored at the distribution reservoir on Provin Mountain, Agawam. From there it travels to the City of Springfield and surrounding communities through large size carrying mains and then through smaller mains and service pipes to the consumer. Littleville Reservoir located in Chesterfield provides back-up water supplies.

The West Parish Filters Plant is designed to produce up to 120 million gallons of water per day; the average use is 34.5 million gallons per day. The commission distributes water to homes and businesses in Springfield and Ludlow and wholesales water to the towns of Agawam, East Longmeadow and Longmeadow.

Wastewater leaves the households, businesses and industries within Springfield and surrounding communities including Agawam, Chicopee, East Longmeadow, Longmeadow, Ludlow, Wilbraham and West Springfield and travels through the sewer collection system and pumping stations to the Springfield Regional Wastewater Treatment Facility (SRWTF) located along Route 5 in Agawam. One of the largest most modern facilities in New England, the SRWTF is designed to treat up to 67 million gallons of waste water per day; an average of 44 million gallons of wastewater is cleaned and released to the Connecticut River each day.

The Springfield Water and Sewer Commission serves a population of approximately 260,000. It is expected that the water and wastewater systems will adequately meet the demands of Springfield and the surrounding communities throughout the foreseeable future.

Long Term Development Patterns: Springfield is an urban

community with limited land available for new development. There are 1,564 acres of vacant land in the city representing 7.5 percent of the total land area. However, much of the vacant acreage consists of small lots interspersed throughout otherwise built-up areas. Some of the vacant land in the low density residential neighborhoods of eastern Springfield is marginally developable land and has been targeted by the Conservation Commission for acquisition.

Considering the limited amount and dispersed nature of vacant land, Springfield can be viewed as having achieved maximum build-out. Future development will consist of continued in-fill development along with redevelopment of older commercial centers, including downtown, and inner-city neighborhoods. Major shifts in the general land use pattern are not anticipated nor is the population level expected to change dramatically in the foreseeable future. In fact, at the current rate of population growth, it will be well into the next century before the population once again reached the 1960 U.S. Census count of about 175,000 residents.

Ecological impacts from new growth will be minimal. Public investments will, for the most part, be directed towards upgrading existing infrastructure, redeveloping existing commercial and industrial centers and improving existing residential neighborhoods. With regard to open space resources, the emphasis will be on restoration and enhancement of land and facilities already in public ownership, although some undeveloped wetlands are recommended for protection through Conservation Commission ownership.

Zoning is the city's most important legal instrument for protecting existing land uses and guiding new development. Springfield's zoning ordinance defines twenty land use districts, three of which are designed to protect and enhance the city's natural resources. One is a floodplain district, which is an overlay district coterminous with the flood hazard areas designated by the National Flood Insurance Administration. It regulates development in the 100-year floodplain. A second overlay district is the Connecticut Riverfront District. It is intended to "...promote and protect the natural and aesthetic qualities of the river." Most uses in the Riverfront District are subject to

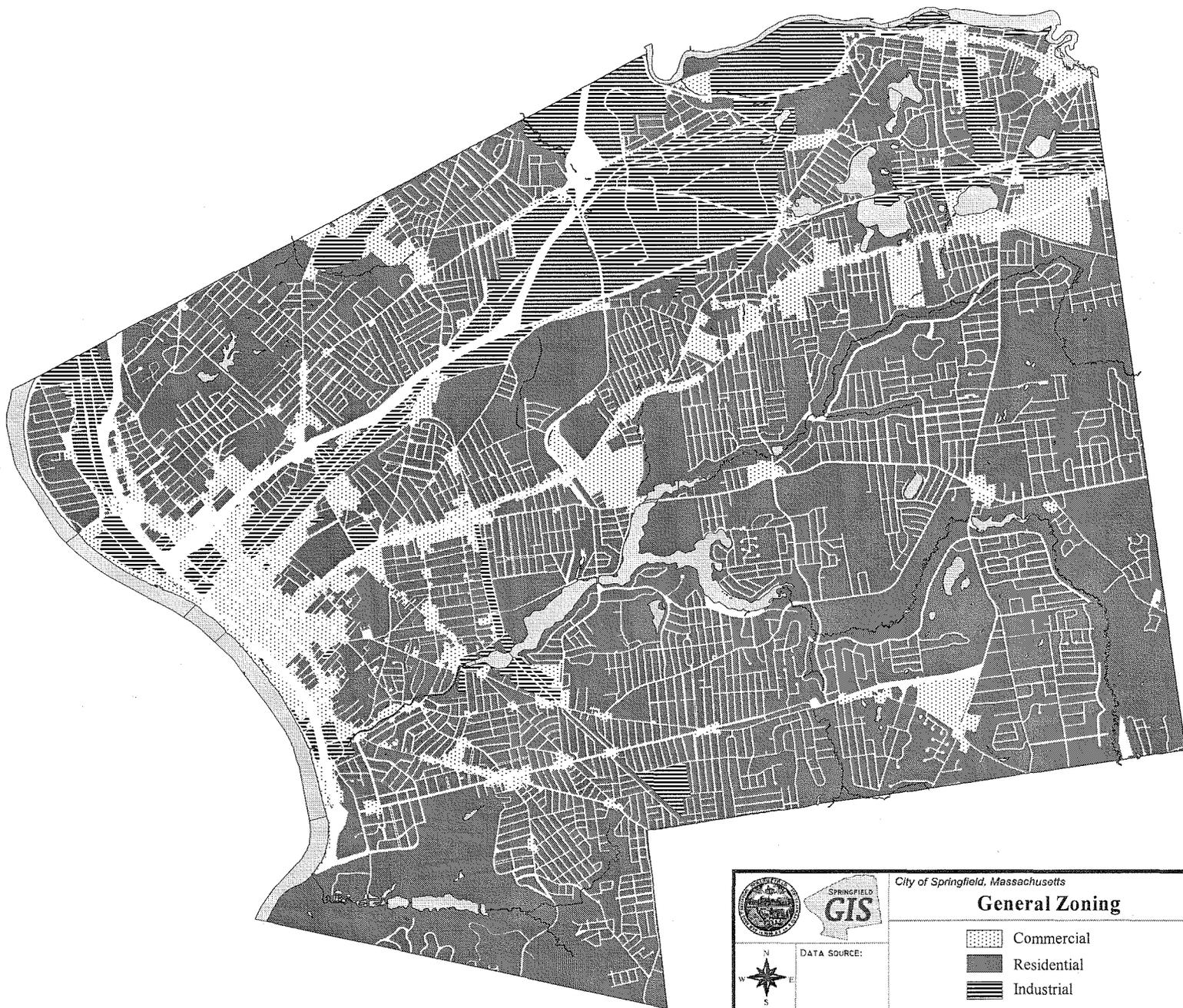
review and approval by the Riverfront Development Commission. The third is the West Columbus Avenue Urban Renewal District. This district was created to accommodate the development of the riverfront within the West Columbus Avenue Urban Renewal Plan in a manner "...respectful of and in keeping with the natural and aesthetic qualities of the Connecticut River for the overall welfare of the general public..."

The Office of Planning & Economic Development, with a Smart Growth Grant from the Executive Office of Environmental Affairs, is currently in the process of re-drafting the city's Zoning Ordinance. This project was

started in March 2006 and is scheduled to be completed in the spring of 2008. Important landscaping issues such as buffers, interior landscaping of parking areas, size and locations of parking areas, open space, etc. are being addressed.

One of the major goals of the project is to implement site plan review for the city. This site plan review will help to better incorporate smart growth principles into commercial and residential development. The site plan review will be designed to incorporate stormwater issues as well.





	City of Springfield, Massachusetts General Zoning					
	<table> <tr> <td></td> <td>Commercial</td> </tr> <tr> <td></td> <td>Residential</td> </tr> <tr> <td></td> <td>Industrial</td> </tr> </table>		Commercial		Residential	
	Commercial					
	Residential					
	Industrial					
	DATA SOURCE:					

Environmental Inventory and Analysis



Mirror Lake, Forest Park, Circa 1880's

SECTION 4: ENVIRONMENTAL INVENTORY AND ANALYSIS

A. Geology, Topography and Soils

Geology and Topography: Geologically speaking, Springfield is part of the Connecticut Valley Lowlands, a north-south faulted area with adjacent uplands rising both to the east and west of the valley floor. Surface topography is characterized by terraces and deltas formed during the melting of huge glacial lakes which once extended from near the Massachusetts-Vermont line south to Middletown, Connecticut. Triassic sedimentary formations underlie the valley floor. In Springfield, they are overlain by unconsolidated surface deposits of varying depth except for small areas in Sixteen Acres and East Forest Park where the bedrock nears the surface.

Remnants of glacial activity are evident throughout the city, and some of the unique glacial features have been preserved in conservation areas such as Indian Orchard Kame, Delta Hills Preserve, and White Cedar Bog. The terrain is broken by a number of meandering streams with relatively flat gradients. Small lakes and ponds are also numerous, some man-made and some of glacial origin.

Lookout Hill, in the southeastern part of the city, is the highest point with an elevation of about 335 feet above mean sea level. Lowest elevations are found along the Connecticut River, which flows from north to south along the western boundary of the city. Normal water surface elevations on the river are approximately 45 feet above sea level as it passes the city.

Soils: It is estimated that more than four-fifths of the surface soils within the city have been modified during the process of urbanization, including all those soils in what was once the floodplain of the Connecticut River.

In 1971, the U.S. Department of Agriculture, Soil Conservation Service (SCS) classified the soils of 4,874 acres of land representing 23 percent of the total area of the city. Approximately one-half of the surveyed acres were located in public parks and conservation areas and one-half within vacant, privately-owned land. In the twenty years since the survey was completed, most of the vacant, non-public land has been consumed by urban development.

Seventy-seven percent of the land surveyed by SCS was occupied by soils of the Windsor-Hinckley-Made-Land Soil Association. These are excessively drained sandy and gravelly soils occurring on level to moderately sloped land. Except for organic mucks and peat found in kettle holes and other depressions, all soils of Springfield are characteristically sandy, reflecting the geologic process of water sorting in their formation. SCS mapped over one hundred separate locations ranging in size from less than 1 acre to over 700 acres (Forest Park). (See Appendix for USDA Soils Maps)

B. Landscape Character

As an urban community, Springfield's landscape character can be described within the context of three broad categories related to the density of urban development.

The most densely developed region is the floodplain of the Connecticut River. The city's central business district is located here along with many other commercial and industrial districts that developed along north-south transportation corridors in the city's early history.

A second category includes the medium and high density residential neighborhoods that were established on riverine terraces east of the floodplain. This district is characterized by closely spaced one to three family wood frame residences interspersed with brick multi-family structures. Concentrations of neighborhood stores can be found at the confluence of major streets. Historic districts in the McKnight and Forest Park neighborhoods are included in this category.

A third level of urban density is found in the low density residential districts of eastern Springfield. Here the landscape character is typically suburban with a predominance of the single family home and auto-oriented shopping districts. This was the last area of Springfield to be developed and it contains many of the city's undeveloped parks and conservation areas.

Each of these three districts gradually blends with another forming diversified transition zones. The Indian Orchard community is atypical of this west to east transition as it expanded from north to south from the bank of the Chicopee River in the northeast corner of the city.

Although Springfield can be described as a fully developed urban community, numerous lakes, streams, parks and conservation areas add variety and diversity to the urban landscape. The extent of Springfield's park system has earned it the historical reputation as both the "Garden City" and the "Park City."

C. Water Resources

Connecticut River: An outstanding natural feature of Springfield is the four and one-half mile stretch of the Connecticut River that forms the city's western boundary. It was an important transportation route in the days of early settlement and has had a profound influence on the historical development and character of the region. Historically, flooding of the river caused extensive damage to portions of Springfield. A series of earth dikes and concrete flood walls constructed by the Corps of Engineers now protects the built-up area of the floodplain.

In recent years, water pollution abatement programs, mandated under federal and state law, have resulted in improved water quality and the city is now promoting intensive recreational use of the river. In 1978, a consultant's report suggested that joint public/private investment should occur along the entire 4.5 mile river frontage. The report, entitled "Riverdesign Springfield", utilized a unique public participation process that included three hours of live, prime television

time to solicit ideas from the public. Proposals for riverfront use included marinas, parks, theaters, landscaping and improved access. A Riverfront Development Commission, which consists of five members appointed by the Mayor, is promoting improved access, facilities for recreation and compatible urban development along the length of the river. (See the section on Recreational Trails for new Riverfront Development.)

Other Surface Waters: Other important rivers are the Chicopee, which runs along the northeastern boundary of the city for three and one-half miles, and the Mill River, which flows westerly from the Wilbraham town line in two branches. Both of these rivers were harnessed at one time as sources of power, the latter to operate the Springfield Armory.

There are fourteen significant lakes or ponds with public access in Springfield. Some are artificial impoundments, while others are natural lakes formed in kettle hole depressions or glacial outwash (See table on page 25). Several of the lakes have no inlets or outlet but are hydraulically interconnected by subsurface ground water.

Fresh water swimming, under the supervision of the Department of Parks, Buildings & Recreation Management, is offered at Five Mile Pond. Swimming at Lake Lorraine Beach is supervised by the State. The Department recently acquired Loon Pond and plans to offer swimming at this facility. The department also sponsors skating, when conditions permit, on Porter Lake and Barney Pond in Forest Park.

Wetlands: The wetland category includes those areas in which the ground water level is at or near the surface for much of the year but generally lack extensive areas of open surface water. Numerous bogs and wooded swamps are found in Springfield. Many are located on land in Conservation Commission or Department of Parks, Buildings & Recreation Management ownership.

Wetlands act as storage basins for surface run-off, thus, reducing localized flooding as well as downstream peak flows. They also provide food and habitat for wildlife and offer opportunities for nature study and other forms

of passive recreation. Because of their high water tables, wetlands are poor sites for urban development. Inadequate site drainage, basement flooding and differential settling due to the high organic content of wetland soils are commonly associated with development in wetland areas. The Wetlands Protection Act (Massachusetts General Laws Chapter 131, Section 40) was enacted to protect the public benefits derived from wetlands. It allows local Conservation Commissions and the Massachusetts Department of Environmental Protection to restrict the use of wetland areas.

Included among Springfield's more significant wetlands are White Cedar Bog, Grayson Kettle, Pasco Road Bog, Duggan Leatherleaf Bog, Tamarack Swamp and Gralia Road Swamp, all in Conservation Commission ownership. **(Wetland areas recommended for acquisition by the commission are described in Appendix III.)**

The Red Maple Woods in East Forest Park is a large wetland area in Department of Parks, Buildings & Recreation Management ownership.

Water Resources Map: Springfield's surface waters are shown on the map on page 33. The Connecticut and Chicopee Rivers form part of the city's borders. Lake Massasoit can be seen near the city's geographic center, while a cluster of large, kettlehole lakes are found in the northeast sector.

Although wetlands are too numerous and generally too small to show on the Water Resources Map, swamps and bogs are identified on the large scale Open Space Map appended to this report and referenced by Appendix II, Public Open Space Inventory, and also by Appendix III, Proposed Conservation Areas. The large scale map should also be referred to whenever exact locations of surface waters are desired.

Flood Hazard Areas: The City of Springfield is a participant in the National Flood Insurance Program and revised Flood Insurance Rate Maps were issued for the city on June 17, 1991 by the Federal Emergency Management Agency. Both the 100-year and 500-year floodplain boundaries are delineated on the rate maps with the 100-year

floodplain boundaries corresponding to the areas of special flood hazards. For the most part, flood hazard areas are confined to stream valleys which are in Department of Parks, Buildings & Recreation Management or Conservation Commission ownership. Along the Connecticut River, the flood hazard area is limited to a narrow strip of land westerly of flood control structures built by the Corps of Engineers. Only one building, a publicly owned building, leased to a commercial boating company, lies within the river's flood hazard zone. It is estimated that less than a dozen structures in the entire city would be impacted by the occurrence of a 100-year flood.

Historic Flood Levels City of Springfield	
Date	Flood Level at Memorial Bridge*
March 1936	65.90**
September 1938	63.00
November 1927	59.70
August 1955	58.40
April 1960	57.30
Height of Existing Protection	66.40
<small>*In feet above sea level. **Since the construction of 13 upstream reservoirs, a flood equivalent to the one in 1936 would rise to an elevation of 61.4 feet above mean sea level (msl) at the Memorial Bridge Source: Water Resource Investigation, Connecticut River Basin, U.S. Department of the Army, Corps of Engineers, October, 1977</small>	

Historically, floods on both the Connecticut and Chicopee Rivers have caused extensive damage to industrial, commercial and residential buildings as well as to railroads, highways and bridges. The greatest flood in Springfield occurred in March, 1936 as a result of spring rains accompanied by melting snow. The second greatest flood was associated with a hurricane which crossed the region in September, 1938. In

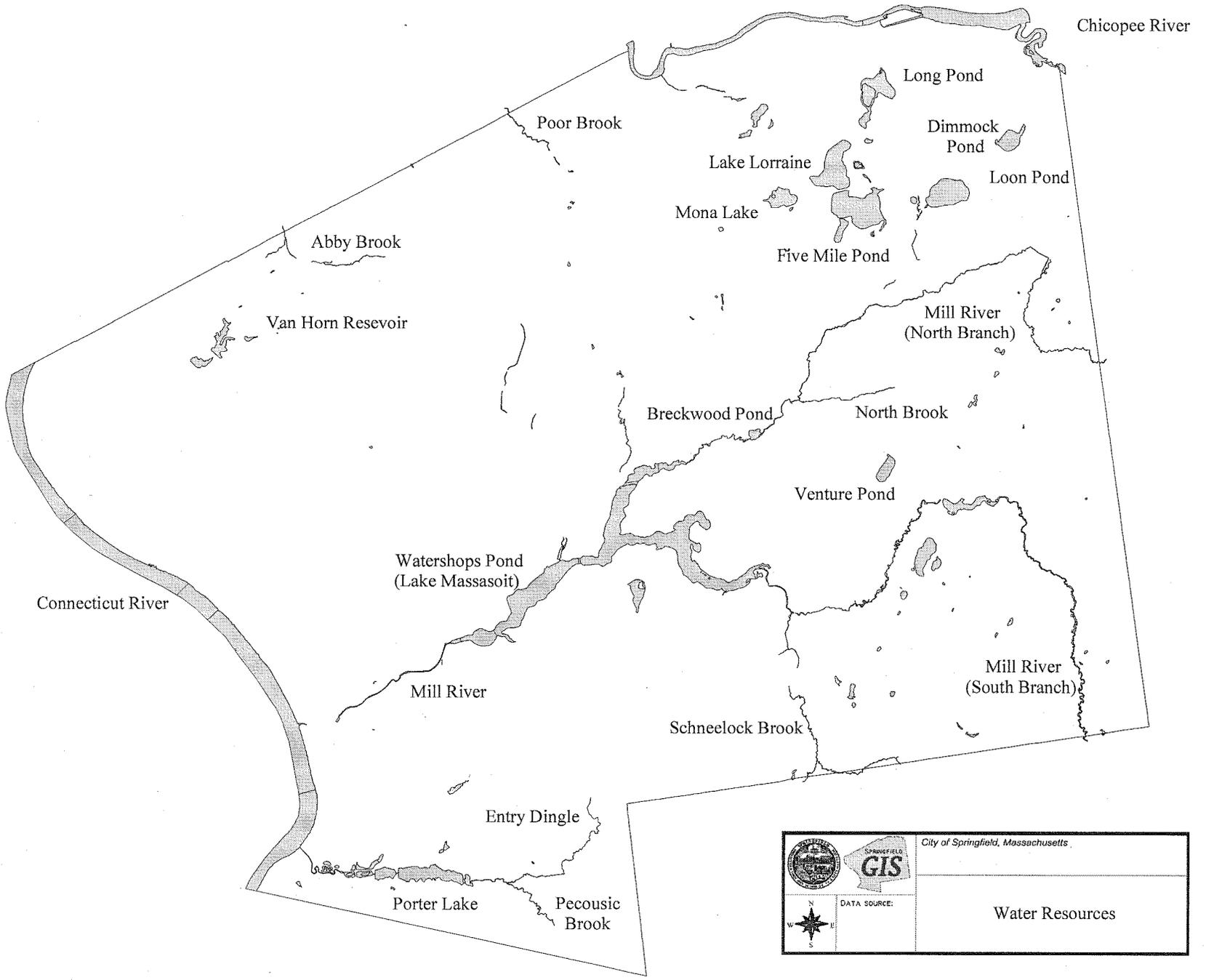
Springfield's Lakes and Ponds

	Surface Area (Acres)	Maximum Depth (Feet)	Mean Depth (Feet)	Origin
Lake Massasoit	198	20	8	Artificial Impoundment
Lake Lorraine	31	37	17	Glacial Kettle Hole
Five Mile Pond	39	36	15	Glacial Kettle Hole
Dimmock Pond	13	11	6	Glacial Kettle Hole
Upper Van Horn Reservoir	10	20	8	Modified Natural Lake
Lower Van Horn Reservoir	5	8	4	Modified Natural Lake
Venture Pond	8	9	4	Natural Depression
Mona Lake	14	17	5	Glacial Kettle Hole
Loon Pond	26	25	12	Glacial Kettle Hole
Mill Pond	15	4	2	Artificial Impoundment
Breckwood Pond	4	5	2.5	Artificial Impoundment
Long Pond	26	6	3	Glacial Kettle Hole
Putnam's Puddle*	7	8.5	5	Artificial Impoundment
Porter Lake	31	14	8	Artificial Impoundment
Bass Pond	13	50	15	Artificial Impoundment
Quarry Pond	2.3	50	5	Artificial Impoundment
Fountain Lake	5.8	8	5	Artificial Impoundment

*Presently dry due to dam failure.

(Island Pond is privately owned and does not have public access.)

Source: Springfield Lakes and Ponds, Inventory & Restoration Plan: Baystate Environmental Consultants, Inc. and Purcell Associates, May 1980



response to these storms, the Army Corps of Engineers completed a series of flood control dams and reservoirs in the Connecticut and Chicopee River basins and constructed a local protection works along the banks of both rivers. The City of Springfield and the Springfield Water & Sewer Commission are working in conjunction to update the flood control structures along the Connecticut River. Like many communities throughout the country after Hurricane Katrina, Springfield was notified by the Army Corps of Engineers of multiple deficiencies. Without the repairs currently under way, large sections of the City could be remapped as within the FEMA 100-year floodplain boundaries.

D. Vegetation

Few areas of natural vegetation remain outside of public park and conservation areas. However, a wide variety of native and ornamental trees, shrubs and grasses have been planted throughout the city in place of the natural vegetation removed during urbanization.

The majority of the undisturbed woodlands belong to the Oak-Hickory Forest Association, although a small area of eastern Springfield lies within the Elm-Ash-Red Maple Association and a stretch of land along the Chicopee River is within the Aspen-Gray Birch Forest Association. Cottonwood, Basswood and other water-tolerant species are commonly found along river and stream banks.

One important stand of Coastal White Cedar is located in a bog near the geographic center of the city. It has been described as a natural oddity in that it represents the most northwestern stand of Coastal White Cedars with a reasonable chance of continued survival. The bog evolved from a glacial kettle hole, gradually filling with sphagnum moss, which created a seed bed for acid-tolerant plants, including—in addition to the cedars—black spruce, tamarack, leatherleaf, swamp azaleas and over thirty species of liverworts and mosses. In 1968, this unique natural resource, known as the White Cedar Bog, was acquired by the Springfield Conservation Commission.

Rare and Endangered Species: As a result of the Conservation

Commission's efforts to preserve unique habitats and wetlands for passive recreation and the Department of Parks, Buildings & Recreation Management's establishment of greenway corridors along the city's principal streams, nearly all the areas considered to have a high likelihood of containing protected species have been acquired or are identified in the current land acquisition program.

Conservation land with habitats known to support rare or endangered plants are White Cedar Bog and Pasco Road Bog. The seasonally inundated shorelines of Lake Lorraine, Five Mile Pond, and Mona Lake also provide habitat for a number of rare plant communities.

Several of the rare plants in Springfield are recent records of plants that occupy shorelines and shallow water of ponds that fluctuate naturally throughout the year. Lake Lorraine and Five-Mile Pond have been greatly impacted over the years, but still support disjunct populations of what are mostly species of ponds in the coastal plain. Other species of these habitats have been lost from the City. Other plant species formerly known from Springfield, such as New England Blazing Star and Wild Lupine, suggest open sand areas. Upland forests support Large Whorled Pogonia and Purple Clematis grows on forested rocky cliffs and talus—a variety of habitats that appear to have been lost over time.

Approximately one-third of the shoreline of Loon Pond, a habitat for Teretes Arrowhead, which is rare in this part of Massachusetts, was recently donated to the Conservation Commission and the Massachusetts Division of Youth Services transferred 24 acres of land to the Conservation Commission in which a population of Yellow Lady Slipper (*Cypripedium calceolus*) had been identified.

There is an uncommon community from Springfield in the NHESP database, Atlantic White Cedar Bog (AWC Bog) is the westernmost example in Massachusetts (and New England) of that natural community type. Atlantic White Cedar Bogs are uncommon community types in the state and region, with most occurrences found in the southeastern part of the state. The occurrence in Springfield, being so remote from the core area, is particularly interesting. This community type and other wetlands

depend on a consistent supply of clean water.

There are two Certified Vernal Pools (CVP) and many Potential Vernal Pools (PVP) (identified from aerial photographs, needing verification on the ground) in Springfield. Areas of swamps also provide habitat for vernal pool species. The PVP data are available as a datalayer from MassGIS at <http://www.mass.gov/mgis/pvp.htm>. Certifying the PVPs would provide more protection to these wetlands and the species that use them. There are several clusters of CVPs/PVPs, which provide extra habitat value for the species that use them since each pool is somewhat different and provides alternate habitats in different years and seasons. Any such lands already protected are good sites for biodiversity and good cores for larger properties.

The Division of Fisheries & Wildlife, Natural Heritage & Endangered Species Program collects and manages information on endangered species within the Commonwealth. In cooperation with the program, the Springfield Conservation Commission has taken the following actions:

- The Commission cooperates with the program by providing background information on existing and potential public open space areas for endangered species surveys.
- The Commission maintains a current list of rare species as compiled by the Natural Heritage Program.
- The Commission has initiated a program to identify vernal pools within the city. The Renaissance School (an Expeditionary Learning School) is developing such a program as part of their curriculum for the 2007 – 2008 school year.
- Within existing conservation areas where rare species are documented, the Commission will establish and maintain uses compatible with their protection. This will include routing trail systems around sensitive areas or limiting direct access as well as not publicizing the specific location of rare

or endangered species.

The Natural Heritage Program's listing of rare plant species occurrences in Springfield contains 32 different species. The rarity, ranking and identity of the species are described in the table on page 37.

E. Fish and Wildlife

Many common varieties of small mammals, reptiles, amphibians and birds can be found in Springfield in spite of its high degree of urbanization.

Since wildlife populations are intricately related to land use and vegetative types and upland forests and open land are virtually gone, the majority of wildlife types are those that are normally found in and around wetland areas such as bogs, ponds, and wooded swamps. Conservation areas, and undeveloped park land provide habitat for wildlife, and the city's rivers, lakes and streams attract waterfowl. In the suburban environment, bird feeders, nesting boxes and shrub or tree plantings of food value add to the quality of habitat for songbirds.

According to the Natural Resource Conservation Service, there do not appear to be any sites in Springfield that would be suitable for wildlife management. However, the preservation of wildlife habitat in conservation and park areas can provide opportunities for education and enjoyment by nature enthusiasts.

Local rivers, lakes and ponds support fish populations which include bass, pickerel and common panfish such as bluegills and perch. An anadromous fish restoration program in the Connecticut River Basin for Atlantic Salmon and American Shad has been in operation since 1966. Anadromous fish spawn in fresh water but spend most of their lives in the sea. A goal of the program is to restore a run of two million shad and 40,000 salmon to the mouth of the Connecticut River.

Rare and endangered species: According to the Division of Fisheries and Wildlife, Natural Heritage & Endangered Species Program, four areas of Springfield provide habitat for rare wetland wildlife. One area encompasses the length of the Connecticut River and its environs, a

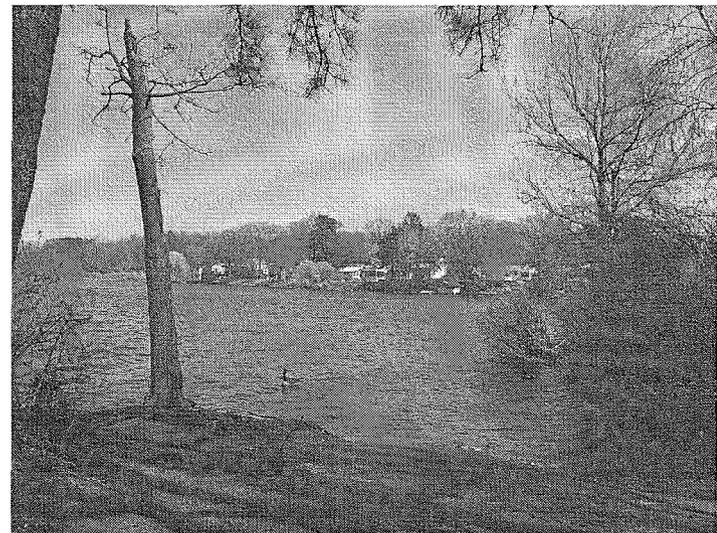
second area includes the Grayson Kettle Conservation area and the adjacent Edgemere Road Swamp, a third area includes portions of South Branch Parkway, and the fourth area is located in the vicinity of the South Branch of the Mill River and Tinkham Road in the southeastern corner of Springfield. These areas provide habitat for the Eastern Spadefoot Toad, the Spotted Turtle, the Eastern Worm Snake and the Jefferson Salamander. The Connecticut River is home to the Shortnose Sturgeon, a fish classified as rare and endangered in Massachusetts.

Many of the currently known rare species in Springfield are associated with wetlands. Many of these species, such as the blue-spotted and Jefferson salamanders and Wood and Spotted Turtles also use uplands for much of their lives including for foraging for food. The Blue-spotted and Jefferson Salamanders breed in vernal pools and spend most of their time in surrounding upland forests, under the leaves (as a result, they are called “mole salamanders”). There are detailed guidelines for their management at http://www.mass.gov/dfwele/dfw/nhosp/conservation/pdf/spp_prot_jeff_bluespotsal.pdf. Four-toed Salamanders nest in areas with sphagnum moss growing over open water – in permanent wetlands. Wood Turtles are found primarily in flowing water and adjacent wetlands and adjoining forests. They travel overland between wetlands and to upland nesting areas. Guidelines for protecting Wood Turtles are at http://www.mass.gov/dfwele/dfw/nhosp/conservation/pdf/spp_prot_woodturtle.pdf. To continue to have good populations of the recently delisted Spotted Turtle in Massachusetts, protecting areas with good populations, such as wetland forests are important. Eastern Box Turtles use wetlands on hot summer days, but are primarily species of upland forests. All the turtle species use vernal pools as part of their habitat, and all these turtles nest in open, often sandy, areas. Another species of reptiles does not use wetlands in their habitat: Worm Snakes are another species found below the layer of leaves on a forest floor, or shaded ground of vacant lots. Several populations of Worm Snakes occur in Springfield, including on in city parks and in residential neighborhoods. Leaving these areas undisturbed helps maintain the populations of this state Threatened species. More information is available at http://www.umass.edu/nrec/snake_pit/pages/worm.html.

The most established rare bird species in Springfield is the Peregrine Falcon that occupy habitat in downtown Springfield. Since 1988, a pair of peregrine falcons have nested in Springfield. The pair had originally nested on a ledge of the twenty-seventh floor of Springfield’s tallest building, Monarch Place. However, in recent years, the pair has alternated nesting spots between Monarch Place and underneath the Memorial Bridge. It should be noted that the pair currently nesting in Springfield is not the original pair of falcons. The original pair have died and been replaced by a new nesting pair of Peregrine Falcons. The Peregrine Falcon is an endangered species, and the original pair represented the first to nest in Western Massachusetts in more than forty years. The rare hawks, owls, and water birds formerly known from Springfield, haven’t been seen there in many years.

The rare invertebrates formerly of Springfield include the freshwater mussels that haven’t been relocated in many years. They require clear clean water, which is only slowly returning to the Connecticut. The Purple Tiger Beetle, also not seen in Springfield for a long time, is a species of open grasslands.

The Natural Heritage Program’s listing of rare wildlife species occurrences in Springfield contains 17 different species. The rarity, ranking and identity of the species are described in the proceeding tables.



Rare Species Element Occurances In Springfield	
Endangered Species	
Type of Species	Scientific Name (Common Name)
Bird	<i>Asio flammeus</i> (Short-Eared Owl)
Bird	<i>Botaurus lentiginosus</i> (American Bittern)
Bird	<i>Falco peregrinus</i> (Peregrine Falcon)
Bird	<i>Podilymbus podiceps</i> (Pied-Billed Grebe)
Mussel	<i>Alasmidonta heterodon</i> (Dwarf Wedgemussel)
Vascular Plant	<i>Carex mesochorea</i> (Midland Sedge)
Vascular Plant	<i>Pedicularis lanceolata</i> (Swamp Lousewort)
Vascular Plant	<i>Prenanthes serpentina</i> (Lion's Foot)
Vascular Plant	<i>Rotala ramosior</i> (Toothcup)
Vascular Plant	<i>Scleria triglomerata</i> (Tall Nut-Sedge)
Vascular Plant	<i>Verbena simplex</i> (Narrow-Leaved)
Vascular Plant	<i>Scheuchzeria palustris</i> (Pod Grass)
Vascular Plant	<i>Ludwigia polycarpa</i> (Many-fruited False loosestrife)

Threatened Species	
Type of Species	Scientific Name (Common Name)
Amphibian	<i>Ambystoma opacum</i> (Marbled Salamander)
Amphibian	<i>Scaphiopus holbrookii</i> (Eastern Spadefoot)
Reptile	<i>Carphophis amoenus</i> (Eastern Worm Snake)
Vascular Plant	<i>Agrimonia pubescens</i> (Hairy Agrimony)

Threatened Species (Con't)	
(Vascular Plant)	<i>Ophioglossum pusillum</i> (Adder's-Tongue Fern)
Vascular Plant	<i>Ranunculus pensylvanicus</i> (Bristly Buttercup)
Vascular Plant	<i>Sphenopholis nitida</i> (Shining Wedgegrass)
Vascular Plant	<i>Sphenopholis pensylvanica</i> (Swamp Oats)
Vascular Plant	<i>Veronicastrum virginicum</i> (Culver's-Root)

Species of Special Concern	
Type of Species	Scientific Name (Common Name)
Fish	<i>Notropis bifrenatus</i> (Bridle Shiner)
Amphibian	<i>Ambystoma jeffersonianum</i> (Jefferson Salamander)
Amphibian	<i>Gyrinophilus porphyriticus</i> (Blue-spotted Salamander)
Amphibian	<i>Hemidactylium scutatum</i> (Four-Toed Salamander)
Reptile	<i>Clemmys insculpta</i> (Wood Turtle)
Reptile	<i>Terrapene carolina</i> (Eastern Box Turtle)
Bird	<i>Accipiter striatus</i> (Sharp-Shinned Hawk)
Bird	<i>Gavia immer</i> (Common Loon)
Bird	<i>Tyto alba</i> (Barn Owl)
Mammal	<i>Sorex palustris</i> (Water Shrew)
Mussel	<i>Alasmidonta undulata</i> (Triangle Floater)
Beetle	<i>Cicindela purpurea</i> (Purple Tiger Beetle)

Species of Special Concern (Cont)	
Vascular Plant	Arceuthobium pusillum (Dwarf Mistletoe)
Vascular Plant	Clematis occidentalis (Purple Clematis)
Vascular Plant	Eragrostis frankii (Frank's Lovegrass)
Vascular Plant	Liatris borealis (New England Blazing Star)
Vascular Plant	Lygodium palmatum (Climbing Fern)
Vascular Plant	Rhynchospora scirpoides (Long-Beaked Bald-Sedge)
Vascular Plant	Sagittaria teres (Terete Arrowhead)
Source: Massachusetts Natural Heritage & Endangered Species Program, October, 2007	

F. Scenic Resources and Unique Environments

Springfield's most distinctive natural feature is the Connecticut River, which reaches a width of nearly 1,500 feet along the western boundary of the city. The river passes by the city's central business district and creates a scenic backdrop for downtown office employees and visitors.

Although Springfield's topography is relatively level, the flood plains of the Connecticut and Chicopee Rivers as well as the Berkshire Hills to the west of the city, the Wilbraham Hills to the east, and the Mt. Holyoke range to the north, can be observed from several vantage points. The 735 acre Forest Park is not only an important regional recreation area, but with its varied terrain and diverse flora and fauna, is a significant contributor to the overall scenic quality of the city. The King Philip's Stockade section of the park offers broad views of the Connecticut River Valley and surrounding uplands to the north and west. Delta Hills Conservation Area and the Chicopee River Overlook offer scenic views of the Chicopee River basin. White Cedar Bog represents a unique environment due to its unusual

vegetation. (see discussion on White Cedar Bog on page 34).

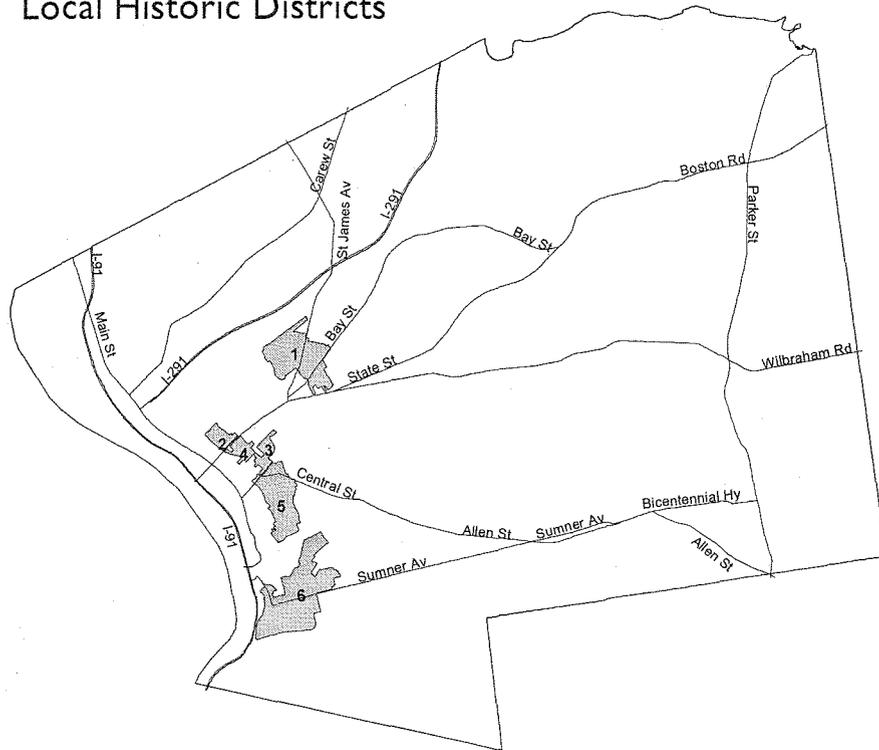
Springfield's architectural and cultural heritage has been protected through the efforts of the Springfield Historical Commission. The commission, established in 1972, is responsible for identifying areas or buildings of historical significance, setting priorities for preservation or restoration and insuring that changes to historic properties and districts are compatible with their historic character. To date, the commission has conducted historical surveys for over 3,500 properties and green spaces. Using the surveys, six local historic districts and fifteen national register districts have been established under the provisions of state-enabling legislation or by listing historically significant areas on the National Register of Historic Places. In addition to the districts, more than sixty individual properties are listed on the National Register, including thirty-five properties in downtown. For the most part, the historic districts are located in the central business district and surrounding residential neighborhoods. The location of Springfield's historic districts is depicted on the Historic Districts and Properties Map on the next page.

G. Environmental Problems

The quality of recreational resources in the Springfield area is affected by a number of environmental problems, some of which are regional in nature while others must be solved at the local level.

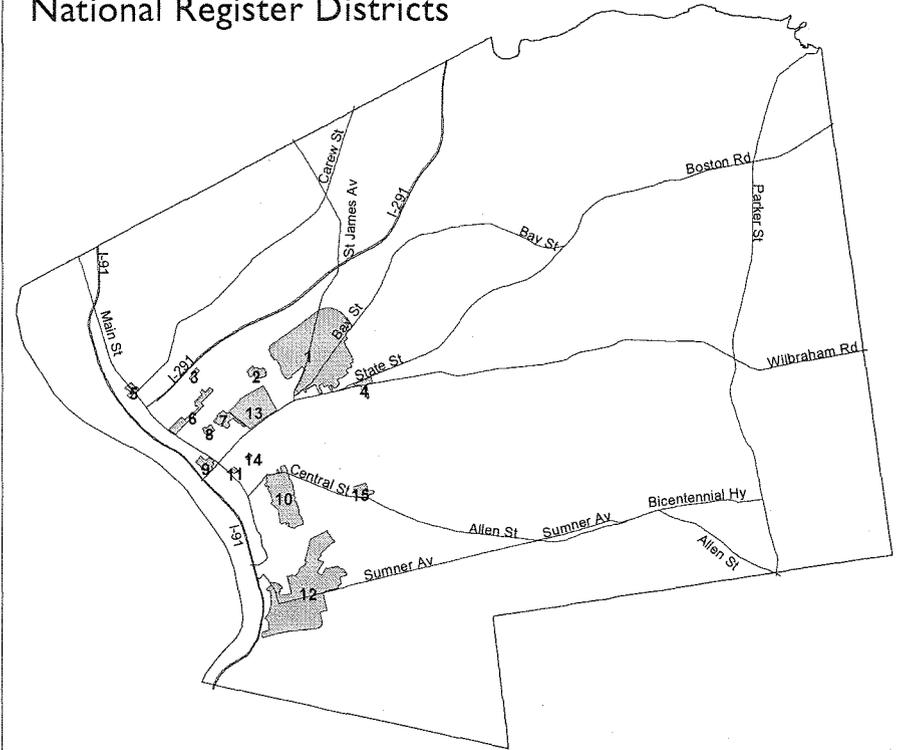
Combined Sewer Overflows: Although the quality of the Connecticut River has vastly improved in recent years due to the construction of pollution treatment plants throughout the basin, Springfield, along with a number of other communities in the region, still has combined sewer overflow (CSO) problems during periods of heavy rain. Overflows occur when the existing combined sewage/stormwater collection system capacity is exceeded due to increased flows as a result of wet weather. Excess flows are diverted through CSO outfall pipes to the Chicopee, Mill, and Connecticut Rivers, to prevent street flooding and back-ups into basements. The Springfield Water and Sewer Commission is bound by a United States Environmental Protection Agency (USEPA) Administrative Consent Order to address

Local Historic Districts

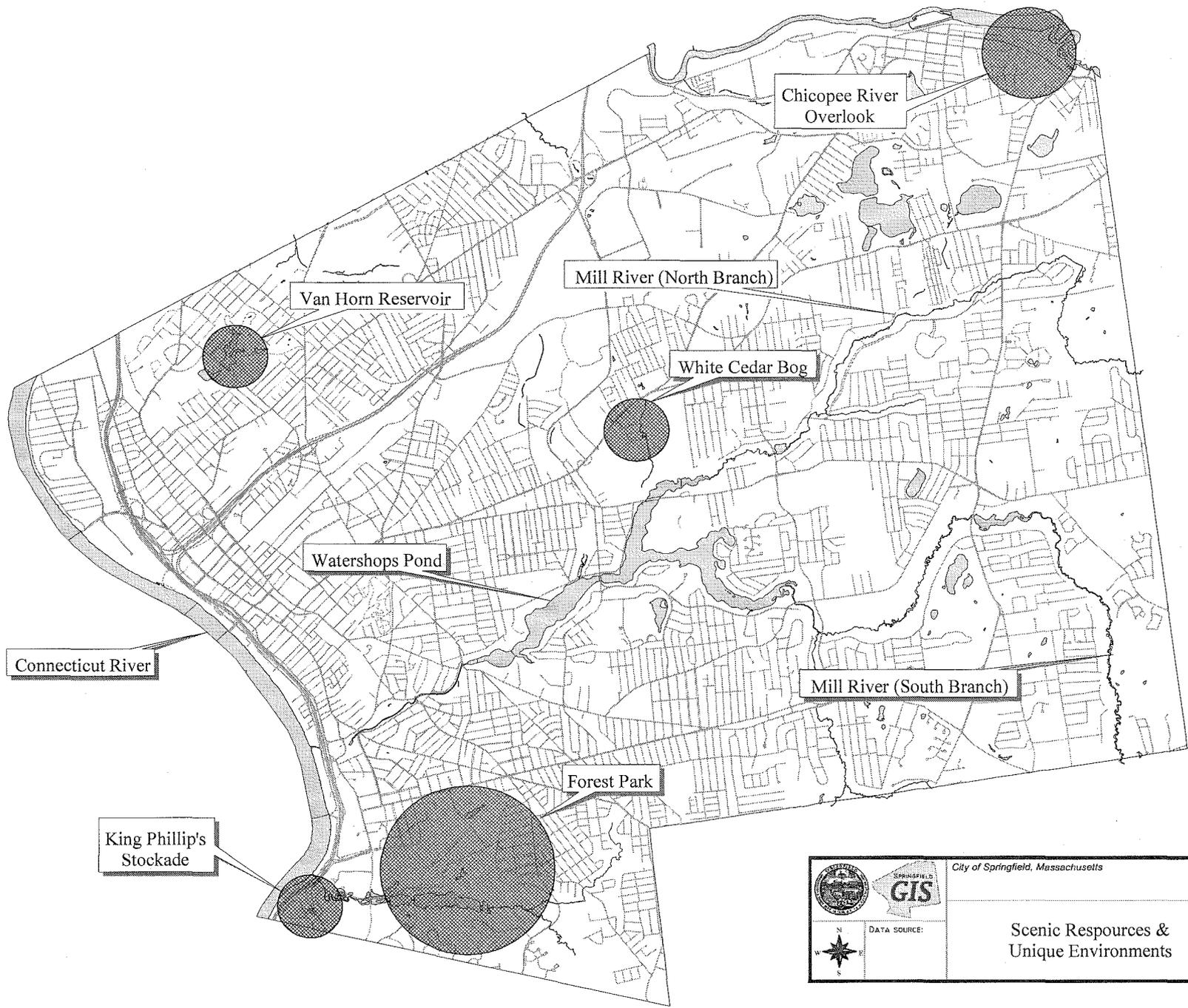


ID	Name
1	McKnight District
2	Quadrangle-Mattoon District
3	Ridgewood Local Historic District
4	Lower Maple Local Historic District
5	Maple Hill Local Historic District
6	Forest Park Local Historic District

National Register Districts



ID	Name
1	McKnight District
2	Upper Worthington
3	Belle-Franklin Streets Historic District
4	Winchester Square District
5	Memorial Square District
6	Downtown Springfield Railroad District
7	Byers-Spring/Quadrangle-Mattoon District
8	Apremont Triangle
9	Court Square District
10	Ames and Crescent Hill District
11	Smith Carriage Company District
12	Forest Park Heights
13	Springfield Armory
14	Maple-Union Corners District
15	Watershops Armory



		City of Springfield, Massachusetts
	DATA SOURCE:	Scenic Resources & Unique Environments

the problems with CSOs. To date the Water and Sewer Commission has maintained compliance with the USEPA requirements by undertaking CSO abatement projects throughout the City. A \$7 million project along the Mill River was completed in 2004, and two projects along the Chicopee River valued at \$36 million are currently being constructed. The Water and Sewer Commission is currently designing projects to reduce CSOs along the Connecticut River. After the Commission has completed the CSO projects underway, there still remain approximately \$160 to \$180 million in further CSO abatement projects on the Connecticut River to meet the federally mandated regulations.

Development of cost effective projects designed to control combined sewer overflows has become a public works crisis nationally. The USEPA has mandated that CSO communities commit to controlling these overflows without providing meaningful financial aid to fund the projects. Maintaining compliance with USEPA mandates while funding CSO projects continues to be a challenge for all CSO communities, including Springfield.

Non-point urban stormwater run-off: CSOs are considered point sources of pollution, while urban stormwater run-off flowing directly into lakes, ponds and streams from streets, parking lots, buildings and lawns is considered non-point pollution. Common pollutants in non-point urban run-off include de-icing salts, fertilizers, pesticides and residues from oil and fuel used in the operation of motor vehicles. Non-point stormwater run-off degrades water quality and accelerates eutrophication of lakes and ponds (discussed below). In addition, non-point run-off impacts the frequency of CSO discharges by entering combined sewer systems. The Pioneer Valley Planning Commission, in cooperation with the Massachusetts Division of Water Pollution Control, has initiated a "Demonstration Project for Urban Run-off Control in the Connecticut River Valley" which will explore ways to reduce pollutant loads from non-point sources. The City has joined several other communities on the Connecticut River Stormwater Committee. The Committee has developed a grassroots program educating the public about their contributions to poor stormwater quality via posters, television and radio ads, and presentations.

Eutrophication of lakes and ponds: Sediments and pollutants contained in surface run-off have caused shoaling and excessive growth of aquatic weeds and algae in many of Springfield's lakes and ponds. Shallow lakes such as Dimmock Pond, Mona Lake, Lower Van Horn Reservoir, Venture Pond, and upper portions of Lake Massasoit are severely eutrophic while the deeper kettle hole lakes such as Five Mile Pond and Loon Pond are less affected. Advanced eutrophication results in a loss of habitat for fish and wildlife and limits recreational use. The city has embarked on a lakes and ponds restoration program with the goal of eventually restoring all sixteen (16) publicly-owned water bodies. Because of limited financial resources, full restoration may be replaced by a less expensive, but still beneficial, management program.

Erosion: Nearly all conservation areas and some parks are subject to some degree of erosion. Storm water outlets have caused excessive stream bank erosion in Abbey Brook and Delta Hills. Off road vehicles (ORVs) are also causing erosion in some of the city's conservation areas, most notably in the LaBelle Drive, Delta Hills and Duggan Bogs areas. In Forest Park, stream bank erosion was addressed as part of the Porter Lake restoration program. A long-term solution to this problem will require a combination of strategies including reconstruction of stormwater outlets, stream bank stabilization, trail maintenance and the adoption and enforcement of regulations governing the use of ORVs on park and conservation land. Uncontrolled soil erosion from construction sites also contributes to pollution and sedimentation of water resources. The City is preparing an erosion control ordinance as required under the federal NPDES permit to address this issue.

Soil and groundwater contamination: On occasion, leachate from contaminated soil is detected in streams and lakes. Contamination may originate from underground fuel storage tanks, auto-salvage operation, residues from former or current industrial activity and former landfills on Cottage Street and Boston Road. A septic system serving the gun club located in Wesson Park and a leaking and periodically blocked interceptor sewer are the apparent sources of high coliform bacteria counts in Carlisle Brook and the Noonan Cove section of Lake Massasoit. The problem of soil contamination can be addressed through

elimination of the few remaining septic systems in the city and diligent enforcement of Massachusetts Contingency Plan (MGL chapter 21E) by the Massachusetts Department of Environmental Protection.

Illegal dumping and vandalism: Unfortunately, the city's conservation areas and undeveloped park lands are prime targets for illegal dumping of building debris, appliances and ordinary household garbage. This problem has been addressed to some degree through citizen involvement in Earth Day clean-ups, but more needs to be done. Replacement of vandalized park and playground equipment is an ongoing function of the Department of Parks, Buildings & Recreation Management's Maintenance Division, but budgetary reductions are hampering the division's ability to replace or repair vandalized park facilities. Greater neighborhood involvement in policing and maintaining park and conservation areas is being advocated as a partial solution to this problem.

Brownfields: While there is no formal definition of the term "brownfields" in Massachusetts, brownfields often have certain characteristics in common: they are typically abandoned or for sale or lease; they typically have been used for commercial or industrial purposes; they may have been reported to MassDEP because contamination has been found; or they may not have been assessed due to fear of unknown contamination conditions. The U.S. Environmental Protection Agency (EPA) has established a definition of brownfields for federal funding purposes, "With certain legal exclusions and additions, the term 'brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant".¹

Springfield's Brownfield Program is managed by the Office of Planning and Economic Development. This office employs three community planners and six economic development professionals. The Office of Community Development also plays a critical role by managing the funds for the program.

The City of Springfield Brownfields Program facilitates Phase I/II

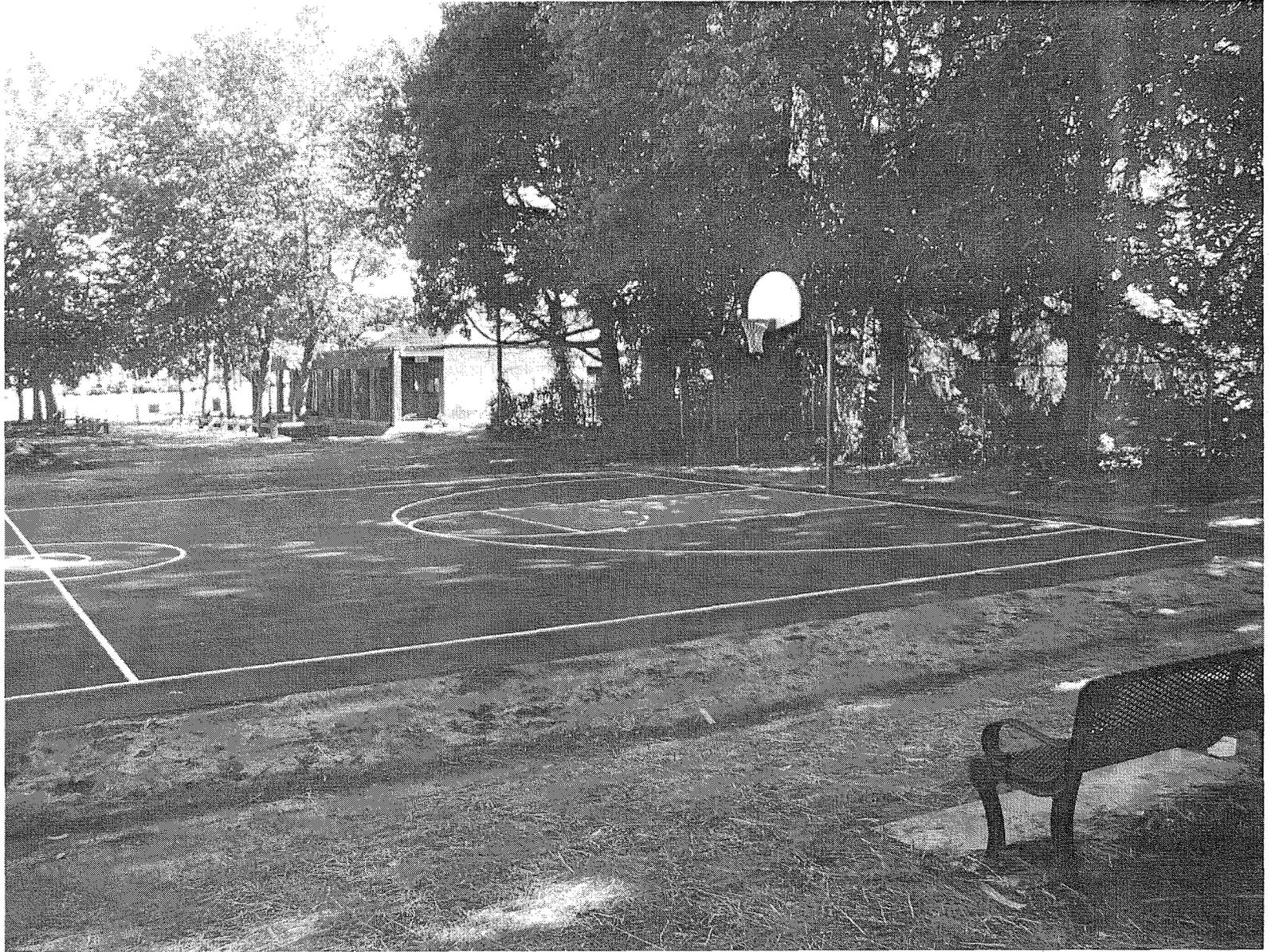
Environmental Site Assessments and Phase III Cleanup Plans on priority redevelopment sites. The site assessments have been primarily funded through the City's EPA grants, or from Targeted Brownfields Assessments performed by the Massachusetts Department of Environmental Protection or EPA.

The City's main goal is to promote the sustainable reuse existing brownfields and preventing the creation of additional ones. Redeveloping brownfields shifts development pressures away from undeveloped land, improving and protecting the environment. Further, brownfields redevelopment returns non-productive real estate assets to productive use, promoting economic development.

¹ The Brownfields Site definition is found in Public Law 107-118 (H.R. 2869) - "Small Business Liability Relief and Brownfields Revitalization Act" signed into law January 11, 2002.



Inventory of Lands of Conservation and Recreational Interest



Myrtle Street Basketball Court



SECTION 5: LANDS OF CONSERVATION AND RECREATION INTEREST

The City of Springfield's open space system is a mix of publicly and privately owned land with characteristics that range from highly managed landscapes to naturally wooded areas. This open space system also ranges in size from park land with over 700 acres to individual conservation controlled parcels with only 5,000 square feet.

This open space system is extremely important to the City as it helps to provide residents with both active and passive recreational opportunities and provides wildlife habitats. Additionally, this open space system helps to contribute to the overall aesthetic quality of the city while also helping to mitigate the harmful effects of both urban air and water pollution. Under this section, the term "protected" refers to publicly owned parcels such as municipal parks, federal facilities, municipal conservation areas and municipal school playgrounds.

A. Private Parcels

Springfield is an urban community with over ninety percent of its land area either developed or dedicated for park or conservation use. There are no agricultural lands or large tracts of forest land remaining in the city and no land in special taxation programs such as Chapter 61A or 61B. A number of private institutions, including three private colleges and one private high school, have developed extensive recreational facilities. While these facilities complement public sector activities, public recreation is not recommended for any privately owned property except for some areas proposed for acquisition by the Conservation Commission. These are primarily lands associated with water resources identified on the "Water Resources Map" and are often extensions of existing conservation areas or undeveloped parks. For clarity, the areas are shown on the large scale Open Space Map. They are described in Appendix III, Proposed Conservation Areas.

B. Public and Nonprofit Parcels

All public parks and conservation areas are listed in the public Open Space Inventory (Appendix II) and identified on the Open Space Map. School playgrounds are also identified since they form an important part of the city's recreational inventory. Following is a summary of the federal, state and municipal facilities included in the inventory:

C. Federal Facilities

The 55-acre Springfield Armory National Historic Site is administered by the National Park Service, a branch of the U.S. Department of the Interior. Two buildings constructed in the 1840's are located on the site. One is the Main Arsenal Building, which houses what is regarded as one of the world's largest collection of small arms. There is also a large open space that surrounds the site. Currently, this open space is underutilized for any type of recreational use. The city, along with the National Park Service, are reviewing strategies for ways that this very important asset can be better integrated and utilized by not only the citizens of Springfield, but for tourists as well. These strategies not only include better promotional efforts by both the city and the National Park Service, but also looking for additional funding sources for the continual long term maintenance of the grounds. This maintenance not only includes the park grounds but also the historical sidewalks and treebelts that surround the site.

D. Municipal Parks

There are over 2,000 acres of recreational park land in Springfield, of which 1,081 acres are contained in four large community parks. The remaining acreage is divided among numerous neighborhood recreation areas, two 18-hole golf courses and several undeveloped open space areas. Geographic distribution of facilities is satisfactory, and a wide range of recreational opportunities are available, most of which are free of charge. The abundance and variety of recreational land is an important asset to the community and enhances the quality of life for all the residents of Springfield.

C. Municipal Conservation Areas

To date, 2,652 acres of land in 323 separate locations have been preserved through the efforts of the Conservation Commission. All acquisitions are in fee interest and are acquired by eminent domain or by donation. Land acquired by the Commission remains essentially in its natural state, although hiking trails and plant identification signs are planned for all areas to enhance their value for passive recreation and education. In addition, the Commission regularly requires private land owners to place a Conservation Restriction on a portion of their properties as a condition of their permit under the Wetlands Protection Act and the Springfield Wetlands Protection Ordinance.

Municipal School Playgrounds

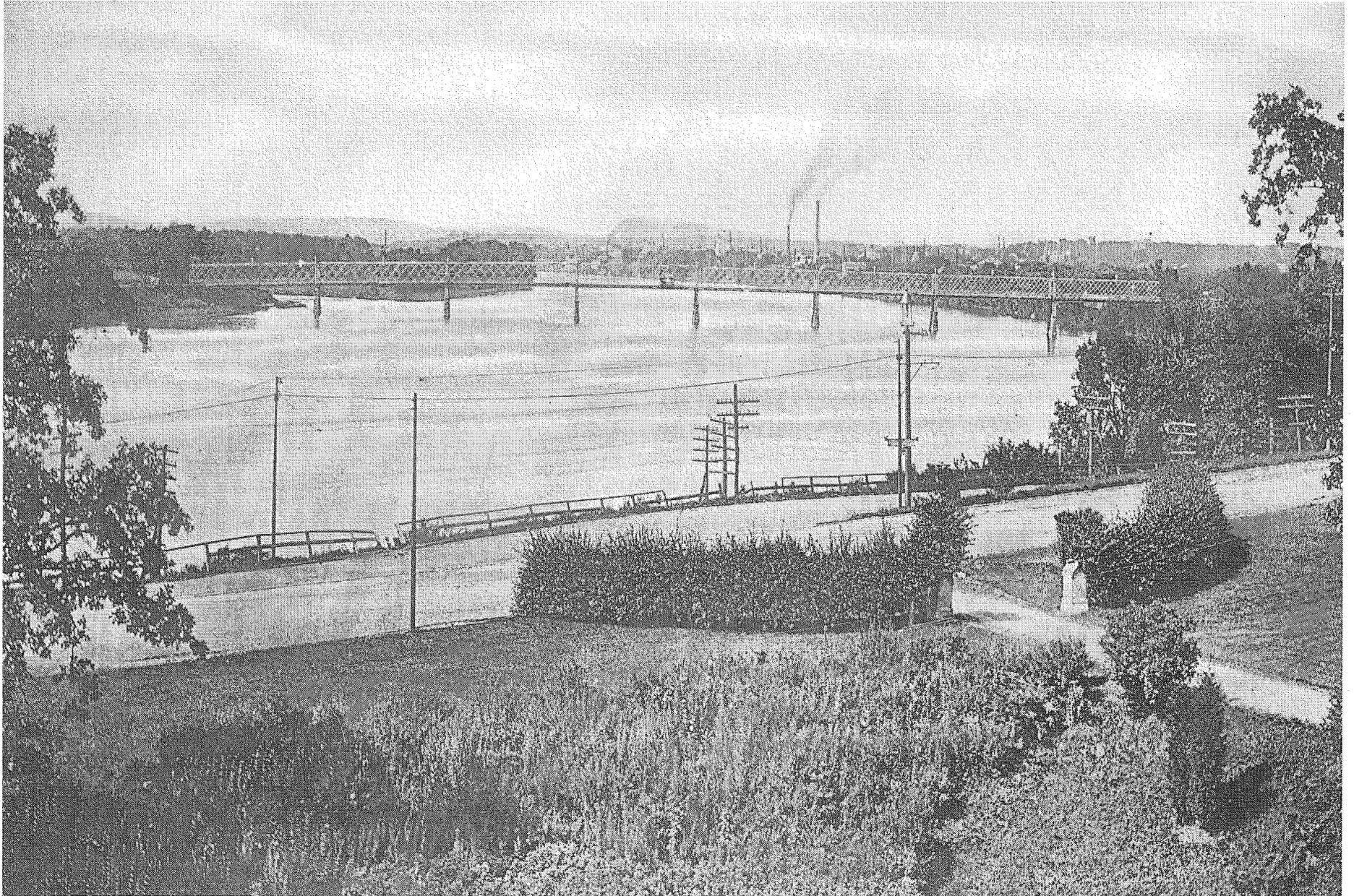
Thirty-four school playgrounds are listed in the inventory. Unlike public parks or conservation areas, these are not “protected” areas. Exceptions are the Gerena Playground and Linda’s Park which were acquired and built with HUD Open Space Land Funds, the Balliet School Playground which was restored with Land & Water Conservation Funds and Chestnut Accelerated Athletic Fields which were constructed with Urban Self-Help Funds. In these cases, the recreational land is protected by deed restrictions. School playgrounds vary considerably in size and quality, ranging from small, paved play areas at some elementary schools to facilities for competitive sports at high schools. The recreational needs of students and the fact that the city is planning to build new schools for a growing student population, assures that school playgrounds will continue to serve as an important component of the recreation supply.

E. Section 504 Handicapped Accessibility Survey

In accordance with the 504 requirements of the Division of Conservation Services, a 504 survey of recreation facilities has been conducted. The survey is appended to this Open Space Plan as Appendix V, but, due to its bulk, is available only on request.



Community Goals



Connecticut River and Springfield from Laurel Hill-Forest Park, Circa 1880's

SECTION 6: COMMUNITY GOALS

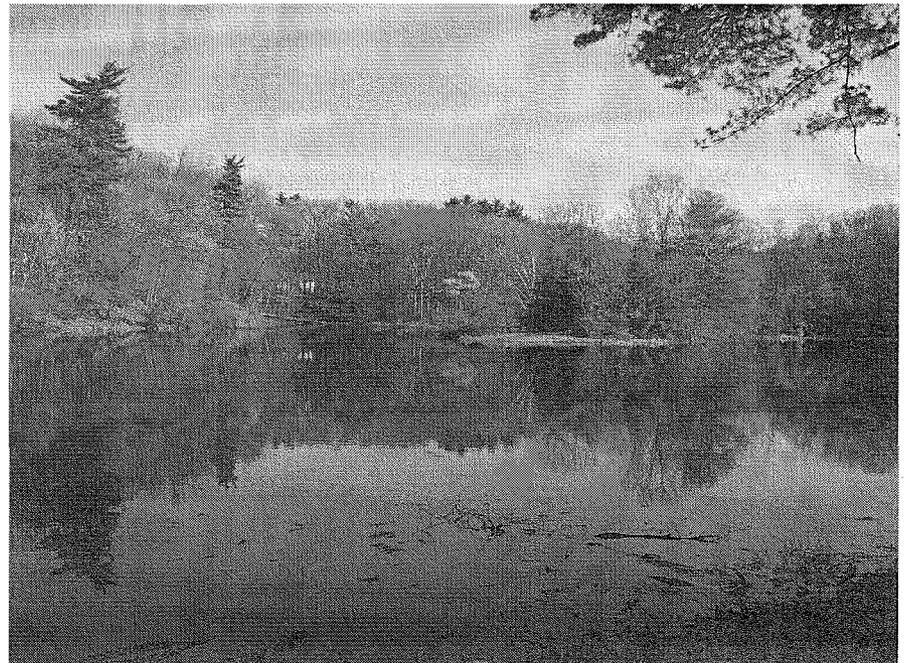
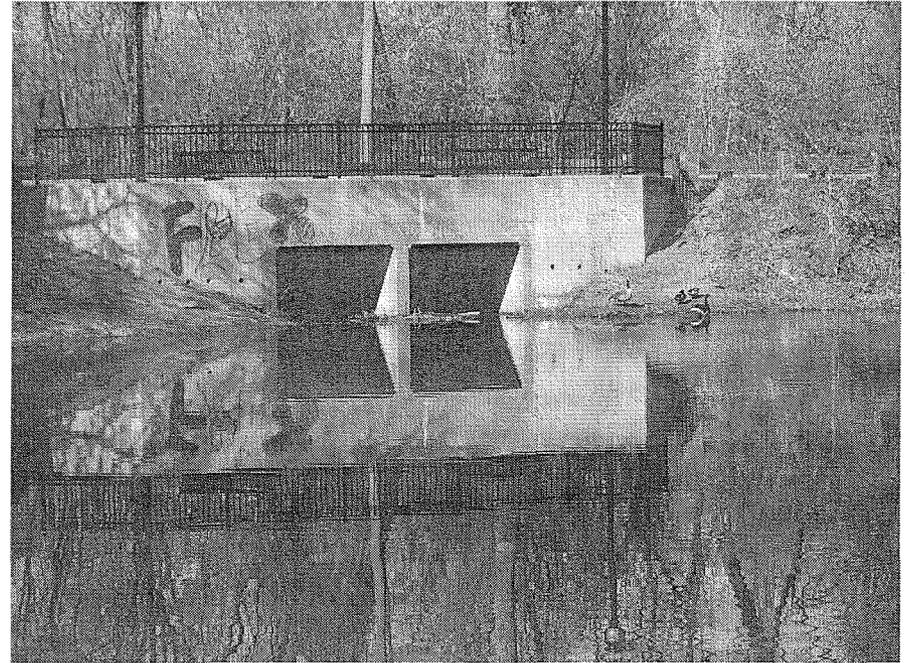
A. Description of Process

This open space plan takes a different approach from years past. One of the largest difficulties a municipality this size faces is communication and collaboration between departments. In the spirit of collaboration, the City has moved away from individual goals for each department. Instead, we have developed four broad goals that cover the individual goals of each department, allowing every party involved in managing open space in Springfield to be working on the same goals. The draft goals were circulated among the key stakeholders for comments. Responses to these changes were positive.

Additionally, in order to elicit public input on this important document, a copy of the draft Open Space Plan was posted on the city's website including a form to provide comments. In addition to the online posting, public comments were also solicited at a Planning Board hearing, Conservation Commission hearing and Parks Commission hearing. Copies were also distributed to various organizations for review prior to final editing and submission.

B. Statement of Open Space and Recreational Goals

- 1) **Acquire** open space and recreation lands based on its value as a natural resource or recreational opportunity.
- 2) Adequately and consistently **manage** open space and recreation lands to reduce public safety hazards, increase opportunities for interacting with the outdoors and maximize protection for the city's natural resources.
- 3) **Regulate** for the proper use and protection of open space and recreation lands.
- 4) **Enforce** the regulations for the proper use and protection of open space and recreation lands.



Analysis of Needs



Lily Ponds-Forest Park, Circa 1880's

SECTION 7: ANALYSIS OF NEEDS

A. Summary of Resource Protection Needs

Only a small percentage of Springfield's land has escaped urbanization, but a sizeable portion of the undeveloped land is marginally developable wetland with high resource value. The Springfield Conservation Commission recommends that all remaining wetland areas be preserved through public acquisition or control. This policy recognizes the cumulative effect of past instances of wetland destruction that have permanently altered the environment by lowering the water table, increasing the frequency of local flooding and lowering the quality of water entering Springfield's lakes and streams. In addition, wildlife habitats and potential recreational resources have been irretrievably lost.

This policy is consistent with the Massachusetts wetland policy outlined in the Statewide Comprehensive Recreation Plan (SCORP), a policy which, according to the SCORP, has resulted in a much lower rate of wetland loss in Massachusetts than in other states.

Areas recommended for preservation are described in Appendix III and are identified on the Open Space Map. Many have been targeted for protection since the early 1970's when the U.S. Department of Agriculture, Soil Conservation Service (SCS) evaluated Springfield's natural resources. Two studies were conducted by SCS, a soil survey of undeveloped land and a natural resource inventory. These studies have guided the Conservation Commission in identifying open space areas compatible with their land acquisition goals. Areas recommended for acquisition are generally associated with three categories of wetlands.

Streambelts: Springfield has already set aside significant acreage along the north and south branches of the Mill River, Schneelock Brook, Pecousic Brook and Entry Dingle. These areas serve to protect adjacent flood prone areas. In addition, they form linear greenbelts adaptable to the development of hiking trails and provide a

high degree of visual relief in otherwise monotonous expanses of low-density housing. Extensions are proposed to the north and south branches of the Mill River and Entry Dingle. Portions of the streambelt along Jamaica Brook and the lower portion of the Mill River are also recommended for preservation.

Sites bordering rivers, lakes or ponds: The increasing demand for water-oriented recreation can be alleviated through public ownership of land adjacent to the city's many streams, lakes and ponds. Seven sites have been selected by the Commission primarily for their proximity to bodies of water, although each satisfies a wide range of conservation goals.

Wetlands: While it is recognized that sites categorized as streambelts or as access sites to streams or lakes often incorporate "wetland areas", a separate wetland category is employed here to designate those areas classified as marshes, swamps or bogs. Every wetland plays a vital role in flood control and water purification and each type has a distinctive ecosystem to which a variety of wildlife is attracted. Marshes are treeless tracts of shallow water dominated by cattails, sedges and other aquatic plants, while swamps are a further stage of succession of marshes in which water tolerant shrubs and trees such as red and silver maples are present. Bogs were formed in kettle hole depressions created during the last glacial period about 10,000 years ago. Eight wetland areas are included in the acquisition program.

In addition to protecting privately owned wetland areas through public acquisition, the city must protect resources already in public ownership from pollution and activities which diminish their recreational value. Programs to alleviate stream bank erosion and eutrophication of lakes and ponds are essential. Pollution abatement programs that affect all surface waters in our urban environment must be supported by federal and state environmental agencies.

Finally, maintaining high quality open space resources can only be achieved if the citizens of Springfield respect park and conservation land.

Degradation of parks and natural areas through vandalism and dumping must be controlled through education and policing. Through continued participation of private organizations and citizen councils, a great deal of progress has been made. Over the past few years these organizations have volunteered to clean up and maintain several neighborhood parks. Based on the survey responses, a public education campaign to complement clean up efforts is needed so that more people become aware of the location of conservation areas and understand the reasons for protecting natural resources.

B. Summary of Community Needs

The recreational needs of Springfield will not radically change in the foreseeable future. The population has grown slowly in the 1980's and decreased in the 1990's, though some increase in the youth population has occurred particularly among minority groups. A nearly stable population is projected into the next century.

Active and passive recreation needs are currently addressed by the Park and Recreation Department within the constraints of budgetary resources. Demand by special interest and demographic age groupings are for the most part satisfied, but deficiencies do exist. A desire for more active recreational facilities and programs has been expressed by neighborhood representatives. Active recreational programs for youth is the most pressing recreational need. Lack of facilities and maintenance has been cited as the most significant deficiencies in the park system, although security and programming are also major concerns. Past surveys have indicated a willingness on the part of neighborhood residents to accept a fee system to pay for facilities and maintenance. The idea of private enterprise providing recreation services for a user fee is another idea that has been receptive in the past to neighborhood residents. Generally speaking, there exists a desire for more and better maintained facilities in existing neighborhood parks, especially those in inner-city neighborhoods. One goal of the Department of Parks, Buildings & Recreation Management is to provide a diverse array of recreational programs for all age groups.

Upgrading substandard facilities will allow for the expansion of recreational programs. While all parks require periodic updating, such as the replacement of playground equipment, more heavily used neighborhood and community parks require more extensive renovation to expand their recreational potential.

One of the most pressing needs of the Department of Parks, Buildings & Recreation Management is the need to replace outmoded equipment and modernize park buildings. In fact, much of the department's emphasis in the ensuing years will be on upgrading existing resources and facilities to more efficiently and effectively serve the recreational needs of the residents of Springfield. More efficient delivery of services combined with a greater degree of citizen involvement in maintenance activities can do much to counter budget shortfalls.

At many of the public hearings held by the Conservation Commission, residents express dismay at losing naturalized open space. They often discuss how much they enjoy watching the local wildlife and simply walking around a wooded area. As many of the marginal lots in this municipality and others are being developed, it has become clear that residents of Springfield need well-managed conservation land. A lack of funding and staff has not allowed the Commission to develop trails, maps and other amenities on their sites. This plan will address some concrete goals the Commission can pursue in the next five years to better meet this need.

C. Management Needs

Recreation facilities and services cost money and the budget cuts experienced at all levels of government due to the economic recession are a major obstacle to delivering park services. Proposition 2 ½ further complicates the situation by limiting a community's ability to raise tax money to pay for services. Current budget reductions are forcing the Department of Parks, Buildings & Recreation Management to examine how it manages its open space efficiently and still provide the public with safe quality recreation areas.

The use of technology and equipment will ensure services are delivered in a timely manner to the residents of Springfield. These budgetary constraints are influencing management practices in three distinct ways:

1. Optimization of Existing Resources: Because of the reduction in manpower and maintenance supplies, the Department of Parks, Buildings & Recreation Management must make optimum use of its remaining resources in order to sustain a high level of service. This will be accomplished through increased productivity and efficiency, made possible by improved scheduling and maintenance procedures, the use of new technology and the replacement of obsolete maintenance equipment.

2. Increased Citizen Involvement: Participation in the "Adopt a Park" Program by neighborhood councils and private organizations been a great success and has assisted the Department of Parks, Buildings & Recreation Management by alleviating some of its maintenance responsibilities. The program is designed to have neighborhood groups provide park clean-ups and security watches. This type of citizen involvement instills a sense of pride in participants, which in turn reduces the incidence of vandalism in neighborhood parks.

3. New Funding Sources: The department will rely more heavily on fees and private donations to pay for park improvements. A vehicle entry fee for Forest Park was instituted in June, 1992. Vehicle entry fees have also been instituted at Blunt Park and Five Mile Pond Park. Also, fees at the city's two golf courses were raised to help pay for capital improvements. In addition, through efforts of the Commonwealth Division of Conservation Services, an Enterprise Account was established to ensure yearly improvements to the city's courses.

D. Major Ongoing Projects

The Connecticut River Walk and Bikeway: One of the recent projects is the Connecticut River Walk and Bikeway which was opened in November, 2002. This 3.7 mile path, gives the people of Springfield the opportunity to experience the Connecticut River and all its beauty up close. For many years, cities, including Springfield, have turned their back on its rivers. It is only after years of neglecting the rivers, that cities are finally starting to realize the invaluable importance of these natural resources.

The Connecticut River Walk and Bikeway has increased the recreational opportunities along the Connecticut River corridor. The trail consists of new amenities such as a paved path for bicycling, strolling, jogging and rollerblading; scenic overlooks, benches, urban promenades and a landscaped greenbelt. The walkway also offers benefits that go beyond that of recreation. Benefits include reduced automobile traffic and emissions, and the riverwalk serves as a stimulus for future riverfront development in Springfield. The Office of Planning & Economic Development continues to explore opportunities in which the new walk/bikeway can be connected to existing recreational facilities throughout the City of Springfield.

Currently, the town of Agawam is has opened their portion of the River Walk. The cities of Chicopee and Holyoke are still in the planning process. The long range goal of the Connecticut River Walk and Bikeway is to create a regional pedestrian and bicycle path along the Connecticut River that will connect the communities of Springfield, Agawam, West Springfield, Chicopee and Holyoke. Once completed the total length of the entire River Walk and Bikeway will be in excess of 22 miles.

Riverfront Development: The City of Springfield, in conjunction with the Basketball Hall of Fame, is in the process of putting the finishing touches on the development of an 18 acre site located along West Columbus Avenue. In October, 1997, the city broke ground on this expansive project. Today, the city has a new \$100 million Naismith Basketball of Fame, which opened in September, 2002. Also, a new

Hilton Garden Hotel and Pizzeria Uno Restaurant have been completed and have been open since the summer of 2002. Currently, this Pizzeria Uno Restaurant is one of the busiest in the United States. The rehabilitation of the former Naismith Memorial Basketball Hall of Fame into a 70,000 square foot riverfront entertainment and fitness experience containing an LA Fitness facility, Onyx Restaurant and ProEx Sports Medicine & Day Spa is an important re-use of existing development along the riverfront. The project was totally financed with private dollars. Both facilities were opened in the spring of 2008 and are attracting patrons from not only the City of Springfield but the region as well.

Environmental site work is now complete and the City of Springfield has completed demolition of the former York Street Jail. This is a 3.3 acre parcel along the Connecticut River. The complex was comprised of 16 structures, all of which were in a state of serious disrepair. The property was given to the City through a Special Act of Legislature in 1997. Now that demolition is complete, the City will be offering the site for redevelopment opportunities through a Request for Proposals.

Another important link to riverfront development is the renovation of Riverfront Park. This under used six-acre recreation area has been restored as a gateway and linkage from downtown Springfield, to both the Connecticut River Walk and Bikeway and the newly refurbished Hall of Fame. Riverfront Park is now used throughout the year for several festivals including the Puerto Rican Festival.

The Highland Division Rail-Trail: This proposed rail-trail is located along the former right-of-way of the Highland Division (or Hazardville Branch) of the Boston & Maine Railroad. The corridor runs from the Hazardville section of Enfield, Connecticut, to downtown Springfield, Massachusetts. The former line comprises 12.5 miles; 8.5 miles in Massachusetts and 4 miles in Connecticut. Originally, the line was part of the New Haven Railroad and subsequently was acquired by Penn Central (1969), Conrail (1976), and B&M (1982). In 1993, the line was formally abandoned.

This rail-trail abuts seven city neighborhoods with a combined population

of 67,000. These neighborhoods alone comprise a larger population than any other community in western Massachusetts.

The rail-trail is a two phase project, with the first phase running from the East Longmeadow town line, approximately 1.7 miles north, to Watershops Pond in Springfield. The second phase would continue the trail over Watershops Pond and would eventually connect with downtown Springfield. Recent neighborhood opposition to the project has slowed the advancement of the first phase; however the second phase has strong support from the neighborhoods surrounding Mason Square.

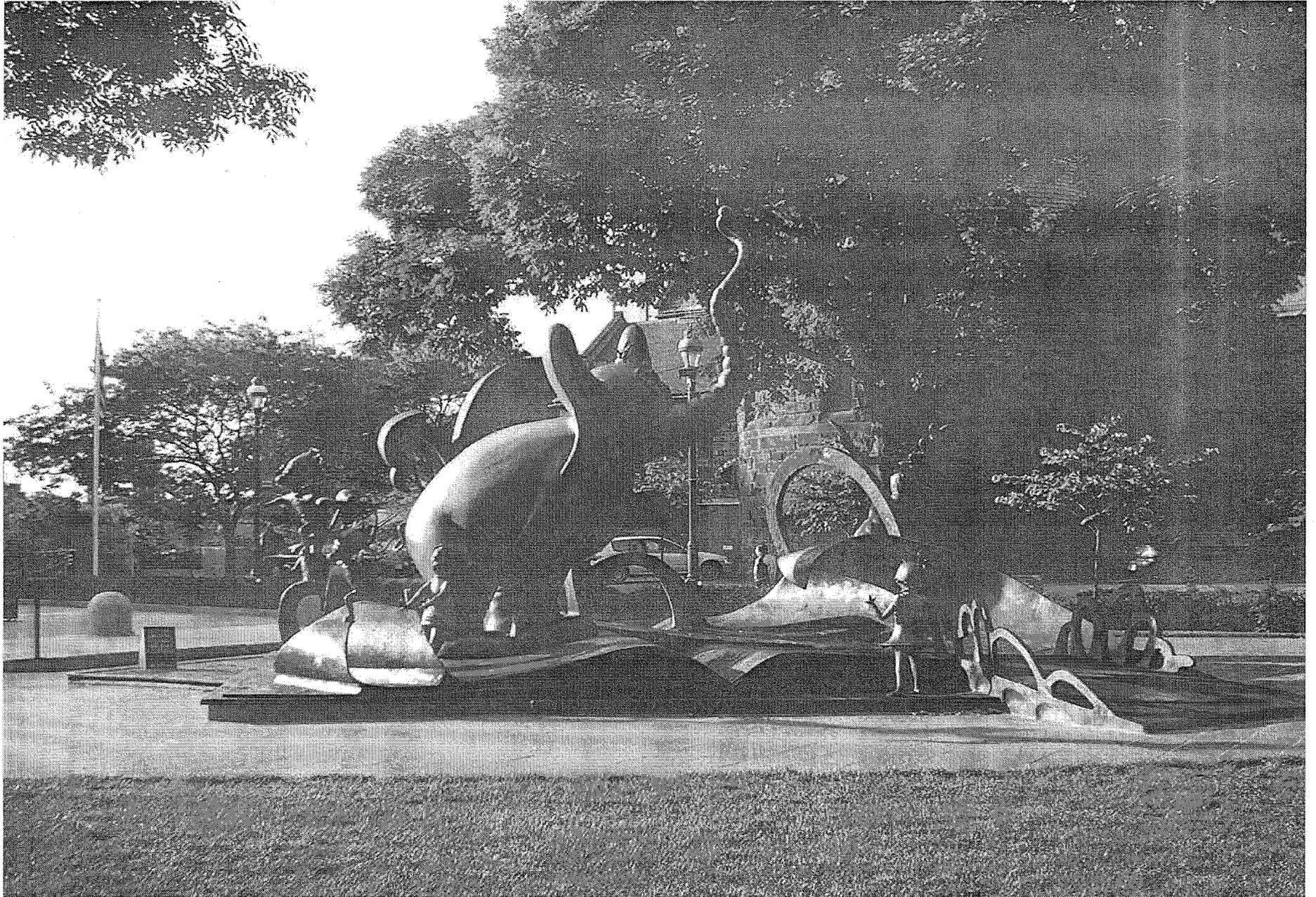
In 1998, the City of Springfield received a Federal Transportation grant for \$84,000 for a preliminary design of the phase one portion of the trail. Since the awarding of the grant, the city has held a number of public meetings to discuss ideas and concerns of the surrounding neighborhoods.

In the fall of 2008, a group of Landscape Architect students from the University of Massachusetts at Amherst engaged the Mason Square neighborhoods in a 14 week design studio project to address the portion of the rail-trail north of Watershops Pond. Neighborhood response has been very positive and work continues to address the feasibility of the proposed designs.

This trail continues to offer the opportunity to turn a deteriorated and overgrown rail line into a unique recreational bikeway for the citizens of Springfield.

Chicopee River Walk and Bikeway: The Office of Planning & Economic Development, along with the Indian Orchard Main Street Corporation and residents, are looking at the feasibility of establishing a formal pedestrian/bike path abutting the abandoned rail bed along the Chicopee River. This walk/bikeway could be tied into a regional system and possibly connecting with the Connecticut River Walk and Bikeway initiative. As of 2007, the Parks Department has received funding for development and construction of the walk and bikeway. They are currently in the permitting stages of this project.

Goals and Objectives



Dr Seuss Sculpture-Quadrangle

SECTION 8: GOALS AND OBJECTIVES

Goal #1: Adequately and consistently manage open space and recreation lands to reduce public safety hazards, increase opportunities for interacting with the outdoors and maximize protection for the city's natural resources.

Objective: To restore degraded areas in order to provide greater recreational and open space values.

Objective: To continue routine maintenance and repairs.

Objective: To make capital improvements to open space in the city.

Goal #2: Acquire open space and recreation lands based on its value as a natural resource or recreational opportunity.

Objective: To provide additional swimming opportunities in the city.

Objective: To increase inventory of open space, park land and conservation land

Objective: To provide additional open space in areas which demonstrate the greatest need.

Objective: To protect water resources via acquisition of open space

Goal #3: Regulate for the proper use and protection of open space and recreation lands.

Objective: Clarify appropriate open space use within the city.

Goal #4: Enforce the regulations for the proper use and protection of open space and recreation lands.

Objective: Protect open space in the city from detrimental uses and encroachment.



Five Year Action Plan



Linda's Park

SECTION 9: FIVE YEAR ACTION PLAN

GOAL #1: ACQUISITION

Objective: To provide additional swimming opportunities in the city.

Action Steps:

1) Restore Jam's Beach for public swimming area, by improving water quality. (Parks)

Objective: To increase inventory of open space, park land and conservation land.

Action Steps:

1) Acquire approximately 8 acres of land along the Springfield/Chicopee line. (Parks)

2) Acquire Solutia Park on Page Boulevard. (Parks)

Objective: To provide additional open space in areas which demonstrate the greatest need.

Action Steps:

1) Identify and acquire small parcels to create neighborhood parks and playgrounds in areas with a high number of children and limited open space. Areas include Metro Center and other older city neighborhoods. (Parks)

Objective: To protect water resources via acquisition of open space.

Action Steps:

1) Acquire the Camerota Property, approximately 11 acres of open space located on the north shore of Five Mile Pond.

(Parks)

2) Acquire the property at 148 Temby Street. (Conservation)

3) Acquire marginal lots via the tax title process. (Conservation, Parks)

4) Acquire parcels that are contiguous with currently owned parcels, would contribute to a wildlife corridor or greenway, are wetlands or are listed as NHESP Priority Habitat. (Conservation)

GOAL #2: MANAGEMENT

Objective: To restore degraded areas in order to provide greater recreational and open space values.

Action Steps:

1) Renovate Blunt Park, Phase II. (Parks)

2) Brownfield restoration and playground renovation at Walsh Street Playground. (Parks)

3) Dredge Five Mile Pond and upgrade the associated Park. (Parks)

4) Repairs to various tennis and basketball courts throughout the city. (Parks)

5) Restoration of small triangles and terraces throughout the city. (Parks)

6) Rehabilitate over 60 acres of school athletic fields. (Parks)

7) Renovate Camp Seco. (Parks)

- 8) Restore Meadow Brook Ravine in Forest Park. (Parks)
- 9) Raze and rebuild the Horticultural Center/Botanical Garden. (Parks)
- 10) Renovate old zoo buildings in Forest Park. (Parks)
- 11) Renovate DeBerry Field. (Parks)
- 12) Demolish existing building at Wesson Park, conduct 21E and remove leaching field. (Parks)
- 13) Develop Management Plan for Conservation Areas. (Conservation)

Objective: To continue routine maintenance and repairs.

Action Steps:

- 1) Continue replacement of outdated playground equipment city-wide. (Parks)
- 2) Continue ballfield renovations at Van Horn Park. (Parks)
- 3) Repair elevator at Pynchon Plaza. (Parks)
- 4) Continue development of recreational amenities at Camp Wilder and Quarry Pond. (Parks)
- 5) Improve walkways, landscaping, lighting, signage, etc., at Merrick Park. (Parks)
- 6) Improve parking and create trails at Hubbard Park. (Parks)
- 7) General improvements at Veteran's Golf Course. (Parks)
- 8) Continue to manage water resources with herbicides, lake

level drawdowns and maintenance of detention basins. (Parks)

- 9) Continue the City's tree replacement program. (Parks)
- 10) Ongoing renovations of the trail systems city-wide. (Parks)
- 11) Fencing, monument and landscaping improvements at Bay Path, Cherry Lane and Wachogue Cemeteries. (Parks)
- 12) Implement recommendations in Dam Reports (2006) for restoration and repairs to all City owned dams. (Parks)
- 13) Continue to upgrade all park roads. (Parks)
- 14) Continue to make all parks handicapped accessible. (Parks)
- 15) Institute a program to regularly remove trash dumped on conservation land. (Conservation)

Objective: To make capital improvements to open space in the city.

Action Steps:

- 1) Construct new maintenance facilities at park district and golf course facilities. (Parks)
- 2) Improve access, install dock system, stabilize shore and upgrade existing restroom facilities at Riverfront Park. (Parks)
- 3) Construct a new community building at Ruth Elizabeth Park. (Parks)
- 4) Completely renovate field house at Myrtle Street Park. (Parks)

- 5) Construct addition to community building, install new playground equipment, etc., at Greenleaf Park. (Parks)
- 6) Construct concession building at Marshall Roy Park. (Parks)
- 7) Construct a driving range. (Parks)
- 8) Install atrium with climate control at Barney Mausoleum. (Parks)
- 9) Apply for land management grants. (Conservation & Parks)
- 10) Design trails on conservation land, possibly with the assistance of college students and interns. (Conservation)
- 11) Install new trails and signage on conservation land. (Conservation)
- 12) Organize fishing derbies on conservation land. (Conservation)
- 13) Encourage research partnerships, especially with local schools and colleges. (Conservation)
- 14) Create and distribute trifold pamphlets advertising conservation lands, with a special focus on environmental justice outreach. (Conservation)

GOAL #3: REGULATION

Objective: Clarify appropriate open space use within the city.

Action Steps:

- 1) Develop and pass new regulations for the appropriate use of conservation and park land. (Parks & Conservation)
- 2) Develop and pass new regulations regarding stormwater and erosion control as part of NPDES compliance.
- 3) Attempt to achieve a designation of an Area of Critical Environmental Concern (ACEC) for the white cedar bog. (Conservation)

GOAL #4: ENFORCEMENT

Objective: Protect open space in the city from detrimental uses and encroachment.

Action Steps:

- 1) Increase staff presence on conservation land. (Conservation)
- 2) Reinstate ticketing procedures. (Conservation & Parks)
- 3) Work closely with the Law Department to pursue legal action against violations and encroachment. (Conservation)

A. Discussion

Under ideal circumstances, all projects would be completed in five years. However, given the current fiscal limitations at all government levels, the plan must be approached with some flexibility. Failure to appropriate sufficient funds, or acquire them through grants, will necessitate rescheduling of activities over a period exceeding five years.

The priorities of the Department of Parks, Buildings & Recreation Management are reflected in the detailed list of projects that follow. The

Five-Year Action Plan addresses a number of departmental goals ranging from internal management improvements to the continued implementation of the Master Plan for Forest Park. Nearly all projects call for updating existing resources and facilities to allow for maximum utilization by recreational users or to promote more economical and efficient service delivery by the Department of Parks, Buildings & Recreation Management. Cost estimates are supplied for most projects in the attached appendix.

Since its formation, the Conservation Commission has concentrated its efforts on preserving land with natural resource value before it is lost to urban development. Additional land acquisitions are scheduled in the five-year plan. Because specific boundaries of proposed areas have not been delineated nor have appraisals been done, cost estimates are not provided for proposal acquisitions. The Commission will continue its focus on acquisition, but will begin a renewed effort to actively manage its lands.

Handicapped Accessibility Plan: The Five-Year Plan incorporates specific proposals to make some recreation and conservation facilities accessible to the physically disabled.

Currently, the Department of Parks, Buildings & Recreation Management operates one facility for mentally handicapped children called Camp Angelina which is located in Sixteen Acres. The department also provides recreation programs for physically disabled children, known as Camp Star, at one of the city's middle schools. Improvements within the last ten years to many of the city's parks and playgrounds have incorporated accessible features including fully accessible play units for the handicapped. Prior to this, handicap accessibility features in public parks were limited to restroom facilities. All future structural renovations to public recreation areas will provide for handicap accessibility.

Renovations to all of the city's eight community parks have either been completed or are currently underway with handicap accessibility issues being met. These parks include: Forest Park, Five Mile Pond Park, Blunt Park, Van Horn Park, Greenleaf Park, Hubbard Park, Kenefick Park and

Nathan Bill Park. Additional improvements are continuing to be made to the city's community parks, with handicap accessibility being an integral component of all renovation plans.

During the design and construction phases on the proposed trails, the Conservation Commission will attempt to provide access to the physically disabled. As conservation land is supposed to be maintained as close to its natural state as possible, there are limitations due to topography, soil material, etc. Still, every attempt will be made to provide handicap accessibility on at least a portion of each developed site.

B. Funding Sources

Potential sources of funding are identified for each proposal in the Five-Year Action Plan. They include:

Local Sources: The source of operating and maintenance funds for both the Department of Parks, Buildings & Recreation Management and the Conservation Commission is the city's general fund, while major capital improvements are normally funded through the issuance of general obligation bonds. There are some trust accounts available to the Department of Parks, Buildings & Recreation Management that were established for specific activities. Appropriations to the Conservation Fund are used for the local share of the Commission's land acquisition program. Because of budget limitations, the city will become increasingly more reliant on fees and private donations to finance open space projects.

Community Development Block Grant (CDBG): Funds from the city's annual CDBG entitlement can be used for recreation facilities when the benefits are primarily for low and moderate income neighborhoods. During the past five years CDBG Funds have been used by the Department of Parks, Buildings & Recreation Management as matching funds for grant appropriations from the Commonwealth. A water playground at Barrows Park and a new Community Center at Kenefick Park, both completed in 2006, are the most recent examples of CDBG funded projects.

Federal Land and Water Conservation Fund (L&WCF): The Land and Water Conservation Fund provides for the reimbursement of up to 50 percent of the costs of acquiring or developing outdoor recreation facilities. The program is administered by the Massachusetts Executive Office of Energy & Environmental Affairs, Division of Conservation Services.

The Local Acquisitions for Natural Diversity Program: The program provides up to 70 percent reimbursement for the cost of acquiring land for conservation and passive recreation purposes. Since 1969, the acquisition of thirteen conservation areas totaling 275.88 acres has been assisted by \$120,965 in Local Acquisitions for Natural Diversity Program funds.

The Parkland Acquisitions & Renovations for Communities Program: Reimbursement of up to 70 percent of the cost of acquisition and development of active or passive outdoor recreation areas is possible under this program. Similar to the Local Acquisitions for Natural Diversity Program, the Parkland Acquisitions & Renovations for Communities Program is administered by the Division of Conservation Services. Recent projects utilizing Parkland Acquisitions & Renovations for Communities Program funds include, the acquisition of the beach at Loon Pond (\$437,500), the renovation of Harriet Tubman Park (\$175,000), improvements to the ballfields and the front entrance at Van Horn Park (\$450,000) and the installation of water playgrounds at Kennefick (\$252,000) and Barrows Parks (\$120,000).

Urban Parks and Recreation Recovery Program (UPARR): This federal program makes funds available to municipalities for renovation projects, planning activities and innovative programming. The major thrust of the program is toward rehabilitation of existing recreation facilities. Grants are for 70 percent of project costs. Recent projects receiving UPARR funding are Calhoun and Emerson Wight Parks (\$252,000) for new playground equipment and other various recreational amenities. Magazine Park is the most recent recipient of UPARR funds (\$300,000) for a new water playground, new play

equipment, youth baseball field and other general park improvements.

Rivers and Harbors Program: This program provides up to 50 percent reimbursement for the restoration of publicly owned lakes or other water ways. The Department of Conservation & Recreation administers the program. Over the past ten years, the Department of Parks, Buildings & Recreation Management has received approximately \$700,000 towards the restoration of its lakes and ponds.

Special Programs: The Commonwealth often sponsors programs such as Heritage Parks, Town Commons and Olmsted Parks, which provide funds for special purpose parks. Funds may also be sought from diverse sources such as the Commonwealth's Department of Public Works for monies for bikeway projects. Grants specifically for conservation land management will be researched and applied for. Recently, Forest Park received \$5,000,000 from the Olmsted Program for improvements to the lower park and King Phillip's Stockade. Blunt Park and Van Horn Park each received \$775,000 and \$500,000 respectively, from the Massachusetts Highway Department. Van Horn Park received an additional \$650,000 for the continued improvements to its bikeway/walkway and infrastructure. Forest Park has received \$750,000 from MassHighway over three (3) years for continued improvements to its infrastructure.

Five Year Action Plan

Organization: Park Department

Park Renovations	Estimated Cost	FY '08	FY '09	FY '10	FY '11	FY '12	Description
Continue the replacement of outdated playground equipment city-wide	\$750,000	X	X	X	X	X	Routine replacement of damaged and obsolete equipment with handicap accessible equipment
Continue program to make all community parks handicap accessible	\$500,000	X	X	X	X	X	Community parks include; Van Horn Park, Blunt Park, Kenefick Park, Greenleaf Park, Hubbard Park, Nathan Bill Park, Five Mile Pond Park and Forest Park.
Creation of a common signage program for all parks city-wide	\$600,000	X	X	X	X	X	Development of a park font, colors and design, for signage throughout the park system.
Blunt Park Phase II Bikeway/Walkway Park Improvements	\$1.4 Million	X	X				Renovations to the community building; a new equipment storage building for the maintenance district; renovations to the many athletic fields including irrigation; repairs to the running tracks; the possible construction of a miniature golf course; the possible relocation of the city's zoo; more picnic pavilions; benches; picnic tables; trash receptacles; new field lighting; new decorative lighting; continuation of the bikeway/walkway; trail restoration; water bubblers; signage; and fencing.
Van Horn Park	\$2,000,000		X	X	X		Continue ball field renovations
Ruth Elizabeth Park	\$600,000			X			Construction of a new community building
Myrtle Street Park	\$500,000			X			Complete renovation of the existing field house to allow for handicap accessibility and improved ventilation and heating.
Greenleaf Park	\$2,000,000	X	X				Addition to community building for senior programming; new district maintenance facility; new accessible playground equipment; tennis court restoration; new basketball court; two new soccer fields; additional parking; water playground; benches; trash receptacles; lighting.

Five Year Action Plan

Organization: Park Department

Park Renovations	Estimated Cost	FY '08	FY '09	FY '10	FY '11	FY '12	Description
Walsh Street Playground	\$1 Million				X		Brownfield restoration; new playground equipment; water spray playground; benches; picnic tables; trash receptacles; ball field renovations
Cottage Hill Park	\$450,000				X		Development of an historic open green space into a passive neighborhood common area; including benches; trash receptacles; lighting; irrigation; and a large centrally located gazebo.
Camp Wilder and Quarry Pond	\$1 million		X	X			Continuation of the development of recreational amenities including pavilions, increased parking areas, paddle boat docks, playground equipment, tree work, landscaping, lighting and picnic areas. In lake management of rooted vegetation and algae.
Five Mile Pond Park	Phase I; \$1.5 Million		X		X		Dredging of cove near the entrance; upgrade picnic grove & old bathhouse.
Citywide tennis court improvements	\$450,000	X	X	X	X	X	Repairs to tennis courts in various parks throughout the city, ranging from minor improvements to complete restoration.
Citywide basketball court improvements	\$300,000	X	X	X	X	X	Repairs to basketball courts in various parks throughout the city, ranging from minor improvements to complete restoration.
Marshall Roy Park	\$500,000			X			Construction of concession building.
Restoration of small triangles and terraces throughout the city	\$500,000	X	X	X	X	X	Comprehensive improvements to smaller green spaces citywide, including but not limited to Thompson Triange, McKnight Park, Dartmouth Terrace, and Clarendon Triangle.
Merrick Park	\$175,000			X			Improve pedestrian walkways; landscaping; lighting; signage.
Hubbard Park	\$650,000		X				Increase parking areas and improve existing parking lots; improve park entrance to allow for safer pedestrian access; create woodland trails; improve ball fields.

Five Year Action Plan

Organization: Park Department

Park Renovations	Estimated Cost	FY '08	FY '09	FY '10	FY '11	FY '12	Description
Veteran's Golf Course Improvements	\$3.5 million		X	X	X		Relocation and new construction of club house; expansion of existing maintenance building; paving of cart paths throughout the course; rebuilding of various tees and greens; construction of two rain shelters; water bubblers; fairway repairs; sand trap renovations.
Construction of a Driving Range	\$2 million					X	Facility to be located on Dwight Road adjacent to Franconia Golf Course or at City's landfill.
Lake Management City-wide	\$500,000	X	X	X	X	X	Continue to manage the city's many natural water resources with herbicides, lake level drawdowns and maintenance of existing detention basins.
Continue the City's tree replacement program	\$350,000	X	X	X	X	X	Tree replacement for city streets and public parks.
Replacement of obsolete maintenance equipment	Cost undetermined	X	X	X	X	X	Continuous replacement and updating of park equipment in an effort to continue keeping the park system highly maintained.
Upgrade school athletic fields	\$3 million	X	X	X	X	X	Rehabilitation of over 60 acres of school property to allow for public use due to the annual increase in demand for park athletic fields.
Camerota Property	Cost undetermined			X			Approximately 11 acres of open space located on the northern shoreline of Five Mile Pond. Property is an old automotive junk and scrap metal yard. Acquisition would preserve the watershed.
Solutia Park	Cost undetermined					X	The park is located on Page Boulevard and is currently owned by Solutia. Acquisition of land would add to overall park inventory and preservation of open space in the City.
Open Space - Chicopee/Springfield Line	Cost undetermined	X					Acquisition of approximately 8 acres of land. Addition to park inventory and preservation of open space.
Walker Grandstand	\$1.5 million			X			The stadium is in need of structural and cosmetic renovation. The basement area will be renovated to accommodate classroom space for a horticultural program with the school department.
Barney Mausoleum	\$800,000					X	Installation of atrium with climate control to preserve the future integrity of the Mausoleum

Five Year Action Plan

Organization: Park Department

Park Renovations	Estimated Cost	FY '08	FY '09	FY '10	FY '11	FY '12	Description
Zoo Improvements	Cost undetermined			X			Analysis of existing site with regard to increasing the quantity and quality of the exhibits; possible relocation of the Zoo to another park in the city.
Trail Renovation	\$350,000	X	X	X	X	X	Ongoing renovation of the many trail systems throughout the parks; cleanup of forest due to Wooley Adelgid damage.
Bowles Fountain	\$400,000			X			Removal, relocation and restoration of the Bowles Fountain to a more visible and prominent place in Forest Park.
Porter Lake Skate House	1.3 million		X	X			Interior improvements including; updating entire building to comply with handicap accessibility requirements; enlarging restrooms; grinder pump installation; exterior site improvements including pedestrian walkways, sitting areas, landscaping, lighting, and bank stabilization.
Camp Seco	\$2.5 million			X	X		Pool repairs; ball field improvements; handicap accessible playground equipment; demolition of 'A' framed building; construction of two new buildings as multi-use facilities for the Park, Schools and the YMCA; increased parking areas; repairs to existing pavilion; picnic tables; benches; grills; trash receptacles.
Meadow Brook Ravine	\$1.5 million					X	Restoration of this historic area in Forest Park including trail restoration, bank stabilization; clearing and grubbing of vegetation; replication of gazebo and bridges.
Horticultural Center/ Botanical Garden	\$5 million		X	X	X		Razing of existing greenhouse, construction of new conservatory building with interior and exterior botanical gardens.
Creation of small neighborhood parks within the Metro Center Neighborhood and other older city neighborhoods	Cost undetermined			X	X	X	The identification and acquisition of small parcels to create neighborhood parks and playgrounds in areas with a high number of children and limited to open space. Areas include Metro Center and other older city neighborhoods.
Bay Path Cemetery	\$60,000		X				Improvements include fencing, monument repairs, flag poles and landscape improvements.
Cherry Lane Cemetery	\$60,000			X			Improvements include fencing, monument repairs, flag poles and landscape improvements.
Wachogue Cemetery	\$30,000				X		Improvements include fencing, monument repairs, flag poles and landscape improvements.

Five Year Action Plan

Organization: Park Department

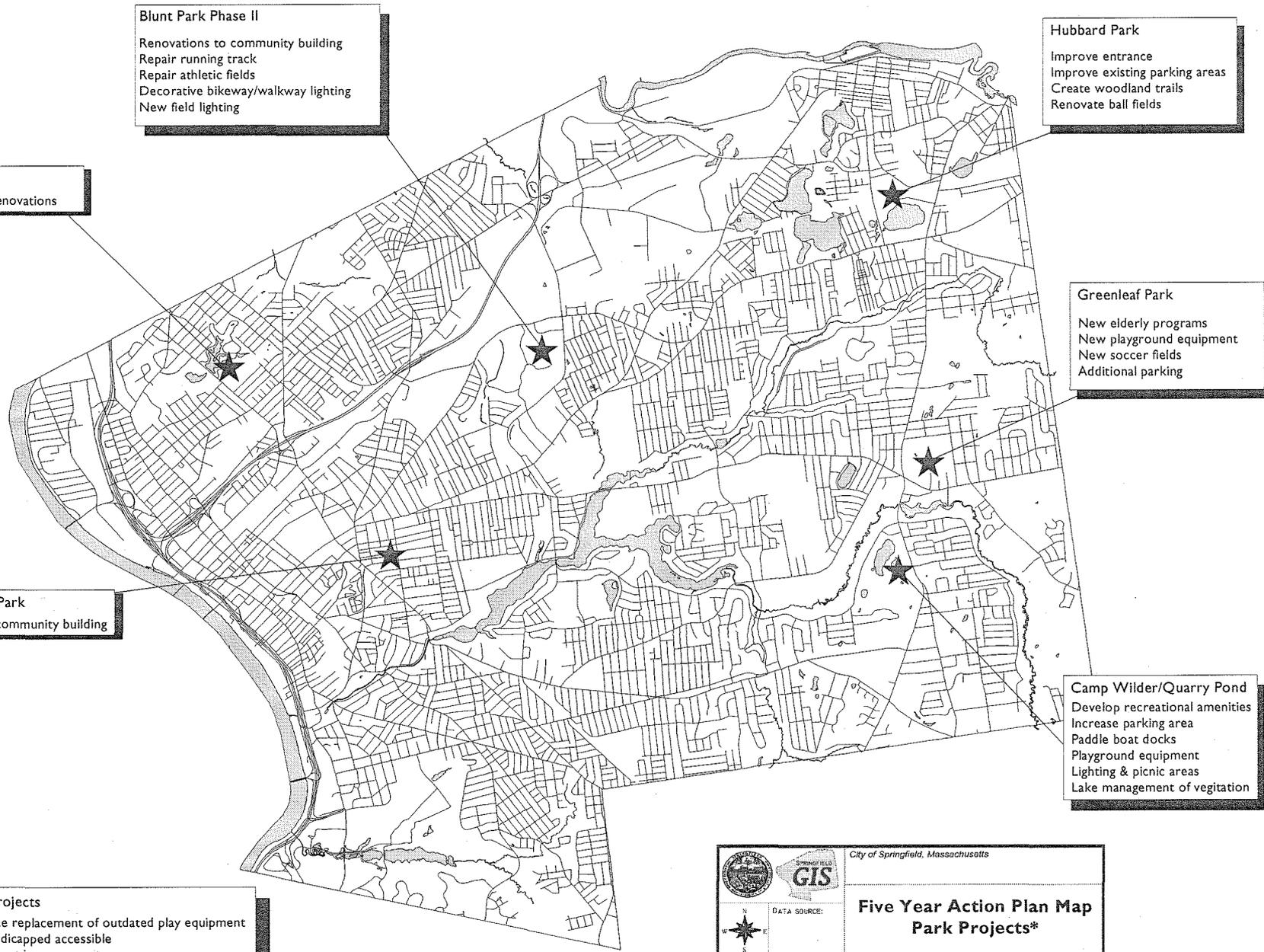
Park Renovations	Estimated Cost	FY '08	FY '09	FY '10	FY '11	FY '12	Description
Forest Park	\$500,000			X	X	X	Repairs to gullies that surround the park and add to the nutrients and sediment loads currently entering the Park's water bodies.
Forest Park	\$1.7 million		X	X	X		Renovation of old zoo buildings for use as classroom space and park museum space.
Forest Park	\$650,000	X	X				Continue to upgrade all park roads with new bituminous, drainage and curbing. Continue bikeway/ walkway.
Forest Park New Maintenance Building	\$450,000	X					Consolidate all maintenance efforts under one central location. Construction of a butler building approximately 9,000 square feet.
Various City owned dams	\$1.5 million	X	X	X	X	X	Implement recommendations in Dam Reports (2006) for restoration and repairs to all City owned dams.
Park Lighting	\$200,000	X	X	X	X	X	Repair / replace all security and decorative lighting within the park system.
Construction of Maintenance Facilities for Park Districts and Golf Courses	\$3.5 million	X	X	X	X	X	Construction of new maintenance buildings at park district and golf course facilities. Replace outdated and inadequate structures with new facilities.
Small Neighborhood Park Renovations	\$3.5 million	X	X	X	X	X	Emerson Wight and Hubbard Park; renovations include new lighting, parking improvements, and new play equipment.
Riverfront Park	\$1.5 Million		X	X	X	X	Improve access to park from parking areas, install dock system for kayaking and small boating activities, shore stabilization, and upgrade existing restroom facilities.
Wesson Park	\$300,000		X	X	X	X	Demolition of existing building, 21E conducted on soils, Removal of leach field.

Funding Sources for the projects outlined in the Park Department's Five Year Action Plan include the Commonwealth's following grant programs; Urban Self-Help, Olmsted, Massachusetts Historic Commission, Rivers and Harbors, Land and Water Conservation Fund, City and Town Commons, Transportation Bond and the Legislative Capital Improvement Budget. Federal Sources of funding include; Urban Parks and Recreation Recovery Program, Land and Water Fund, Community Development Block Grant Funding, Environmental Protection Agency, and ISTEA. Local sources of funding include; private donations, city bonds and trust accounts.

Five Year Action Plan

Organization: Conservation Commission

Conservation Projects	Estimated Cost	FY '08	FY '09	FY '10	FY '11	FY '12	Description
Create Land Management Plan	Cost Underdetermined	X	X				
Acquire 1-3 proposed conservation areas per year until program is completed.	Cost Underdetermined	X	X	X	X	X	Funding Source: Conservation Fund,Self-Help
Acquire marginal lots via the tax title process.	No Cost	X	X	X	X	X	
Acquire parcels that are contiguous with currently owned parcels, would contribute to a wildlife corridor or greenway, are wetlands or are listed as NHESP Priority Habitat.	Cost Underdetermined	X	X	X	X	X	Funding Source: Conservation Fund,Self-Help
Demolish existing building at Wesson Park, conduct 21E and remove leaching field. Clean and remove trash on conservation lands.	Cost Underdetermined	X	X	X	X	X	Funding Source: Conservation Fund,Self-Help
Design trails on conservation land, possibly with the assistance of college students and interns and install new trails and signage on conservation land.	Cost Underdetermined	X	X				Funding Source: Self-Help, L&WCF
Organize fishing derbies on conservation land.	No Cost	X	X	X	X	X	
Create and distribute trifold pamphlets advertising conservation lands, with a special focus on environmental justice outreach.	No Cost	X	X				
Work closely with the Law Department to pursue legal action against violations and encroachment.	No Cost	X	X	X	X	X	



Blunt Park Phase II
 Renovations to community building
 Repair running track
 Repair athletic fields
 Decorative bikeway/walkway lighting
 New field lighting

Hubbard Park
 Improve entrance
 Improve existing parking areas
 Create woodland trails
 Renovate ball fields

Van Horn Park
 Continued field renovations

Greenleaf Park
 New elderly programs
 New playground equipment
 New soccer fields
 Additional parking

Ruth Elizabeth Park
 Construction of community building

Camp Wilder/Quarry Pond
 Develop recreational amenities
 Increase parking area
 Paddle boat docks
 Playground equipment
 Lighting & picnic areas
 Lake management of vegetation

Miscellaneous Projects
 Continuation of the replacement of outdated play equipment
 Make all parks handicapped accessible
 Citywide tennis court improvements
 Citywide basketball court improvements
 Restoration of small triangles and terraces
 Construction of a driving range
 Creation of common signage program for city parks

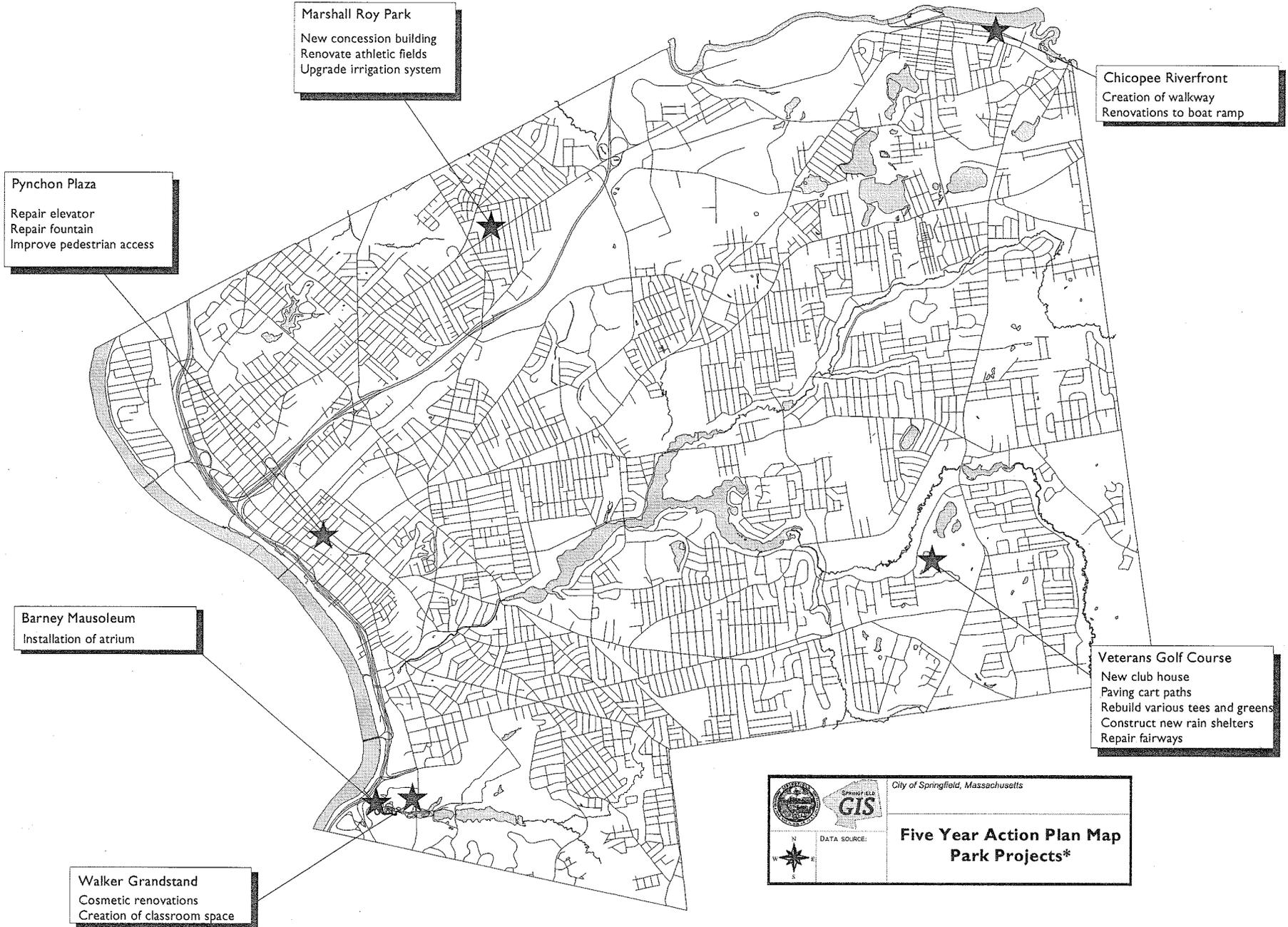
City of Springfield, Massachusetts

SPRINGFIELD GIS

DATA SOURCE:

**Five Year Action Plan Map
 Park Projects***

*See the 2008-2013 Open Space Plan for details and for Conservation Projects.



Marshall Roy Park
 New concession building
 Renovate athletic fields
 Upgrade irrigation system

Chicopee Riverfront
 Creation of walkway
 Renovations to boat ramp

Pynchon Plaza
 Repair elevator
 Repair fountain
 Improve pedestrian access

Barney Mausoleum
 Installation of atrium

Veterans Golf Course
 New club house
 Paving cart paths
 Rebuild various tees and greens
 Construct new rain shelters
 Repair fairways

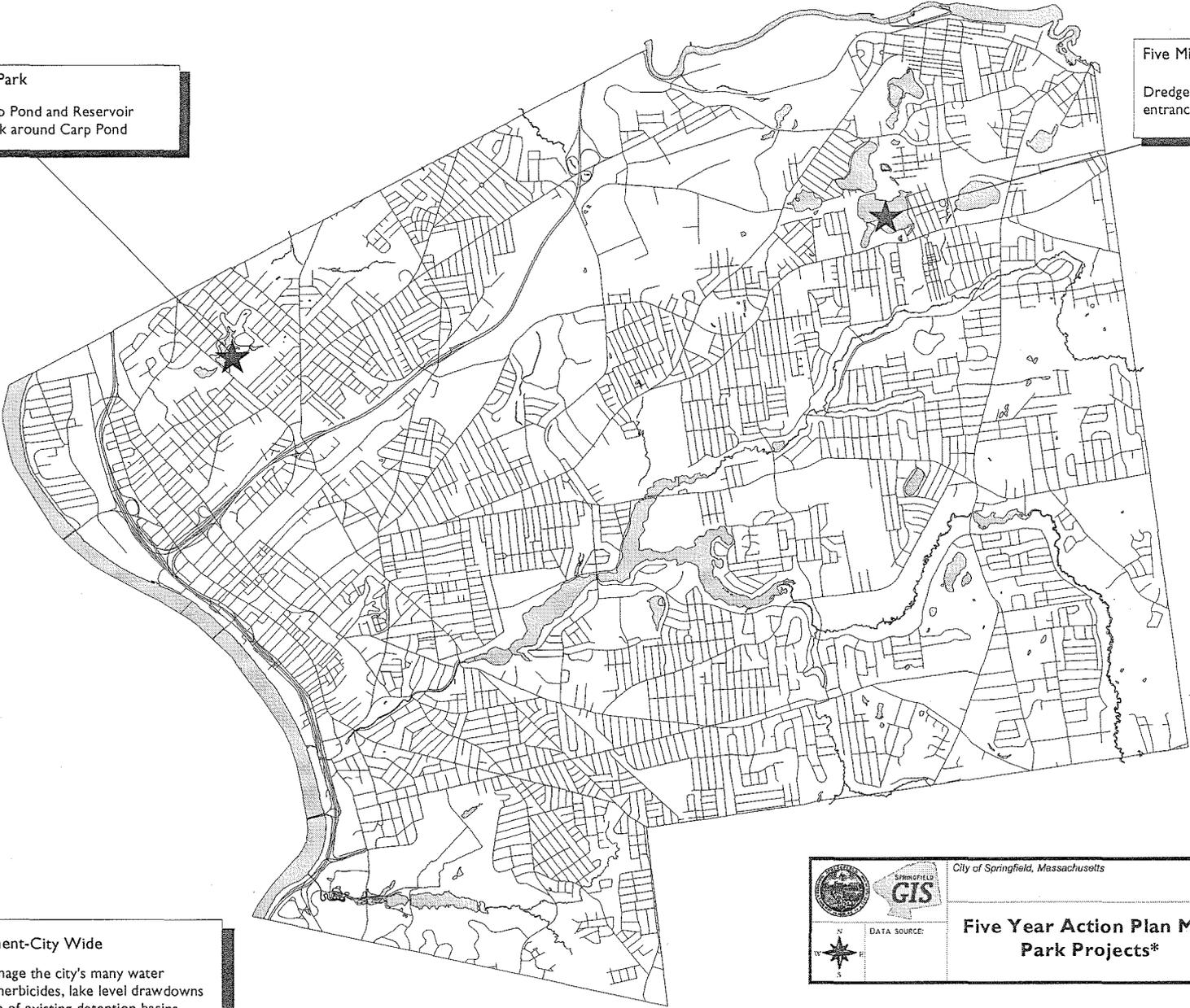
Walker Grandstand
 Cosmetic renovations
 Creation of classroom space

 DATA SOURCE:	City of Springfield, Massachusetts
	Five Year Action Plan Map Park Projects*

*See the 2008-2013 Open Space Plan for details and for Conservation Projects.

Van Horn Park
 Dredge Carp Pond and Reservoir
 Stabilize bank around Carp Pond

Five Mile Pond Park
 Dredge cove near the
 entrance of the park.



Lake Management-City Wide
 Continue to manage the city's many water
 resources with herbicides, lake level drawdowns
 and maintenance of existing detention basins.

		City of Springfield, Massachusetts
		Five Year Action Plan Map Park Projects*
	DATA SOURCE:	

*See the 2008-2013 Open Space Plan for details and for Conservation Projects.

Public Comments



Stearns Square, Circa 1880's



November 19, 2008

Ian Bowles, Secretary
Executive Office of Energy & Environmental Affairs
100 Cambridge Street
Springfield, MA 02114

Re: 2008-2013 City of Springfield Open Space & Recovery Action Plan

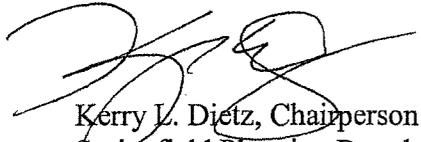
Dear Secretary Bowles:

On behalf of the Springfield Planning Board, I would like to express our full endorsement of the City of Springfield's *2008-2013 Open Space & Recovery Action Plan*. As with the previous plan, this amendment continues the City's commitment to preserving and maintaining its open spaces.

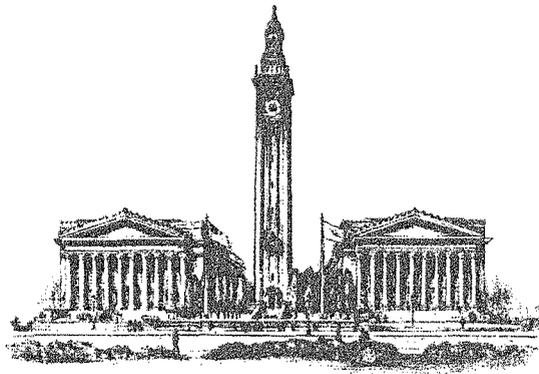
As Springfield continues to grow, the Board feels that its open spaces become more and more important to the overall quality of life of the citizens of Springfield. These open spaces provide a wide range of recreational activities, both passive and active, necessary for the enjoyment of the city.

The Planning Board looks forward to the state endorsement of this plan and its continual successful implementation.

Sincerely,



Kerry L. Dietz, Chairperson
Springfield Planning Board



THE CITY OF
SPRINGFIELD, MASSACHUSETTS

Ian Bowles, Secretary
Executive Office of Energy & Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: 2008-2013 Open Space & Recovery Action Plan

Dear Secretary Bowles:

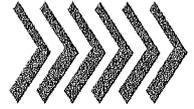
The Springfield Conservation Commission has reviewed the 2008-2013 Open Space & Recovery Action Plan and agrees that the document represents a workable plan for the next five years. The Commission's goal is to protect and preserve our natural resources. These natural resources are vital pieces to the City's open space network and continue to provide much needed wild life habit as well as passive recreational opportunities for the citizens of Springfield. As noted in this plan, the Commission is committed to the long term preservation and maintenance as well as the continued acquisition of these much valued resources.

The Conservation Commission is pleased to have participated in the development of this five year plan and we look forward to the challenges of implementing the goals we have set.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Collins". The signature is fluid and cursive.

Christopher Collins, Chairperson
Springfield Conservation Commission



Catalyst for Regional Progress

PVPC

Timothy W. Brennan, Executive Director

February 23, 2009

The Honorable Domenic J. Sarno
City of Springfield
36 Court Street
Springfield, MA 01103

Reference: Open Space and Recovery Action Plan 2008-2013, Springfield, MA

Dear Mayor Sarno:

The Pioneer Valley Planning Commission (PVPC) has reviewed the Open Space and Recovery Action Plan 2008-2013 and is pleased to note that the plan is consistent with regional goals for recreation and open space protection within the urban core while also promoting neighborhood level programming and improvements. Overall the plan illuminates the concept that a well maintained system of parks, playgrounds and natural areas play a vital role in the quality of urban life by establishing a realistic Five-Year Action Plan for continued progress toward this goal.

The plan seeks to restore and modernize many existing parks and recreational facilities with an emphasis on high-use facilities in densely populated neighborhoods. Projects such as improvements to Forest Park, the city's largest and most heavily used park, and the pond and lakes restoration program, are on-going projects with scopes that extend beyond the Five-Year Action Plan contained within the plan. PVPC is particularly pleased to note that the plan seeks the initiation of programs that will promote recreational uses of the Connecticut River Walk and Bikeway as well as planning for connections from the River Walk to other destinations.

Overall the plan meets the Massachusetts Department of Conservation Service's guidelines for an Open Space and Recreation Plan. Many of the plans stated goals, objectives and actions will not be achievable without continued grant funding from state and federal agencies. The PVPC will continue to work with the City of Springfield to implement the Five-Year Action Plan and secure grants when opportunities arise.

Sincerely,


Timothy W. Brennan
Executive Director

cc: Phil Dromey, Planning and Economic Development, City of Springfield

References



Waterfall at Mill Pond

SECTION 11: REFERENCES

- Open Space Plan, Springfield Planning Department, 1986.
- Open Space Plan, Springfield Planning Department, 1992.
- Open Space Plan, Springfield Planning Department, 1997.
- Open Space Plan, Springfield Planning Department, 2002.
- Massachusetts' Outdoors, Volumes I & II, Executive Office of Environmental Affairs, Department of Environmental Management, Division of Planning and Development, December 1988.
- Natural Resources Program of the City of Springfield, Phase I - Study Inventory of Sites with Natural Resource Potential, Natural Resources Technical Team of Hampden County, December 1971.
- Water and Related Land Resources of the Connecticut River Region, U.S. Department of Agriculture, 1978.
- Water Resources Investigation, Connecticut River Basin, U.S. Department of the Army, Corps of Engineers, October 1977.
- Flood Insurance Study, City of Springfield, Federal Emergency Management Agency, June 1991.
- Streamflow and Water Quality in the Connecticut River Lowland, Massachusetts, Department of the Interior, U.S. Geological Survey, 1977.
- 2000 U.S. Census, U.S. Department of Commerce.
- Major Employers of the Pioneer Valley, Pioneer Valley Regional Planning Commission, February 2005.
- Regional Population Projections: 2000-2020, Pioneer Valley Regional Planning Commission, February 1992.

Executive Office of Environmental Affairs, Division of Fisheries and Wildlife and the following departments:

- Department of Environmental Management: www.state.ma.us/dem
- Department of Fisheries, Wildlife and Environmental Law Enforcement: www.state.ma.us/dfwele
- Department of Environmental Protection: www.state.ma.us/dep
- Department of Food and Agriculture: www.state.ma.us/dfa
- Metropolitan District Commission: www.state.ma.us/mdc

Connecticut River Walk and Bikeway, Grant Application for ISTE A Enhancement Funds, Pioneer Valley Regional Planning Commission, April 1995

The following city departments and individuals:

- Parks and Facility Management
Capital Asset Construction
Springfield Conservation Commission
Springfield Historical Commission
Springfield Water and Sewer Commission
Pioneer Valley Planning Commission
Pioneer Valley Transit Authority

Appendices



Memorial Bridge viewed from Riverfront Park

Appendix I
**Recreation Programs Sponsored by the Springfield Department of Parks, Buildings
 & Recreation Management**

Programs	Frequency	Participants	Attendance
Movies	Summer	Adults/Children	4,000
Roller Skating	Once a year	Adults/Children	250
Fabulous February	One Week in February	Adults/Children	2,500
Winter Programs	All parks included	Adults/Children	50,000
Summer Programs	All parks included	Adults/Children	75,000
Pool Programs	July to Labor Day	Adults/Children	15,000
Senior Drop-In Center*	Year round	Adults	2,500
Bright Nights	Nov. 21 to Jan 1	Adults/Children	210,000
Mega-Shell Programs	24 Programs	Adults/Children	30,000
Valentine Dance	Once a year	Children	550
Fishing Derby	Once a year	Children	3,500
Special Needs Program	Year round	Adults/Children	5,000
Bocce	Fall, Spring, Summer	Adults	500
Lawn Bowling	Fall, Spring, Summer	Adults	1,500
Life Guard Training	Twice a year	Adults	100
Outdoor Skating	Depending on ice conditions	Adults/Children	6,000
Outdoor Concerts	Total of 6 in the summer	Adults/Children	6,000
Tennis	Summer	Adults/Children	1,200
Tennis Tournaments	Spring/Summer	Adults/Children	2,000

Appendix I
Recreation Programs Sponsored by the Springfield Department of Parks, Buildings
& Recreation Management

Programs	Frequency	Participants	Attendance
Cyr Arena*	October-April	Adults/Children	20,000
Basketball Clinic	Once in summer	Children	150
Soccer Clinic	Once in summer	Adults/Children	150
Golf (Franconia)	April-November	Adults/Children	50,000
Golf (Veterans)	April-November	Adults/Children	55,000
Passive Recreation	All year/All parks	Adults/Children	500,000
Road Races	Year round	Adults/Children	30,000
Walk-a-thons	Year round	Adults/Children	30,000
The Zoo in Forest Park**	Year round	Adults/Children	50,000
Shuffleboard	3/4 Year	Adults/Children	2,000
Soccer	Fall/Spring	Children	8,000
Volleyball	Year round	Adults	2,500
Evening Gym Program	Fall/Winter/Spring	Children	15,000
After School Programs	Fall/Winter/Spring	Children	2,500
Youth/Adult Leagues	Continuous	Children Adult	10,000 8,000

*Includes all Cyr Arena programs (hockey, figure skating and public skating).

**The Zoo is located in Forest Park; the Forest Park Zoological Society is in charge of the maintenance and operation.

APPENDIX II: PUBLIC OPEN SPACE INVENTORY

(Part 1 and 2)

Technical Description: Part 1

Map Key: The map key refers to the large-scale Open Space Map appended to this report. (Note: the first two letters of the key are neighborhood abbreviations, i.e., BW = Brightwood, MS = Memorial Square, etc.)

Name: Open space areas are identified within each of Springfield's seventeen neighborhoods. Neighborhoods are shown on the Open Space Map.

Acres: The acreage of each open space area is given as well as the total public open space acreage for each neighborhood.

Type/Facilities: For open space areas with active recreation facilities, type indicates whether the area functions as a neighborhood or community park. Unless such areas are identified as community parks, it can be assumed that they function primarily to serve the neighborhood in which they are located. Facility abbreviations are as follows:

All properties held by the Conservation Commission are identified as natural areas and, along with undeveloped parks, are available for passive recreation.

Technical Description: Part 2 Ownership, Management, Public Access and Degree of Protection are described prior to the listing of individual sites.

Map Key: (Same as Part 1)

Name of Area: Open space areas are listed by ownership. Listings are in alphabetical order within each ownership category.

Conditions: The current condition is judged as excellent, good, fair or poor.

For active recreation areas, condition is based principally on the quality of recreational facilities. For conservation areas and parks lacking active recreation facilities, condition is based on factors such as the degree of erosion or the presence of illegally dumped debris.

Recreation Potential: Recreation potential is rated as low, medium or high depending on whether adding new recreational facilities or upgrading existing facilities will likely increase recreational activity within the area. The recreation potential for natural areas relates to the feasibility of constructing trails and installing benches and signs. It should be noted that many conservation areas are acquired primarily to protect wetland resources and recreation is a secondary benefit.

Funds Used: Federal or state funding programs are identified wherever external funds have been used to supplement local resources for the acquisition, development or restoration of open space. Funding programs are described in Section 9: Five-Year Action Plan and include:

UPARR - Urban Parks and Recreation Recovery Program

L&WCF - Land and Water Conservation Fund

CDBG - Community Development Block Grant

HUD-OSP - U.S. Department of Housing and Urban Development, Open Space Program

EPA - Environmental Protection Agency (Section 314 Clean Lakes)

DEP - Massachusetts Department of Environmental Protection

DEP Programs:

Clean Lakes

Rivers and Harbors

DEM - Massachusetts Department of Environmental Management

DEM Programs:

City and Town Commons

Olmsted Parks

Heritage Parks

Executive Office of Environmental Affairs - Division of Conservation Services:

Self-Help

Urban Self-Help

**Appendix II: Part I
Public Open Space by Neighborhood**

Map Key	Name	Acres	Use/Facilities
Bay			
BY1	Ray Smead Arena	3.2	Skating Rink/State Owned
BY2	Blunt Park	161.7	Community Park/Basb., Bask., P.E., Soccer, Tennis, Track, Picnic, Ticket Booth
BY3	Acorn Park	4.0	Basb., Tennis, P.E.
BY4	Hennessey Park	1.28	Passive, Monument
BY5	Central HS Athletic Fields	9.87	Basb., Football, Soccer, Track, Tennis
BY6	Ells Playground	4.7	Basb.
BY7	State Pool	1.98	Pool
	Neighborhood Total	186.73	
Boston Road			
BR1	Five Mile Pond	22.9	Community Park, P.E., Picnic, Boat Launch, Concession Bldg., Restrooms, Ticket Booth, Parking Lot
BR2	Loon Pond Access	0.39	Boat Launch
BR3	Warner Playground	3.8	Basb., Bask., P.E,
BR4	Grayson Kettle	16.82	Natural Area
BR5	Fanti Bog	11.4	Natural Area
BR6	Merrill/Wrentham Bog	6.74	Natural Area
BR7	Five Mile Pond Access	1.23	Natural Area
BR8	Loon Pond Shore	1.60	Natural Area
BR9	Wollaston Conservation Area	0.83	Natural Area
BR10	Kent Road Conservation Area	0.61	Natural Area
BR11	Loon Pond Beach	4.21	Beach, Picnic Area, Swimming, Restrooms
	Neighborhood Total	70.53	

Appendix II: Part I
Public Open Space by Neighborhood

Map Key	Name	Acres	Use/Facilities
Brightwood			
BW1	Kenefick Park	12.70	Community Park, P.E., Picnic, Water Park, Restrooms, Tennis, Community Bldg.
BW2	Connecticut River Access Park	1.26	Undeveloped
BW3	Wason Avenue Park	1.63	Passive
BW4	Brightwood School Playground	0.63	Bask., Basb., P.E., Handball, Pool, Passive
BW5	Marina Park	3.40	Boat Ramp
BW6	Chestnut Accelerated Playground	5.44	Basb., Bask., Football, Soccer
	Neighborhood Total	25.06	
East Forest Park			
EF1	Treetop Park	17.76	Soccer, parking lot, restrooms, children's playground
EF2	Nathan Bill Park	19.02	Community Park, Basb., Bask., Soccer, P.E., Tennis, Picnic, Passive, Restrooms, Parking
EF3	Edward J. Murphy Park	2.49	Undeveloped Woodland
EF4	Red Maple Swamp	26.98	Undeveloped Woodland
EF5	Memorial School Playground	6.07	Basb., Bask., Picnic
EF6	Harris School Playground	1.19	Bask., P.E.
EF7	General Edwards Triangle	0.43	Monument
EF8	Schneelock Brook (Helen C. White Conservation Area)	41.91	Natural Area
EF9	Colorado Street Conservation Area	.31	Natural Area
EF10	Pine Crest Conservation Area	6.45	Natural Area
	Neighborhood Total	122.61	

Appendix II: Part I
Public Open Space by Neighborhood

Map Key	Name	Acres	Use/Facilities
East Springfield			
ES1	Marshall Roy Park	14.63	Basb., Soccer, Football, Bask., P.E., Water Playground
ES2	Rio Vista Park	4.77	Undeveloped Woodland
ES3	Camp Angelina	3.33	P.E., Picnic
ES4	Bircham Park	0.52	Undeveloped Woodland
ES5	Bowles School Playground	1.98	Bask., P.E.
ES6	Pottenger School Playground	0.99	P.E.
ES7	Delta Hills Conservation Area	27.52	Natural Area
ES8	Brookdale Dr. Conservation Area	8.30	Natural Area
ES9	Peter J. Carando, Sr. Conservation Area	8.32	Natural Area
	Neighborhood Total	70.36	
Forest Park			
FP1	Forest Park	735.20	Community Park, Pool, Bathhouse, Skating Rink, Basb., Bask., Football, Soccer, Tennis, P.E., Picnic, Bicycle Trails, Nature Trails, Monument, Sculpture, Zoo, Administration & Maintenance Bldg's., Handicap Play Structures, King Philip's Stockade, Carriage House, Parking, Toll Booth, Water Playground, Rose Garden and Horticulture Displays
FP2	Forest Park Extension	77.59	Undeveloped Woodland
FP3	Franconia Golf Course	103.00	18-Hole Golf Course, Clubhouse
FP4	Valentine Park	9.02	Undeveloped Woodland
FP5	Shamrock Park	10.43	Undeveloped Woodland
FP6	Mary Shea Park	0.50	Passive*
FP7	Garfield Triangle	0.12	Fountain
FP8	Beal School Playground	6.76	Bask., Basb., P.E.
FP9	Washington Street School Playground	0.77	P.E.

Appendix II: Part I
Public Open Space by Neighborhood

Map Key	Name	Acres	Use/Facilities
Forest Park (cont.)			
FP10	White Street School Playground	0.78	P.E.
FP11	Kensington Avenue School Playground	0.44	P.E.
FP12	Entry Dingle	17.38	Natural Area
FP13	Entry Dingle Access	0.77	Natural Area
	Neighborhood Total	962.76	
Indian Orchard			
IO1	Lake Lorraine State Park	1.26	Public Beach, Bathhouse
IO2	Hubbard Park	65.69	Community Park, Basb., Bask., Soccer, Tennis, P.E., Picnic, Nature Trails, Passive, Pond, Restrooms, Parking, Water Playground
IO3	Cottage Hill Park	3.34	Passive
IO4	Myrtle Street Park	1.55	Basb., Bask., Water Playground, P.E., Community Bldg., Restrooms
IO5	Godfrey Park	0.96	Monument
IO6	Kennedy Athletic Fields	16.87	Basb., Bask., Football, Soccer, Tennis, Track
IO7	Indian Orchard School Playground	4.78	P.E.
IO8	Indian Orchard Kame	1.26	Natural Area
IO9	Lake Lorraine Conservation Area	7.98	Natural Area
IO10	Long Pond Bog	10.26	Natural Area
IO11	Mona Lake	0.01	Natural Area
IO12	Chicopee River Overlook	5.87	Natural Area, Walkway, Boat Ramp
	Neighborhood Total	119.83	

**Appendix II: Part I
Public Open Space by Neighborhood**

Map Key	Name	Acres	Use/Facilities
Liberty Heights			
LH1	Atwater Park	9.05	Undeveloped Woodland
LH2	Van Horn Park	113.95	Community Park, Basb., Bask., Football, Soccer, Tennis, P.E., Picnic, Bicycle Trails, Nature Trails, Pond, Skating, Recreation Center, Water Playground, Parking
LH3	John A. Sullivan Park	5.62	Bask., Basb.
LH4	Gurdon Bill Park	6.61	Picnic, Passive
LH5	Walsh Park	4.0	Softball, Bask., P.E.
LH6	Brunton Park	0.12	Passive
LH7	Central Academy (Van Sickle) School Athletic Fields	5.28	Pool, Basb., Bask., Football, Tennis, Track
LH8	Glenwood School Playground	0.90	P.E.
LH9	Liberty Street School Playground	0.98	Bask., P.E.
LH10	Hogan/Abbey Brook Conservation Area	28.13	Natural Area
	Neighborhood Total	174.64	
McKnight			
MK1	Magazine Park	3.13	Basb., Bask., P.E, Water Playground
MK2	McKnight Glen	2.45	Passive
MK3	Thompson Triangle	0.81	Passive, Fountain
MK4	McKnight Triangle	0.43	Passive
MK5	Rebecca Johnson School Playground	2.25	Basb., P.E.
	Neighborhood Total	9.07	

Appendix II: Part I
Public Open Space by Neighborhood

Map Key	Name	Acres	Use/Facilities
Memorial Square			
MS1	Calhoun Park	2.43	Water Playground, Basb., Bask., Handball, P.E.
MS2	Linda's Park	1.75	Community Gardens, Outdoor Classrooms
MS3	Jaime Ulloa Park	3.41	Basb., Bask., P.E., Picnic, Water Playground
MS4	Lincoln Street School Playground	0.54	P.E.
	Neighborhood Total	8.13	
Metro Center			
MC1	Armory National Historic Park	18.50	Small Arms Museum, Passive
MC2	Kibbe Triangle	0.80	Passive
MC3	Quadrangle**	1.06	Passive, Dr. Seuss National Memorial Sculpture Garden
MC4	Merrick Park	0.57	Sculpture, Passive
MC5	Apremont Triangle	0.10	Passive
MC6	Emily Bill Park	4.24	Basb., Bask., Water Playground, P.E., Community Bldg.
MC7	Armoury Commons	0.57	Sculpture, Passive
MC8	Pynchon Plaza	0.44	Sculpture, Passive
MC9	Stearns Square Park	0.41	Sculpture, Passive
MC10	Court Square Park	2.4	Monument, Passive
MC11	Riverfront Park	6.42	Passive, Walk/Bikeway, Amphitheater
	Neighborhood Total	35.51	

Appendix II: Part I
Public Open Space by Neighborhood

Map Key	Name	Acres	Use/Facilities
Old Hill			
OH1	Barrows Park	1.63	Water Playground, P.E.
OH2	Pendleton Avenue Park	1.70	Bask., Passive, P.E.
OH3	Harriet Tubman Park	1.70	Bask., P.E., Picnic, Passive
OH4	Mason Square	0.24	Monument, Passive
OH5	DeBerry School Playground	2.83	Basb., Bask., P.E.
	Neighborhood Total	8.10	
Pine Point			
PP1	Sylvester & Lorenzo	4.71	Undeveloped Woodland
PP2	Putnam Park	6.83	Soccer, Football
PP3	Balliet School Playground	3.88	Basb., Bask., P.E., Handball, Tennis, Picnic, Shuffleboard
PP4	Dorman School Playground	1.64	P.E.
PP5	White Cedar Bog	26.98	Natural Area
PP6	Seymour Dingle*	20.36	Natural Area
PP7	Good Shepard's Brook	3.62	Natural Area
PP8	Edgemere Road Swamp	4.55	Natural Area
PP9	Hutchinson Bog	1.82	Natural Area
PP10	Bayside Street Wetlands	0.23	Natural Area
PP11	Ralph Street Conservation Area	0.71	Natural Area
PP12	Tilton Street Conservation Area	0.88	Natural Area
	Neighborhood Total	76.21	

**Appendix II: Part I
Public Open Space by Neighborhood**

Map Key	Name	Acres	Use/Facilities
Six Corners			
SC1	Stebbins Park*	4.77	Bask., P.E., Picnic, Passive
SC2	Ruth Elizabeth Park	5.94	Water Playground, Basb., Bask., P.E.
SC3	Gerrish Park	1.07	Monument, Passive
SC4	Commerce Playfields	3.47	P.E., Basb., Soccer, Football
	Neighborhood Total	15.25	
Sixteen Acres			
SA1	South Branch Park*	167.92	Passive
SA2	Camp Angelina	2.0	Camp (Disabled Children)
SA3	North Branch Park*	94.64	Undeveloped Woodland
SA4	North Branch Tributary Park	27.70	Undeveloped Woodland
SA5	Greenleaf Park	22.0	Community Park, Basb., Bask., Football, Soccer, Tennis, Recreation Center, Restrooms, Parking, Library
SA6	Hermitage Tract	5.34	Undeveloped Woodland
SA7	Veteran's Golf Course	149.0	18-Hole Golf Course, Clubhouse
SA8	Venture Pond	10.60	Undeveloped Woodland, Pond
SA9	Kiley School Athletic Fields	13.03	Basb., Bask., Soccer, Tennis, Pool
SA10	Duggan School Athletic Fields	14.42	Basb., Bask., Tennis, Pool
SA11	Lynch School Playground	21.07	Basb., Bask., Soccer, P.E.
SA12	Sixteen Acres School Playground	21.89	Basb., Bask., Soccer, P.E.
SA13	Glickman School Playground	4.25	Basb., Bask., P.E.
SA14	Brunton School Playground	3.84	Basb., P.E.
SA15	Freedman School Playground	5.11	Basb., P.E.

Appendix II: Part I
Public Open Space by Neighborhood

Map Key	Name	Acres	Use/Facilities
Sixteen Acres (cont.)			
SA16	Talmadge School Playground	4.64	Basb., P.E.
SA17	Keddy Tracts	16.60	Natural Area
SA18	Bonavita Conservation Area	2.76	Natural Area
SA19	DYS Tracts	24.10	Natural Area
SA20	LaBelle Drive Conservation Area	22.88	Natural Area
SA21	Lake Massasoit Access	0.64	Natural Area
SA22	Duggan Leatherleaf Bog	11.16	Natural Area
SA23	Rose Chase Conservation Area	14.66	Natural Area
SA24	Garvey Drive Promontory	3.52	Natural Area
SA25	South Branch Extension	12.97	Natural Area
SA26	Grand Valley Conservation Area	8.98	Natural Area
SA27	Venture Pond Conservation Area	3.04	Natural Area
SA28	Mill Pond Access	2.41	Natural Area
SA29	Wetstone Tract	0.78	Natural Area
SA30	Tamarack Bog	19.23	Natural Area
SA31	Woodland Park Conservation Area	39.10	Natural Area
SA32	Gralia Road Swamp	10.83	Natural Area
SA33	Broska Farm	27.30	Natural Area
SA34	Dutchess Street Vernal Pool	5.14	Natural Area
SA35	Michael Street Access to South Branch of the Mill River	0.30	Natural Area

Appendix II: Part I
Public Open Space by Neighborhood

Map Key	Name	Acres	Use/Facilities
Sixteen Acres (cont.)			
SA36	Heritage Drive Extension	0.34	Natural Area
SA37	Ramblewood Conservation Area	19.60	Natural Area
SA38	Breckwood Park	27.65	Undeveloped Woodland, Pond
SA39	Sabis School Playground	14.85	Basb., Soccer, Football, P.E.
SA40	Senator Street Conservation Area	0.26	Natural Area
SA41	Stapleton Road Conservation Area	0.14	Natural Area
SA42	Timothy Circle Conservation Area	0.73	Natural Area
SA43	Camp Wilder	27.55	Community Park, Pond, Picnic, Restrooms, Camp, Conference Center
SA44	Tinkham Road Wetland	29.10	Natural Area
SA45	South Branch Conservation Area	4.25	Natural Area
SA46	Vann Street Conservation Area	2.84	Natural Area
SA47	Jordon Street Swamp	3.58	Natural Area
	Neighborhood Total	924.74	
South End			
SE1	DaVinci Park	0.41	P.E., Passive
SE2	Emerson Wight Playground	6.88	Water Playground, Basb., Bask., Soccer, P.E., Picnic, Pavilion, Track
	Neighborhood Total	7.29	
Upper Hill			
UH1	Gunn Square Park	0.78	Bask., P.E., Passive
UH2	Adams Playground	2.28	Basb., Bask., P.E., Picnic, Water Playground
UH3	Weeping Willow Lane	1.70	Undeveloped Woodland

Appendix II: Part I
Public Open Space by Neighborhood

Upper Hill (cont.)

UH4	Wesson Park	19.79	Undeveloped Woodland
UH5	Lake Massasoit Access	2.54	Undeveloped Woodland
UH6	Homer Street Playground	0.33	Bask., P.E.
	Neighborhood Total	27.42	

City Total: 2844.24Acres

(Note: This inventory does not include numerous small triangles and terraces owned and maintained by the City of Springfield.)

*Indicates area extends beyond neighborhood boundaries.

**Quadrangle Park is owned and maintained by the Springfield Museums Association.

**Appendix II: Part II
Public Open Space by Ownership**

A: Federal Property

Owner/Manager: U.S. Department of the Interior

Public Access: Admission is free.

Degree of Protection: Federal law protecting national historic sites.

Map Key	Name of Area	Condition	Recreation Potential	External Funding
MC1	Armory National Historic Park	Good	Medium	Department of Interior

B: State Property

Owner/Manager: Commonwealth of Massachusetts, Department of Environmental Management (DEM)

Public Access: Fee charged at both sites.

Degree of Protection: Article 97 of the State Constitution.

Map Key	Name of Area	Condition	Recreation Potential	External Funding
IO1	Lake Lorraine State Park	Excellent	Low	DEM
BY1	Ray Smead Arena	Fair	Low	DEM

C: Department of Parks, Buildings & Recreation Management

Owner/Manager: City of Springfield, Department of Parks, Buildings & Recreational Management

Public Access: There is a daily automobile fee at Forest Park, Five Mile Pond Park and Blunt Park. Season passes are available which allow a vehicle to enter all parks for a reduced price. Pedestrians may walk or bike into all parks for no cost. All other parks have no vehicle entrance fee.

Degree of Protection: All land under the ParkDepartment ownership is dedicated for park use and the conversion to other uses invokes Article 97 of the State Constitution.

Map Key	Name of Area	Condition	Recreation Potential	External Funding
BY3	Acorn Park	Fair	Medium	L&WCF
UH2	Adams Playground	Good	High	CDBG, L&WCF, Urban Self-Help
MC8	Armoury Commons	Excellent	Low	CDBG
ES3	Angelina Park	Fair	High	
MC5	Apremont Triangle	Good	Low	CDBG
LH1	Atwater Park	Good	Low	
OH1	Barrows Park	Excellent	Low	CDBG, L&WCF, Urban Self-Help

Appendix II: Part II
Public Open Space by Ownership

C: Department of Parks (cont.)

Map Key	Name of Area	Condition	Recreation Potential	External Funding
ES4	Bircham Park	Good	Low	
BY2	Blunt Park	Excellent	High	Mass. Hwys., Urban Self-Help
SA38	Breckwood Park	Fair	Low	
LH6	Brunton Park	Good	Low	CDBG
MS1	Calhoun Park	Good	Medium	CDBG, L&WCF, UPARR, Urban Self-Help
SA2	Camp Angelina	Good	Low	
SA43	Camp Wilder	Good	High	Urban Self-Help, City Funds
IO12	Chicopee River Overlook	Fair	High	
BW2	Connecticut River Access	Good	Low	
IO3	Cottage Hill Park	Fair	Low	
MC10	Court Square Park	Excellent	Low	Heritage Park
SE1	DaVinci Park	Good	Low	CDBG
EF3	Edward J. Murphy Park	Good	Low	
SE2	Emerson Wight Playground	Good	Medium	CDBG, L&WCF, UPARR, Urban Self-Help
MC6	Emily Bill Park	Excellent	Medium	L&WCF, Private Funds, Urban Self-Help
BR1	Five Mile Pond Park	Good	Low	Clean Lakes, L&WCF, Urban Self-Help
FP1	Forest Park	Excellent	Medium	Urban Self-Help, EPA, Clean Lakes, Rivers and Harbors, Olmsted, MassHighway
FP2	Forest Park Extension	Good	Low	
FP3	Franconia Golf Course	Excellent	Medium	Urban Self-Help

Appendix II: Part II
Public Open Space by Ownership

C: Department of Parks (cont.)

Map Key	Name of Area	Condition	Recreation Potential	External Funding
FP7	Garfield Triangle	Good	Low	
EF7	General Edwards Triangle	Good	N/A	
SC3	Gerrish Park	Good	Low	
IO5	Godfrey Park	Excellent	Low	
SA5	Greenleaf Park	Excellent	High	L&WCF, Housing and Community Development
UH1	Gunn Square Park	Fair	Medium	CDBG
LH4	Gurdon Bill Park	Fair	Medium	CDBG, L&WCF
OH3	Harriet Tubman Park	Excellent	Low	CDBG, Urban Self-Help
BY4	Hennessey Park	Good	Medium	CDBG
SA6	Hermitage Tract	Good	Low	
IO2	Hubbard Park	Good	Medium	CDBG, L&WCF, Clean Lakes, Urban Self-Help
MS4	Jaime Ulloa Park	Good	Low	UPARR
LH3	John A. Sullivan Park	Good	Medium	
BW1	Kenefick Park	Excellent	Medium	CDBG, L&WCF, Urban Self-Help, Housing and Community Development
MC2	Kibbe Triangle	Good	Low	
UH5	Lake Massasoit Access	Good	Medium	
BR2	Loon Pond Access	Good	Low	
BR11	Loon Pond Beach	Excellent	Low	Urban Self-Help
MK1	Magazine Park	Good	High	CDBG, L&WCF, UPARR, Urban Self-Help
BW6	Marina Park	Good	Low	

Appendix II: Part II
Public Open Space by Ownership

C: City Parks Department (cont.)

Map Key	Name of Area	Condition	Recreation Potential	External Funding
ES1	Marshall Roy Park	Excellent	Low	L&WCF, Urban Self-Help
FP6	Mary Shea Park	Good	Low	
OH4	Mason Square	Excellent	Low	CDBG
MK2	McKnight Glen	Fair	Low	CDBG
MK4	McKnight Park	Good	Low	CDBG
MC4	Merrick Park	Excellent	Low	
IO4	Myrtle Street Park	Excellent	Low	CDBG, L&WCF, Urban Self-Help
EF2	Nathan Bill Park	Good	High	L&WCF, Urban Self-Help
SA3	North Branch Park	Good	Low	
SA4	North Branch Tributary Park	Fair	High	
FP5	Oakland Street Park	Good	Low	
OH2	Pendleton Avenue Park	Poor	Medium	
MC8	Pynchon Plaza	Poor	Low	CDBG
MC3	Quadrangle Park	Excellent	Medium	Heritage Park
EF4	Red Maple Swamp	Good	Medium	
ES2	Rio Vista Park	Good	Low	
MC11	Riverfront Park	Good	High	CDBG, Heritage Park
SC2	Ruth Elizabeth Park	Good	Medium	CDBG, L&WCF, Urban Self-Help
SA1	South Branch Park	Good	Low	

Appendix II: Part II
Public Open Space by Ownership

C: Department of Parks (cont.)

Map Key	Name of Area	Condition	Recreation Potential	External Funding
MC9	Stearns Square	Good	Low	CDBG
SC1	Stebbins Park	Fair	High	
PP1	Sylvester & Lorenzo	Fair	Low	
MK3	Thompson Triangle	Excellent	Low	CDBG, City & Town Commons
EF1	Treetop Park	Excellent	Medium	Urban Self-Help
LH2	Van Horn Park	Excellent	Low	Clean Lakes, L&WCF, Urban Self-Help
FP4	Valentine Park	Good	Low	
SA8	Venture Pond	Good	Medium	
SA7	Veterans Golf Course	Excellent	Medium	
LH5	Walsh Park	Poor	High	L&WCF
BW3	Wason Avenue Park	Fair	Medium	
UH3	Weeping Willow Lane	Good	Low	
UH4	Wesson Park	Good	Low	

D: City Conservation Land

Owner/Manager: Springfield Conservation Commission

Public Access: All areas are open to the public at no cost.

Degree of Protection: All areas are held by the Commission in fee-simple interest and a change in use invokes Article 97 of the State Constitution.

Map Key	Name of Area	Condition	Recreation Potential	External Funding
PP10	Bayside Street Conservation Area	Good	Medium	
SA18	Bonavita Memorial Conservation Area	Good	High	

Appendix II: Part II
Public Open Space by Ownership

C: City Conservation Land (cont.)

Map Key	Name of Area	Condition	Recreation Potential	External Funding
ES8	Brookdale Drive	Good	High	
SA33	Broska Farm	Poor	High	
SA25	Carol Ann Conservation Area	Fair	Medium	
EF9	Colorado Street Conservation Area	Fair	Medium	
ES7	Delta Hills	Good	High	Self-Help, HUD-OS
SA22	Duggan Leatherleaf Bog	Fair	High	Self-Help, HUD-OS
SA34	Dutchess Street Vernal Pool	Fair	Low	
SA19	DYS	Good	High	
PP8	Edgemere Road Swamp	Fair	Low	
FP14	Entry Dingle	Fair	Low	Self-Help
FP15	Entry Dingle Access	Fair	Low	
BR5	Fanti Bog	Good	High	
BR7	Five Mile Pond Access	Good	High	
SA24	Garvey Promontory	Fair	Low	Self-Help
PP7	Good Shepard's Brook	Fair	Low	Self-Help
SA32	Gralia Road Swamp	Good	Low	
BR4	Grayson Kettle Hole	Good	High	
SA26	Grand Valley Conservation Area	Good	Low	
SA36	Hermitage Drive Extension	Good	Low	

Appendix II: Part II
Public Open Space by Ownership

C: City Conservation Land (cont.)

Map Key	Name of Area	Condition	Recreation Potential	External Funding
PP9	Hutchinson Bog	Good	Low	
IO8	Indian Orchard Kame	Good	Medium	
SA47	Jordan Street Swamp	Good	Low	
SA17	Keddy Tracts	Good	High	Self-Help
BR10	Kent Road Conservation Area	Fair	Medium	
SA20	LaBelle Drive Conservation Area	Poor	High	
IO9	Lake Lorraine Shore	Good	High	
SA21	Lake Massasoit Access	Good	Medium	
BR8	Loon Pond Shoreline	Good	Medium	
IO10	Long Pond Bog	Good	Medium	
BR6	Merrill/Wrentham Bog	Fair	Low	
SA35	Michael Street Access	Fair	Medium	
SA28	Mill Pond Access	Good	Low	Self-Help
IO11	Mona Lake	Fair	Medium	
ES9	Peter J. Carando, Sr. Conservation Area	Good	Low	
EF10	Pine Crest Conservation Area	Fair	Medium	
PP11	Ralph Street Conservation Area	Fair	Medium	
SA37	Ramblewood Conservation Area	Poor	High	
SA23	Rose Chase Conservation Area	High	High	

Appendix II: Part II
Public Open Space by Ownership

C: City Conservation Land (cont.)

Map Key	Name of Area	Condition	Recreation Potential	External Funding
EF8	Schneelock Brook	Good	Low	Self-Help
SA40	Senator Street	Fair	Medium	
PP6	Seymore Dingle	Fair	Low	Self-Help, HUD-OS
SA41	Stapleton Road Conservation Area	Fair	Poor	
SA45	South Branch Conservation Area	Good	Low	
SA30	Tamarack Bog	Good	Low	
PP12	Tilton Street Conservation Area	Good	Low	
SA42	Timothy Circle	Fair	Medium	
SA44	Tinkham Road Wetland	Fair	Medium	
SA46	Vann Street Conservation Area	Good	Low	
SA27	Venture Pond	Good	High	
SA29	Wetstone Tract	Good	Low	Self-Help
PP5	White Cedar Bog	Good	Low	Self-Help
BR9	Wollaston Street Conservation Area	Fair	Poor	
SA31	Woodland Park	Good	High	Self-Help

E: School Department Property

Owner/Manager: Springfield School Department

Degree of Protection: None except for those areas where federal funds were used for acquisition or development. In those cases, deed restrictions prevent the conversion to other uses without prior consent of the funding agencies.

Map Key	Name of Area	Condition	Recreation Potential	External Funding
PP3	Balliet Playground	Excellent	Low	L&WCF
FP8	Beal Playground	Good	Medium	
ES5	Bowles Playground	Fair	Low	
BW4	Brightwood Playground	Poor	Low	

Appendix II: Part II
Public Open Space by Ownership

C: School Department Property (cont.)

Map Key	Name of Area	Condition	Recreation Potential	External Funding
SA14	Brunton Playground	Fair	Medium	
BY5	Central High School Athletic Fields	Excellent	Low	
BW6	Chestnut Accelerated Playfields	Excellent	Good	Urban Self-Help
SC4	Commerce Playfields	Excellent	Low	
OH5	DeBerry Playground	Excellent	Medium	Urban Self-Help
PP4	Dorman Playground	Poor	Low	
SA10	Duggan Athletic Fields	Good	Low	
BY6	Ells Playground	Poor	Low	
SA15	Freedman Playground	Fair	Medium	
LH8	Glenwood Playground	Good	Low	
SA13	Glickman Playground	Good	Medium	
EF6	Harris Playground	Good	Low	
UH6	Homer Street Playground	Good	Low	
IO7	Indian Orchard Playground	Good	Low	
IO6	Kennedy Athletic Fields	Good	Low	
FP11	Kensington Avenue Playground	Poor	Low	
SA9	Kiley Playfields	Good	Medium	
MS4	Lincoln Playground	Poor	Low	
SA11	Lynch Playground	Good	Medium	

Appendix II: Part II
Public Open Space by Ownership

C: School Department Property (cont.)

Map Key	Name of Area	Condition	Recreation Potential	External Funding
EF5	Memorial Playground	Fair	Medium	
ES6	Pottenger Playground	Good	Low	
PP2	Putnam Athletic Fields	Excellent	Low	
SA39	Sabis Playfields	Excellent	Medium	
SA12	Sixteen Acres Playground	Fair	Medium	
SA16	Talmadge Playground	Good	Low	
MS2	Linda's Park	Excellent	Low	CDBG
LH7	Central Academy (Van Sickle) Playfields	Good	Low	
BR3	Warner Playground	Fair	Medium	
FP9	Washington Street Playground	Poor	Low	
FP10	White Street Playground	Poor	Low	

Appendix III: Part I
Proposed Conservation and Park Areas

Map Key	Name of Area	Ownership	Recreation Potential	Public Access	Zoning
P1	North Branch Extension*	Private	High	Unofficial	Res.
P2	South Branch Extension*	Private	Low	None	Res.
P3	Entry Dingle*	Private	Medium	None	Res.
P4	Jamaica Brook	Private	Low	None	Res. & Comm.
P5	Chicopee River Overlook	Utility Company	High	Unofficial	Comm.
P6	Connecticut River Shore	City of Springfield	High	Unofficial	Comm.
P7	Mona Lake	Private	Low	Unofficial	Comm.
P8	Lake Lookout	Private	Medium	None	Res.
P9	Lake Lorraine Shore*	Private	Medium	None	Res.
P10	Camerota Property**	Private	Medium	None	Ind.
P11	Wilbraham Road Bog	Private	Low	None	Res.
P12	Tinkham Road Swamp	Private	Medium	Unofficial	Res.
P13	Robinson Gardens	Private	Low	Unofficial	Res.
P14	Egdemere Road Red Maple Swamp*	Private	Low	None	Res.
P15	Ellendale Road Red Maple Swamp	Private	Low	Unofficial	Res.
P16	Jordan Street Swamp	Private	Medium	Unofficial	Res.
P17	Rocus Street Swamp	Private	Medium	Unofficial	Ind.
P18	Five Mile Pond Extension**	Private	Medium	Unofficial	Comm.
P19	Solutia Park**	Private	High	Unofficial	Ind.
P20	Duda Property**	Private	Medium	Unofficial	Res.

Degree of Protection: None of the proposed conservation areas or park areas are protected by deed restrictions however, since most of the areas encompass or border wetlands, the Wetland Protection Act restricts development in some degree.

*Indicates the area abuts an existing park or conservation area.

**Indicates proposed park areas.

Zoning abbreviations: Res. = Residential; Comm. = Commercial; Ind. = Industrial

Appendix III: Part II
Description of Proposed Conservation and Park Areas

Map Key	Area (Acres)	Description
P1	North Branch Extension (88.66)	This site encompasses the stream valley of the North Branch of the Mill River in the portion of its wetland between Parker Street and the Wilbraham town line. There are two main trails adjacent to the Hillcrest Park Cemetery and Spikenard Circle. One is a fire road which was constructed by the cemetery after several fires. There are several other trails within the property. The area is suitable for hiking, jogging and cross country skiing.
P2	South Branch Extension (2.94)	Some of the city's few remaining undeveloped woodlands are located in Sixteen Acres along the South Branch of the Mill River. These areas are adjacent to the towns of Wilbraham, Hampden and East Longmeadow and have been identified by the Natural Heritage as supporting populations of rare and endangered species. Although the potential for recreation is good, it is a good area for natural study.
P3	Entry Dingle (10.47)	Acquisition of the streambelt between Tiffany and Dickinson Streets would complete the greenway extending from White Street to Forest Park. One acre was recently donated to the Commission. Recreation potential is limited to hiking due to its steep slopes.
P4	Jamaica Brook (12.71))	Jamaica Brook connects Pasco Road (Fanti Conservation Area) with the North Branch of the Mill River. It is almost entirely wetland.
P5	Chicopee River Overlook (6.52)	This narrow peninsula, located in the Indian Orchard Neighborhood, stretches more than 800 feet into the Chicopee River and along its banks. This area is suitable for walking and notable for its scenic vistas of the Chicopee River.
P6	Connecticut River Shore (3.88)	This site lies on the riverside of the flood control structure just south of the boathouse at the North End Bridge. It contains the last significant stand of cottonwoods and silver maples in Springfield.
P7	Mona Lake (1.76)	Mona Lake is a shallow 11-acre lake near the intersection of Berkshire Avenue and Cottage Street. It's a recreational potential for boating, swimming and ice-skating.
P8	Lake Lookout (9.20)	The North Branch of the Mill River empties into the lake which is sometimes considered part of Lake Massasoit.
P9	Lake Lorraine Shore (3.50)	A 16-foot easement now connects the Lake Lorraine Conservation Area with the lake. Acquisition of an additional three acres would join the existing conservation area with the lake. This area of the shoreline is now being used by fishermen as the state-stocking program at Lake Lorraine.
P10	Camerota Property (9.92)	This area is located at the end of Temby Street and abuts Five Mile Pond. It contains extensive wetlands and a shoreline. It is the former site of a privately owned junkyard.
P11	Wilbraham Road Bog (26.04)	This site is comprised of several bogs located south of Wilbraham Road near the Wilbraham town line. It is adjacent to 29 acres of conservation land acquired from the state Division of Youth Services. The bogs are located in an area of dense undergrowth and steep slopes, limiting recreational use.
P12	Tinkham Road Swamp (85.36)	Tinkham Road Swamp is located south of Tinkham Road, near the Gate of Heaven Cemetery. This area is identified as a habitat for rare and endangered species by the Massachusetts Natural Heritage Program.
P13	Robinson Gardens (12.54)	This wetland area is located northeast of Bay Street behind Robinson Gardens Apartments. This area is generally a swamp.

Appendix III: Part II
Description of Proposed Conservation and Park Areas

Map Key	Area (Acres)	Description
P14	Edgemere Road Red Maple Swamp (15.61)	Edgemere Road Red Maple Swamp is a densely overgrown swamp forming part of the same drainage system and connecting to the Grayson Kettlehole Conservation Area. A portion of the area has been acquired through tax-title takings and donation.
P15	Ellendale Road Red Maple Swamp (17.57)	There are three small ponds and an unnamed tributary to the South Branch of the Mill River in this wetland area. It is located near the intersection of Cooley and Allen Streets.
P16	Jordan Street Swamp (20.06)	As yet, there is little development in the immediate vicinity of this swamp which borders the Wilbraham town line. There are trails through the area which connect to the proposed North Branch Extension Conservation Area.
P17	Rocus Street Swamp (7.51)	Poor Brook intersects the southern end of this wetland area near the intersections of Rocus Street and Robbins Road. The central portion is a kettlehole bog. A pair of nesting Red Tail Hawks have been observed in the area.
P18	Five Mile Pond Extension (0.30)	This small area is located directly adjacent to Five Mile Pond Park. These parcels are privately owned and currently have structures located on them.
P19	Solutia Park (21.50)	This 21 acre parcel is located on Page Boulevard, on the border of the East Springfield and Indian Orchard neighborhoods. This parcel contains a small, unnamed, 4-acre pond. The parcel is currently used as a private park and contains a picnic area, parking area and play fields.
P20	Duda Property (3.14)	This property is a 3-acre parcel on the border of Springfield and Chicopee. The parcel contains a small pond and has scattered vegetation. There is good recreational potential for this site that will serve the surrounding residents of East Springfield.

Appendix IV: Update

Park Department: Forest Park, the city's largest and most heavily used recreation area, is the focus of a large amount of the restoration dollars that come the City's way from the Commonwealth and the Federal Government. Over the last 20 years, in excess of \$20 million has been expended toward improvements in Forest Park. At 735 acres, with an average annual attendance of well over 500,000 patrons, Forest Park is always in need of capital improvement funding.

Projects presently under design in Forest Park include:

Forest Park Conservatory and Botanical Gardens: Historically, Forest Park was always known for its beautiful flower and rose gardens. With the completion of the new Rose Garden in the fall of 2000, it is time for the attention to be turned to the renovation of the horticultural area in Forest Park. The current greenhouse is antiquated and in need of complete replacement. A conceptual design has been completed for a Victorian style conservatory with three wings. Botanical gardens are planned for the immediate area surrounding the conservatory.

Estimated Project Cost: \$35-40 million

Porter Lake Skate House: Improvements planned for this building include gutting the interior first and second floors and renovating the space for use as a public gathering facility. The septic system is failing and must be replaced with a grinder pump system and new restrooms. The exterior will be improved with new decorative pavers, lighting, benches, landscaping and safer access to the water. Handicap accessibility will be addressed.

Estimated Project Cost: \$500,000 - \$600,000

Projects presently under construction in parks city wide, include:

Armoury Commons Park: This is a small, passive, neighborhood park

located in the Metro Center of the City. Armoury Commons will be completely renovated including a new irrigation system, repairs to the existing fountain that will include new spray heads and restoration of the armillary. The Woman's Statue that is currently located in Pynchon Park will be relocated to the center of the lower grassed area of Armoury Commons with a granite pedestal and granite cobblestones surrounding the statue. The perimeter fence will be painted and all signage will be upgraded.

Project Cost:	\$180,000
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Federal (Community Development Block Grant)	\$180,000
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Treetop Park: This 18-acre park is located in the East Forest Park Neighborhood of the City. Currently an undeveloped woodland, Treetop Park is slated for improvements that will include a soccer field, new entrance road with formalized entry area, a restroom facility, parking lot, children's play structure and benches.

Project Cost:	\$714,286
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State (Urban Self-Help Program)	\$500,000
City (Bond)	\$214,286

Blunt Park: Improvements include six new tennis courts with new perimeter fence and benches. The basketball courts will also receive lighting for night play as part of this project.

Project Cost:	\$200,000
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State (Urban Self-Help Program)	\$140,000
City (Bond)	\$ 60,000

Marshall Roy Playground: Located in the East Springfield Neighborhood of the City, Marshall Roy Park is approximately 12 acres.

This phase of improvements include renovations to the ball fields, expansion of the existing parking lot, a new restroom facility with a paved accessible walkway, updating the irrigation system, players benches, trash receptacles and landscaping.

Project Cost:	\$630,000
<hr/>	
City (Bond)	\$189,000
State (Urban Self-Help)	\$441,000

Indian Orchard Riverfront Park: This is a 1,600 linear foot park that the City recently acquired along the Chicopee River. Renovations will include new wood guardrail along the entire length, tree trimming and under story removal to open up vistas at various locations along the walk and benches and picnic tables at these vistas.

Project Cost:	\$110,000
<hr/>	
Federal (Community Development Block Grant)	\$75,000
State (Office of Boating and Safety)	\$35,000

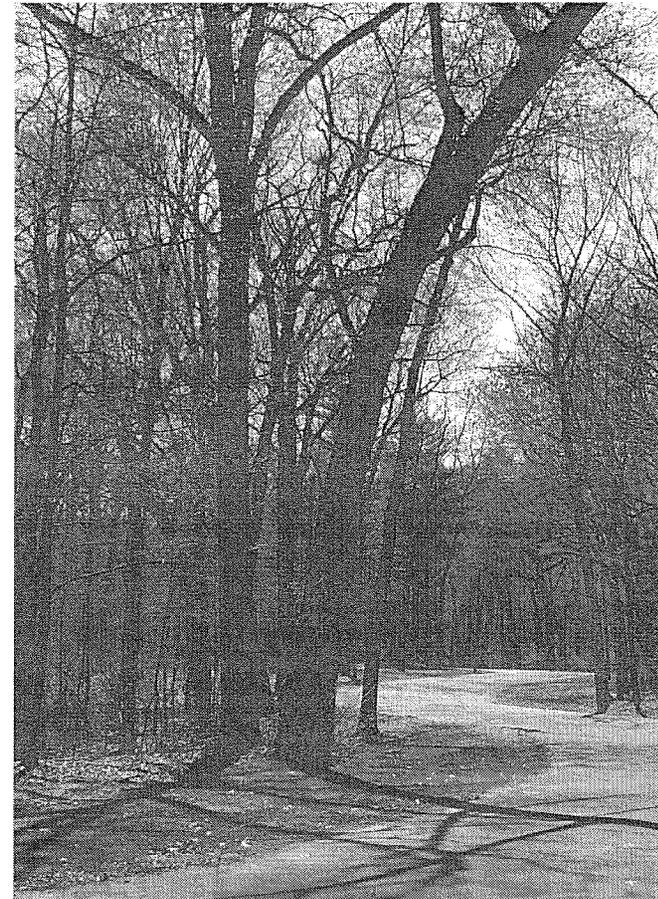
Hubbard Park: The field house is slated for improvements including gutting the interior, as there has been a significant amount of water damage over the years due to a grading issue at the front door. Additional improvements will include new sheetrock, new doors, new bathrooms and a new community center which will be used by the elderly in the Indian Orchard Neighborhood.

Project Cost:	\$50,000
<hr/>	
Federal (Community Development Block Grant)	\$35,000
City (Bond)	\$15,000

Appendix V: 504 Facility Inventory

In accordance with the Section 504 Compliance Guidelines of the Rehabilitation Act of 1973, a separate inventory for each of the properties under the jurisdiction of the Department of Park and Recreation or Conservation Commission has been completed. A statement of the City's administration policies accompanies the survey form.

Survey forms are available for viewing at the Office of Planning & Economic Development, 70 Tapley Street, Springfield, Massachusetts.



Rehabilitation Issues:

Geographic Areas and Neighborhoods Needing Rehabilitation:

There are seventeen (17) neighborhoods in the City of Springfield. For planning purposes, each neighborhood is treated as a separate entity and, therefore, land use, demographic and social data is compiled on a neighborhood basis. In light of this approach, information on parks, conservation areas and school playgrounds has been summarized by neighborhood in Appendix II and Action Plan proposals are also grouped by neighborhood.

Several neighborhoods are the target of comprehensive rehabilitation strategies due to the prevalence of physical deterioration, economic distress and social problems. Comparative neighborhood data on income, poverty, employment and housing are shown on the previous pages. From the data, it can be seen that certain neighborhoods have poverty and unemployment rates much higher than the city average, while in these same neighborhoods, median income and home ownership rates are generally much lower than those of the rest of the city. Most of the poorer neighborhoods are located in the older, densely populated, westerly portion of the city surrounding and including the central business district. In addition to experiencing physical decline and economic stress, social problems are common in these neighborhoods.

The U.S. Department of Housing and Urban Development (HUD) is the principal source of external funds for housing rehabilitation, urban renewal, public facility improvements and social services. Neighborhoods eligible for HUD monies based on HUD criteria for identifying low and moderate income areas closely correlate with those neighborhoods needing physical rehabilitation. They include; Memorial Square, Brightwood, Metro Center, South End, Six Corners, Old Hill, McKnight and Bay. Portions of Upper Hill, Indian Orchard, Forest Park, Liberty Heights and Pine Point also meet HUD eligibility requirements and are in need of rehabilitation. Since opportunities for developing new parks in these older, densely settled neighborhoods is constrained by the lack of available land, upgrading and improving existing parks is the most cost

efficient and practical strategy for satisfying recreation demands. Park renovation is an integral part of the city's neighborhood rehabilitation strategy, and eleven of the thirteen neighborhood parks earmarked for rehabilitation in the Five-Year Action Plan are located in the low and moderate income areas identified above.



HAMPDEN COUNTY, MASSACHUSETTS, CENTRAL PART -- SHEET NUMBER 18

18



(Joins sheet 10)

300 000 FEET

300 000 FEET

11

(Joins sheet 17)

WnB

305 000 FEET

(Joins sheet 27)

CaA

HAMPDEN COUNTY, MASSACHUSETTS, CENTRAL PART - SHEET NUMBER 26



(Joins sheet 17)
 (Joins sheet 23)
 (Joins sheet 27)
 (Joins sheet 32)
 (Joins sheet 37)

28

HAMPDEN COUNTY, MASSACHUSETTS, CENTRAL PART — SHEET NUMBER 28



(Joins sheet 19)

336 000 FEET

MeA

412500 FEET

1 Mile
5 000 Feet

(Joins sheet 27)

Scale 1:15 840

1400 000 FEET

Es

(Joins sheet 29)

320 000 FEET (Joins sheet 34)

Mu

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WnB

MeA

HgA

HAMPDEN COUNTY, MASSACHUSETTS, CENTRAL PART — SHEET NUMBER 33

(Joins sheet 27)



33



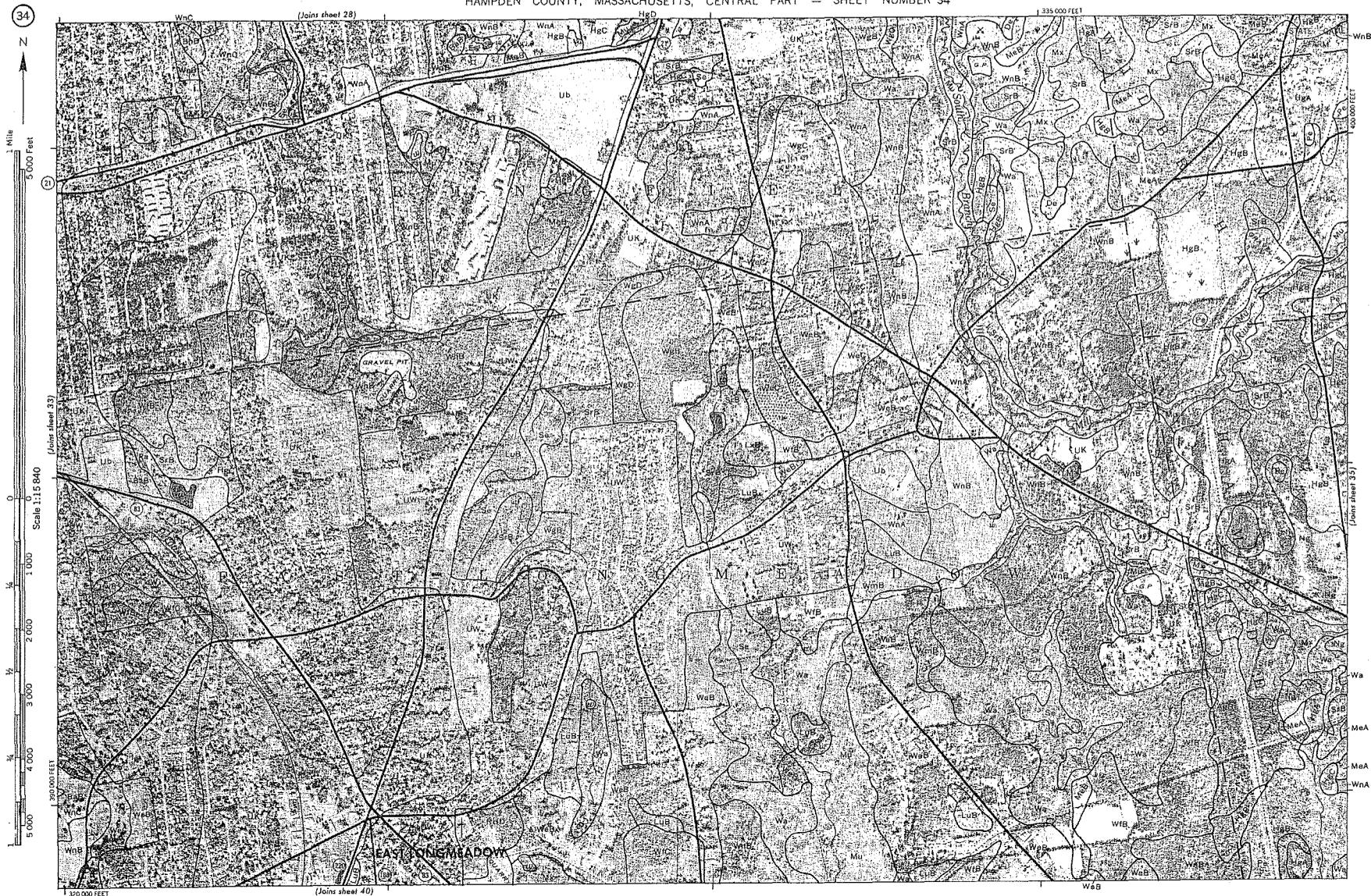
1 Mile
5 000 Feet

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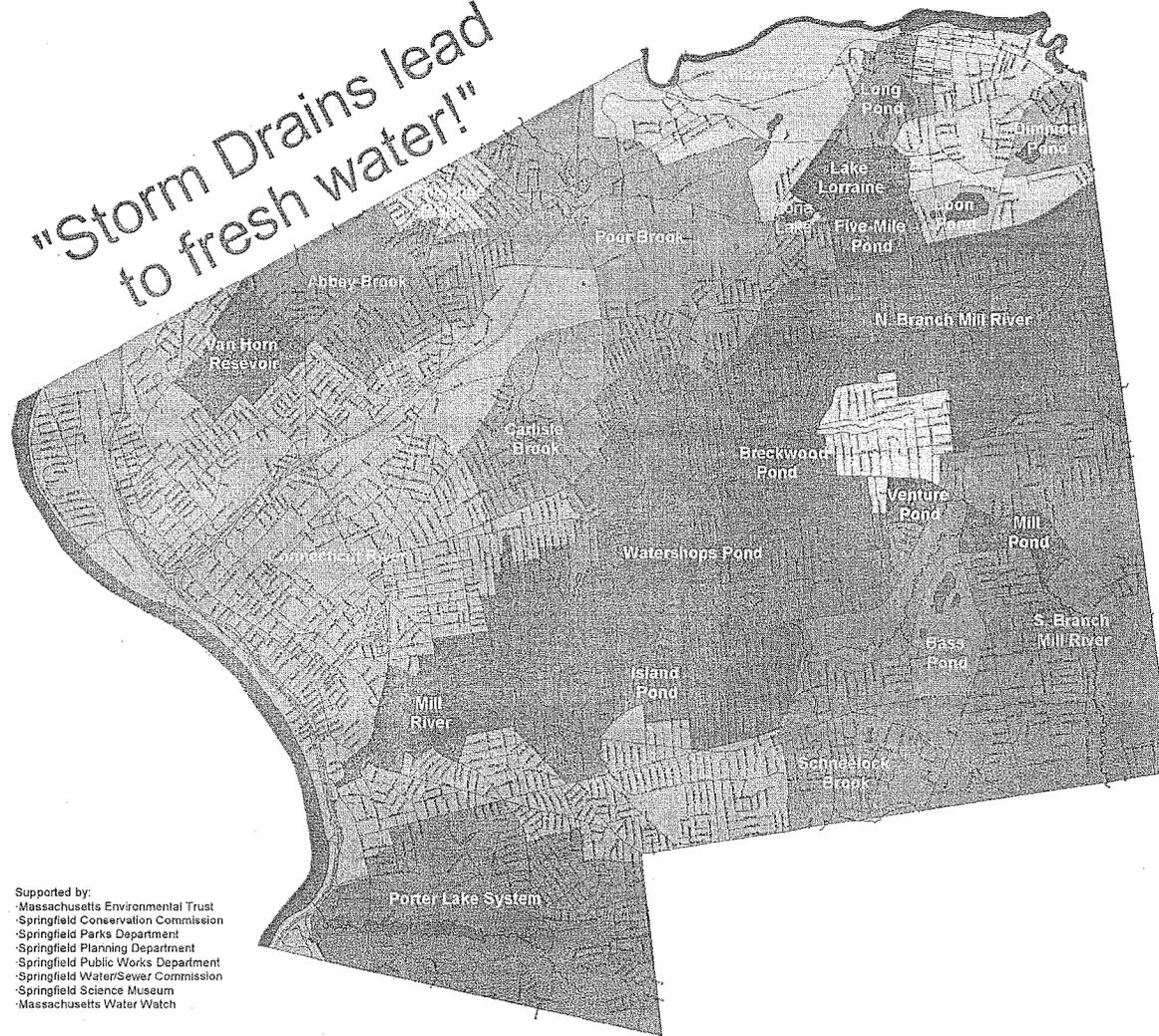
HAMPDEN COUNTY, MASSACHUSETTS, CENTRAL PART — SHEET NUMBER 34



Revised to conform with the Standard of the U.S. Geological Survey, 1943. Original published by the Massachusetts State Geologist, 1908.

City of Springfield - Stormwatershed Map

"Storm Drains lead to fresh water!"



Supported by:
 -Massachusetts Environmental Trust
 -Springfield Conservation Commission
 -Springfield Parks Department
 -Springfield Planning Department
 -Springfield Public Works Department
 -Springfield Water/Sewer Commission
 -Springfield Science Museum
 -Massachusetts Water Watch

Keep Our Streams Clean

Street Litter, Plastics, and Leaves

Be mindful of litter, NEVER throw litter down into storm drains. Keep catch basins free of debris and leaves.

Fertilizers

Avoid use of fertilizers. If needed, use organic fertilizers. Sweep, do not wash any fertilizers or soil off driveways and walkways.

Pesticides and Herbicides

Minimize use of pesticides and herbicides. Use natural alternatives. Trim grass and remove weeds by hand without herbicides.

Pet Waste

Dispose of pet waste by flushing it down the toilet, burying it, or discarding it in a plastic bag and place it in your trash.

Yard Waste

Keep soil, leaves, and grass clippings from accumulating on your driveway, sidewalk, or in the street. Compost yard waste and use on your soil.

Motor Oil

Never pour used motor oil down the drain. Take oil to a local service station to be recycled.

Anti-Freeze

Take used Anti-Freeze to a local service station for recycling. Never mix Anti-Freeze with any other substance.

Paint

Donate old paint to local groups. Dispose of oil and lead based paints at the designated household hazardous waste collection center, Bonoli's Island Landfill. Appointments are available by calling 787-7840.

Household Hazardous Waste

Do not pour hazardous waste down any drain or discard with regular trash. Contact your Springfield Solid Waste Office at 787-7840 to learn how to properly dispose of hazardous waste. Use natural or less toxic alternatives to accomplish the task.