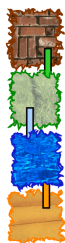


# Somerville Open Space & Recreation Plan



2002  
2003  
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2008

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## Preface

Open Space means different things to different people. To some it is a field for pee-wee soccer on Saturday mornings or little league baseball on an early summer evening. To others it is a quiet place to take a short walk and sit on a bench. Playgrounds, climbing structures, sandboxes, and basketball courts have always been an essential component of urban parks. The recent growth of “rails-to-trails” bike paths has reminded us that our open spaces can also serve other functions, such as providing transportation alternatives. And even in a built-out city like Somerville, there are a few remaining wild places, reminding us of the natural landscapes and ecological systems underlying our community.

The purpose of this Plan is to bring together all of these notions of Open Space in a comprehensive fashion, to assess the current state of the City’s open space and recreational opportunities, and to develop an implementable plan to address our current and future needs. This document represents a physical plan for our shared open spaces as well as an organizational plan to provide guidance for the public and private groups that steward them.

In this Plan, the term “open space” was defined as follows: *Publicly owned, undeveloped land that is primarily vegetated, or paved areas that serve a recreational or cultural purpose. This includes, but is not limited to, parks, playgrounds, community gardens, walking or biking trails, cemeteries, civic plazas, and playing fields, regardless of the level of protection. Also included as open space are certain water bodies with recreational use, namely Alewife Brook and Mystic River. Not included in this definition, but recognized for their potential usefulness as open space are certain privately owned properties, such as lawns, memorial sites, and other landscaped areas.*

This Open Space and Recreation Plan is guided by the 1990 Open Space and Recreation Plan Requirements for compliance with Self-Help and Urban Self-Help Grants administered by the Executive Office of Environmental Affairs, Division of Conservation Services. This Open Space and Recreation Plan’s acceptance by the State Division of Conservation Services makes Somerville eligible to compete for such funds, which the City can use for land acquisition and improvement of parks and other open spaces. This plan is also useful as a community information resource and as a guide for government planning.

## Credits/Acknowledgements

### City of Somerville, Mayor Dorothy Kelly Gay

#### Office of Housing & Community Development

Steve Post, Executive Director  
Sherri Geldersma, Director of Open Space and Parks Division  
Tracey Goldberg, Project Manager, Open Space and Parks Division  
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Lisa Brukilacchio  
Anne Phelps, Greenspace Coordinator

#### Recreation Commission

*Directorship currently vacant, but assistance was provided in the early stages of the project by then-Director James Callahan.*

#### Groundwork Somerville

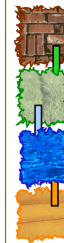
Jennifer Hill, Director

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Ralph Willmer, AICP, Director of Planning Services  
Jonathan Rosen (author of several sidebar articles)

*This Open Space & Recreation Plan represents an update of the material collected, analyzed, and presented in the City's 1997 Open Space & Recreation Plan. Where no updates were necessary, sections from that plan have been excerpted into this plan.*





## Section I: Plan Summary

This Open Space Plan reflects Somerville's desire to protect, maintain, diversify and increase the open space available to its citizenry. Somerville acknowledges the value of existing open spaces—in terms of aesthetics, health, welfare, the economy, and recreation—for our densely built city. At the same time, we recognize the challenges of commercial and residential development.

*"The City's guiding principle is that parks and open spaces are for everyone and are essential to a healthy community."*

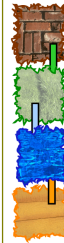
—Mayor Dorothy Kelly Gay

Ultimately, the quality of life for all of Somerville's residents is enriched by the quality of the open space in each of the City's neighborhoods, whether the space be enjoyed for recreational activity or green tranquility. An inventory of the City's parks, playgrounds, and other large and small open spaces helps to identify the open space planning priorities for the next five years.

This plan also offers an overview of Somerville's history, physical development, and environmental characteristics. Section 2 provides an introduction and describes the public process component of the plan. Section 3 describes the City's history and development, set in a regional open space context, and discusses major changes over the past five years, and progress towards meeting the goals of the 1997 Plan. Section 4 analyzes the City's environment, past and present, to establish a clear baseline of environmental opportunities and constraints. Section 5 contains the detailed open space inventory, broken down and digested in a number of ways to render the data meaningful. Section 6 presents the overall open space and recreation goals for the plan. Section 7 includes an in-depth needs analysis, including resource protection needs, community needs, and management needs. Section 8 refines the Section 6 goals into more tangible objectives, which then become the framework for the five-year action plan presented in Section 9.

The following key findings are worth noting:

- 1) Somerville has little open space. Only 123 acres, or 4.7%, of the City's 4.1 square miles meet the definition of public open space laid out in this plan. The natural corollary to this fact is that the existing open spaces, be they playgrounds, basketball courts, or bike trails, are intensively used by the City's nearly 80,000 residents. The one exception to this rule relates to the passive open spaces along the Mystic River and Alewife Brook, which many residents believe could be enhanced and made more accessible.
- 2) Somerville has relatively few opportunities to expand its open space inventory dramatically. The City is essentially built out at this point, and it is unlikely that large parcels will become available anytime in the foreseeable future for conversion to open space. High land costs make even small acquisitions difficult, and competing needs such as affordable housing, municipal facilities, and economic development must be considered as well. Exceptional progress has been made by concentrating on small in-fill sites for recreation, such as the recent expansion of Conway Park, the purchase and clearing of the old Kemp Nut site near the High School, or recent projects with lots on Allen Street and Marshall Street. In a context as built out as Somerville, any additions are remarkable. Such opportunities should continue to be pursued, especially in regard to community gardens, which require little land and are very intensively used. Additional attention must also be paid to preserving, protecting, and even expanding the stock of privately owned open space accessible to the public (Assembly Square and Tufts University being the two most notable areas for consideration).



- 3) Maintenance remains a major concern. Given the high levels of use seen in the City's open spaces, it is understandable that maintenance issues would present an ongoing problem. From regular maintenance of park infrastructure and equipment to the overall care and stewardship of the City's street trees, maintenance continues to be the Achilles' heel of the open space system. Despite the best efforts of many dedicated workers, the fact remains that these parks are all intensively used by the City's dense population, leading to more "wear and tear" than elsewhere. Of course, the issue of improved maintenance relates closely to the issues of funding, interdepartmental coordination, and public accountability discussed below.
- 4) Additional funding is required to meet the City's ambitious open space and recreation goals. To the skeptic (or perhaps realist), each of the action items mentioned in Section 9 comes with a price-tag attached. The positive spin on this fact is, of course, that the tax dollars we currently spend on open space are already stretched to the practical limit, due to the diligence and inventiveness of City staff (i.e., when you are already getting a good value for your money, the only way to get more is to spend more). The City currently spends about \$2.7 million, or 1.85% of the total budget, on "culture and recreation" (the closest reporting category used by the State Department of Revenue—see Section 7). On a per-acre basis, this spending figure (\$55,000 per acre) is higher than any of our neighboring communities; viewed per capita (\$35.15), it is below average for the area. Of course, given the current predictions of declining revenues and budget cuts, it may be some time before additional sources of support can be found, and they may involve less traditional funding mechanisms.
- 5) Open space activities need to be coordinated better within the City. The City has a number of different boards, departments, and agencies with responsibilities for open space management, preservation, and enhancement. These include the Office of Housing & Community Development, the Conservation Commission, the Department of Public Works/Buildings and Grounds Division, the Recreation Commission, and the School Department (schoolyards or community school gymnasiums). Jurisdictions, powers, and areas of expertise are clearly defined in some situations, but clouded or overlapping in others. Due to the heavy workloads of all staff members, time spent communicating and coordinating between departments is at a minimum. As a result, a number of opportunities may be lost and the important considerations of one group may be ignored by another. This plan makes a number of recommendations to improve communication and coordination within the City, including the creation of an Open Space Advisory Committee.
- 6) Public involvement and a "customer satisfaction" approach are key to meeting the goals of this plan. Where open space is concerned, the City is committed to involving and informing the public at all levels of decision making: after all, the parks belong to the people. Throughout the public process residents made specific comments relating to parks and open space, but also expressed a more general desire to stay involved with these issues. The plan includes recommendations for continuing to foster this sense of ownership in the parks (for example, through the publication of an open space newsletter), as well as the corresponding sense of individual and public responsibility for their care (for example, more scheduled neighborhood work days for the parks).

For more information on the specific recommendation of the Plan, consult the summary at the beginning of Section 9.

In addition to the technical inventories and analysis required by the Division of Conserva-



tion Services, this plan includes a number of elements developed to elaborate on the past, present, and future issues facing the City. These new sections, described below, form a sort of anthology of Somerville Open Space stories—the people and the places, the successes and the problems—reminding us all of the richness of our community and the depth of our resourcefulness, as well as the essentially communal nature underlying all of our open spaces.



**Open Space Scrapbook:** Across our history and throughout our diverse community, our City is filled with colorful characters and poignant stories related to our open spaces. Celebrating these tales reminds us of the richness and resourcefulness of our City, and helps us to adopt the long-term perspective that planning requires.



**Open Space Successes:** These selections describe recent achievements in the City's open spaces, such as the formation of new partnerships or creative new open spaces. An important component of planning is to rejoice in (and learn from) our recent achievements so as to inspire more of the same.



**Open Space Obstacles:** In addition to recognizing our successes, we must also frankly acknowledge existing barriers to achieving our goals—including those of our own creation as well as those beyond our control. Learning to think strategically and creatively about ways to solve these problems is an important part of any planning process, and the implementation that flows from it.



**Open Space Opportunities:** Following directly from the previous three elements, this fourth component looks for the chances to achieve our goals in new and different ways, building on what we have done to date, and inventing new approaches where necessary. Many of these pieces point directly to stated objectives or action items in the body of the Plan.

## Section 2: Introduction

### 2A Statement of Purpose

Open space provides many kinds of recreation for residents, valued habitat for flora and fauna, public health and aesthetic benefits and occasionally a bit of beauty in an urban setting. The purpose of this plan is fourfold:

- to increase awareness concerning the open space and recreational needs and opportunities in Somerville, including a characterization of size, type, location, ownership, and current levels of protection of open space properties;
- to encourage thoughtful planning and a sustained commitment to open space;
- to outline a five-year plan of action with the City agencies and Somerville's community organizations for the protection, care-taking, and enhancement of land in the City; and
- to avoid *ad hoc* efforts while providing a basis for future open space planning efforts through a comprehensive, centralized document for open space.

Importantly, this document includes elements of a *physical* plan (concerned with existing and proposed properties, facilities, and infrastructure), an *organizational* plan (concerned with the formal and informal organizational structures the City has for maintenance, management, and overall decision-making related to open space and recreation), and also an *informational* resource (inventorying and describing resources, discussing past successes and present challenges, and in general telling the Somerville open space story).

It is hoped and expected that this Plan will be a living document to guide the City, consulted on a daily basis by citizens and decision-makers and evaluated and updated periodically. A number of the action items in Section 9 speak directly to ways to accomplish this goal.

### 2B Planning Process and Public Participation

This Plan update builds on the significant work of the 1997 Open Space and Recreation Plan Update, which involved a comprehensive rewrite of the entire Plan and a comprehensive re-thinking of the City's approach to open space planning.

In January, 2002, the Office of Housing and Community Development began initial work with the Conservation Commission to begin the present update process. After two well-attended and publicized community meetings involving City Staff and volunteers from a variety of local open space groups, the decision was made in March to hire an outside consultant to help facilitate the process and draft the updated sections of the Plan. After the required bidding process was completed, the City selected the firm of McGregor & Associates to assist them, led by Ezra Glenn, AICP.

From the outset, all parties were in agreement that public participation was a central concern for the present update. Rather than a dry and technical plan that simply met the letter of the requirements of the State, this Plan would need to include and address the needs and concerns of the multitude of open space and recreation interests in the City, including City boards and departments, local and regional environmental groups, and the community at large. In addition, it was agreed that the Plan Update would need to focus on implementation and concrete actions (and not simply

*"Too much planning, not enough action."*

—Anonymous Survey Respondent





offer vague “motherhood and apple-pie” visions), and the public process should include consideration of these aspects.

The public participation component of the process involved a number of simultaneous and mutually-reinforcing tracks, as follows:

- **Initial Planning Meetings:** Prior to the hiring of the consultant, two public meetings were sponsored by the Greenspace Coordinator and OHCD to evaluate the previous Plan update and begin to chart a process for the present work. These meetings were open to the public and attended by approximately 25 people.
- **Departmental, Commission, and/or Interagency Meetings:** The Plan update was discussed at a number of meetings of City Staff or Boards throughout the spring and summer, including the Conservation Commission, the Office of Housing and Community Development, the Department of Public Works/Buildings and Grounds Division, the Recreation Commission, and Groundwork Somerville. These meetings provided an opportunity to evaluate the previous plan and past progress towards its stated goals and objectives, and to thereby refine the goals, objectives, and actions of the present plan.
- **Neighborhood Public Forums:** The Plan update was discussed at four neighborhood forums in May and June as part of the City’s “Community Development Plan Visioning Process” under Executive Order 418. Due to their comprehensive nature representing a broad cross-section of City residents, these forums were able to capture input that might have otherwise been missed. Approximately 50 people attended these meetings. The Plan update was also featured at a display table at the city-wide “Community Development Fair” in June attended by well over 100 residents, and informal feedback was solicited.
- **Open Space Survey:** An open space and recreation survey was prepared by the consultant and distributed to groups in the City working on environmental and recreation issues (see “Survey and Distribution List,” Appendix F), who were to be asked to distribute them to members and/or constituents. Approximately 1,500 copies of the survey were made available, in both English and Spanish; approximately 75 responses were received. The emphasis of the survey was to generate qualitative input on issues for the plan to address (as opposed to simple quantitative rankings or issues), to allow the plan to include substantive comments from as wide a group as possible.
- **Meetings of Existing Open Space Groups:** Somerville is a very active community, with many local and regional groups involved in open space, environmental, and recreation issues. Groups such as Groundwork Somerville, the Mystic River Watershed Association, Somerville Climate Action, and the Somerville Garden Club were contacted and asked to allocate a portion of their next regular meeting to discuss the goals, objectives, and recommended actions of the 1997 Plan, and to provide the consultant with any revisions or additional information.
- **Herring Run:** On May 11, 2002, the Mystic River Watershed Association and the Alewife/Mystic River Advocates held their Annual Herring Run road race. At the celebration following the race, participants reviewed the plan at a booth and offered their comments informally.
- **Health Meeting:** On May 14, 2002, the role of open space and recreation in the community’s overall health was discussed at a joint meeting of six different environmental and health organizations..
- **Board of Aldermen:** Information on the Open Space & Recreation Plan Update was provided to the Board of Aldermen as the project progressed, and the draft goals and objectives were presented and discussed at the Board’s August 8, 2002

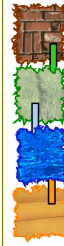
- meeting.
- **Community Television:** The status of the Open Space Plan was discussed on “Reshaping Somerville,” a community-access cable show that ran throughout the length of the project. Viewers were invited to contact the City with ideas for the Plan.

Despite all of these opportunities for input, it is certain that there are still a significant number of residents who did not participate in the process. For example, although 1,500 surveys were distributed, only about 75 were returned; of the 500 Spanish-language surveys distributed, none were returned. In a City as large, diverse, and active as Somerville there is always the potential for more citizen involvement, and the democratic ideal of full participation is often frustrated by busy schedules and competing demands on time. One of the recommendations of the Plan is to continue to emphasize public involvement in all aspects of open space and recreation decision making (see Sections 6, 8, and 9).

By August, a draft version of the Plan was completed and circulated for public comment. In September, 2002, this Plan was submitted to the State Division of Conservation in draft form, with completed maps and the open space inventory matrix. In March, 2003 a final draft of the Plan was completed and submitted.

*“Plant more trees.”*

*—Anonymous Survey Respondent*



## Section 3: Community Setting

### 3A Regional Context

Somerville's location in the Boston Basin coastal plain has guided its development in the last three and a half centuries. At 4.1 square miles, Somerville is bounded by the Mystic River and the cities of Medford, Malden, and Everett to the north, the Alewife Brook and the Town of Arlington to the west, and the cities of Boston and Cambridge to the east and south. In this dense, urban fabric, surrounding communities are integrally woven into Somerville's neighborhoods: Tufts University straddles the boundary between Medford and Somerville, with residential areas, university buildings, and parks located on both sides; Cambridge and Somerville share a contorted geographic border, and the large employers and universities in Cambridge and Boston help to complement and support Somerville's residential character. To the north and west, the surrounding communities become increasingly suburban. To the northeast and east lie Everett and Charlestown.

High volume traffic arteries isolate Somerville's largest and finest open spaces—those along the Alewife Brook and Mystic River—from the adjacent citizenry. These same regional highways (Routes 16, 28, and Interstate 93) also provide easy access to parts of the City, and have spurred recent commercial and retail activity along the Mystic River in the Assembly Square area. The recent development of recreational corridors such as Community Path (popularly called "the bikepath") in west Somerville have begun to restore connections to some of these waterfront and wetland resources.

Open space within the City is particularly scarce. Somerville's well known status as the most densely populated municipality in New England (29.45 people/acre as per the 2000 U.S. Census) was earned by a development and subdivision pattern that ended before World War II with precious little open space remaining. The 123.23 acres of parkland within

the City supports a variety of uses, including passive recreation, athletic fields, playgrounds, and natural habitat. Less than 40% (48.24 acres) of this parkland is actually owned by the City of Somerville and a fair portion of that is unprotected land. The remainder is owned and managed by the Metropolitan District Commission (68.36 acres), the MBTA (6.13), and Middlesex County (.50 acres). Not included in these figures are the approximately 45 acres of privately held open space, such as Tufts University fields and small church properties. *[Note: these numbers differ significantly from those presented in the 1997 Plan; the difference, however, has little to do with the gain or loss of actual open space, but rather with corrections of mathematical errors in the tabulation of the previous plan and a revised definition of "open space" to exclude private properties. More complete figures are presented and discussed in the Section 5 and Appendix A.]*

Although Somerville itself has a shortage of open and unbuilt space, residents do have access to regional open and natural space. The MDC's 2,060-acre Middlesex Fells Reserva-

The following definition of "open space" is to be used throughout this Plan:

*Publicly owned, undeveloped land that is primarily vegetated, or paved areas that serve a recreational or cultural purpose. This includes, but is not limited to, parks, playgrounds, community gardens, walking or biking trails, cemeteries, civic plazas, and playing fields, regardless of the level of protection. Also included as open space are certain water bodies with recreational use, namely Alewife Brook and Mystic River.*

*Not included in this definition, but recognized for their potential usefulness as open space, are certain privately owned properties, such as lawns, memorial sites, and other landscaped areas.*

tion, one of the largest such areas in metropolitan Boston, lies less than a mile north of Somerville's northwest border. The Upper and Lower Mystic Lakes and their protected shorelines are two miles to the northwest and the 115-acre Alewife Reservation lies little more than a half mile beyond the western boundary of the City. The popular Charles River shoreline and parkland is two miles to the south of the City.

While the need for more open space in Somerville is obvious, the acquisition of large parcels of new land has been, to date, economically unfeasible. Therefore, past efforts have focused on three primary objectives:

- 1) meeting the high maintenance and renovation needs of the existing overburdened parks and open spaces;
- 2) acquiring small "infill" sites for neighborhood playgrounds, community gardens, or park expansion, when possible; and
- 3) developing stronger connections to important regional open space resources.

### ***MetroGreen: MAPC's Regional Open Space Plan***

In 1992 the Metropolitan Area Planning Council, the regional planning agency for the Greater Boston Area, adopted a regional open space plan known as "MetroGreen." The plan established four main goals for MAPC's open space planning in the region:

- 1) to preserve and protect critical land resources;
- 2) to shape the growth of the region;
- 3) to help preserve and enhance a "sense of place" for the region; and
- 4) to fulfill the recreational needs of the region's population and to provide access, where appropriate, to protected open spaces.

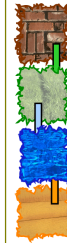
The plan also maps an ambitious network of areas recommended for protection. Action item LR#8 specifically calls for land resource protection planning in concentrated development centers, such as Somerville, and item #LR11 calls for the creation of an Inner Core Greenspace Alliance. Action item LR#9 calls on MAPC to encourage implementation of local open space and recreation plans.

Somerville, through the Office of Housing & Community Development, is an active participant in MAPC's Inner Core Committee, a group of communities that meet regularly to discuss issues of common interest. The Inner Core Committee is an excellent forum for discussing regional open space issues and opportunities.

### ***3B History of the Community***

The history of European settlement and land use patterns in Somerville began with the City's relationship to maritime colonial Boston. The parcel of land that was to become Somerville was connected to Charlestown by a narrow neck of land settled by colonists in the 1630s and deeded to the Massachusetts Bay Colony by the Pawtucket in 1639. Governor Winthrop's Estate lay on the banks of the Mystic River in what is now the Ten Hills neighborhood of Somerville. The river provided a maritime connection to the port of Boston and the Ten Hills offered defensible positions for forts. The point of land near the base of Bunker Hill in Charlestown provided one of the shortest water crossings to the mainland from the burgeoning port of Boston and was established as an early trade path.

As a second settlement sprang up in Cambridge along the banks of the Charles River, another overland path developed along what is now Washington Street. Originally the Millers River near Union Square was surrounded by marshlands. Cobble Hill, Prospect Hill, Central Hill, and Spring Hill formed an east-west ridge that defined travel routes along their bases. Crossings of the Mystic River near Wellington and of the Alewife Brook near Clarendon Hill





defined routes such as Broadway, Medford Street, and Massachusetts Avenue. Ploughed Hill, Winter Hill, and the marshlands along the Mystic River similarly defined routes of travel. The land beyond the Charlestown neck was plotted by 1700 to define grazing land with the earliest streets like Walnut, School, Central, and Lowell running north to south over the low points of the east-west ridges.

After the revolution Cobble Hill was developed into an estate surrounded by the waters of the Millers River, while most of Somerville remained farmland with some commercial development along the well traveled trade routes.

Somerville's history is a study in changing modes of transportation. From the early horse-drawn trade routes, the industrial cities up the Merrimack founded an early 1820s barge route down the Middlesex Canal to a mill pond near the neck. By the 1830s trains had replaced the barges and the earliest of rail lines were run through from Lowell in 1837 cutting past Tufts Hill through Union Square and crossing the Charles River at Lechmere.

In 1842 the Town of Somerville broke away from Charlestown in a boundary defined by the waterline at the neck. As ever increasing industrial rail lines crossed the tidal flats heading towards the City of Boston industrial growth lined their tracks. The uncontrolled filling of the tidal flats along the Millers River between Somerville and Cambridge had caused such pollution that the Commonwealth decreed the river must be filled. In 1872, as Prospect Hill was used to fill the area of flats along Union Square, the charter of the town was changed to that of a city. A period of rapid municipal growth began, with civic buildings along the ridge of Central Hill and the Police and Fire Stations in Union Square.

After the Civil War Somerville's population increased rapidly. The dense residential areas had been concentrated in the east due to the proximity of Boston, but with the advent of street railways areas further west became an easy commute. Lands along the tops of hills had seen limited development because of a lack of available water and limited roads. A water tower built on Spring Hill (at what is now Bailey Park) in the 1880s solved the problem of water. Sewer lines were run by the City as the Metropolitan District Commission provided a pumping station

*"Somerville is distinctly a city of homes. This is radically different from a city of wealth or a manufacturing city. Such a city requires unusual effort to make it beautiful, convenient and comfortable. It must also have an unusually active local sentiment."*

*—Somerville Mayor Edward Glines' Inaugural Address, 1902, as quoted in Beyond the Neck: The Architecture and Development of Somerville, Massachusetts, 1982.*



*historic view of Prospect Hill Tower*



*scenic view from City Hall, looking North*

along the Alewife Brook.

As transportation provided a link to the western part of the City, orchards and farmlands as well as brick yards and marshlands were developed into dense tracts of predominantly two family housing. Larger residential properties were subdivided to accommodate speculative infill lots. The pattern of long street blocks with shorter dead end spurs began during this time. Much of the subdivision was criticized at the time for its relatively cheap construction, high density, and lack of landscaping—not much different from the aesthetic concerns that are expressed today except for the additional, modern presence of the automobile.

Somerville streetcars moved working people quickly about the City and into the neighboring commercial and business centers, thus strengthening the demand for housing in the City. By the turn of the century a group of citizens and businesses had initiated a movement to attend to quality of life concerns in Somerville including the concern for the City's disappearing open spaces: a few significant parks were established (including Central Hill Park, within which Somerville's High School, City Hall, and Central Public Library now rest), Broadway Park (now Foss Park, owned by the MDC), and links to Frederick Law Olmstead's system of open spaces were created: the Fellsway (Route 28) and Powderhouse Boulevard connecting to Alewife Brook Parkway (Route 16).

*"Somerville is already so densely built that creating and maintaining open space and places for recreational activities is crucial for the City."*

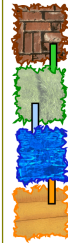
—Anonymous Survey Respondent

Soon after the turn of the 20th century, almost all of Somerville had been developed. In fact, 50% of today's housing stock was built in the 20-year period between 1890 and 1910. The "triple-decker" predominated and the City's population exceeded 100,000 (U.S. Census data; *Beyond the Neck*). Interestingly, the current population is significantly lower (about 78,000, according to the most recent Census, roughly 75% of the peak). The major trends of the 20<sup>th</sup> century have been a steady—or slightly declining—population (largely due to smaller family sizes and the de-densification of housing) and a decreasing presence of industry and open space.

### 3C Population Characteristics

As noted above, residential and industrial density in Somerville peaked around the turn of the last century. Predominantly working class neighborhoods have been home to generations of families, but the steady influx of new residents has really been the recent overriding theme. Affordable rental units, the constant turnover of university students, a location in the heart of metropolitan Boston, and cultural attitudes welcoming to newcomers have coalesced to produce a community of immense diversity.

The varied ethnic enclaves of the earlier part of the century have given way to a modern mix of families, young people, retirees, and students—both recent immigrants and longtime city dwellers. The eastern and western portions of the City have always been somewhat dissimilar, but the rate of divergence has accelerated over the last ten years. The neighborhoods of East Somerville, Ten Hills, and Ward Two (and areas of Spring Hill and Winter Hill, depending upon where boundaries are placed) have lower median incomes, lower property values, and less open space than other sections of the City. East Somerville and Ward Two, in particular, became densely developed earlier in the City's history, contain most of the City's remaining industry, and have a flatter topography—more resembling neighboring Charlestown and Cambridge. West Somerville neighborhoods have higher median incomes and have been influenced strongly by the Red Line extension to Davis Square and by Tufts University. Much of the land west of





## Summary Demographic Changes & Changes in Open Space Needs



Census questions vary from one census to another. The information below summarizes only the information that was obtained from identical or very similar questions on both the 1990 and the 2000 census.

1. Total population has increased by 1.66%.
2. The number of individuals under 18 declined slightly; 144 fewer children, slightly less than 2%, were counted in 2002.
3. However, more individuals (population 3 years and older) are attending school; school enrollment has increased by over 6%, and students represent one quarter of the population. Most of the increase, 4.29%, is in grades K-12, with the remaining increase, 2.39%, in college enrollment.
4. Of workers 16 years or older who commute to work, there appears to be a substantial increase in those who take public transport, walk, or use means other than private automobiles to travel to work. In the 1990 census, about 30% of the commuters did not use automobiles to get to work. In 2000, 42% of the population reported using means other than private automobile to get to work. Although the 2000 figures do not identify those who worked at home, these figures probably indicate a real, sizeable increase in those using means other than private automobile to get to work.
5. The number of foreign-born residents has increased by an estimated 7.5% in the past five years. The figure is an estimate because foreign-born children of U.S. citizens were counted in the 2000 census as "natives" rather than "foreign born," and there was no such category available in the 1990 census with which to compare.

Somerville is so built-out that, in general, any increase in population size means some increase in density. Virtually all of the new housing in Somerville built in the last 5 years has been multi-unit housing that is rapidly 'filling in' all possible building spaces. This puts pressure on existing open space and makes it extremely difficult to create new open space.

Have open space needs changed in the past 5 years? The relatively small changes in demographics do not point to dramatic changes in needs, but there are indicators of a growing public emphasis on open space. Public interest in open space (and environmental) issues in Somerville has been expressed strongly by outspoken local residents at public hearings and meetings, and in articles in the local newspaper related to the development at Assembly Square, the proposed Lincoln Park land conversion, the Metropolitan District Commission's (MDC) Master Plan for Alewife Brook, and proposed further extension of the Minuteman Bike Path.

This growing interest in open space issues may be partly driven by new federal and state policies enforcing compliance with the Clean Water Act, by increased federal and state funding for open space, and by new links between environmental issues and public health. Such programs seem to have spurred more interest in making maximum use of what open space is available (increasing accessibility to MDC parks along Mystic River and Alewife Brook), and making more open space available through alternative means (such as requiring developers to set aside a percentage of land for open space). The city government has tremendously improved its parks through renovations, is increasing its number of community gardens, and has provided substantial support to launch a local chapter of GroundworkSomerville, a non-profit group for environmental change. Still, the inclusion of "paved areas that serve a recreational or cultural purpose" in our definition of open space highlights the difficulty of finding open spaces with room for trees and wildlife in our increasingly urbanized city.

Central Street was converted to housing later in the City's history, and retains a more forested canopy reminiscent of its orchard past and suburban neighbors.

The City's density can be calculated at 18,897 persons per square mile, according to most recent Census data. These are a number of noteworthy trends of Somerville's population:

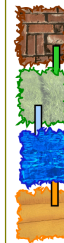
- 1) The total population has grown slightly over the past ten years (by 1.7% increase, to 77,478), representing the first decennial Census since 1930 to show an increase.
- 2) The number and percentage of children under the age of 18 has declined steadily for over 20 years, and the number of non-family households has increased by almost 20% over the past decade. Average family sizes have dropped as well, from 3.10 to 3.06.
- 3) The number of residents over the age of 55 has dropped by more than 15% over the past decade.
- 4) The minority population has grown in every category, including an 18% increase in the number of Black/African American residents, a 78% increase in the number of Asian residents, and a 41% increase in the number of Hispanic residents, corresponding to an 12.4% drop in the number of White/Non-Hispanic residents. (Some studies, including the Commonwealth's "Statewide Comprehensive Outdoor Recreation Plan" show differences in preferences and levels of use for different types of recreational facilities based on race, although there may be other compounding factors to explain these results.)
- 5) More than two thirds of the housing units are occupied by renters, although many rental properties are apartments in owner-occupied two- or three-family homes, and there has been an increase in the number of condominium conversions.

### **3D Growth and Development Patterns: Patterns, Trends, Policies**

Somerville's present physical development is an overlay of patterns from several historical periods: agrarian, suburban, and streetcar suburban. Somerville's residential areas are completely built out with regard to applicable zoning controls. Industrial land uses, once prevalent as a stand-alone activity in specific districts and scattered throughout many residential districts, continue to decline in number. The City's squares host significant commercial activity, much of which is neighborhood-oriented. As is common in older cities, combinations of residential, light industrial, and commercial land uses line arterial streets. There are a few areas where residential/industrial land use combinations predominate, such as the Brickbottom or the new developments near Boynton Yards.

The City's present development policy is best characterized as one of "density abatement." Official demographic statistics indicate that natural population dynamics are in part contributing to the same objective—independently of the City's policy. The number of households is rising; however, the number of persons per household continues to decline. Both trends are well established. (The City's policy of "density abatement" is tempered, however, through a progressive density bonus zoning program for the provision of affordable housing, in recognition of the pressing affordability crisis in the region.)

In 1990, the City revised the Somerville Zoning Ordinance (SZO -- see the "Zoning Map of Somerville" in Appendix B). An underlying goal in this revision was to rezone areas of the City in which densities were considered to be excessive. Also, the revisions were crafted to gain greater control over particular uses and locations where these uses would be permitted. Efforts at reducing density and increasing the amount of open space in the City have also led the City in the past decade to acquire derelict properties, where feasible, for purposes of creating additional recreation and open space, such as the former Bay State Smelting and Kemp





Nut buildings. Additional examples are the Marshall Street Park, Linden Park, Draw 7, and Seven Hills Park. (It must, of course, be acknowledged that not all properties are appropriate for open space, and competing needs of economic development and affordable housing must be considered as well.)

Public transportation services in Somerville are provided by the Massachusetts Bay Transportation Authority (MBTA). The City is principally served by fixed route buses and one rapid transit station. Other MBTA rapid transit services utilized by Somerville residents lie just outside the City boundaries at Lechmere, Porter, and Sullivan Squares. Present bus routes facilitate travel across the City in an east-west fashion, while the Red Line rapid transit service connects West Somerville with destinations in the neighboring communities of Cambridge and Boston. The present hub/spoke system hampers effective north-south travel and is ineffective at transporting people in a radial fashion around Boston. Such radial movement is key for access to places of residence, employment, and recreation. The City, in concert with the MBTA and other agencies, is studying ways in which system improvements can be made, including the recent addition of a "cross-town shuttle," possible subway service to Assembly Square and Union Square, a Green Line extension through Somerville to Medford, and pressure to include Somerville in the MBTA's Circumferential Transit Study.

### *Infrastructure*

The water supply and sewage disposal systems are supplied to the City by the Massachusetts Water Resources Authority (MWRA). Water supplies are transported from surface reservoirs in western and central Massachusetts by pipeline. There are no surface impoundments within the City that are utilized for drinking water. Sewer services consist of combination sanitary/stormwater lines that convey effluent to a regional treatment plant. At present, work is underway to monitor and police illegal connections to the City's stormwater system and to separate sanitary sewage from stormwater sewers in selected locations. City records do not indicate that any private water supplies or sewage disposal systems are in use. The water and sewer systems are considered extensive (but now aging). Through the City's history, utility development (similar to transportation improvements during the streetcar suburban era) have permitted intensive land development.

### *Long-Term Development Patterns*

The City's development is regulated by the SZO, which requires development to be appropriate to the community. Several key provisions function as overlays and further guide development patterns, such as the recently-revised and expanded Planned Unit Development District and the newly-created Assembly Square Interim Planning District. The SZO encourages site development that preserves or creates open space as well as public access to the Mystic River shoreline. Over the past five years, there has been a great deal of activity around the redevelopment of Assembly Square, including discussions of how new uses there can help preserve and enhance the City's open space networks.

Somerville has a culturally diverse and relatively well educated population; it is convenient to Boston and to the northern suburbs and property values are rising. Its development patterns are well suited to an increasing number of households that favor urban lifestyles. The availability and enhancement of public transportation resources will add to Somerville's attractiveness as a place of residence and/or employment.

Where new commercial development occurs, more often than not the new development replaces several smaller structures. Property rehabilitation, due to City assistance and federal incentives, is also gaining in popularity, particularly in and around the City's squares.



Most of the City's preexisting residential areas are expected to remain residential. The City's traditional residential areas are considered to be at maximum building capacity. Dwelling unit legalization, rehabilitation of older housing units, affordable housing developments, and industrial property conversion form the bulk of activity in the residential sector. Existing heavy industrial uses may continue to relocate to suburban locations or leave the region completely, though most of those that remain industries have stayed due to strong ties to the community. Former industrial sites clustered along the railways (including what is now the bikepath) often have great redevelopment potential for nonindustrial use (typically residential or small office space). These types of industrial properties are the most marginal for future industrial uses, because they lack road access suitable for truck shipping and they are in close proximity to dense residential development. Several such properties have been or are under consideration for conversion.

By contrast, marked commercial and light industrial growth is expected for the Assembly Square district, as well as the continued growth of the Boynton Yards redevelopment area. Some infill development will take place in the vicinity of the Inner Belt industrial Park. In turn, these industrial properties, often referred to as "brownfields," are most likely to host future light industrial or commercial development.

The fact that Somerville is chiefly a residential community and that it will continue to experience growth in total number of households and in industrial/commercial conversion to residential use underscores the City's critical future need for open space.

### ***The 1997 Plan: a progress report***

The 1997 Plan contained a great many specific (and some not-so-specific) action plan items. Some, such as the acquisition, clearing, and redevelopment of the Conway Park extension, have been implemented to a "T". Others, such as the formation of the Open Space Advisory Committee, never got off the ground (thereby losing the important oversight role it was to play and decreasing the likelihood of completing actions assigned to it). A number of other items fall somewhere in between, or are harder to measure: for example, most combined sewer overflows in Somerville have been eliminated, but there is still far to go to achieve the goal of a swimmable Mystic River; likewise, some ongoing maintenance chores have certainly been completed over the past five years, but new maintenance issues continue to crop up.

The following chart groups the action items of the 1997 Plan into general subject areas and attempts to summarize progress towards meeting these goals.



Actions/Recommendation	Progress/Notes
<b>1. Maintenance/Management</b>	
a. Maintain and manage existing parks and playgrounds better	Ongoing, difficult to measure, always seems to be room for improvement; lack of funding and staffing cited; recommended in present plan
b. Upgrade existing parks and playgrounds (including accessibility)	14 parks renovated since 1997, all upgrades included ADA compliance; recommended in present plan
c. Protect trees	Some progress made, especially re. installation of irrigation systems for some trees; still raised as issue throughout process; recommended in present plan
<b>2. Organizational</b>	
a. Coordinate activities and departments better within the City	Little progress made, Open Space Advisory Committee never formed; lack of staff time cited; recommended in present plan
b. Coordinate activities and departments better within the region (MDC, MWRA, MAPC, MyRWA, etc.)	Little progress made, Open Space Advisory Committee never formed; lack of staffing cited; recommended in present plan
<b>3. Preservation/Acquisition/Development of New Facilities and Uses</b>	
a. No net loss policy for open space	Never adopted or formally proposed; recommended in present plan
b. Protect open space through zoning	Never adopted or formally proposed; recommended in present plan
c. Increase public open space (including development of new financing mechanisms)	Some new acquisitions, including Conway Park extension and Kemp Nut site; recommended in present plan, with revisions to approach
d. Provide indoor recreational space	New pool at Kennedy School and gymnasiums at various community schools opened; recommended in present plan
e. Enhance wildlife corridors and recreational corridors	Progress made towards extending the bike path/Community Path, as well as studies of trail underpass for Route 28; increased attention since 1997 re. alewife and other wildlife using the Mystic
f. Provide water-based recreation	Some progress related to boating on the Mystic and the development of the Land/Water trail
<b>4. Preserve and monitor water quality</b>	Elimination of all but 2 combined sewer overflows flowing into Mystic/Alewife; much progress made by volunteers (AMRA, MyRWA) and researchers (Tufts) regarding monitoring; still far to go, recommended in present plan
<b>5. Outreach/Constituency Building</b>	
a. Public outreach	Development of City's website, including open space map; active public participation in park clean ups and redesigns of new playgrounds; still room for improvement, recommended in present plan
b. Encourage public/neighborhood participation & stewardship	Active public participation in park clean ups and redesigns of new playgrounds; general atrophy of "friends of" groups; recommended in present plan

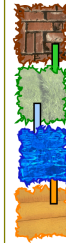
# Who Says Lead Can't Be Turned Into Gold?



We've accomplished this at Conway Park! Conway Park is located adjacent to an MDC Ice Skating Rink on Somerville Avenue. Like most of Somerville it is a multi-racial, multi-ethnic neighborhood. The neighborhood has a history of environmental pollution from old industrial buildings, auto body shops, railroad tracks, and a congested main east-west arterial. People living in this part of the community are impacted daily by these factors and as a result, during the planning process developed a vision that has guided the development process from the early planning stages of the park through its construction and hopefully, beyond. Simply put, "we want to learn from our past, try to understand the present community we live in and inspire hope within the community for our future." We wanted to create a place that embodies possibilities. We wanted to create a place that will make a difference in our neighborhood and allow us to grow physically, mentally and spiritually. We wanted to make a place that offers a sense of what has been accomplished in our past and therefore what is possible in our future. We wanted to make a place that transforms blight into beauty.

To build the park the city acquired and "cleaned-up" an old industrial brownfield site. After the demolition and the toxic soil removal, the construction of the park was constructed in two phases. Phase I built basketball courts, a roller hockey rink, a tree covered seating area with a granite map of the City as a focal point and potentially educational tool and parking for 50 cars (to help relieve a chronic neighborhood parking problem. Phase II added a tot lot, a plaza/water play area, climbing structures, a picnic area and a restroom/storage building. The existing field was enlarged and renovated and 141 trees were added to Somerville's urban forest. Physically, the park has improved the neighborhood by offering beauty and community in the midst of an otherwise congested and urban fabric. It replaces a toxic industrial use and improves the quality of life in the neighborhood with clear light and clean air, shaded green places to play, sit walk and talk. It's a place for the community to come together, a place to perform and learn and a place that visually captures and expresses the positive energy of the people that live in Somerville.

The park is also an outdoor museum that celebrates Somerville's culture and environment. Everyone can come here and learn about the heroic acts of our neighbors, both past and present, famous and not so famous. By creating opportunities to tell our stories and have them become part of a greater community story, the park is a place that allows people to make connections. If explored thoughtfully, with an open mind, it will foster pride in us and in our community.





## The Park's History

Shutting down the smelting company- the project actually started in the 1970's when neighbors began calling the Fire Department because they thought the smoke from the smelting company was a fire in their neighborhood. Later it was people in the neighborhood, the City Health Department, the State Department of Environmental Management and the State Attorney General's Office that all but closed the smelting company down and caused the company to pay substantial fines for the numerous worker safety violations that plagued the poor immigrant families in the neighborhood for generations.

Obtaining the land- not until the mid-1990 did the smelting company's owner put a "For Sale" sign on the lead encrusted building. Its proximity to the adjacent regional indoor ice skating rink and the existing Conway Park made the site an appealing choice to increase the open space in Somerville. However the next tasks were daunting. How could the city afford to buy the building and demolish it? Who would pay for the environmental clean up of the one-acre site? Again the neighbors and enlightened State and City officials worked together to raise funds to purchase the old factory, demolish it, complete the environmental clean-up of the land the factory was built on, and secure funding to create an entire acre of new parkland in one of the most densely populated cities in the Commonwealth of Massachusetts.

Planning a park- through numerous community meetings a vision coalesced. This new open space could be a place that tells the story of the transformation from a blighted, unhealthy place to a place that promotes physical, emotional and spiritual growth. A lot of talent and hard work went into decisions of how this could happen. The idea of stories remained central to the planning process. Telling stories educates, heals, transforms, inspires. How could they be told, shared and endure? Conway Park is the result of our attempt to make this vision a reality.

Building the park- several years went by between the initial planning and design process and the actual construction of the park. Fortunately, the vision remained in the hearts and minds of the community, the city administration and the professionals hired to help make the vision a reality.

Building community- sharing the vision has really been the muse that has spoken to the largest and most diverse parts of our community and this continues to draw people together and inspire them to contribute to the life of the park. Developing the outdoor museum has been the catalyst that keeps the vision alive. It was conceived of as a "living" cultural history. Developing this program brought together school children, parents, grandparents, teachers, young professionals, new immigrants families, members of the Chamber of Commerce, local artists, members of the fire and police department, athletes, librarians and many other members of the community. Though its first material manifestation is in the people size "stop" signs that populate the park, the vision lives on. Advocates for the park continue to apply for grants that might:

- Pay for consultants to work with the community to design and install an educational system into the existing history and mapping program of the park. This could be coordinated with scavenger hunt game and a rubbing book and used as a teaching aid for the Somerville history curriculum in the public schools.
- Help establish a mentoring program that used art and oral history learning projects to be exhibited in the park's outdoor museum.
- Leverage funds to develop self-guided walking tours in the multiple languages spoken by area residents that would facilitate walks from the park into the surrounding neighborhood.
- Sponsor events celebrating community member's accomplishments and honoring various neighborhood residents.
- Combine with other funding to work with neighborhood children to design reading benches that would be installed in the park and foster reading/story telling programs administered by the Early Childhood Education Center in the City.
- Facilitate an "Adopt the Park" program to ensure the long-term care and programming in the park.

**\*\*\*Every success will help foster the vision to manifest in other ways.\*\*\***

## Section 4: Environmental Inventory & Analysis

Note: for the following sections, the maps found in Appendix A may prove helpful.

### 4A Geology, Soils, and Topography

Somerville's soils range from well drained sandy loam in the western upland areas of the City to dense claylands in the Mystic River watershed (Ten Hills) and near the former Miller's River estuary in Ward Two. Ward Two, including much of Union and Inman Square neighborhoods in the southern and eastern portion of the City, is part of the Cambridge Plain, a flood plain which fills the lower valley of the Charles River from Watertown to Boston Harbor (see Figure 3 "Special Landscape Features Map—Soils").

Somerville's Boston Blue clay deposits were formed 14,000 to 15,000 years ago and contain fossilized shells of the salt water Leda clam. The extensive beds were formed with the retreat of the glacier, when 25 feet of water covered the Boston Basin. When waters receded, the claylands rebounded with forest, which later turned into a layer of peat. When Somerville was settled by Europeans, the clay was exposed only near streams or tidal creeks. Settlers found marshes at the eastern, southern and northern edges of the then-named Charlestown mainland, and meadowland and grassland interrupted by marsh at the western edge, bordered by Alewife Brook. The entire tract between Charlestown Neck and Alewife Brook was largely unforested and used for agriculture up through the last century. Trees were planted by the first settlers of Somerville and continue to be planted today in the City. Brickworks were an early dominant industry, aided by developing transportation systems in the nineteenth century.

### 4B Landscape Character

Somerville's landscape is characterized by a series of drumlins with relatively steep sides and outcroppings of slate at Powderhouse Park, at the western edge of Spring Hill and at the northern edge of Winter Hill. These rocky outcroppings are some of the only truly undeveloped land in Somerville. The City's hills rise from the flood plain of the Mystic River and Alewife Brook. These drumlins run generally west to east, and they provide great panoramic views of the Metropolitan Boston Area (see "Unique Features Map").

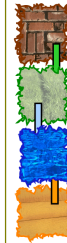
The Mystic River and Alewife Brook combine to form the western and northern natural boundaries of the City. The Mystic River was formerly a tidal estuary, but with the construction of the Amelia Earhart Dam in the 1960s, it is now only tidal in that area below the dam. Above the dam the Mystic River is a slow moving, urban river with open parklands on its banks and strips of riparian vegetation along its edges. These MDC-owned riverside parks have beautiful views of the river and open stretches of sky. The riverside lands also support a variety of wildlife unmatched anywhere else in the City. To the south and east Somerville is bounded by Cambridge and Boston, respectively.

*"I don't see any additional land available."*

*—Anonymous Survey Respondent*

Somerville's open spaces can be grouped into the following types, according to their use:

**Large Recreational Fields:** Three City-owned properties (Trum Field, Lincoln Park, and the newly-renovated Conway Park), three MDC-owned parks (Foss Park, Dilboy Field, and Draw Seven Park), and the playing fields owned by Tufts University serve as the recreation backbone for the City's sports-field users, both formal and informal. Smaller City-owned parks (Hodgkins Park, Glen Park, and Nunziato Field) provide more limited opportunities for field





sports. In all, these ten properties account for all the playing fields in the City.

**Neighborhood Parks and Playgrounds; Schoolyards:** The vast majority of the City's parks come in the form of "pocket parks"—playgrounds typically no more than an acre in size, and often much smaller—and playgrounds associated with the City's neighborhood schools. In all, there are over 40 such properties, serving every neighborhood of the City.

**Shorefront Parks:** The parklands that border both the Mystic River and Alewife Brook are some of the most important scenic areas in the City. While these rivers are not pristine, they are not as dirty and devoid of life as is often thought; for example, alewife swim upriver each spring to spawn, and wildlife can be seen along the shores (see Section 4E). The areas along these rivers have great potential for recreational uses. Highways (especially Route 93), fences, and other impediments, however, separate most Somerville residents from the rivers. With some creative work, access could be achieved along the entire length of the Mystic River and Alewife Brook in Somerville, making it more accessible for walkers, runners and cyclists.

**Community Gardens:** The City's ever-expanding inventory of community gardens includes eight areas presently in use containing over 150 plots, all of which are filled to capacity. Two more sites are currently under development by the City: Durrell Park and Henry Hansen Park. Each site has a garden coordinator who works with the Conservation Commission to ensure that the gardens are properly cared for and maintenance needs are addressed. Some of these gardens have been in production now for more than 20 years, and all are sources of neighborhood and City pride. Two are privately owned (Tufts and Avon), one is on MBTA land leased by the City (Bikeway), and one is on land owned by the Somerville Housing Authority, for the exclusive use of residents (Mystic). With the two new additions to the system, nearly every residence in the City will be within a half-mile of a community garden. A recent study assessed the current state of the gardens and outlined potential future sites for garden development, including Line Street, Summer Street, and North Street.

*"Develop dog-friendly open spaces."*

*—Anonymous Survey Respondent*

Much of Somerville's landscape character can be found in the vibrant, eclectic, and ever-changing makeup of its urban streetscapes. The juxtaposition of historic buildings and squares, modern economic activity, ethnic diversity on a global scale, and the sheer density of people and things to do gives the City a truly unique urban feel. (For more on this urban streetscape, see section 4F, "Scenic Resources and Unique Environments".)

## 4C Water Resources

Somerville's water resources contribute significantly to the total open space acreage. They also present special and unusual recreational opportunities to the City's residents. Pollution assaults on these water resources (as briefly described in this section), however, limit their full potential. Following is a brief discussion of these resources.

### Surface Water Resources

Somerville's surface water resources consist of the last mile of the Alewife Brook before it joins the Mystic River and the last mile or so of the lower section of the Mystic River before it joins the salt water of the Boston Harbor below the Amelia Earhart Dam (see "Water Resources Map"). Due to some malfunctions at the Dam, salt water of an unknown volume is leaking into the freshwater basin as evidenced by the thriving barnacle populations just upstream of the Dam. As noted earlier in this Plan, Somerville shares these surface water resources with Medford and Arlington.

## Plant Yourself in Somerville: Groundwork Somerville



Groundwork Somerville (GWS) works with community groups, businesses, and government agencies to enhance Somerville public spaces. GWS aims to build sustainable communities through joint environmental action through programs that are:

- for people creating opportunities for people to learn new skills and take local action,
- for places creating better, safer and healthier neighborhoods, and
- for prosperity helping businesses and individuals fulfill their potential.

For example, in October 2001 GWS held an event to plant daffodils along the bikepath. On a sunny Saturday afternoon, they assembled the portable Groundwork Greenhouse, set out trowels and a basket of bulbs on a bright yellow ironing board and asked passers-by if they wanted to plant a flower. Almost one hundred people of all ages were delighted to do so. Early the next April, they returned to see their flowers in magnificent bloom. Like all GWS projects, many partners were involved. The Somerville Garden Club and National Park Service provided funding for the project. Clients of the Walnut Street Center, a job-training agency for adults with developmental disabilities, provide the watering and weekly weeding to keep the area beautiful while the City's Department of Public Works provides mulch and mows nearby.

Other Groundwork Somerville projects include working with high school students to redesign their courtyard as outdoor learning space, working with the Boys & Girls Club to provide environmental education at their Blessing of the Bay Boathouse and managing the Adopt-a-Spot program for the City. All of GWS programs lead to changing places and changing lives.

For more information, visit the GWS website at [www.GroundworkSomerville.org](http://www.GroundworkSomerville.org) or contact Jennifer Hill at: Groundwork Somerville, PO Box 441033, Somerville, MA 02144; (617) 628-9988.

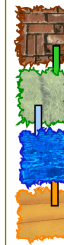
The Alewife Brook in Somerville is mostly lined with concrete and fenced off for safety. Many residents are unaware of the Brook due to the steep banks and overgrown vegetation. Over the past five years, the cities of Cambridge and Somerville have worked with the MWRA, the EOE Basin Team, and local watershed groups to remove Combined Sewer Overflow (CSO) outlets from the Alewife Brook, although non-point source pollution and litter/dumping continue to be problems. One CSO outlet from the Somerville stormwater system still drains to the Alewife. During fair weather this urban brook supports a few hardy canoeists who rarely disembark in Somerville due to the steep banks and fences. Other health and safety hazards are presented by the sediments accumulated on the brook's concrete bottom. While fishing is rated poor for Alewife Brook, it still supports a significant alewife and herring migration during late spring.

Somerville's section of the Mystic River has slightly better water quality than the Alewife Brook due to the dilution coming from higher flow volumes coming from the Mystic Lakes. The

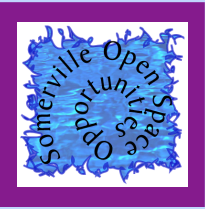
City has removed all but one of the CSOs draining directly into the Mystic (in addition to the one draining to the Alewife mentioned above). DEP rates boating as fair to good on days

*"I've never even been to the Mystic River in my 20+ years here. Are there nature trails/programs there that should be publicized more?"*

—Anonymous Survey Respondent



## A Plan for the Alewife Brook



Six years ago, the MDC conducted a visionary Master Plan for the restoration of segments of the Alewife Brook and Mystic Valley Parkways (an update to this Master Plan is currently in process as well). Overall goals of this plan included:

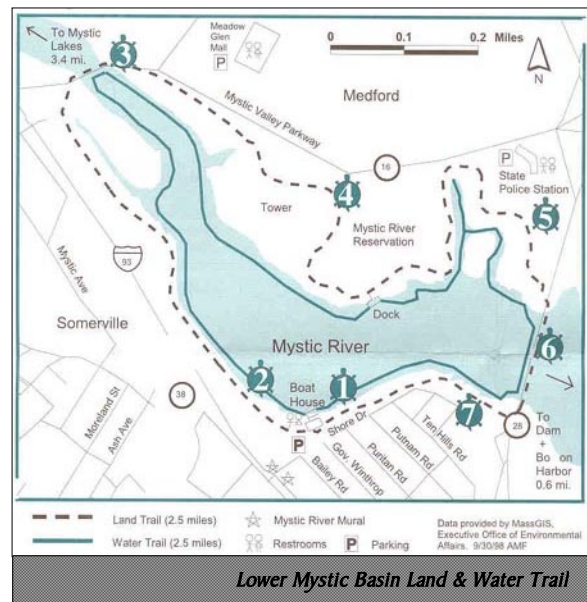
- reclaim the original parkway character as a tree-shaded boulevard with appropriate lighting, signage, and curbing
- develop a landscape and maintenance plan
- heighten public awareness of the area's unique wetlands and increase visibility of the Alewife Brook and Mystic River
- provide safe and convenient travel routes for pedestrians, cyclists, and in-line skaters (including connections to the Minuteman Trail)
- update existing recreational facilities and parking lots (including the Dilboy Field Stadium)
- mitigate the safety and aesthetic park land impacts of existing utility pipes
- reclaim the park land from private encroachments
- estimate restoration costs and recommend construction phasing as funds become available.
- securing rangers and park maintenance professionals to manage the park land.

"Short term" goals included installation of historic street lights, installation of new granite curbs, planting of new trees, and the removal of the chain link fence enclosing the Alewife Brook.

Needless to say, not all of these lofty goals have been accomplished, and there is much work to be done, but the Plan does provide a good "jumping off" point, as well as some common ground between the MDC and the communities of the Mystic River Watershed. As such, it can be regarded as a promise of things to come, and an obligation to make good on this promise. The MDC should be held to the high standard it has set in this Plan, but should also be supported wherever possible to provide it with the resources it needs to accomplish these goals.

that are not on or shortly after rain events. Motorized boats regularly traverse this section of the Mystic River on their way to Boston Harbor and beyond. One of the three yacht clubs harboring motorized craft along the lower Mystic's shores is in Somerville. Canoes can be launched from a ramp at the Blessing of the Bay Boat House in the Ten Hills neighborhood of the City. A "land-and-water" trail has been designed for the lower Mystic Basin, inviting participants to walk a land trail along the river, and then follow a boat trail to specified points of interest (see map, left).

The Mystic River and Alewife Brook are part of the Mystic River Watershed



that includes approximately 70 square miles of land and 400,000 persons living in 19 municipalities, including Arlington, Belmont, Boston, Burlington, Cambridge, Chelsea,

*“More imaginative [recreational] activities, not just in summer.”*

—Anonymous Survey Respondent

Everett, Lexington, Malden, Medford, Melrose, Reading, Somerville, Stoneham, Wakefield, Watertown, Wilmington, Winchester and Woburn (Fig. 1). Until recently, the Department of Environmental Protection assigned these waters a “Class B” (Fishable and Swimmable). Since March, 1999, and until October, 2003, these waters have been classified as “Class B<sub>CSO</sub>” under a “variance” from attainment of this status, to allow the remaining CSOs to be addressed.

The Millers River, which used to run from Union Square to the Charles River, now flows underground through a series of drain pipes. These drainage pipes, which flow through the flats of Cambridge prior to emptying into the Charles River, affect the CSO flows into the Mystic River and the Alewife Brook due to interconnections among the City’s drainage systems.

### **Flood Hazard Areas**

A number of major floods have occurred in the Mystic River Basin during this century. The worst of these took place in 1936, 1955, 1968, 1978, 1979, 1991, and 1998. Most major floods occurred during the late winter and early spring when snowmelt is combined with heavy spring rains.

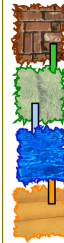
Review of the SZO’s Floodplain Overlay District and the most recent Flood Insurance Rate Maps (1986, but currently being updated) shows that the 100-year floodplain (the estimated lateral extent of floodwater that would theoretically result from the statistical 100-year frequency storm event) is restricted to the banks of the Mystic River and the Alewife Brook. Along the river north of the Amelia Earhart Dam, the floodplain boundary lies immediately along the western and southern bank. South of the dam the flood plain boundary extends west approximately 100 feet into the railyard. Along Alewife Brook the floodplain area is larger: at its widest point the floodplain extends approximately 500 feet from the bank. The MDC parkland in both of these areas serves to provide water storage capacity during flood events. Efforts should be made to protect this small amount of flood storage area.

Somerville’s historical floodplain was likely much larger than the areas noted above. The filling of marshlands to make way for rail-yards and other industries, however, combined with channeling Miller’s River, has consumed most of the City’s flood storage capacity. Another important change occurred with the construction of the Amelia Earhart Dam. This dam is located at the confluence of the Mystic and Malden rivers. Completed in 1966 by the MDC and the Army Corps of Engineers, the dam is used to eliminate tidal influence upstream and to lower the river level in anticipation of coming storms. Its diesel pumps can discharge 4,000 cubic feet per second from the river against high tide into Boston Harbor.

Much of the City’s lower neighborhoods—including Union Square, Somerville Avenue, historic rail beds, and parts of Davis Square—suffer from localized stormwater flooding during heavy and sudden storm events, because of large amounts of paved surfaces, the piping of the Millers River and the filling of its floodplain, and other alterations.

### **Wetlands**

Due to the extensive modification to the original landscape most of Somerville’s wetlands have been lost. The remaining wetlands are essentially located along the shores of the Alewife Brook and the lower Mystic River. They are of great value for landscape diversity, natural





## Trees: A Vital Component

Frederick Law Olmstead couldn't have said it better when he told the city of New York in 1872 that he was creating the "lungs of the city" with his design for the heavily forested Central Park. As we now know, in addition to their aesthetic value and importance in shelter from the sun, urban trees are vital to the absorption of carbon dioxide and various other gaseous pollutants, which are broken down into less harmful chemicals during photosynthesis, thus providing healthier air for everyone to breathe and giving aid to the earth's vital layer of ozone.

Still, according to Anthony Sanchez, director of Eagle Eye Institute in Somerville, a center that aims to encourage inner-city youths to care for their environment, trees are often overlooked when formulating broad urban plans, particularly in cities as densely populated as Somerville. "A lot of times nobody thinks of the trees," he says, "Yet they are a vital component of our cities and our lives."

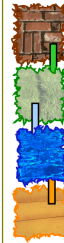
Since it began providing hands-on environmental education to predominantly minority urban youth in 1992, Eagle Eye has become a leader in the urban tree movement on both the local and national stage, using the philosophy that children who gain a respect and appreciation for their natural environment will be more likely to go out of their way to care for it. "We use the power of nature to transform our youth," says Sanchez. "To get them to care, something must go on inside of them."

Eagle Eye, which works in conjunction with Somerville Public Schools to recruit participants for their workshops, sponsors a variety of different programs, including "Learn about Forests," in which children are taken on a field trip to experience an area of actual wilderness, and "Rainbow Stewards," an after school program where city youth are directly involved in caring for, and conducting Geographic Information Systems (GIS) surveys of Somerville's street trees, which allows the city to know which trees are healthy, and which may soon need to be replaced. Most recently, Eagle Eye launched the national movement "Trees are My Friends" in 2001, an award winning televised campaign to get inner-city youths across America involved in preserving and enhancing the greenery in their neighborhoods.

While the administration in Somerville has been supportive of tree planting and preservation in recent years, there is little room in the budget to provide increased funds for the good of city greenery. Further problems being addressed include the lack of irrigation to the trees and insufficient sizes of tree pits. As Eagle Eye hopes, a new generation of informed and adept city residents may do just as much good for the trees of Somerville as a decent sized chunk of change. "We make that lead of getting people involved," says Sanchez. "We want them to realize all the opportunities that nature provides us and get them caring about their community."

habitat and recreational enhancement. The Mystic River Reservation on the northern shore of the Mystic is a vital and much used habitat and recreation area.

The MDC owns most of Somerville's wetlands. One exception is an isolated wetland just south of the Inner Belt Road industrial area, the last pooling of the Miller's River, which supports some migrant water fowl. These wetlands are not formally inventoried, so the extent to which they contribute to the interests protected in the Wetlands Protection Act (e.g. protection of wildlife habitat) is not known. Nevertheless, given their small size and lack of native plant species, it may be assumed that wildlife habitat value is low.



## The Somerville Beach

Despite recent efforts to help clean up the Mystic River, the typical Somerville resident isn't about to throw on his or her swimsuit and take a dive into the city's main body of water. Still, for much of the first half of the twentieth century, thousands of citizens - a large majority of them children - would flock to the banks of the Mystic where a beach had been created over a period of time, as tanker ships unloaded sand used as ballast onto the south shore of the river.

Although the area around the beach was eventually sprawling with trash dumped by City factories, and the water polluted by years of heavy industry, people still took refuge from the summer heat in the Mystic, one of the few sources of water that was available.

"I remember walking to the beach, passing by the Ford plant and seeing all the workers," remarks one longtime city resident, who vividly remembers days spent on the shores of the Mystic as a child in the 1920's and 1930's. "We used to swim across the river, right near all of the factories. Only later did we realize what we were probably swimming in. But did it bother us? No."

While heightened environmental concerns gradually reduced the river's use for recreational swimming, boating is still present, very much due to the Mystic's location as a gateway to Boston Harbor. Still, with the presence of advocacy groups such as the Friends of the Mystic River, The Mystic River Watershed Association, and the Alewife/Mystic River Advocates, which are devoted to cleaning up, protecting, and heightening public awareness of the River and its watershed, it seems possible that the Mystic may someday see the return of widespread recreation.

With the presence of various volunteer river cleanups and events like the Herring Run, an annual road race which allows runners to traverse the 10k route upstream along with thousands of alewives and herring on their way to spawn along the banks of the river and Lower Mystic Lake, the public is well on its way to becoming more involved and informed in the fight to restore the Mystic. Whether or not there will ever be another Somerville Beach, we are every day developing a cleaner, safer, and more appealing Mystic River.

### Aquifer Recharge Areas

Somerville's only aquifer recharge area is a small piece of a larger aquifer recharge area, mostly located in Medford. This aquifer is classified by the Massachusetts Department of Environmental Protection as a "medium potential aquifer unlikely to be used." Somerville obtains its drinking water from the MWRA via the Quabbin Reservoir and therefore contains no drinking water supply aquifer recharge areas.

### 4D Vegetation

As far back as the first European settlements Somerville's forests were limited to upland areas. Marsh and floodplain and other adjacent lands were kept open by native Americans for hunting and camping. For the past century Somerville has been a densely populated urban area and, therefore does not have forested areas. The City of Somerville does have an ambitious street tree planting program and has been recognized as a "Tree City USA" for

*"Clean in and around the Mystic River, and add lights during night, and benches."*

—Anonymous Survey Respondent



seven years straight. The City's zoning ordinance also requires landscaping, specifying number and caliper of trees in some instances. There are a good number of trees in Somerville and some beautiful specimens can be found through the City.

Powderhouse Park has a number of mature oaks and pines. The northern Mystic River parks also have large numbers of majestic old black and white oaks. There are also beautiful old trees throughout the City which are currently being inventoried as "Great Trees of Somerville." The old railroad right of way that is now a bikeway is home to many trees, including silver maples, sugar maples, northern catalpas and apple trees. Efforts should be made to enhance the viability of trees throughout the City.

The lands along the river are areas that have vegetation that is varied and desirable to wildlife. While in some areas this vegetation may appear to inhibit human access to, and views of, the river, it enhances the river's value as wildlife habitat. Many native riparian varieties have seeded along the river. They include silver maple, alders, American elm, white oak, poplars, birch, scrub dogwoods, sumac, black cherry and cotton woods. Unfortunately, there are also some areas of major infestation by exotics. These exotics include phragmites, Japanese knotweed, Norway maple, bittersweet and ailanthus. Efforts should be made to identify these

## An Unexpected Drain on the Mystic



This past Spring, open space advocates were surprised and alarmed to discover the MDC unilaterally acting to open the Amelia Earhart Dam to draw down the water level of the Mystic River, Alewife Brook, and Mystic Lakes. This dramatic action was apparently undertaken without adequate review, input, or even public notice to the Mystic communities of Somerville, Medford, Malden, and Arlington, who woke up one morning to find these water bodies significantly drier. The water levels were reportedly lowered to allow the Medford Wellington Yacht Club easier access to repair a faulty boat ramp owned by the MDC.

Adding injury to insult, the timing of the draw down could not possibly have been worse: Spring is when the annual run of the Mystic River herring occurs, as they swim upstream to return to their birthplace to spawn another generation. The Mystic River Watershed Association (MyRWA) and the Alewife Mystic River Advocates (AMRA), two local environmental groups, were deep in preparations for their annual Herring Run Road Race, a regional celebration of the historical ecological connections of the watershed. The problem was also compounded by the near-drought conditions of the watershed following a very dry winter.

With better communication between the State and the communities that rely on MDC lands for open space and natural resource protection, problems such as this can be avoided in the future. The MDC must acknowledge its legal responsibility to act in an open and respectful manner, to serve the communities it assesses for its funding. Some steps have been made in recent history, such as the 1996 Master Plan Study for the restoration of the Alewife Brook (see related story) and the creation of the Watershed Basin Teams by the Executive Office of Environmental Affairs (on which citizens, MyRWA, and City officials have been actively participating), but more still needs to be done. At the same time, the Mystic communities need to coordinate their actions on the State level to be more effective.

## EMPACT: A Community Collaborative



The ongoing crusade to restore clean water to the Mystic River added a major weapon to its arsenal on December 3, 2001 with the inception of the city's new project, known as "Real Time Water Quality Monitoring and Modeling for Equitable Recreation on the Mystic River," funded under the federal Environmental Monitoring for Public Access and Community Tracking (EMPACT) program.

In formally announcing that the city of Somerville had received a grant worth more than \$360,000 from the U.S. Environmental Protection Agency (EPA), Mayor Dorothy Kelly Gay introduced the City's plan to develop a state-of-the-art system that will allow scientists to measure various levels of bacteria and other pollutants at key junctures along the river, and make the data immediately available to the public.

The Project marks a partnership between The City of Somerville, the EPA, Tufts University, and the Mystic River Watershed Association. Its goal is to make the first water quality measurements available to the public. The measurements, taken three at a total of five sites along the Mystic River system used heavily for recreational activities, including one on the substantially contaminated tributary the Alewife Brook, will be transmitted through cellular modem technology to a server at Tufts, where data will be analyzed and information made available to the public via the likes of television, internet, and telephone recordings. EMPACT's underlying goal is to provide the public with up-to-date information about whether or not it is safe to boat, or even swim, at various points along the river.

"This is a tremendous advancement for the community and may well serve as a model for other urban areas across the country," Mayor Kelly Gay stated upon announcement of the project. "It represents an important first step beyond regulatory initiatives under way to clean up the Mystic River."

invasive exotics and to replace them with native species of greater value.

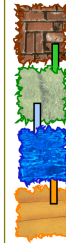
There are no known rare or endangered plant species in Somerville.

### 4E Fisheries and Wildlife

Somerville is an urban area and, therefore, has a fairly typical collection of urban wildlife. There are not any known rare or endangered species inhabiting the City. Many people, however, appreciate the wildlife that is present and would favor the enhancement of habitats to attract a more diverse selection of wildlife, particularly birds, through tree and shrub planting.

Species diversity is the highest on the fringes of the City along the Mystic River and Alewife Brook. That diversity tends to thin out as one moves towards the City's center because there are fewer desirable areas of habitat. The central part of the City has few large parks with mature trees and, for the most part, lacks the variety of food sources and cover that protect wildlife from predators and provide other vital cover factors. There is a paucity of evergreens for nesting and shelter in the winter months.

There are several railroad rights-of-way in Somerville which are important corridors for wildlife. In many places these railroads have steep banks which have become heavily vegetated. These "wild" areas have become many of the most important places in Somerville for nesting



## Biodiversity Days



Biodiversity is the term used to describe the number of different kinds of plants and animals in an area. "Biodiversity Days" is the creation of Massachusetts Environmental Affairs (EOEA) Secretary Bob Durand to draw attention to the natural environment and the need to protect biodiversity and ecosystems. The first 3-day celebration of Biodiversity Days was held in June 2000. Activities helped to reconnect people with nature, and helped inform the public about the importance of native habitat and species. The Somerville Conservation Commission has co-sponsored a celebration of Biodiversity Days each year since its inception. In May-June 2002, Conservation Commission members and volunteers from Eagle Eye Institute and GroundworkSomerville led five educational tours to look for birds, mammals, insects, trees and other plants. Students and the general public learned to identify different plants and animals, and counted different species during the tour. Totals of plants and animals were forwarded to the EOEA for inclusion in its Local Species and Habitat Registry database.

birds. Garter snakes have also been identified there. Although the best mammalian habitat sites may be in the wooded rail corridors and the river parks, resident mammals are spread through the City, occurring in many of the neighborhoods away from both parks and railroads. These mammals include gray squirrels, raccoons, opossums, skunks, mice, rats, and even brown bats. The river areas may provide access points for rabbits, foxes, muskrats, moles, shrews, and other mammals, but documentation of these species is lacking. All of these species have been documented nearby, up river from Somerville and, therefore have the potential for occurring in Somerville.

Bird life is relatively varied in Somerville. Identified species include, cardinals, chickadees, juncos, mocking birds, blue jays, downy woodpeckers, crows, mourning doves, robins, nuthatches, seagulls, catbirds, grackles, mallards, Canada geese, red-tailed hawks, swans, herons, terns, osprey and a reported pair of woodcocks near the Amelia Earhart Dam. All of these birds, however, are habitat specific and are not found throughout the City.; many are limited in their occurrence and can only be found in specific habitats such as those along the Mystic River or in railroad rights-of-way.

For the past three years, the Conservation Commission has participated in the State's Biodiversity Days.

The wildlife of Somerville has not been formally catalogued (although an innovative project in the Somerville Schools is currently underway to engage students and adults to document the City's biodiversity). Populations and nesting areas are not known. Perhaps such a formal catalog of the City's wildlife could be done in conjunction with one of the local universities. In addition, efforts could be made to increase populations of native wildlife, primarily through increased plantings of types of native vegetation that would provide both food and shelter. Efforts in other urban areas to do this show that this kind of habitat improvement for urban wildlife can increase the numbers of indigenous bird species, and reduce exotic species such as pigeons, starlings and house sparrows.

Blueback herring and alewife migrate up the lower Mystic River each spring through to the



lower Mystic Lake and up the Alewife Brook. There the herring spawn and then return to the ocean. While there are no documented sites of herring spawning in Somerville itself, these herring do run through Somerville in the spring and fall and are a fishery resource within the City of Somerville. Other fishery resources include the fresh water fisheries of the Mystic/Alewife River system. The species that make up that system are not well inventoried, but it is known that the system has been invaded by carp, an exotic species.

The major problem for fisheries and wildlife in Somerville is the fragmentation of available habitat areas. The normal upstream migration of blueback herring and alewife into the lower Mystic River is inhibited by the presence of the Amelia Earhart Dam at Assembly Square. Although a fish ladder was installed at the dam, it is not in working condition. The migration is preserved only by the actions of the MDC personnel who open the boat lock to allow fish passage several times during the spring.

Increased open space, green corridor development, density abatement and plantings beneficial to wildlife in established open areas would help improve Somerville's wildlife resources.

## **4F Scenic Resources and Unique Environments**

### **Scenic Landscapes**

Somerville's major physical characteristic is the density of its residential and commercial development. As the City's mayor commented nearly 100 years ago "Somerville is a city of homes...a city which requires unusual effort to make it beautiful, convenient and comfortable." The visual impact of such intense development is apparent when a building is razed creating a "view" or visual space along a street or at an intersection.

The riverside areas described in Section 4A and vistas described below are valuable scenic resources as are the larger open spaces (Foss Park, Trum Field, Lincoln Park). The City's many private and community gardens, grape arbors, and public plantings are welcome visual and environmental attributes if not scenic resources.

While Somerville may have few scenic landscapes, it has many scenic vistas, including hilltop, corridor, and riverside views. Those places where one is able to see into the distance and to "see the sky" are also considered important scenic resources in Somerville.

From east to west through the City there are scenic vistas in Somerville (Fig. 4):

- 1) from the banks of the Lower Mystic River near the Assembly Square Mall looking north and east in the direction of the Amelia Earhart Dam, along Shore Drive looking north and east and along the pathway looking north and east across to the MDC Reservation in Medford.
- 2) from the crest of Prospect Hill (and particularly from the Monument in Prospect Hill Park) in all directions.
- 3) from Winter Hill looking southeast toward the Boston skyline, and west at sunset.
- 4) from the Central Hill looking toward the northern suburbs and east in the direction of the Boston skyline.
- 5) from the crest of Spring Hill (particularly along Summer Street at St. Catherine's Church and at the corner of Craigie Street) looking south and west over Cambridge.
- 6) from any of the railroad bridges looking along the tracks and particularly from the new portion of the Bikeway looking west toward Route 2 in Arlington at sunset.
- 7) from Powderhouse Park overlook looking north-west over Tufts University.
- 8) from Powderhouse Boulevard looking in either direction, because of the tree



- canopy and setback.
- 9) from Tufts University land in Somerville looking west and south.
- 10) from the open space along the shore of the Alewife Brook on Somerville's western boundary, in all directions.
- 11) from the Bikeway Community Garden looking east and west along the Community Path.
- 12) from the center of the Labyrinth in the Growing Center.

### Historically Significant Areas

The following open spaces are of historic and cultural interest (see Fig. 4 and Appendix 3):

*"We should work with Corps of Engineers to open up Amelia Earhart Dam for visitors ... establish a visitor center there or nearby with exhibits about the river's history."*

—Anonymous Survey Respondent

- 1) Paul Revere Park, a National Park Service site, is located at the junction of Broadway and Main Street, at the crest of Winter Hill. Often referred to locally as the smallest park in the world, the site is marked by a simple stone to commemorate the route taken by Paul Revere on his ride to Lexington and Concord. This is also the site of the Winter Hill Fort, a revolutionary stronghold during the siege of Boston and a prisoner of war camp.
- 2) The Old Cemetery is located on the south side of Somerville Avenue opposite School Street. Originally part of the Samuel Tufts farm, this land was established as a cemetery in 1808 with the condition that the land be used only as a burying ground and that it always be fenced. The City was given control of the site in 1893. The cemetery is no longer in active service but remains the City's only burial place. An ornamental iron fence extends along the front of the cemetery and the first Civil War Memorial in the country, erected in 1863, is the main focal point of this site.
- 3) Nathan Tufts Park (also known as "Powder House Park") is the site of a historic powder house, built in 1704 as a gristmill. In 1747 this mill was deeded to the Province of Massachusetts Bay for use as a public powder house. The first encounter of the American Revolution occurred here in 1774, when the British seized more than 200 barrels of gunpowder. The property was later owned by the Tufts family, which operated a large brickyard just east of the site. At the end of the 19th century the family conveyed the property to the City with the stipulation that a park be erected around the Powder House for public use. The Powder House was renovated by the City in the late 1990s and the renovation of the Park is scheduled for completion in the Spring of 2003.
- 4) Prospect Hill Park was the site of camps and fortification built after the Battle of Bunker Hill. The Battle of Prospect Hill occurred when the British Troops were retreating from Lexington and Concord. The first flag of the United Colonists was raised on January 1, 1776, on the highest point of the hill. The top of the hill was later removed to fill adjacent meadows and to form the Boston and Main Railroad yard in the Brickbottom area southeast of Prospect Hill. A monument erected at this site commemorates Somerville's involvement in the revolutionary war.

Due to the extensive movement, extraction and filling of lands that has occurred in the City in the past 200 years there are no known areas of archeological significance in the City although further research may reveal interesting industrial or municipal dump areas.

## *Areas of Critical Environmental Concern*

According to the Massachusetts Executive Office of Environmental Affairs there are no designated Areas of Critical Environmental Concern within city limits.

## *4G Environmental Issues*

### *Hazardous Waste Sites*

Like many other older urban industrial cities, Somerville's contaminated properties or "brownfields" are spread throughout the community. Somerville contains a pattern and density of development that dates back over one hundred fifty years to an era when residences abutted industrial areas for functional reasons. Due to this historic development pattern, many of Somerville's 288 brownfields properties are situated within residential areas, causing blight and underscoring the need for environmental justice in such neighborhoods. Frequently, to continue a commercial end use for a brownfields site located in a residential area is not appropriate for the site, and residential or open space use provide for a more compatible development option.

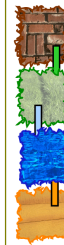
Although Somerville has 228 known brownfield sites, none of them are Superfund sites under the U.S. Environmental Protection Agency's (EPA) jurisdiction but rather are regulated by the Massachusetts Department of Environmental Protection (DEP) under M.G.L. 21E. Sometimes the presence of contamination affects the marketability of a site but is not usually prohibitive to redevelopment. Most often, the costs and responsibility for site remediation are considered in the negotiated purchase and sale of a property.

Contamination with petroleum products, a common characteristic of industrial and commercial sites, can be mitigated at relatively low costs. Given new technology and unique cleanup options that have been approved by DEP, even sites with other hazardous materials can be remediated with a financially acceptable option. In addition, contamination at many sites will be localized to a few "hot spots" which can be addressed by removal of a small quantity of soil, utilizing that area for parking where the asphalt serves as a cap, or treating the contamination with the soils kept intact at the site. Finally, remediation of the groundwater to drinking water standards is not required in Somerville since there are no drinking water wells serving the community.

The City of Somerville takes an aggressive stance toward the issue of contamination with three different efforts:

- 1) The prevention of further site degradation or contamination of new sites through the efforts of the City's Environmental Strike Task Force, the Somerville Fire Department, and the City's permanent Household Hazardous Waste Collection Center:
- 2) The investigation and listing of potentially contaminated sites to initiate these properties into compliance and/or remediation schedule.
- 3) Encouragement of site remediation or outright purchase and cleanup to prevent long term abandoned sites.

The City of Somerville has many innovative programs to assist owners of brownfields sites. For example, site investigation projects are eligible for funding through the City's site testing grant from the U.S. EPA. The Brownfields Cleanup Revolving Loan Fund program was capitalized by a grant from the U.S. EPA. This grant funding allowed the City to establish a revolving loan program to assist property owners with the costs associated with remediation. Somerville is one of nine cities in the United States chosen by the National Park Service with funds from the U.S. EPA to be a Groundwork community. Groundwork Somerville, a non-profit agency, assists with enhancement and improvement projects on or around brownfields sites.





## Landfills

All municipal solid waste generated in Somerville is unloaded from trucks at a transfer station in Somerville. All recyclable materials generated in Somerville are tipped at a Materials Recovery Facility in Charlestown, MA. It is not known whether the City has any defunct municipal landfills, although further research may locate dumpsites.

## Erosion/Chronic Flooding

Neither erosion nor chronic flooding are issues of relevance in the City of Somerville. Sedimentation is addressed briefly in Section 4C of this report. Localized flooding due to stormwater runoff is addressed in section 4C as well.

## Connecting People and Places



An exciting new plan is in the works in Somerville, one that will benefit both open space and transportation while tying the various neighborhoods of the city together and linking the city to its surrounding communities.

Working with the local "Friends of the Community Path," the City has proposed a 2.5 mile extension to the existing path (which now runs from Davis Square to Cedar St.), bringing the bikeway from Cedar St. to Northpoint (near Lechmere, just over the border in Cambridge), and eventually meeting up with the Charles River Bridge near the Boston Museum of Science.

The current plan, the result of a feasibility study completed in May of 2001 calls for much of the route to be constructed along a section of the Lexington & Arlington Railroad. The path itself, due to the likelihood that the MBTA will probably extend the Green Line from Lechmere to Tufts University in upcoming years, will be laid out atop an embankment on the western side of the railroad corridor, with a fence to shield it from the tracks.

Originally envisioning the trail as a route to move bicycles in a city where 25% of all households do not own cars, its proponents soon realized that, like the existing segment of the path, an extension would be a valuable piece of open space accessible to all members of the Somerville community, and thus spawned the name, "Somerville Community Path."

Since the completion of the feasibility study, the City and the Friends of the Community Path have worked hard with the MBTA and other owners of much of the property the trail will run along – and solicited private donations in an attempt to get the ball rolling. Lynn Weissman, spokesperson for the Friends group, estimates that the cost of the path's design will be in the figure of \$200,000 to \$300,000, with construction running upwards of ten times that of the design. So far, the city has provided partial funds for the design, which may be the most challenging phase of the process, as a number of federal grants appear up for grabs once the project is ready for its construction phase.

As far as a time frame on the project, it is simply too early to say. "Right now," says Weissman, "we're just trying to make all the pieces necessary for the design to come together."

When it does come together, the path will unite more than just Somerville. Coupled with the neighboring Minuteman bikeway that runs from Arlington to Bedford and the Charles River Path to Waltham, as well as a variety of paths and works in progress statewide, the trail will be the first segment in the proposed Central Mass Railway, which will run 104 miles from Boston to the town of Williamsburg, with much of the route along the path of a railroad that was shattered by a hurricane in 1938.

## Ground and Surface Water Pollution; Point and Non-Point and Development Impact

Water pollution is a critical issue to the fulfillment of Somerville's full open space and recreational potential. Point and non-point sources, from within and out of Somerville, combine to degrade the portions of the Alewife Brook and the Mystic River bounding Somerville. Several regional pollution problems are manifest in Somerville's water bodies due to their location near the mouth of the Mystic River.

The point sources consist of combined sewer overflows (CSOs) upstream of the City, as well as two remaining CSOs in

Somerville, which make water bodies unusable for days following heavy rains. CSO impacts are magnified by the presence of illegal sewer hookups to stormwater collection system. These problems are shared by most of Somerville's neighbors, although work is underway throughout the watershed to correct the problem (see Section 4C above).

Non-point source pollution issues arise from Somerville's intensely urbanized development. The urbanized development creates expansive impermeable surfaces, including paved yards, which generate large volumes of runoff, an ongoing problem for the Conservation Commission and the health of the City's water bodies. The runoff is commonly contaminated with road and highway dirt, auto leakage, animal wastes, trash, and other unwanted materials. Again, Somerville shares these

non-point water pollution issues with most neighboring communities. The Somerville Zoning Ordinance contains some provisions limiting ground coverage of new development and requiring landscaped areas

on all lots, but these provisions could be strengthened to better limit overall impervious surface on a lot.

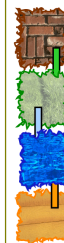
Even though the Conservation Commission has stenciled water destinations with pleas not to dump next to storm drains, and DPW has started monitoring drainage pipes into surface water resources, the combined point and non-point water pollution onslaughts remain a major obstacle to the realization of the open space and recreational capacities of the City's water resources.

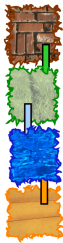
*"Build the bike path extension."*

—Anonymous Survey Respondent

*"Impervious surfaces cost everyone money because of storm drains needed for runoff."*

—Anonymous Survey Respondent





## Section 5: Inventory of Lands of Open Space, Conservation, and Recreational Interest

This section provides information about Somerville's current open space. The inventory matrix and neighborhood maps on the following pages include parks, playgrounds, and significant open space parcels from an informal survey done in spring of 1996 by resident-volunteers, updated in 2002.

The following definition of "open space" is to be used throughout this Plan:

*Publicly owned, undeveloped land that is primarily vegetated, or paved areas that serve a recreational or cultural purpose. This includes, but is not limited to, parks, playgrounds, community gardens, walking or biking trails, cemeteries, civic plazas, and playing fields, regardless of the level of protection. Also included as open space are certain water bodies with recreational use, namely Alewife Brook and Mystic River.*

*Not included in this definition, but recognized for their potential usefulness as open space are certain privately owned properties, such as lawns, memorial sites, and other landscaped areas.*

The goal of listing and categorizing these properties is to provide a comprehensive inventory of the places and

properties in the City with current or future potential use for conservation, gardening, and/or active or passive recreation. It is understood that some of the properties contained herein may fall short of an idealized notion of open space in one respect or another—the sites may be in poor condition, currently paved, inaccessible to all residents at present. By listing these properties and acknowledging them for what they are, the inventory serves as an important tool for present and future planning: as a record of those locations presently in use and as a guide to highlight places in need of further protection, enhancement, or other attention.

OPEN SPACE PROPERTIES BY OWNERHIP ENTITY			
Owner	Number of Properties	Total Area (acres)	Percentage of Total Area
MDC	5	68.36	55.47%
City	58	48.24	39.15%
MBTA	3	6.13	4.97%
County	1	0.50	0.41%
<b>Total</b>	<b>67</b>	<b>123.23</b>	<b>100.00%</b>

OPEN SPACE PROPERTIES BY CURRENT USE (SOME OVERLAP WHERE MULTIPLE USES EXIST ON SINGLE PROPERTY)			
Current Use	Number of Properties	Total Area (acres)	Percentage of Total Area
Active Recreation	41	60.46	49.06%
Passive Recreation	10	65.76	53.36%
Community Gardening	6	1.23	1.00%
Lawn / Landscaping	5	1.21	0.98%
Historic Site	5	11.50	9.33%
Parking	1	0.92	0.75%
Cemetery	2	1.52	1.23%
Memorial Site	1	0.15	0.12%
None/Under Construction	4	1.04	0.84%
<b>Total</b>	<b>75</b>	<b>n/a due to overlap</b>	

In total, the inventory lists 67 properties with a combined area of just over 123 acres, approximately 4.7% of the City's total land area, but this figure is not entirely useful, as it merges so many different considerations. Depending on the particular issue at hand, one can distill the inventory down in a number of ways—by ownership, current use, level of protection, accessibility, and so on. The tables here provide some basic breakdowns of this information. The complete matrix can be found in

Appendix A. (Also included in the matrix, but not in the discussion or tables of this section, are approximately 45 acres of privately owned fields and church grounds excluded from the definition of open space in this plan.)

The roughly 60.5 acres of active recreation sites can be broken down as shown in the table to the right [Note: these numbers are approximate based on rough estimates and do not total exactly the number seen in the previous chart.]

BREAKDOWN OF ACTIVE RECREATION PROPERTIES (APPROXIMATE)			
Current Use	Number of Properties	Total Area (acres)	Percentage of Total Area
Playing Fields	9	34	56.07%
Playgrounds	39	18	29.51%
Community Path	n/a	5.8	9.51%
Basketball Courts	27	2.6	4.43%
Tennis Courts	3	0.3	0.49%
<b>Total</b>	<b>n/a</b>	<b>~60.7</b>	<b>100.00%</b>

Throughout the public process, comments were made concerning the relative numbers of paved vs. unpaved open space in the City. As a rough estimate, the following table attempts to break down the inventory in this way.

OPEN SPACE PROPERTIES BY PAVING			
Paving Condition	Number of Properties	Total Area (acres)	Percentage of Total Area
Unpaved	30	108.64	88.16%
Playgrounds	23	7.90	6.41%
Schoolyards	10	5.29	4.29%
Paved	4	1.40	1.14%
<b>Total</b>	<b>67</b>	<b>123.23</b>	<b>1.00</b>

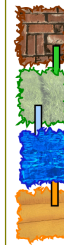
It can be assumed that at present all schoolyards and playgrounds are paved, although most contain at least some "soft" surface, such as wood chips or sand, and nearly all feature some sort of landscaped borders as well. Similarly, many of the areas listed as unpaved may include paved trails or parking areas.

OPEN SPACE PROPERTIES BY LEVEL OF PROTECTION			
Level of Protection	Number of Properties	Total Area (acres)	Percentage of Total Area
None	27	17.02	13.81%
Open Space Zoning	11	3.73	3.03%
In Perpetuity	28	101.78	82.59%
Unknown	1	0.70	0.57%
<b>Total</b>	<b>67</b>	<b>123.23</b>	<b>100.00%</b>

Adding together the categories with some level of paving, the total amount of paved open space can be approximated at 14.59 acres, or just under 12% of the open space inventoried. It is also important to remember that for some open space uses, such as basketball courts or playgrounds, pavement may be appropriate, but its use should be limited where possible to provide the aesthetic and environmental benefits of green open space.

OPEN SPACE PROPERTIES BY PUBLIC ACCESSIBILITY			
Public Access	Number of Properties	Total Area (acres)	Percentage of Total Area
Public	61	114.50	92.92%
Partial	3	7.70	6.25%
None	3	1.03	0.84%
<b>Total</b>	<b>67</b>	<b>123.23</b>	<b>100.00%</b>

Determinations of each site's condition, recreational potential, and public access (via public transportation) were made based on observation in 1997 and updated in 2002 by the City's consultant and the Office of Housing & Community Development.





## Types of Open Space Protection

Open space within a city, whether publicly or privately owned, can be protected against development in a number of different ways. The following are all forms of open space protection employed in Somerville and referred to in the open space matrix. Of these types of protection, only protection through deed restrictions, or funding through the LWCF or Urban Self Help programs (often requiring the placement of a deed restriction) are considered by the Division of Conservation Services (and this plan) to be “in perpetuity.”

**Open Space Zoning:** The Somerville Zoning Ordinance includes a provision for an “Open Space Zoning District,” which affords a degree of protection to open space parcels. Within this district, development is strictly limited, and the only permitted uses are those associated with recreation, farmers markets, outdoor seating, and certain protected institutional uses. Many of these uses require special permits from the Zoning Board of Appeals, providing an additional level of review and protection.

**Land & Water Conservation Fund Protection/Urban Self-Help Funding Protection:** In the case of many Somerville playgrounds, the receipt of grant funding affords these parcels protection as parklands, essentially in perpetuity. Note that for these properties the protection of Article 97 (below) would apply as well.

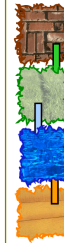
**Article 97 Protection:** A codification of the “Public Trust Doctrine,” Article 97 of the Massachusetts Constitution protects all publicly-owned lands used for conservation or recreation purposes. Before these properties can be sold, transferred, or even converted to a different use, this amendment requires a vote of the Conservation Commission and the Board of Aldermen as well as a roll-call vote of the State House and Senate.

**Protection through Conservation Restrictions, Easements, or other Deed Instruments:** Due to the high costs of acquiring land, it has become increasingly popular to acquire conservation restrictions limiting future development. Similarly, access easements can provide permanent public access to a property. In certain situations, deed restrictions or easements may be granted by a private party as part of a development approval process (as is required under the “Useable Open Space” provisions of the Somerville Zoning Ordinance). As with any matters involving real property, care must be taken in the drafting of the restrictions to ensure the rights and interests of all parties are represented and clearly documented. Conservation Restrictions must be approved by the State Division of Conservation Services.

**A Note About Schoolyards:** Many schoolyards are under a license agreement between the City of Somerville and the Somerville School Committee. This agreement permits the City to use the school grounds for a neighborhood playground. Schoolyards, however, do not have an individual zoning designation (with the exception of the University District for Tufts University) and fall into zoning districts as defined by the Somerville Zoning Ordinance. Schoolyards are not protected open space.

The Open Space Matrix column headings are defined below.

- **Type:** An administrative column related to ownership and type of use.
- **Name:** Names the open space site.
- **Size:** Gives the site’s acreage or an approximation in cases of the non-park and playground parcels. One acre is 43,560 square feet or 210 feet by 210 feet.
- **Owner/Management:** Indicates the owner of the property and the agency or department responsible for managing and maintaining the parcel.
- **Current Use:** Identifies whether the site is primarily used for active or passive recreation, gardening, landscaping, memorial site, or other use.
- **Condition:** Describes the general physical condition of the site, based on park



- and playground criteria, if applicable, or aesthetic and functional criteria.
- **Recreation Potential:** Suggests the potential for expansion of recreational uses or whether it has any recreation potential as yet unfulfilled (high, medium, or low).
  - **Public Access:** Indicates if the public can access the site via public transportation.
  - **ADA Access:** Indicates the degree to which the parcel is accessible to persons with disabilities.
  - **Paved:** Indicates whether or not the parcel is paved. Can be either “yes”, “no”, “playground”, or “schoolyard”. For the tabulation of results, playgrounds and schoolyards were assumed to be paved.
  - **Type of Grant Received:** Lists the type (if any) of grant received to purchase the land and the type. Land and Water Conservation Fund grants are indicated by LCWF. Urban Self-Help grants are awarded through the state Division of Conservation Services.
  - **Zoning:** Indicates what zoning district the parcel is within. Parcels zoned OS (Open Space District) are protected according to the Somerville Zoning Ordinance, Appendix 6.
  - **Degree of Protection:** Indicates if the site, either by virtue of its zoning or by the fact that it has received state or federal funding, is protected from sale and building development (see sidebar, left).

### Accessibility of Open Space

Much of Somerville’s recreational open space is accessible to persons with disabilities.

Current park and playground renovation complies with the accessibility requirements of the Americans with Disabilities Act, and all parks renovated since 1994 are ADA accessible. The ADA Coordinator of Somerville and Executive Director of the Disability Commission is Shenendoah Titus, who can be reached at 617.625.6600. The ADA Self-Evaluation can be found in Appendix D.

OPEN SPACE PROPERTIES BY ADA ACCESSIBILITY			
ADA Access	Number of Properties	Total Area (acres)	Percentage of Total Area
Full	35	29.20	23.70%
Partial	24	92.41	74.99%
None	5	1.34	1.09%
Unknown/Unverified	3	0.28	0.23%
<b>Total</b>	<b>67</b>	<b>123.23</b>	<b>100.00%</b>

## Section 6: Community Goals

### 6A Description of the Process

Throughout the open space planning process, all parties were in agreement that public participation was a central concern for the present update. Rather than a dry and technical plan that simply met the letter of the requirements of the State, this Plan would need to include and address the needs and concerns of the multitude of open space and recreation interests in the City, including City boards and departments, local and regional environmental groups, and the community at large. In addition, it was agreed that the Plan Update would need to focus on implementation and concrete actions (and not simply offer vague “motherhood and apple-pie” visions), and the public process should include consideration of these aspects.

*“Acquire as much space as possible/reasonable, without sacrificing human quality-of-life items, i.e. housing, employment, etc.”*

—Anonymous Survey Respondent

*“When the City takes a property for non-payment of taxes, the first consideration should be whether that property can be converted to open space use.”*

—Anonymous Survey Respondent

The public participation component of the process involved a number of simultaneous and mutually-reinforcing tracks, including public meetings and neighborhood forums, open space visibility events interviews with key players, and a qualitative survey.

The goals, objectives, and five-year action plan described herein represent the sentiments expressed through these channels, as well as the collective knowledge and expertise of City staff, volunteers, and advocacy groups dedicated to open space and recreation. Excerpted below is the open space section of the recently adopted “Community Development Plan” vision funded under Executive Order 418; the visioning sessions of this project took place concurrently with the preparation of this Open Space Plan, and the information and views expressed by residents helped to further define the goals presented here. Also included as an Appendix

	ASPECTS TO PRESERVE	ASPECTS TO ENHANCE OR IMPROVE	POTENTIAL CONNECTIONS AND/OR TRADEOFFS
OPEN SPACE	<ul style="list-style-type: none"> <li>▪ Preserve variety of neighborhood parks and playgrounds within walking distance of nearly all residents</li> <li>▪ Preserve trees and remaining natural areas</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improve connections between open spaces, especially along the Community Path and along the Mystic River</li> <li>▪ Prevent additional paving or development of public and private green space</li> <li>▪ Acquire additional open space properties when unique opportunities arise</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ensure adequate open space opportunities for new and existing housing, whether public or private (connects to Housing Element)</li> <li>▪ Enhance connections between open spaces and commercial centers, especially in Davis Square (Community Path) and Assembly Square (Mystic River waterfront) (connects to Economic Development Element)</li> <li>▪ Develop Community Path and river waterfront as open space as well as alternate transportation route (connects to Transportation Element)</li> </ul>

are more detailed results of these neighborhood meetings, as well as results of the Open Space & Recreation attitudes survey. Finally, central to this plan is a critical evaluation of past progress on the action items contained within the previous plan, and a concerted effort to revise, reformulate, and redefine these tasks into a concrete, ambitious, and implementable plan for action.

## **6B Statement of Open Space and Recreation Goals**

Somerville has been a home to more than a million people since it became a city in 1872. Because of Somerville's high density, the quality of life in our city of homes and businesses is greatly enriched by the many open spaces in which we play, gather, garden and exercise. Our open spaces buffer the visual clutter and auditory clatter of the City; the trees and plants found in our urban open spaces add greatly to the health of the City's people by cleaning the air and providing beauty for the spirit.

The eight open space and recreation goals for Somerville, listed below, support the existing open space of Somerville, enhance it with care, and encourage the expansion of open space and its benefits to the quality of life in the City.

The Goals described below can be grouped into "Substantive" goals to improve open space and recreation in the City, and "Organizational" goals to create the administrative structures necessary to achieve these ends. Note also that the appearance of a goal or objective in these pages is not to imply that steps are not already being taken in this direction.

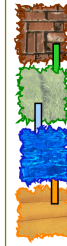
### **ORGANIZATIONAL GOALS**

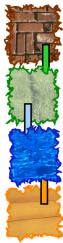
- **Goal 1—Funding and Support:** To increase funding, staffing levels, and other support to meet existing management and programming needs.
- **Goal 2—Management and Programming:** To make the most of our limited supply of open space through the coordination of open space and recreational activities within the City.
- **Goal 3—Active Public Involvement & Ownership:** To promote and expect public awareness, utilization, and care of Somerville's open space and involve the public at all levels of open space decisions and stewardship.
- **Goal 4—Regionalism:** To emphasize, investigate, and benefit from a regional approach to open space and recreation, including both cultural and ecological regions.

### **SUBSTANTIVE GOALS**

- **Goal 5—Preservation and Stewardship:** To maintain, manage, preserve, and otherwise steward our existing open spaces, recreational facilities, and natural resources.
- **Goal 6—Enhancement:** To improve the City's open space and recreational facilities and programs to provide innovative, state-of-the-art, and accessible opportunities for all residents.
- **Goal 7—Expansion:** To expand and increase the City's inventory of permanently protected open space and recreation resources through acquisition (and other means) whenever feasible.
- **Goal 8—Environmental and Public Health:** To safeguard and improve the health of our community, including consideration of physical, mental, social, economic, and environmental well-being.

In essence, these eight goals can be understood together as forming a comprehensive vision for open space in our City, concerned with the physical, organizational, and political aspects of open space.





## Section 7: Analysis of Needs

### 7A Summary of Resource Protection Needs

#### Water Resource Protection Needs

Despite much progress on the part of the City, the MWRA, and local and watershed groups, Somerville's water resources are still much in need of enhancement and protection. Along with the ongoing problem of non-point pollution runoff from the streets, parking lots, and even yards, two combined sewer overflow pipes still allow untreated sewerage to flow into the Alewife Brook and Mystic River after major storm events. Both of these problems must be addressed if the Mystic is to be truly swimmable and fishable.

Beyond these seemingly perennial needs, some more specific needs are:

#### The Mystic River Shoreline

The two disjoint Mystic River shoreline areas, Shoreline Drive near Ten Hills and the Assembly Square mall area, need

- 1) better connections between each other and the rest of Somerville, as well as to neighboring Medford (for example, an undercarriage at the Wellington Bridge);
- 2) enhancements to improve their utility to various sub-populations (e.g., cyclists, dog walkers, educational groups, etc.); and
- 3) improved access to the water for boating and fishing.

#### Alewife Brook

The virtually unknown strip of Somerville adjoining the Alewife Brook needs more access and visibility to increase its utility to Somerville residents. Water quality and safety issues must be addressed before more public use can be supported. This shoreline shares with Somerville's Lower Mystic River the need for stronger cross-municipality revitalization and wetlands protection.

#### Fisheries and Wildlife Protection Needs

Healthy fisheries need healthy water and access to it. Along with open space preservation and enhancement, many other efforts to protect surface water resources and wetlands obviously protect the fish and wildlife habitats associated with the City's water resources. As discussed in Section 4, the annual herring migration in particular is threatened or compromised by a number of problems, including nonpoint source pollution and a broken fish ladder.

#### Vegetation Protection Needs

The use and enjoyment of open space is greatly enhanced when there are green corridors connecting the different parcels of open space. Connected and related open spaces not only serve as wildlife passageways but they diffuse overcrowding in densely settled areas. The planting efforts of the City's tree planting program, of Somerville's Garden Club, and of Earthworks/Groundwork Somerville along the bikeway and across the City represent an important way to meet the needs of native and migratory birds and other wildlife forms.

A strong case can be also made for the protection of mature trees (if not all healthy trees) due to the clear environmental, aesthetic and economic enhancements which they provide.

Street trees must be cared for, provided with adequate tree pits or other sources of water, and protected from disease, salt, vandalism, car damage, and unnecessary trimming. Street trees must also be replanted when removed, to ensure that the total inventory grows each year.

## 7B Summary of Community's Needs

Somerville's parks have seen a significant transformation over the past several years. Mayor Dorothy Kelly Gay along with Somerville residents, Aldermen, Office of Housing and Community Development, Conservation Commission, and Department of Public Works staff are working hard to renovate and maintain the City's parks and open spaces.

*"Urban parks are a crucial element in the statewide open space system. Local parks and playgrounds provide everyone with easy access to the outdoors, whether for active sports or quiet contemplation. As Olmsted envisioned, urban parks function as democratic gathering places where citizens of different ages, classes, and backgrounds can freely meet and mingle."*

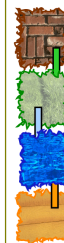
—From *The State of Our Environment 2000*, Executive Office of Environmental Affairs.

This has not been an easy task. Somerville is one of the most densely populated cities in the Commonwealth. Furthermore, only 4.7% of the land within the City's borders (123 acres) is allocated for parks and open space. Of that land, a little more than a third (about 48 acres) is owned and managed by the City. The balance is in the hands of the MDC (about 68 acres), and the MBTA (a little over 6 acres). Private holdings, such as Tufts University's fields and large church properties account for an additional 44 acres of fields and lawns that, while not considered public open space under this plan, do provide a valuable resource to Somerville residents. As a result of these figures, our community has significant constraints in planning and improving the City's parks and open space. [Note: the Open Space Inventory in Section 5 provides a more detailed breakdown of these spaces, including figures for type of ownership, protected/unprotected status, paved/unpaved status, types of use, and so on.]

COMMUNITY	POPULATION, 2000 CENSUS	TOTAL LAND AREA (SQ. MILES)	O.S. ACRES, CITY-OWNED	O.S. ACRES, OTHER PUBLIC	O.S. ACRES, PRIVATE	TOTAL OPEN SPACE ACRES	PERCENTAGE OF LAND AS OPEN SPACE	O.S. ACRES PER 1000 PEOPLE
Arlington	42,389	5.18	183.13	56.07	128.78	367.98	11.10%	8.68
Cambridge	101,355	6.25	378.41	222.09	137.19	737.69	18.44%	7.28
Chelsea	35,080	1.86	16.00	2.00	2.00	20.00	1.68%	0.57
Everett	38,037	3.36	95.36	58.74	166.54	320.64	14.91%	8.43
Malden	56,340	5.08	184.43	79.55	185.14	449.12	13.81%	7.97
Medford	55,765	8.21	365.84	1,410.35	106.06	1,882.25	35.82%	33.75
<b>Somerville</b>	<b>77,478</b>	<b>4.11</b>	<b>49.35</b>	<b>74.88</b>	<b>44.43</b>	<b>168.66</b>	<b>6.41%</b>	<b>2.18</b>
<b>Average</b>	<b>58,063</b>	<b>4.86</b>	<b>181.79</b>	<b>271.95</b>	<b>110.02</b>	<b>563.76</b>	<b>18.11%</b>	<b>9.71</b>

Compared to neighboring cities, Somerville has the second lowest percentage of land as open space, well below the average of 18% for this inner-core region (only Chelsea has less: 1.68%). On a per-person basis, the City contains just over two acres per thousand people, just 22% of the area average. To put this in context, consider that for every thousand residents, our City has only two acres of open space—about the size of the average suburban house lot.

The lack of open space negatively impacts the community's self image. While Somerville has a variety of positive features, its dearth of vegetated open areas, particularly in neighbor-



*"Maintain what already exists, keep everything clean!"*

—Anonymous Survey Respondent

hood centers detracts from its overall image. A few more well-groomed parks strategically placed would pleasantly interrupt the density of buildings

and parking lots. Trees planted by the City are a welcome addition to the urban landscape.

In addition to comparing the City with its neighbors, Somerville's open space inventory can be compared to accepted national standards. In doing so it must be understood that some of these standards may apply better to less-urban locations (e.g., it is not surprising that Somerville has more basketball courts and fewer tennis courts than the standards dictate, or that the average park size is smaller than those found elsewhere). In addition, Somerville residents have the opportunity to take advantage of a number of other passive and active recreational facilities within the region. This includes parks and trails in Cambridge, Medford, and Arlington that are frequented by residents of Somerville, such as the Minuteman Bicycle Trail, the Charles and Mystic River Reservations, and the Middlesex Fells.

TYPE OF AREA	STANDARD REQUIRED PER 1,000 POPULATION	RECOMMENDATIONS BASED ON SOMERVILLE POPULATION	ACTUAL ACRES IN SOMERVILLE (NUMBER OF SITES IN PARENTHESIS)	DIFFERENCE FROM STANDARD (ACRES) / PERCENTAGE OF STANDARD
Children's Play Area (with equipment)	0.5 acres/1,000 population	39 acres	19 acres (39 sites)	Minus 20 acres / 49 % of standard
Field Play Areas	1.5 acres/1,000 population	116 acres	70 acres (10 sites, including Tufts University)	Minus 46 acres / 60 % of standard
Tennis & Outdoor Basketball Courts	1 acre/5,000 population	15.5 acres (approximately 75-100 courts total)	Approximately 3 acres (3 tennis courts, 29 basketball courts)	Minus 12.5 acres / 19 % of standard (30-40 % of standard by number of courts)
Swimming Pools	1 pool/25,000 population	3 pools	4 pools (3 public: MDC/Foss, MDC/Dilboy, Kennedy, 1 private: YMCA)	Plus 1 pool / 133 % of standard

*Source: Urban Planning & Design Criteria, second edition, de Chiara and Koppelman, 1975*

That said, it is clear from the table above that the City's inventory is deficient in terms of the acreages devoted to both playgrounds (approximately half of the prescribed standard) and playing fields (60% of the prescribed standard). Sixty-five more acres of playground and playing fields would be necessary to meet these standards, more than doubling the current figure for City-owned open space.

*"I'm not sure if there are enough staff for Parks and Recreation or the DPW."*

—Anonymous Survey Respondent

The number of tennis and basketball courts is below the standard, although basketball courts can often be used to "absorb" additional density through the use of "half court" games. Interestingly, the number of swimming pools exceeds the standard, although one is a small indoor private pool at the YMCA on Highland Avenue, and state budget problems at times threaten to restrict hours and seasons for the two MDC pools.

The Survey conducted as part of this Plan asked residents to rank the types of open space

they considered most needed in the City. Top vote getters were Bike Trails (36 responses), Conservation Areas (34 responses), Local Neighborhood Parks (32 responses), Children's Play Areas (21 responses), Hiking Trails (22 responses), Community Gardens (25 responses), Hiking Trails (22 responses), and Children's Play Areas (21 responses). The weighted averages of all responses (on a scale of 0-5, where 5 would mean that all respondents selected this item as "most important") and total number of respondents selecting each item (out of the 61 who ranked items) are shown at right. (It should be noted that including both of the similar categories of "Local Neighborhood Parks" and "Children's Play Areas" may have been an error in survey design, effectively "splitting the vote" for this type of use; adding the responses for these two, although not methodologically 100% sound, would indicate an even higher desire for local parks/play areas.)

TYPE OF USE	WEIGHTED AVERAGE (0-5)	NUMBER OF RESPONSES (OUT OF 61)
Bike Trails	1.89	36
Conservation Areas	1.64	34
Local Neighborhood Parks	1.44	32
Children's Play Areas	1.20	21
Hiking Trails	1.02	22
Community Gardens	0.99	25
Outdoor Performance Space	0.82	18
Skateboarding Facilities	0.79	15
Ice Skating Rinks	0.77	13
Public Access Boating	0.75	15
Tennis Courts	0.61	13
Dog Run	0.59	11
Indoor Playgrounds	0.44	8
Recreation Center Buildings	0.38	11
Soccer Fields	0.25	4
Street Hockey Areas (safe)	0.20	5
Sports Stadium (with bleachers/seating)	0.18	4
Basketball Courts	0.12	3
Baseball/Softball Fields	0.08	2
Swimming Pools	0.07	2
Volleyball Courts	0.02	1

Some of these survey results are in line with the Commonwealth's "Statewide Comprehensive Outdoor Recreation Plan" (SCORP), a broad-based document that considers open space and recreational needs on a statewide and regional basis. It examines different categories of open space and recreational facilities, the level of usage, the demographics and level of satisfaction of facility users, distance traveled by users, etc. For the Boston Metropolitan region, residents ranked swimming, walking, tennis, road biking, playgrounds, and basketball highest in terms of preference for new facilities. Thus, neighborhood parks, tot lots, playgrounds, bike paths and greenways were considered important needs. (Note also that in Somerville, many properties provide all of these uses together.)

A more sophisticated mechanism for assessing the sufficiency of the City's open space and recreation inventory, beyond the scope of this Plan, would be to make use of a "Level of Service" approach, as advocated by the "Park, Recreation, Open Space and Greenway Guidelines" of the National Recreation and Park Association (NRPA), as described in Appendix B.

## 7C Management Needs

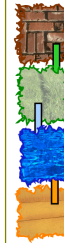
### Current Organizational Structure

The following departments or groups all play a major role in programming, managing, or protecting open space and recreation properties in the City:

- **Office of Housing & Community Development/Parks & Open Space:** The Parks & Open Space Division of OHCD is primarily concerned with park renovations and new

*"Because of the heavy demands for use put upon them, urban parks need a higher degree of maintenance. Yet such places have often gone underfunded and neglected."*

—From *The State of Our Environment 2000*, Executive Office of Environmental Affairs.





park development. Working closely with neighborhood residents through an involved public process, OHCD designs and renovates approximately three parks each year, on a needs-based rotating schedule. Once a renovation project is completed, responsibility for maintenance and upkeep falls to the DPW/Buildings and Grounds (or, for school properties, the School Department). Needless to say, close coordination between these departments is essential, as management and maintenance needs and abilities must be considered at the design stage. OHCD also houses the City's street tree planting program (which, in turn, must coordinate closely with the DPW divisions of Lights and Lines, Engineering, and Highways).

- **Conservation Commission:** The Conservation Commission was created through the State Conservation Commission Act to promote and protect open space and adminis-

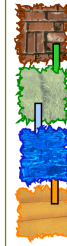
## City Open Space Agents



Arts Council  
Board of Alderman  
Communications Department  
Conservation Commission  
Department of Public Works (including Building and Grounds, Parks, Environmental Protection, Engineering, Highways, Tree Warden, Consulting Arborist, and Greenspace Coordinator)  
Disabilities Commission  
Mayor's Office of Human Services  
Mayor's Office  
Office of Housing and Community Development (including Open Space & Parks and Long-Range Planning)  
Planning Department/Planning Board  
Historic Preservation Commission  
Recreation Commission  
School Department

## Community, State, & Regional Open Space Agents

Alewife/Mystic River Advocates  
Executive Office of Environmental Affairs  
"Friends of" neighborhood groups (e.g., Friends of Lincoln Park)  
Friends of the Community Path  
Local Task Forces (Davis Sq., Union Sq., etc.)  
Massachusetts Water Resources Authority  
Metropolitan Area Planning Council  
Metropolitan District Commission  
Mystic River Watershed Association  
Somerville Bicycle Coalition  
Somerville Environmental and Recycling Volunteers  
Somerville Garden Club



ter the Wetlands Protection Act. Among its other functions, the Conservation Commission protects, expands, and improves Somerville's open space, including parks, gardens and public lands. The Conservation Commission also develops and supports the Community Garden Program by identifying and developing the number of gardens available to residents, increasing participation in group gardening activities, and increasing the resources available for maintaining and improving the gardens. The full-time Director of the Executive Office of the Conservation Commission also serves as Conservation Agent for the Commission and as Greenspace Coordinator for the City.

- **Department of Public Works/Buildings & Grounds:** This department is responsible for maintenance of all city Parks, Playgrounds, Broadway Islands and the Bike Path. The responsibilities are cleaning parks and playgrounds on a daily basis; permitting all the organized athletics for field use; removing graffiti in all public spaces in the City; repairing play equipment; painting lines and field preparation for baseball, football, and soccer games; lighting schedules for each park; and snow removal for all the bridges, the bike path, and public walkways.
- **Recreation Commission:** The Recreation Commission is primarily charged with programming and scheduling recreation activities for the City's open spaces, including youth and adult league play and group activities, as well as the City's summer playgrounds program, Summer Special Needs Program, and "Kid Stop" program at Powder House Park. In total, over 25 leagues or seasonal programs are sponsored by the Commission. *[Note: the position of Commissioner is currently vacant, due to a recent retirement.]*
- **School Department:** The School Department is responsible for managing many of the City's open spaces which take the form of schoolyards (and some of the playing fields), although often responsibilities for these properties overlap with the DPW or OHCD (when renovations occur). After a City funded renovation of a school yard, the school yards are shared by the school and by the community. They are considered community parks after school hours. East Somerville, Cummings School on the Prescott St. side and Winter Hill Community School, both Medford St. side and Evergreen St. side. are the only examples of this to date. The School Department also managed most of the City's indoor recreation sites open to the public, including community school gyms and the swimming pool at the Kennedy School.
- **Metropolitan District Commission:** Although not a City department, the MDC owns and manages three of the largest fields in Somerville (Foss Park, Draw Seven Park, and Dilboy Field), as well as the reservation land along the Mystic River and Alewife Brook. In all, the MDC controls over 55% of the City's open space. Somerville pays an annual assessment to the MDC for these services. *[Note: at press-time, the State is in the process of reorganizing a number of environmental agencies and functions, including the MDC.]*
- **Community Groups:** The City also enjoys a rich depth of community-based organizations active in open space and recreation issues, including the various sports leagues, some neighborhood "Task Forces," the garden club and other community gardening groups, and the host of local and regional environmental organizations active in the Mystic River Watershed. One

*"Better coordination of city departments, so not working against each other."*

—Anonymous Survey Respondent

noticeable shortcoming is in the area of local "Friends of" groups for the particular parks: only two or three of the City's more-than-45 parks have any such organization to speak of.

Although the respective responsibilities of the City departments are generally understood, it is not uncommon for there to be some overlap, or conversely some responsibilities that fall between the cracks. Since all of these departments are administratively separate (i.e., the only common link on the organizational chart is the Mayor herself), the potential for such confusion is even greater, and clear interdepartmental communication is essential to improve operations and understanding. For example, when a schoolyard property is to be renovated to include a play structure, a playing field, and a community garden, it is unclear exactly who should be making design decisions, who is committing to upkeep, who to contact with problems, and so on. Issues involving the MDC are prone to even more complications.

### Funding & Support

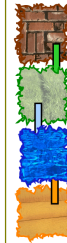
Although Somerville has surprisingly little space devoted to open space and recreation—a scant 123 acres in all, with fewer than 50 acres owned by the City—these spaces are very intensively used by the City's nearly 80,000 residents. Furthermore, unlike suburban or rural towns with large unbroken swaths of open space, Somerville's parkland is fragmented into over 45 different parks, each requiring individual attention. The sheer number of benches, swings, water fountains, planting strips, basketball nets, and so on requires an overwhelming amount of attention to maintain, which is not necessarily apparent when one simply looks at acreages. In a City like Somerville, even comparable funding and staffing levels for maintenance and upkeep are necessarily stretched thinner than in less urban settings.

COMMUNITY	FY2001 GENERAL FUND EXPENDITURES, TOTAL	FY2001 GENERAL FUND EXPENDITURES, "CULTURE & RECREATION"	FY2001 EXPENDITURES PER ACRE OF CITY-OWNED OPEN SPACE	FY2001 EXPENDITURES PER CAPITA	FY2001 EXPENDITURES FOR "CULTURE & RECREATION" AS PERCENTAGE OF TOTAL EXPENDITURES
Arlington	\$77,533,228.00	\$1,616,654.00	\$8,827.90	\$38.14	2.09%
Cambridge	\$274,681,242.00	\$9,956,095.00	\$26,310.34	\$98.23	3.62%
Chelsea	\$85,656,912.00	\$370,650.00	\$23,165.63	\$10.57	0.43%
Everett	\$88,513,574.00	\$2,204,535.00	\$23,118.03	\$57.96	2.49%
Malden	\$101,714,642.00	\$1,558,839.00	\$8,452.20	\$27.67	1.53%
Medford	\$96,915,130.00	\$1,729,414.00	\$4,727.24	\$31.01	1.78%
<b>Somerville</b>	<b>\$146,845,376.00</b>	<b>\$2,723,405.00</b>	<b>\$55,185.51</b>	<b>\$35.15</b>	<b>1.85%</b>
<b>Average</b>	<b>\$124,551,443.43</b>	<b>\$2,879,941.71</b>	<b>\$15,842.26</b>	<b>\$49.60</b>	<b>2.31%</b>

Compared to our neighbors, the City's commitment to fund open space and recreation is nonetheless impressive. Among the cities of Arlington, Cambridge, Chelsea, Everett, Malden, and Medford, Somerville's support for open space and recreation ranks second highest overall: over \$146,000 of the General Fund spending in the FY2001 budget was devoted to "Culture and Recreation" (the closest category kept by DOR available for comparative purposes).

*"Let's build an indoor playground, to get us through the wet New England autumn and cold New England winter."*  
—Anonymous Survey Respondent

On a per-acre basis, the City spends over \$55,000 per acre of City-owned open space, more than twice as much as any of these others. (The City also pays an annual assessment to the MDC, not included in these figures.)



On a per capita basis, however, Somerville's spending (\$35 per person) lags behind Cambridge (\$98), Everett (\$57), and Arlington (\$38). Note, also, that thanks to grants and other revenue sources, this means that the average Somerville resident is actually spending significantly less than \$35 a year for the parks—less than what many pay each month for private gym memberships elsewhere. FY2001 spending for this category represented approximately 1.85% of the City's General Fund expenditures, significantly below the average for the region (2.31%).

Simply put, despite a strong commitment on the part of the Administration and clear support on the part of residents, Somerville's Open Space and Recreation departments, programs, and properties remain under-funded and understaffed. In interviews and inter-agency meetings, all departments note staff and other resource shortages to meet current demands, to say nothing of the expanded workload envisioned by the Plan.

### *Management Needs Assessment*

Based on the results of the surveys, public meetings, interagency discussions, and on-site inventory of open space properties, this plan notes the following management needs:

- 1) Increased daily attention to maintenance and management needs, especially playground cleaning (litter, glass, and graffiti removal) and minor repairs (sprinklers, water fountains, and gate latches, etc.); public/private/neighborhood partnerships may prove essential here.
- 2) Improved programming of existing open spaces, to make full use of these limited resources.
- 3) Increased staffing and support for DPW/Buildings and Grounds, OHCD/Parks, and Conservation Commission/Greenspace Coordinator.
- 4) Increased public involvement in parks maintenance and management beyond the design stage, including active "Friends of" groups and ongoing private support for parks.
- 5) Improved communication between city departments and residents concerning park program and maintenance schedules, tree management issues, reasons for delays or closures, and the like, as well as clearer channels to report specific problems (a staff- or intern-written newsletter and/or website on open space, for example).
- 6) Better coordination between City departments concerning open space issues, especially long-term planning related to open space priorities, acquisition, and the competing demands for public properties.
- 7) Better coordination between the City, its neighbors, the MDC, the MWRA, and other public and private groups dealing with open space and environmental issues on a regional level.

In essence, all of these can be distilled down to two principal needs:

- the need for increased funding and support for open space and recreation departments, activities, and properties, and
- the need for improved communication concerning open space and recreation issues, within the City administration, between the City and its residents, and also between the City and the various state and regional agencies.

The Actions discussed below work in a concerted fashion to address these needs, calling attention to organizational tasks as well as substantive ones.



## Section 8: Open Space Goals and Objectives

### ORGANIZATIONAL GOALS

- **Goal 1—Funding and Support:** To increase funding, staffing levels, and other support to meet existing management and programming needs.
  - Investigate existing workloads and staffing levels to set priorities for allocating resources
  - Seek opportunities to pool or otherwise share resources between departments, agencies, commissions, and community groups
  - Seek additional funding for open space and recreation staffing and other needs
- **Goal 2—Management and Programming of Open Spaces:** To make the most of our limited supply of open space through the coordination of open space and recreational activities within the City.
  - Establish a permanent Open Space Advisory Committee
  - Seek opportunities to pool or otherwise share information between departments, agencies, commissions, and community groups
  - Develop and commit to measurements of customer satisfaction and accountability
- **Goal 3—Active Public Involvement & Ownership:** To promote and expect public awareness, utilization, and care of Somerville's open space and involve the public at all levels of open space decisions and stewardship.
  - Provide educational opportunities and events about Open Space and Recreation issues
  - Involve the community at all stages of decision making and open space stewardship
  - Periodically review the changing needs of Somerville residents
  - Promote the Goals, Objectives, and Actions of this Plan, and remind all constituencies of their responsibilities in implementing them
- **Goal 4—Regionalism:** To emphasize, investigate, and benefit from a regional approach to open space and recreation, including both cultural and ecological regions.
  - Work with the MDC to address local and regional open space issues
  - Work with neighboring communities to address regional open space issues
  - Work with regional environmental and nonprofit groups to address regional open space issues

### SUBSTANTIVE GOALS

- **Goal 5—Preservation and Stewardship:** To maintain, manage, preserve, and otherwise steward our existing open spaces, recreational facilities, and natural resources.
  - Preserve existing open spaces from development
  - Preserve water quality in the City and the watershed
  - Protect publicly- and privately-owned trees in the City
- **Goal 6—Enhancement:** To improve the City's open space and recreational facilities and programs to provide innovative, state-of-the-art, and accessible opportunities for all residents.
  - Continue to renovate parks and playgrounds
  - Address remaining ADA issues in all parks, playgrounds, and recreational

- o programs and facilities
- o Investigate opportunities to enhance existing open spaces through public-private partnerships and other innovative strategies
- **Goal 7—Expansion:** To expand and increase the City’s inventory of permanently protected open space and recreation resources through acquisition (and other means) whenever feasible.
  - o Expand the City’s supply of privately-held open space through zoning provisions, development agreements, deed restrictions, public-private partnerships, and other means
  - o Expand the City’s supply of publicly-held open space through outright purchase or dedication whenever feasible
- **Goal 8—Environmental and Public Health:** To safeguard and improve the health of our community, including consideration of physical, mental, social, economic, and environmental well-being.
  - o Research and inventory public health problems caused by environmental hazards in the community
  - o Inform and engage the public in a discussion of the connections between environmental issues and public health





## Section 9 Five Year Action Plan

The Five Year Action Plan is often the most difficult component of an Open Space Plan. Unlike the lofty goals and objectives of the previous sections, here is where the rubber meets the road, where our planning ideals are translated into concrete actions. An Action Plan can be difficult to commit to as well, and problematic to review over time: items that have been accomplished fade from view, while the more intractable problems continue to haunt us. Financial and political trends may change, advancing some items while leaving others high and dry. For these reasons alone, many communities are hesitant to put in writing the full scope of their intentions.

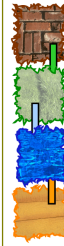
In contrast, the following action plan intends to deliver on the promise of the goals and objectives expressed throughout this process, with an ambitious program of tangible steps for the City to take over the next five years. There are many public and private groups and agencies already involved in open space activities in Somerville, generating a high level of activity on these issues. However, while much progress has been made addressing the goals and objectives of the previous plan, much work still needs to be done, especially in the areas of communication, coordination, and community responsibility/involvement.

These actions are targeted to address the physical as well as the organizational issues confronting the City, as described and analyzed in Section 7. The five-year action plan described below works to correct these "process" problems, while still maintaining a focus on the substantive issues of open space and recreation preservation, acquisition, enhancement, management, and maintenance.

Many of these actions are already well underway; others are ongoing but need additional support. And while all actions listed are recognized as important, four areas in particular rise to the top as being absolutely essential for any future progress towards meeting the goals of this Plan:

- (1) Obtaining "buy-in" from all City departments, commissions, and boards that open space is a central and lasting priority for the City. While there may be competing needs in the City, all groups must abide by the central tenet that open space issues are extremely important to the residents of Somerville. Where open space and recreational resources are concerned, the goals and policies of this Plan and the members or staffs of the appropriate open space agencies must be consulted. Furthermore, all departments and commissions must agree in advance on the proper decision making procedures to be followed in such matters.
- (2) The creation of an Open Space Advisory Committee, as originally recommended in the 1997 Plan. Although there are many groups and departments active in open space and recreation issues, their activities are not coordinated or focused; there is no single consistent voice for open space needs in the City. If the ambitious goals and objectives of this Plan are to be achieved, there needs to be a single committee charged with overseeing this progress and coordinating the actions and priorities of the various groups.
- (3) Completing a rational assessment of existing workloads, staff resources, and both short- and long-term priorities. It may be taken as a given that all departments involved in open space and recreation in the City are taxed beyond their existing capacity. As a result, many important projects may be perennially "back-burnered" and important opportunities may be lost. A comprehensive assessment of this issue could be used to make the case for additional staffing and funding, as well as to establish priorities to make the best use of existing limited resources.
- (4) Securing additional sources of funding, staffing, and other support for open space and recreation activities and programs. As discussed in the Needs Analysis section, open

space and recreation departments in the City (OHCD, Conservation Commission, DPW, and Recreation) are currently understaffed and do not possess the resources to implement all the actions of this plan. Indeed, keeping up with ongoing maintenance demands and programming already overtaxes the system. Support may be found in the form of additional staffing and larger departmental budgets or in other, less conventional means sources, such as local business sponsorship, donated community labor or park “adoption”, and greater reliance on federal, and private grants (though it must be understood that applying for additional grants and coordinating private support will place additional demands on existing staff).



[Note: The column marked "Priority" gives an indication of the weight given to this item in obtaining the overall goals and objectives of this plan. Priority can be understood to relate to both the "level of importance" of items and the necessary sequencing of them (i.e., without completing the first priority items, it may be difficult to proceed to the latter ones). In the tables, \* = lowest/last priority and \*\*\*\*\*=highest/first priority.]

**Goal I—Funding and Support: To increase funding, staffing levels, and other support to meet existing management and programming needs.**

**Objective A: Investigate existing workloads and staffing levels to set priorities for allocating resources**

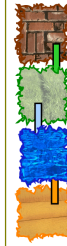
ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Comprehensively review workloads, project backlogs, and staffing levels for Conservation Commission/Greenspace Coordinator, OHCD/Parks, Recreation Commission, DPW/Building and Grounds, and School Department/Grounds (note: this task may be best accomplished by the hiring of an outside consultant)	*****	Mayor's Office, OSAC	Summer 2003
Document and publicize schedules for ongoing maintenance and care taking of parks, playgrounds, and memorials	****	OSAC	2004
Establish staffing and funding targets necessary to meet the objectives of this Plan and the open space and recreation needs of the City	****	OSAC	2004
Publicize the results of this Objective as a proposed "Green Budget" for the City	**	OSAC	2004

**Objective B: Seek opportunities to pool or otherwise share resources between departments, agencies, commissions, and community groups**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Consider savings or economies to be realized through physical relocation of departments	**	Mayor's Office	2005
Draw on additional in-kind support from neighbors and local businesses for park construction (work days), clean up, and ongoing maintenance	*****	OSAC	Ongoing
Investigate grant sources for joint public/private projects (e.g., community gardens, environmental education, park enhancements, etc.)	****	OSAC	Ongoing

**Objective C: Seek additional funding for open space and recreation staffing and other needs**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Consider the Community Preservation Act	*****	OSAC, Conservation Commission, Board of Aldermen	2004
Identify additional opportunities for funding through state, federal, or private grant sources; share application information with boards and commissions; create central repository for grant information	****	OSAC, OHCD	2004
Increase annual funding levels for open space and recreation programs and staff, in accordance with results of "Objective A" study	*****	OSAC, Board of Aldermen	2005





## Goal 2—Management and Programming: To make the most of our limited supply of open space through the coordination of open space and recreational activities within the City.

### *Objective A: Establish a permanent Open Space Advisory Committee*

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Recruit and convene Open Space Advisory Committee, consisting of City Staff (OHCD, Conservation Commission, DPW, Recreation Commission, Schools) and representatives of environmental and neighborhood groups	*****	Mayor's Office	Winter/Spring 2003
Ensure dedicated staffing for OSAC (10-20 hours per week minimum, beyond existing staff workload)	***	Board of Aldermen, OHCD	Winter/Spring 2003

### *Objective B: Seek opportunities to pool or otherwise share information between departments, agencies, commissions, and community groups*

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Hold well-publicized meetings to review progress towards meeting the goals of this plan and discuss ongoing obstacles (bi-monthly or more frequently)	**	OSAC	Winter/Spring 2003, then ongoing
Publish and disseminate interdepartmental information concerning park renovations, maintenance, programming, and other open space and recreation projects or issues	**	OSAC	Spring 2003, then ongoing

### *Objective C: Develop and commit to measurements of customer satisfaction and accountability*

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Conduct biannual customer satisfaction surveys of residents and park users	**	OSAC	2004, then biannually
Maintain and publish customer support "hotline" (telephone and email) for all open space, recreation, environmental, and street tree questions or problems	**	Mayor's Office	2004
Provide "on-line" registration to reserve playing fields	**	Recreation, Communications Dept.	Spring 2004
Post maintenance work orders, schedules, and reasons for delays in parks and playgrounds	**	DPW	Ongoing
Review policies and signage concerning "authorized" uses of parks, fields, and other recreational facilities (e.g., dogs/no dogs, hours of operation, type of sports allowed, etc.)	**	Recreation	Report by Fall 2004

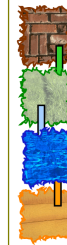
**Goal 3—Active Public Involvement & Ownership:** To promote and expect public awareness, utilization, and care of Somerville’s open space and involve the public at all levels of open space decisions and stewardship.

**Objective A: Provide educational opportunities about Open Space and Recreation issues**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Publish and disseminate open space newsletter	***	OSAC	Summer 2003, then ongoing
Publish and disseminate open space maps, brochures, and other informational resources	***	OSAC	Summer 2004
Create regular communication forums in Somerville Journal and cable television on open space issues	**	OSAC	Ongoing
Install and maintain community bulletin boards in all parks and playgrounds, with postings related to upcoming meetings and events, renovation and maintenance schedules, and contact information; welcome users to parks through signage	***	DPW (installation); OSAC and "Friends of" groups (maintenance)	Significant progress by Summer 2004
Expand program of open space/environmental events (e.g. Edible plants walk, Garden Tours, Tour de Somerville, etc.)	**	OSAC, various groups	Ongoing
Integrate local open space issues into School curriculum	**	OSAC, Schools	Ongoing
Translate and disseminate open space and recreation materials in Spanish, Portuguese, and Haitian Creole	***	Mayor's Office of Human Services	2004

**Objective B: Involve the community at all stages of decision making and open space stewardship**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Continue to involve neighborhood residents in all stages of park design/renovation	****	OHCD	Ongoing
Re-establish (and assist to staff, if necessary) "Friends of" groups for all parks and playgrounds, and commit dedicated City-staff to act as liaisons to these groups	****	OHCD, OSAC	Significant progress by year end 2004





**Objective C: Periodically review the changing needs of Somerville residents**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Conduct and disseminate biannual inventory of field/court usage levels	**	Recreation	Biannually, beginning in 2003
Monitor progress towards meeting the goals of this Plan	**	OSAC	Biannually, beginning in 2005
Update Open Space & Recreation Plan	***	OSAC	Begin work in 2006

**Objective D: Promote the Goals, Objectives, and Actions of this Plan, and remind all constituencies of their responsibilities in implementing them**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Publish and disseminate this plan in hard copy and via the internet	***	OSAC, Mayor's Office	2003
Get formal votes by boards and commissions accepting the Plan	*****	OSAC, Mayor's Office	2003

**Goal 4—Regionalism:** To emphasize, investigate, and benefit from a regional approach to open space and recreation, including both cultural and ecological regions.

**Objective A:** Work with the MDC to address local and regional open space issues

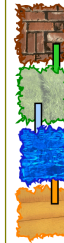
ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Designate a City Staff liaison to the MDC	****	Mayor's Office	Early 2003
Work with MDC to design renovations to Dilboy Field ( <i>duplicate item—see Goal 6</i> )	***	OHCD	Ongoing
Work with MDC and State agencies and officials to reconstruct Somerville Avenue skating rink ( <i>duplicate item—see Goal 6</i> )	***	Mayor's Office, OHCD	2003
Work with MDC to remove fencing from Alewife Brook	***	Conservation Commission	2005
Work with MDC to develop a draw-down policy for the Mystic River	**	Conservation Commission	2004

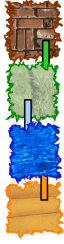
**Objective B:** Work with neighboring communities to address regional open space issues

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Designate a City Staff liaison for regional open space issues	***	Mayor's Office	2003
Distribute this plan to neighboring communities, and request copies of their most recent Open Space & Recreation Plan	**	OSAC	2003
Convene a working group of the MAPC inner-core specific to open space and recreation issues	***	OHCD	Fall 2003

**Objective C:** Work with regional environmental and nonprofit groups to address regional open space issues

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Designate a City Staff liaison for regional open space issues ( <i>duplicate item—see previous objective</i> )	***	Mayor's Office	2003
Distribute this plan to regional environmental groups	**	OSAC	2003
Continue to attend meetings and events of regional groups and Boston Harbor Watershed Basin Team	*****	OSAC/Greenspace Coordinator	Ongoing





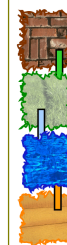
**Goal 5—Preservation and Stewardship: To maintain, manage, preserve, and otherwise steward our existing open spaces, recreational facilities, and natural resources.**

***Objective A: Preserve existing open spaces from development***

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Consider adoption of a "no net loss" policy for City-owned open space parcels	***	Mayor's Office, Board of Aldermen	Spring, 2003
Investigate current rules and regulations and/or departmental policies for Conservation Commission, Planning Board, Zoning Board, DPW, Schools Department, and OHCD to ensure interdepartmental review of all projects affecting parklands or other open spaces; clarify decision making policies and powers	***	Open Space Advisory Committee (OSAC)	2004
Consider rezoning schoolyards, community gardens, plazas, and other City-owned open space properties to provide (albeit limited) protection of OS zoning	**	Planning Board, Board of Aldermen	2005
Work with private owners of listed open spaces (churches, schools) to permanently protect open spaces	***	OSAC, Conservation Commission	2005

**Objective B: Preserve water quality in the City and the watershed**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Continue to work with state agencies to identify and correct adverse impacts from inputs to Alewife Brook and Mystic River, including two remaining combined sewer overflows, in conjunction with development of a Stormwater Management Plan to meet Phase II objectives	***	Conservation Commission, DPW, MWRA	2006
Conduct public outreach on problems of non-point source pollution and steps to minimize problems, in conjunction with public education and outreach component of the city's Stormwater Management Plan	***	Conservation Commission, MWRA	2004
Adopt stormwater best management practices for all City-owned/operated properties, including road and parking lot maintenance, new construction, and major renovations	***	Board of Aldermen; DPW, Conservation Commission	2004
Consider amending the Somerville Zoning Ordinance requirement for "maximum ground coverage" to include limits on impervious surface	***	Planning Board, Zoning Board, Conservation Commission	2005
Continue to integrate stormwater best management practices into zoning/subdivision review procedures	**	Planning Board, Zoning Board, Conservation Commission	2005
Reduce paved/impervious surfaces on all City-owned properties, especially schoolyards	***	Schools, DPW	2005
Continue to monitor, assess, and disseminate information of water quality in the Mystic and Alewife Rivers	**	Conservation Commission, MWRA	ongoing



## Objective C: Protect publicly- and privately-owned trees in the City



ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Consider establishing a Tree Committee, consisting of City Staff (OHCD, DPW, Historic Preservation) and neighborhood/environmental groups	**	Mayor's Office	2003
Consider adoption of a Tree Ordinance	**	Mayor's Office, Board of Aldermen, Conservation Commission	2004
Complete/update City's great tree survey, and distribute widely in print and on web	**	Tree Committee, Conservation Commission, Somerville Climate Action Group	2003
Consider adopting a tree ordinance for the care, planting and maintenance of trees, that would establish and publicize schedules and procedures for maintenance and replacement of street trees	**	OHCD, DPW	2003
Continue to aggressively expand inventory of City streets trees, including locations for special "landmark" trees for future generations	***	OHCD	ongoing
Increase size of new and existing tree wells and investigate ways to improve maintenance, such as installation of irrigation systems	***	DPW, OHCD	ongoing
Undertake public education re. Trees (e.g., develop "Great Tree Tour" events and/or self-guided tour materials)	*	Tree Committee	2004
Monitor utility crews when street trees are trimmed; whenever possible, relocate overhead wires underground to protect trees from unnecessary trimming	*	DPW, OHCD/Arborist	Ongoing
Conduct ongoing trainings for City Staff in street tree care and management	**	DPW	Ongoing

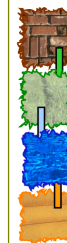
**Goal 6—Enhancement: To improve the City’s open space and recreational facilities and programs to provide innovative, state-of-the-art, and accessible opportunities for all residents.**

**Objective A: Continue to renovate parks and playgrounds**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Continue to renovate parks as per schedule in Appendix B	*****	OHCD	ongoing (see schedule)
Ensure that all water parks and drinking fountains are operational throughout the summer	***	DPW	Spring 2003, annually thereafter
Continue to involve neighborhood residents in all park renovation or development projects	*****	OHCD	ongoing
Work with MDC to design renovations to Dilboy Field <i>(duplicate item—see Goal 4)</i>	***	Mayor’s Office, OHCD	ongoing
Work with MDC and State agencies and officials to reconstruct Somerville Avenue skating rink <i>(duplicate item—see Goal 4)</i>	***	Mayor’s Office, OHCD	2003

**Objective B: Address remaining ADA issues in all parks, playgrounds, and recreational programs and facilities**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Include ADA coordinator in design review of all new/renovated parks and playgrounds	***	OHCD, ADA Coordinator	ongoing
Continue to address ADA issues as parks and playgrounds are renovated (see notes on inventory sheets)	***	OHCD	ongoing
Complete short-term “quick fix” ADA renovations where possible for parks further down renovation schedule (e.g., installation of accessible swings, removal of minor barriers, etc.)	****	DPW, ADA Coordinator	2004





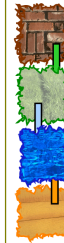
**Objective C: Investigate opportunities to enhance existing open spaces through public-private partnerships and other innovative strategies**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Connect the Mystic River Reservation shorefront walking/biking trail under Route 28 (perhaps in conjunction with development in Assembly Sq.)	***	OHCD; Bike Committee	2006
Work with MDC to remove fencing from Alewife Brook	***	Conservation Commission	2005
Increase programming of open spaces, including parks, plazas, and playgrounds (art exhibits, festivals, performances, block-parties, and other special events)	***	Mayor's Office, OSAC, various groups	Ongoing
Work on improvements at Draw 7 Park	***	OHCD	2005
Get MDC to appoint a liaison to work with Somerville	*****	Mayor's Office	2003
Work with MDC on other properties, including Foss Park and the Boathouse	**	OHCD	Ongoing

**Goal 7—Expansion:** To expand and increase the City’s inventory of permanently protected open space and recreation resources through acquisition (and other means) whenever feasible.

*Objective A: Expand the City’s supply of privately-held open space through zoning provisions, development agreements, deed restrictions, public-private partnerships, and other means*

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Create new open space and other public amenities in Assembly Square through development agreements and zoning provisions	*****	OHCD, Planning Board, Conservation Commission	Ongoing
Use the Zoning Ordinance’s “Usable Open Space” provisions to provide privately-owned publicly accessible open space through development	***	Planning Board, Zoning Board, Conservation Commission	Ongoing
Pursue means of obtaining/preserving open space access through deed restrictions or long-term leases where outright purchase is infeasible	**	OSAC, Conservation Commission	Ongoing/as opportunities arises





**Objective B: Expand the City's supply of publicly-held open space through outright purchase, dedication, or other means whenever feasible**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Expand the Community Path to connect with Boston and Cambridge	*****	OHCD; Bike Committee	Extension to Central Street by 2007
Develop additional community garden sites on underutilized City properties to meet growing demand	****	Conservation Commission	Significant progress by 2005
Consider converting schoolyard or other City-owned parking lots to additional open space (perhaps through ridesharing programs or provision of off-site parking)	***	OSAC, Schools	Study completed by Fall 2004
Study the creation of additional open spaces through the discontinuance of existing underutilized streets or portions thereof (e.g., short one-block segments of roads with no driveways fronting on them)	**	OSAC, OHCD, Traffic & Parking, DPW	Study completed by Spring 2005
Consider creation of rooftop or courtyard open spaces on existing City properties	**	OSAC	Study completed by Fall 2004
Develop additional indoor recreation areas, including an indoor playground for children in winter months	**	Recreation Commission	2007
Obtain surplus State or County property in the City appropriate for open space and recreation purposes, should it become available (e.g., Somerville Armory, County Courthouse, MBTA properties and rights-of-way) <i>[Note that other competing local needs also need to be considered in such decisions, such as housing, schools, and municipal office space.]</i>	**	OSAC	Ongoing/as opportunities arises
Review tax-title lists periodically to assess recreational/open space potential for properties listed (with special attention to providing links with existing open spaces)	**	OSAC	ongoing/yearly

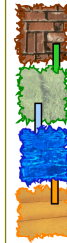
**Goal 8—Environmental and Public Health:** To safeguard and improve the health of our community, including consideration of physical, mental, social, economic, and environmental well-being.

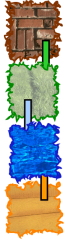
**Objective A: Research and inventory public health problems caused by environmental hazards in the community**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Continue to gather key environmental and public health indicators for the community and gather baseline data	**	Board of Health; Environmental Engineer	Fall 2003
Establish target goals to improve and monitor progress periodically	**	Board of Health; Environmental Engineer	Fall 2003, ongoing

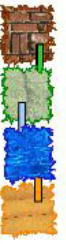
**Objective B: Inform and engage the public in a discussion of the connections between environmental issues and public health**

ACTION ITEM	PRIORITY	RESPONSIBLE LEAD	DEADLINE FOR COMPLETION
Publish and disseminate periodic updates on environmental and public health in the community	**	Board of Health	ongoing
Continue work of the Somerville Community Health Agenda	**	Board of Health	ongoing



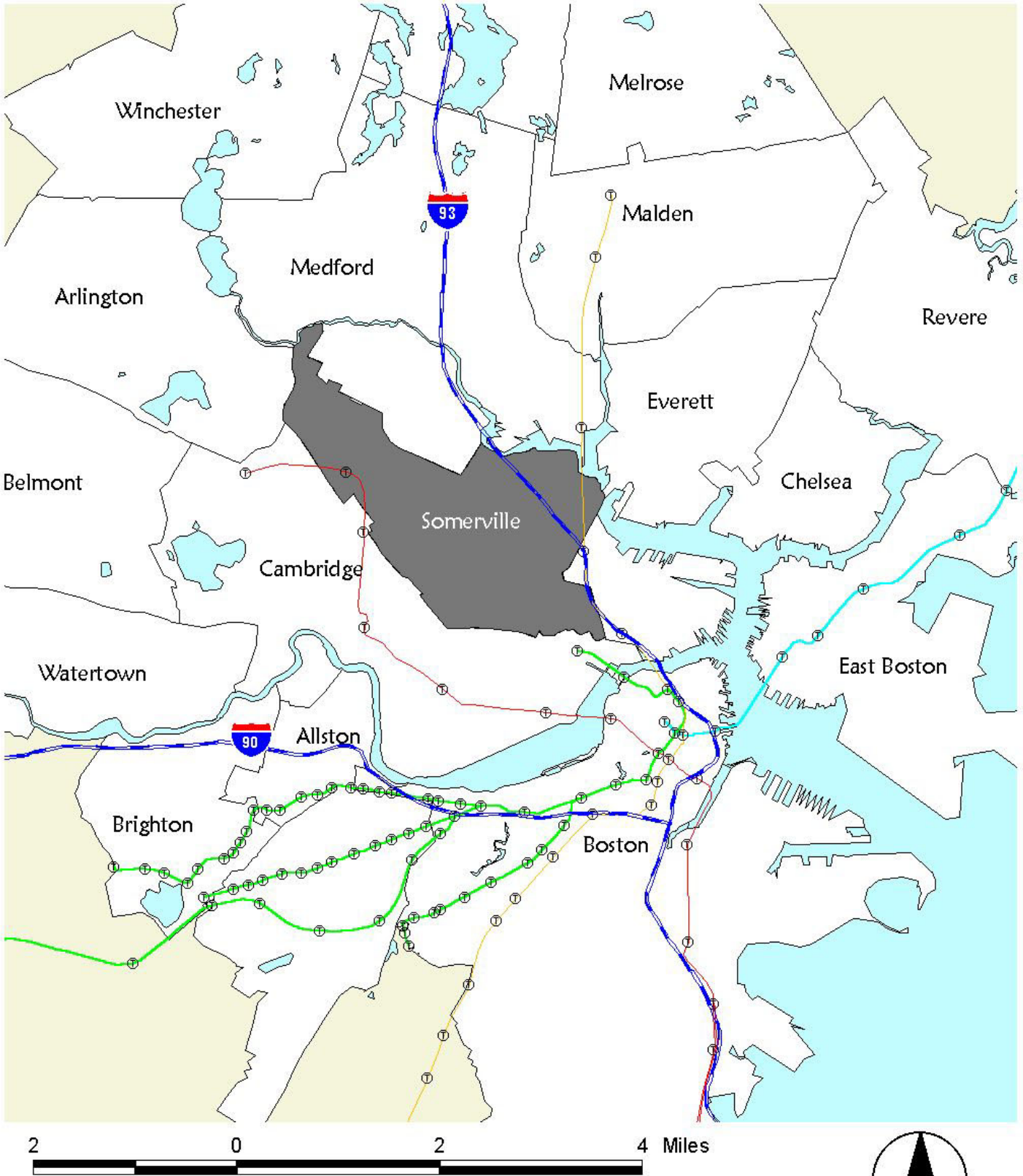
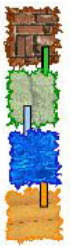


## Appendix A: Maps



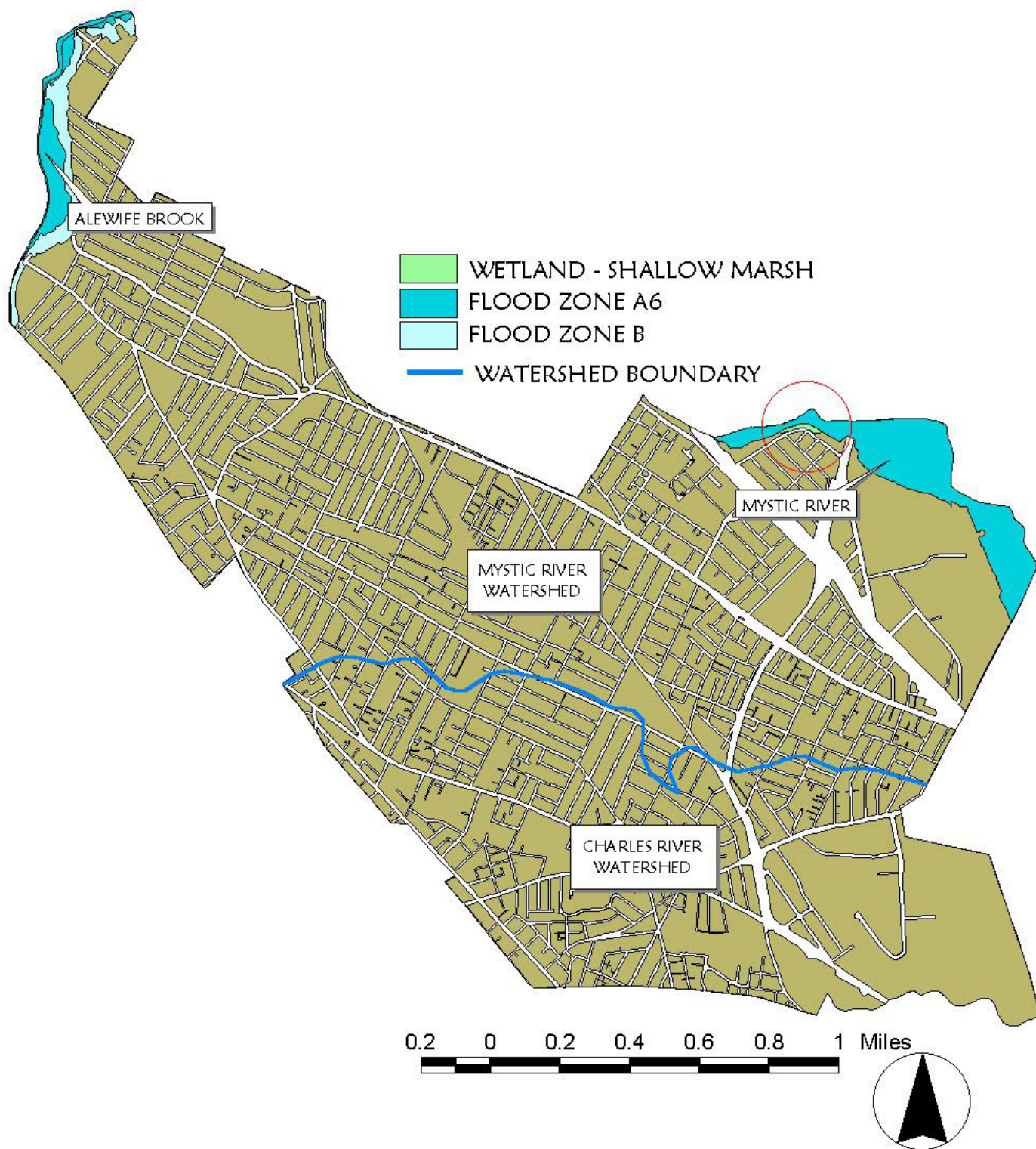
WATERSHED BOUNDARIES

FIGURE NO. 1



SOMERVILLE IN REGIONAL CONTEXT

FIGURE NO. 2



WATER RESOURCE MAP

FIGURE NO. 3

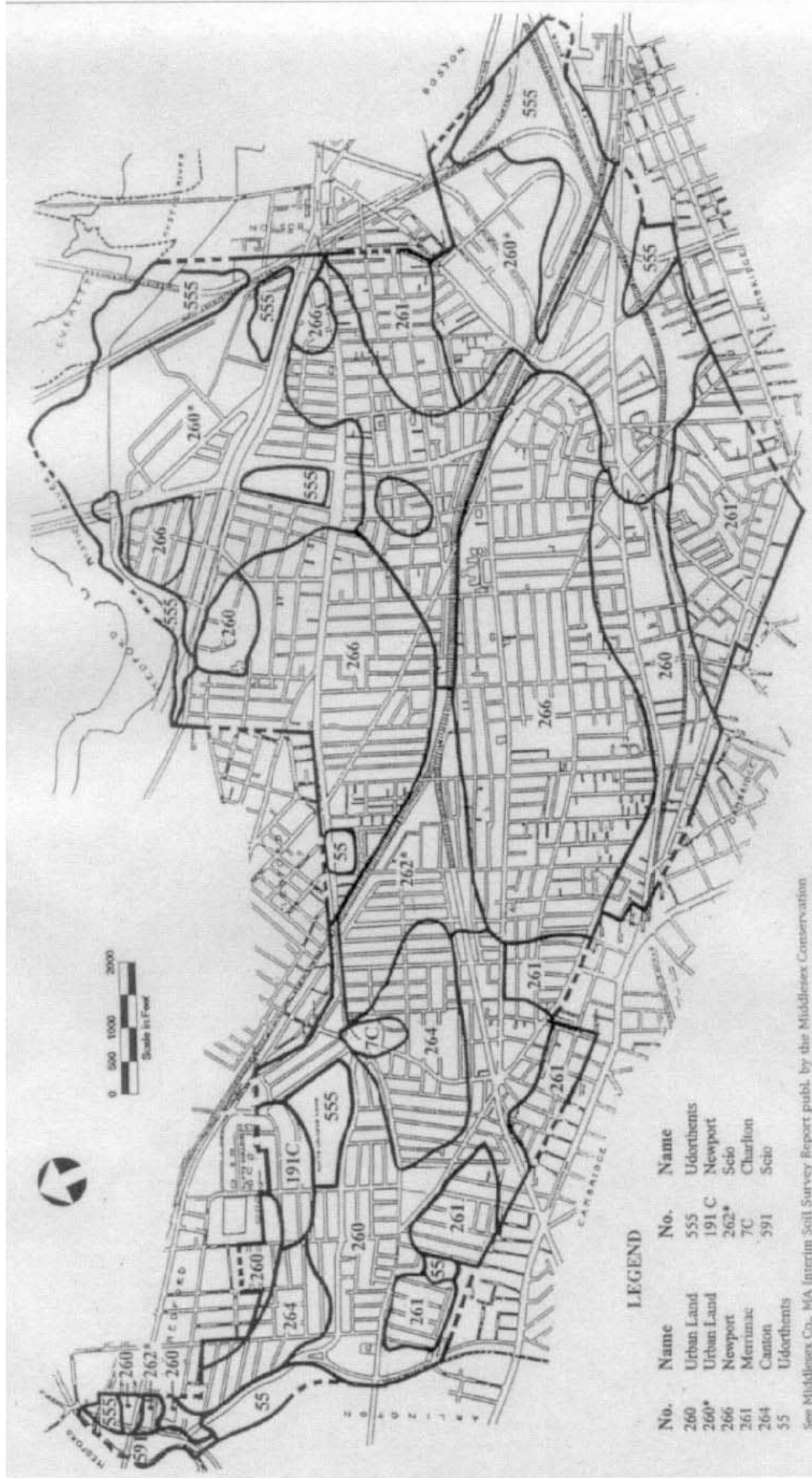
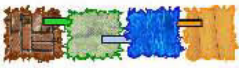


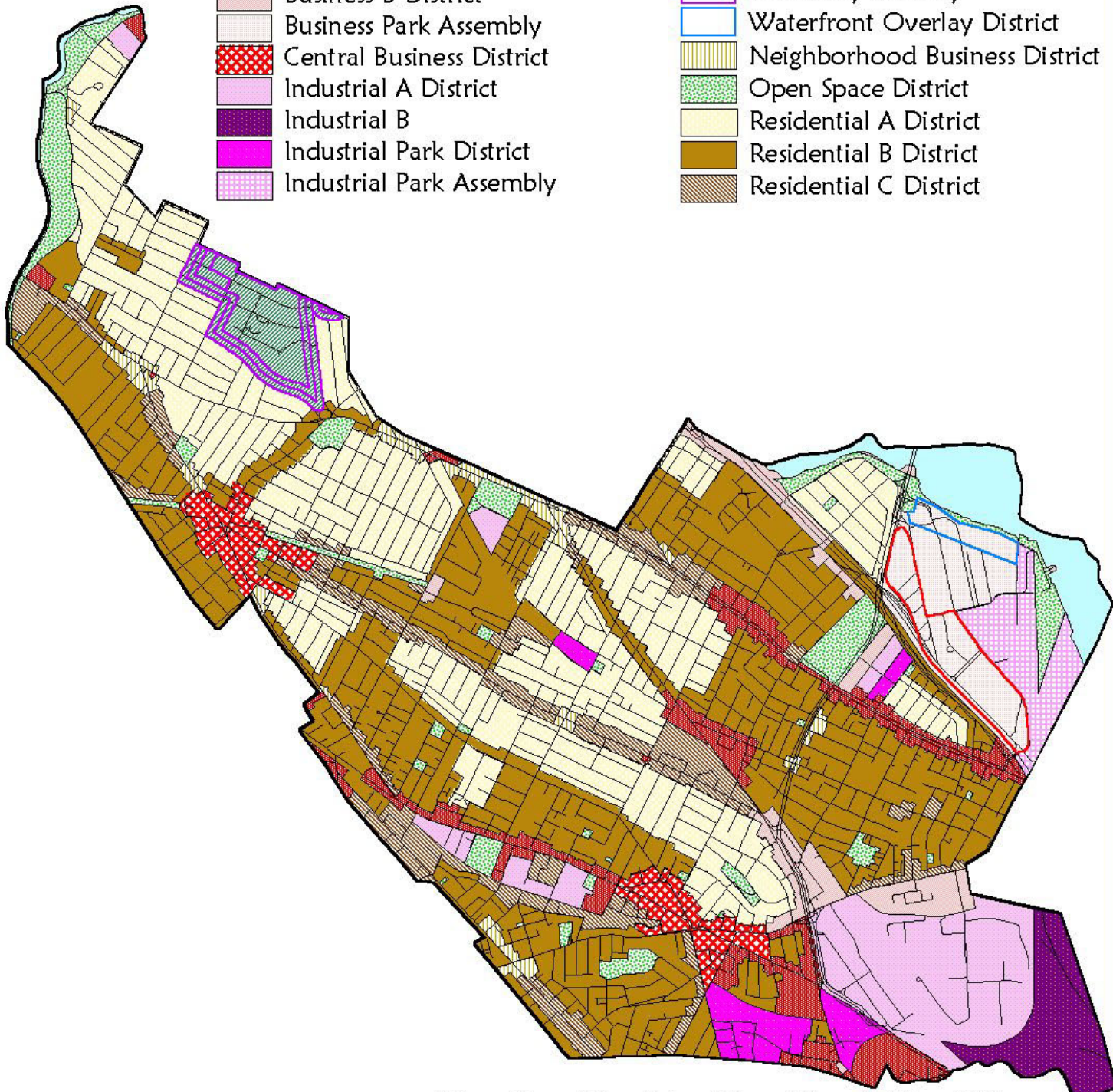
FIGURE NO. 4

### SOIL MAP

mapping prepared by City of Somerville

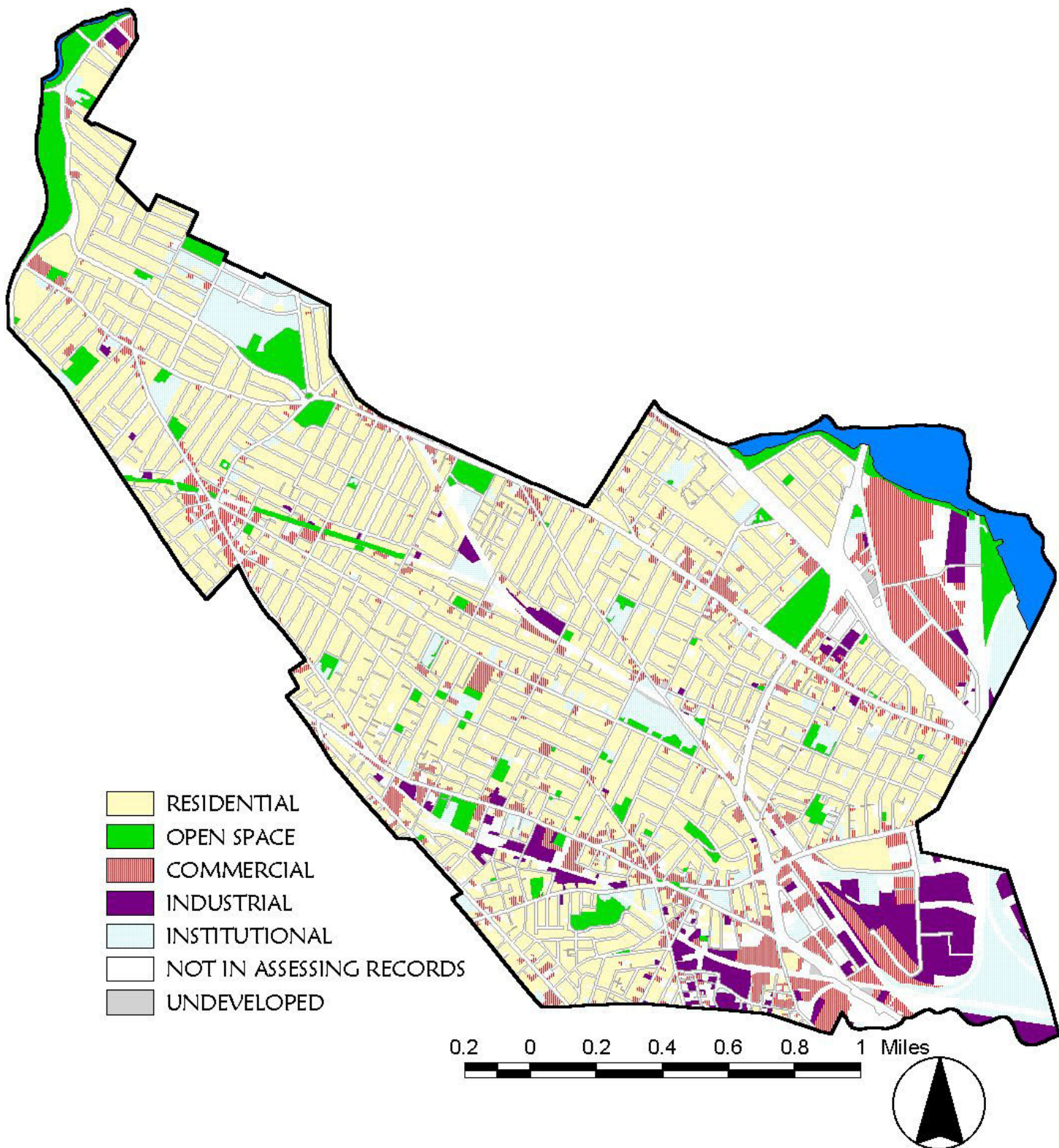
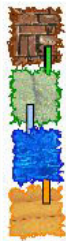


- Business A District
- Business B District
- Business Park Assembly
- Central Business District
- Industrial A District
- Industrial B
- Industrial Park District
- Industrial Park Assembly
- Highway Overlay District
- University Overlay
- Waterfront Overlay District
- Neighborhood Business District
- Open Space District
- Residential A District
- Residential B District
- Residential C District



ZONING MAP

FIGURE NO. 5



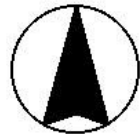
LAND-USE MAP

FIGURE NO. 6



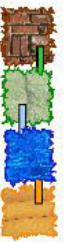
-  SCENIC VISTAS
-  LEDGE
-  HISTORIC PROPERTIES

0.2 0 0.2 0.4 0.6 0.8 1 Miles



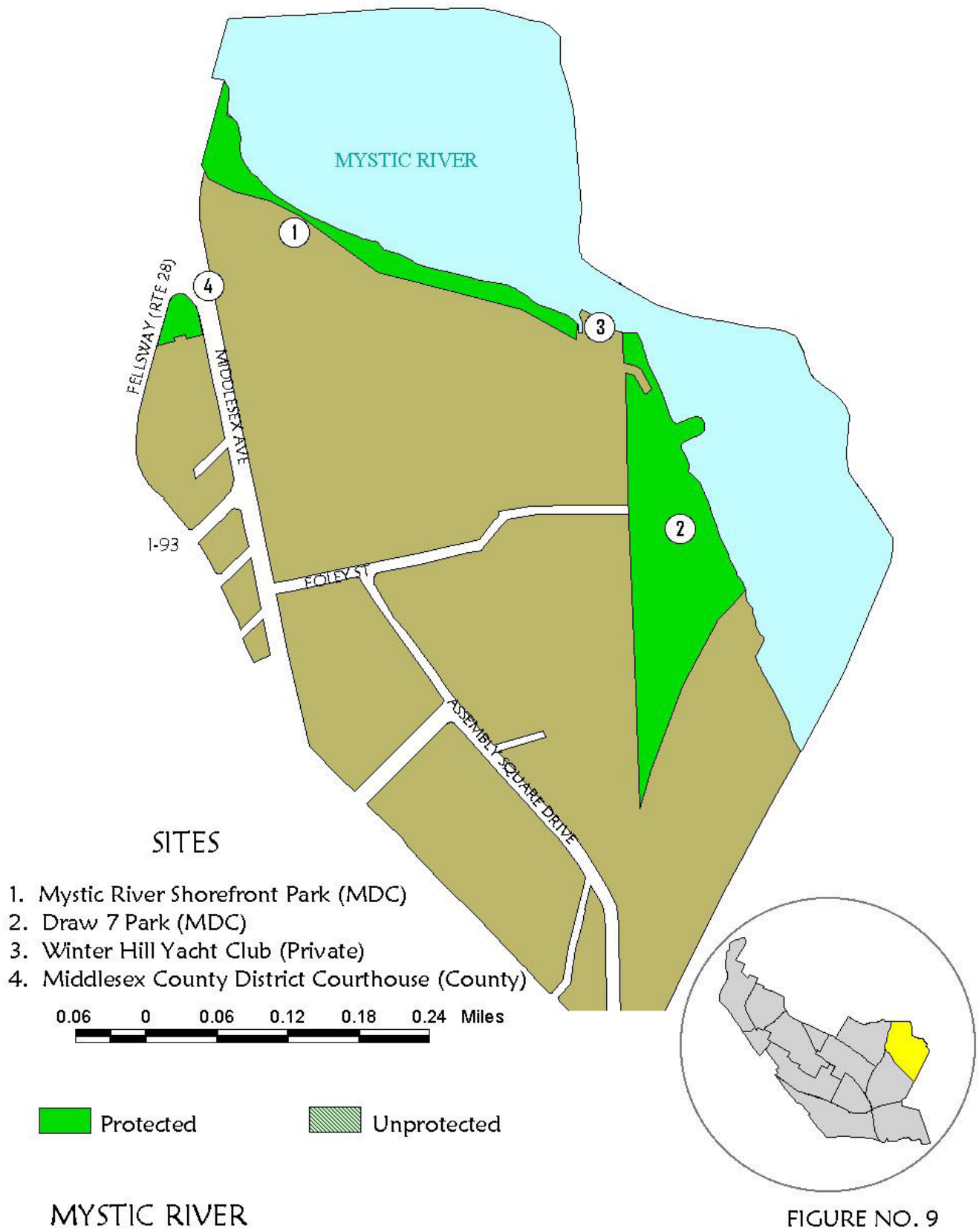
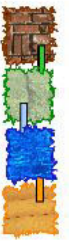
UNIQUE FEATURES MAP

FIGURE NO. 7



OPEN SPACE MAP

FIGURE NO. 8






## SITES

1. Harris Playground (City)
2. Perkins Playground (City)
3. Florence Park (City)
4. Glen Park & Community Garden (City)
5. East Somerville Community School Playground & Entry Courtyard (City)
6. East Branch Library (City)



0.05 0 0.05 0.1 0.15 0.2 0.25 Miles

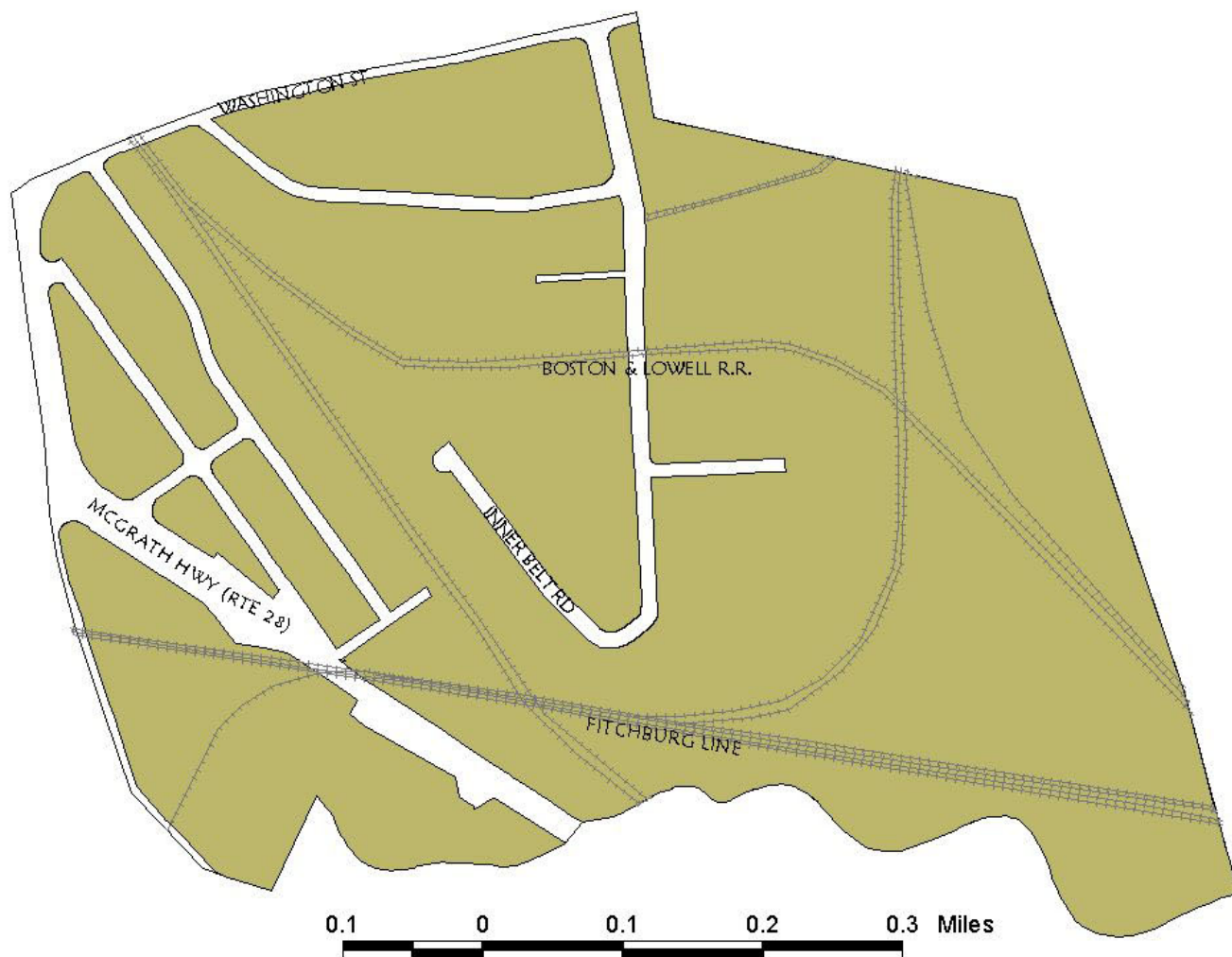
 Protected

 Unprotected



EAST SOMERVILLE

FIGURE NO. 10

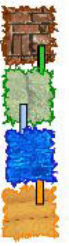


**SITES**  
No open space sites

**INDUSTRIAL PARK**




FIGURE NO. 11



### SITES

- 1. Grimmons Playground (City)
- 2. St. Polycarp's Church (Institutional)
- 3. Foss Park (MDC)
- 4. Healy School Yard (City)
- 5. Paul Revere Park (City)
- 6. Mystic River Shorefront Park (MDC)

 Protected

 Unprotected



### TEN HILLS

FIGURE NO. 12



### SITES

- 1. Hoyt-Sullivan Playground (City)
- 2. Otis Street Playground (City)
- 3. Marshall Street Playground (City)
- 4. Winter Hill Community Playground (City)
- 5. Kemp Nut Site Park (City)
- 6. Henry Mansen Memorial Park & Community Garden (City)

 Protected       Unprotected



### WINTER HILL

FIGURE NO. 13





### SITES

1. Lincoln Park School (City)
2. Lincoln Park City)
3. Perry Park (City)
4. Palmacci Playground (City)
5. Durrell Playground (City)
6. Conway Park West (City)
7. Conway Park East (City)
8. Milk Row Cemetery (City)
9. Vietnam War Memorial (City)
10. Union Square Plaza (City)
11. Concord Square (City)
12. 33 Allen Street (City)

 Protected       Unprotected



## WARD TWO


FIGURE NO. 15



### SITES

- 1. Trum Field (City)
- 2. Trum Playground (City)

 Protected

 Unprotected

### MAGOUN SQUARE



FIGURE NO. 16




0.1 0 0.1 0.2 0.3 Miles

### SITES

1. Powderhouse Park (City)
2. Lexington Playground (City)
3. Albion Playground (City)
4. Linear Park ROW & Community Garden (MBTA)
5. Little Sisters of the Poor Home for the Aged (Institutional)
6. Brown School Yard (City)
7. Somerville Hospital (Institutional)

 Protected

 Unprotected



### POWDERHOUSE


FIGURE NO. 17



### SITES

1. Osgood Park & Community Garden (City)
2. Bailey Park (City)
3. Morse-Kelley Playground (City)
4. Dickerman Playground
5. Kennedy School Yard (City)
6. Greek Orthodox Church (Institutional)
7. St. Catherine's Catholic Church & Parochial School (Institutional)
8. Avon Street Community Garden (Private)

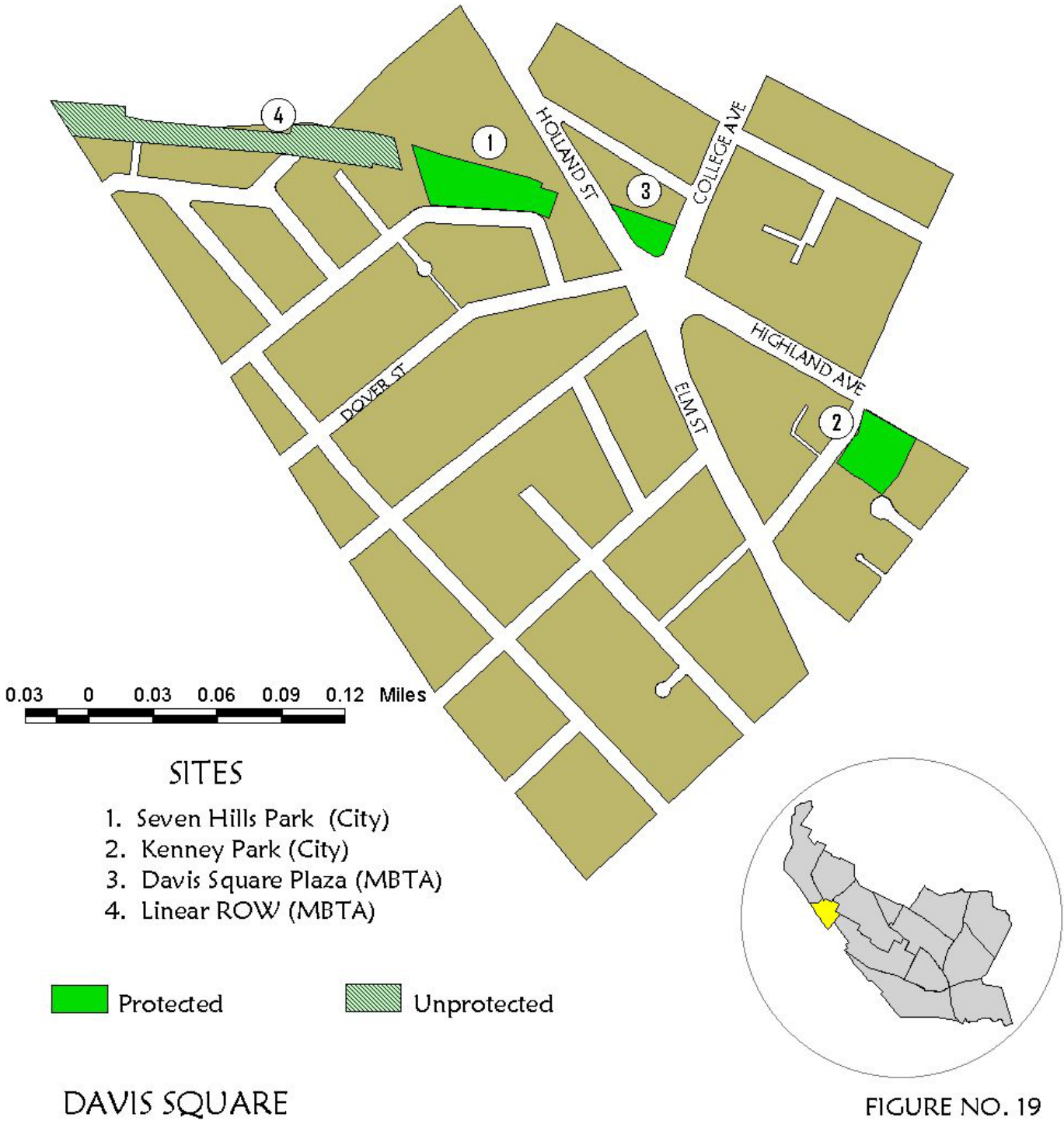
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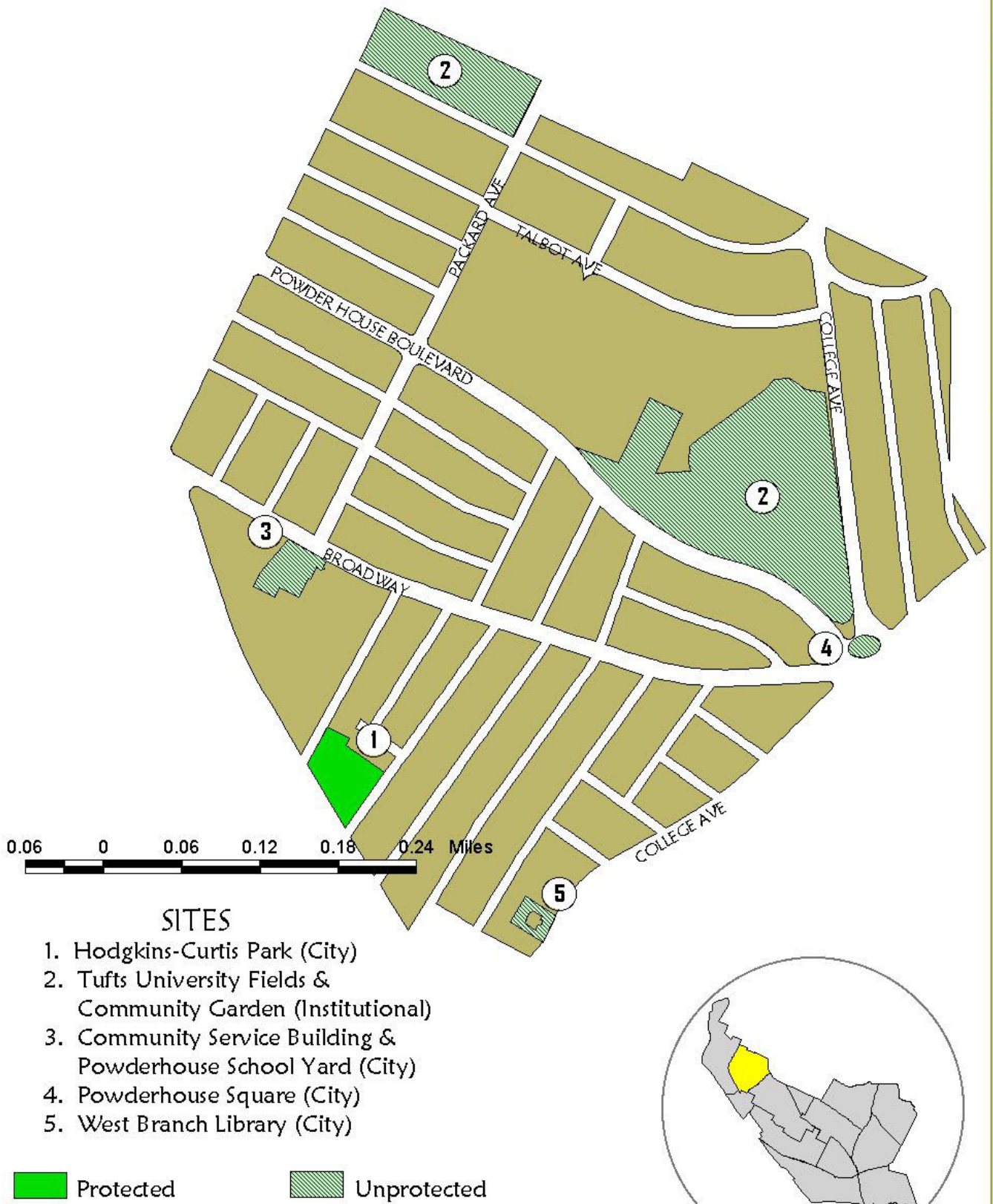
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### SPRING HILL

FIGURE NO. 18

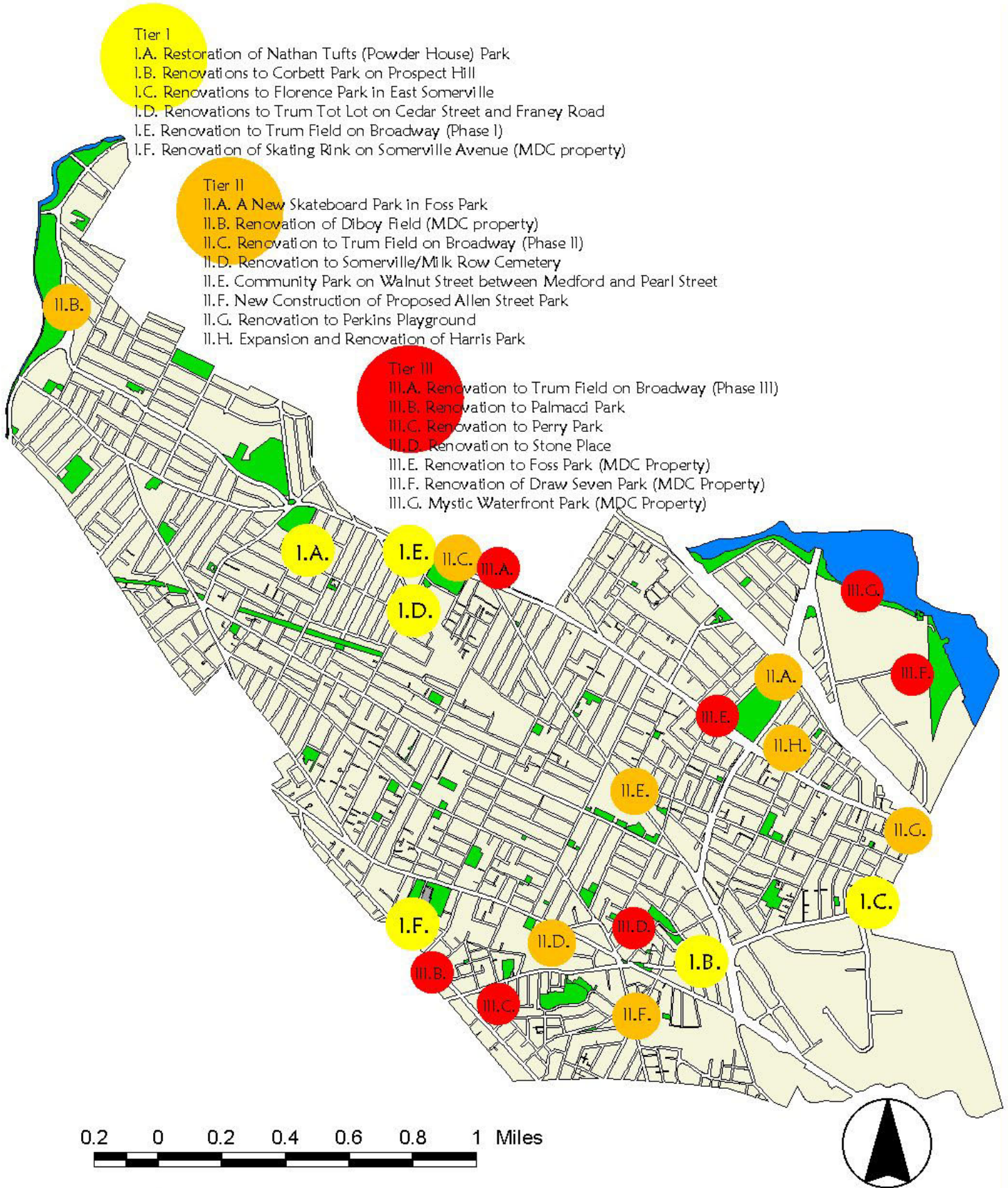




TUFTS

FIGURE NO. 20

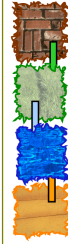




0.2 0 0.2 0.4 0.6 0.8 1 Miles

ACTION PLAN MAP

FIGURE NO. 22



## Appendix B: Open Space Inventory Matrix



## Appendix C: Parks Renovation Schedule

### *Tier I*

- Restoration of Nathan Tufts (Powder House) Park
- Renovations to Corbett Park on Prospect Hill
- Renovations to Florence Park in East Somerville
- Renovations to Trum Tot Lot on Cedar Street and Franey Road
- Renovation to Trum Field on Broadway (Phase I)
- Renovation of Skating Rink on Somerville Avenue (MDC property)

### *Tier II*

- Renovation to Trum Field (Phase II)
- Renovation to Perkins Park
- Community Park on Walnut Street between Medford and Pearl Streets
- Renovation of Dilboy Field (MDC property)
- New Skate Park in Foss Park (MDC Property)
- Renovation to Somerville/Milk Row Cemetery
- New Construction of proposed Allen Street Park
- Expansion and renovation of Harris Park
- Renovation of Prospect Hill Park

### *Tier III*

- Renovation of Trum Field (Phase III)
- Renovation of Palmacci Park
- Renovation of Perry Park
- Renovation of Stone Place Playground
- Renovation of Foss Park (MDC Property)
- Renovation of Draw Seven Park (MDC Property)
- Mystic Waterfront Park (MDC Property)

## Appendix D: A Level of Service Approach to Open Space and Recreation Needs Assessment

In order to properly assess needs for open space and park amenities in Somerville, a comprehensive evaluation of existing resources should be undertaken. The goal is to ensure that existing facilities and any planned improvements best match the needs of the City's demographics. To start such a process, existing parks, playgrounds, and open spaces should be evaluated as to its condition. This Plan takes a first step at this, in the inventory found in Section 5.

NRPA's "Park, Recreation, Open Space and Greenway Guidelines" provide significant direction in conducting a needs assessment for recreational facilities and open space. From this process, the City can establish its standards for the level of recreational and open space opportunities that are available to its citizens.

NRPA describes a methodology for better assessment of local parks and recreational needs. By doing this, the City can establish an appropriate Level of Service (LOS) for existing facilities that will guide future decision-making. The goal is to establish a realistic LOS that can be met as need increases due to population growth.

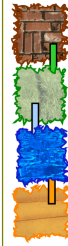
A number of factors must be considered that are in part addressed in the open space and recreational facility inventory in Section 5 of this Plan. Such factors include, but are not limited to the following:

- Park and recreational facility classification (such as tot lot, playground, playing field, bike path, greenway, etc.
- Facility space guideline that denotes the amount of space required for a particular facility
- Type and level of usage a facility receives (informal or organized programs and leagues)
- Timing of typical usage
- Length of time that equipment can be used before maintenance or replacement is required

To determine the LOS, the City should take the following steps:

- Determine which facilities should be classified
- List all recreational activities that occur at a given park
- Determine the optimal size for each facility
- Determine the present supply for each recreational activity throughout the City
- Identify the demand for each recreational activity
- Determine the number of people using different recreational facilities

This will result in a determination of the LOS for each individual park, as well as the entire open space and recreational system in Somerville. This can be a great planning tool for the long-term maintenance and potential future expansion of the City's facilities.



# Appendix E: ADA Self-Evaluation

## *Part I: Administrative Requirements*

### *1. Designation of the 504 Coordinator:*

The City has designated Shenendoah Titus as the 504 Coordinator. Mr. Titus is also the Director of the City's Human Rights Commission. His office is located in the Mayor's Office of Human Services, 167 Holland Street, Somerville, MA 02144. His phone number is (617) 625-6600 x2400. The City also has a Commission for Persons with Disabilities, established in 1983. Commission meetings are held in the Senior Center on Holland Street, an accessible building.

### *2. Grievance Procedures:*

The City of Somerville Grievance Procedure was established to meet the requirements of the Americans with Disabilities Act. It may be used by anyone who wishes to file a complaint alleging discrimination on the basis of disability in employment practices and policies or the provision of services, activities, programs, or benefits by the City of Somerville.

The complaint should be in writing and contain information about the alleged discrimination such as name, address, phone number of complainant and location, date, and description of the problem. Alternative means of filing complaints, such as personal interview or a tape recording of the complaint will be made available for persons with disabilities upon request.

The complaint should be submitted by grievant and/or his/her designee as soon as possible but no later than 60 calendar days after the alleged violations to: Shenendoah Titus, Mayor's Office of Human Services, 167 Holland Street, Somerville, MA 02144, (617) 625-6600 x2400.

Within 15 calendar days after the receipt of the complaint, the 504 Coordinator will meet with the complainant to discuss the complaint and possible resolutions. Within 15 calendar days after the meeting, the 504 Coordinator will respond in writing and, where appropriate, in a format accessible to the complainant, such as large print, Braille, or audio tape. The response will explain the position of the City of Somerville and offer options for substantive resolution of the complaint.

Within 15 calendar days after the receipt of the appeal, the mayor or his/her designee will respond in writing and, where appropriate, in a format accessible to the complainant, with a final resolution of the complaint.

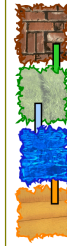
All written complaints received by the City of Somerville, appeals to the Mayor or his/her designee, and responses from the 504 Coordinator and Mayor or his/her designee will be kept by the City of Somerville for at least three years.

### *3. Public Notification Requirements:*

Public notice is given to employees and the general public that the City does not discriminate on the basis of disability. This is included in the City's Affirmative Action Plan as well as indicated on all job postings. The Disability Commission has also worked with various departments to include accessibility information in all brochures and flyers. There has also been an attempt to routinely include sign language interpreters at as many major public events as possible.

In addition, all new employees receive a copy of a sheet notifying them of their rights under 504/ADA and the ability to voluntarily self-declare as having a disability.





The City is ready to provide any materials in alternate format upon request, as well as to provide the required accommodations to individuals who are employed with the City or are applying for employment. All meetings associated with the development of this Open Space Plan were held in accessible buildings.

The City has also instituted a Committee for Community Inclusion, which includes individuals from the community, as well as some administrative employees, whose function it is to update the Affirmative Action Plan, review City policy for recruitment and hiring, and plan strategies to increase diversity.

The City also organizes sporadic ADA trainings and updates, through the ADA Coordinator. These take place internally, as well as for the general public. The local cable access channel (SCAT) offers weekly readings of the Somerville Journal. There is also a plan by the Disability Commission to produce a monthly program on ADA access and issues. In addition, all meetings of the Board of Aldermen are televised on the local government access channel.

The Disability Commission has implemented an awards program for exemplary businesses or organizations in compliance with ADA "The Partners in Access Award."

#### **4. Participation of Individuals with Disabilities or Organizations Representing the Disabled Community:**

This Open Space & Recreation Plan Update and 504 ADA Self Evaluation was prepared with input from the City's 504 ADA Coordinator and the Commission for Persons with Disabilities.

### **Part II: Program Accessibility**

The City is in basic compliance with 504/ADA requirements. All programs are inclusive, willing to offer accommodations where necessary. All flyers include a statement, such as "Should you require an accommodation to participate, please contact ..." In cases where sites are inaccessible, programs are relocated to accessible site.

All municipal meetings are held in accessible locations. All City-sponsored trips for senior citizens provide accessible transportation when requested. Several parks and schools have undergone extensive renovation, addressing issues of disability access as part of the construction. More parks are slated for renovation in the near future, to be rendered fully accessible. More information can be found by consulting the Open Space Inventory Matrix and the attached study and report, "Somerville Physical Activity Guide: Opportunities for All Ages," completed in 2001.

#### **1. Facility Inventory:**

a. Parks, Playgrounds, Playing Fields, & Community Gardens: As indicated on the Section 5 Inventory and the results of the enclosed publication ("Somerville Physical Activity Guide: Opportunities for All Ages," completed in 2001), the City provides multiple accessible opportunities for each programmatic area and type of facility.

b. Buildings:

i. City Hall, 93 Highland Avenue: Building was made accessible in 1992 with the addition of a handicapped entrance ramp. An elevator and lack of other barriers makes all three floors and both bathrooms accessible. Handicapped parking is designated at the entrance.

ii. City Hall Annex, 50 Evergreen Avenue (Conservation Commission Offices): Building was made accessible in 1995 with the addition of an enclosed lift and handicapped parking.



iii. Multiservice Center Building, 167 Holland Street: The building, in which the City leases space for the Mayor's Office of Human Services, is handicapped accessible on all floors with designated parking.

iv. Recreation Commission Offices, 19 Walnut Street: The building provides wheelchair access for all programs.

## **2. Transition Plan:**

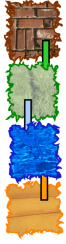
As indicated on the Section 5 Inventory and the results of the enclosed publication ("Somerville Physical Activity Guide: Opportunities for All Ages," completed in 2001), the City provides multiple accessible opportunities for each programmatic area and type of facility. All parks and playgrounds renovated since the early 1990s provide accessible play areas, as do all schoolyards, field houses, and school gymnasiums. Five of the City's Community Gardens are accessible. Accessible swimming is available at the Kennedy School. The Physical Activity Guide describes in more detail the locations and programs for other accessible recreation opportunities (basketball, softball, soccer, boating, and so on). Additional improvements to further widen the number of opportunities (as detailed on the inventory sheets) are to be undertaken as parks are renovated, as per the schedule noted in Appendix C and the Action Plan Map. The following open spaces require renovation to provide access: Milk Row Cemetery, North Street Playground, Otis Street Playground, and Palmacci Playground.

## **Part III: Employment Practices**

The City's employment practices are in compliance with the Americans with Disabilities Act, including procedures for recruitment, personnel actions, leave administration, training, tests, medical examinations and questionnaires, social and recreational programs, fringe benefits, collective bargaining agreements, and wage and salary administration.



## Appendix F: Open Space Survey and Distribution List



## Appendix G: Public Meeting Results / Notes

## **Appendix H: Comment Letters**