TOWN OF HULL

OPEN SPACE AND RECREATION PLAN

UPDATE

2000

Town of Hull Planning Board

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
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February 28, 2001

Jay Szklut
Planning Director
Office of Community Development
Municipal Building
253 Atlantic Ave.
Hull, MA 02045

Re: Open Space and Recreation Plan

Dear Mr. Szklut:

Thank you for submitting the last remaining documents to complete Hull's Open Space and Recreation Plan. I am pleased to write that the plan is approved. This final approval will allow Hull to participate in DCS grant rounds through October, 2005.

Congratulations on a job well done. Please call me at (617) 626-1015 if you have any questions or concerns about the plan.

Sincerely,

Jennifer Jillson Soper
Regional Planner

cc: Board of Selectmen
Conservation Commission
Recreation Department

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What is desired? . . . Community Vision

The current open space and recreation plan update was initiated by the planning board in February 1999. The update continues the open space and recreation planning process begun by the town-wide comprehensive visioning process held in 1994. That visioning process encompassed all aspects of town aspirations. The beginning of the resultant vision statement adopted in 1995 highlights the importance citizens place on open space.

> *"We the people of Hull seek to shape a future for our town that preserves and enhances its natural features . . .".*

Additional phases further emphasized the value citizens hold for its open spaces, relation to the ocean, and maritime character.

> *"Hull's distinguishing characteristics are its spectacular coastal setting, its location in the harbor of a metropolitan region, and its small town identity. . . . the natural peninsular setting of the town, with its diverse topography, varied landscape and views, and extensive beach front, continues to be its dominant feature and great asset."*

The vision statement elaborated several principles that directly relate to open space and recreation planning and were incorporated into the 1995 Open Space and Recreation Plan. These principles include:

- Protect and enhance the qualities of the natural resources.
- Recognize that visitors and summer residents come to Hull for its waterfront amenities.
- Protect and enhance Hull's maritime character.

- Consider each new development opportunity very carefully since relatively few opportunities for development remain (or for preservation of open space and recreation use.)
- Establish a process that ensures predictable, steady, and visible progress toward our goals.

What do we have to do? . . . Community Needs

Since the adoption of the 1995 Open Space and Recreation plan the Town of Hull has addressed and met many of the needs facing the community. These needs include: transportation improvements, harbor management plan, Allerton harbor improvements, Pemberton area improvements, involvement in the Boston Harbor Islands National Recreation area, development of Nantasket pier area, and addressing the Straits Pond area. Work continues in several of these areas to insure that objectives are fully met. Other activities have included beginning improved recreation facility maintenance, building modifications for handicapped accessibility, and revitalization of the MDC maintenance complex.

The high priority needs identified for the future during this open space and recreation plan update are:

- Town Beautification
- Maintenance of Existing Open Space and Recreation Lands
- New Recreation Fields
- More marinas and boating facilities

Medium priority needs included:

- Community center
- Beach maintenance
- Identification of private vacant parcels for possible acquisition

What is our intent? . . . Community Goals

The 1995 Open Space and Recreation Plan adopted the principles and the goals as presented in the vision statement. The current update elaborates on these goals and identifies quantifiable objectives to achieve the goals. The goals identified in this update are as follows:

- Hull should beautify its entry points and main roadways with landscaping and other improvements to enhance the image of the town, welcome visitors, and link its districts.
- Hull's beaches, parks, the Weir River area, Straits Pond, and other resources provide Hull with high-quality and diverse open space areas. Hull's planning should concentrate on maintaining, protecting, and enhancing these public open spaces.

- Hull's past is interesting, important and unusual; it is an attraction to visitors. Opportunities to enhance the understanding and appreciation of the past are encouraged.
- The recreational needs of Hull's residents are paramount to maintaining the local quality of life. The Town should insure adequate space is available to meet these needs, now and into the future.
- Opportunities should be pursued that enhance both recreational and commercial uses of the waterfront. Properly planned improvements should be compatible with residential and tourism uses. This may include dredging or water edge improvements where environmentally responsible and where economically feasible or where state or federal funds may be available as assistance.
- Hull should join in the initiatives underway to establish the Harbor Islands as a comprehensive park system by promoting itself as a gateway to and from the islands through water transportation connections, visitor information, and other appropriate amenities.
- Access by the public to the waterfront, to parks, to playfields, and to other public areas is a consistent goal throughout the various Town planning documents. The Town's ADA Compliance Plan recognizes this goal and includes an accessibility analysis of the Town's recreational facilities and fields, and the Town's parks and beaches.
- The Hull school system should be encouraged to develop curricula that capitalize on the town's unique natural setting.
- Establish Hull as a recognized center of information on coastal and marine issues by bringing its unique natural resources to the attention of agencies and academic/research institutions.
- New development and improvements to existing properties should enhance the character of the districts in which they occur.
- Hull's residential character is in large part due to the conversion of summer homes. As Hull becomes more and more a suburban residential community appropriate densities and zoning guidelines should be recognized and established.

How do we achieve it? . . . Community Actions

Each goal listed above generated a number of objectives for achieving the goal. These objectives were grouped by goal and sub-grouped by principle. Several objectives applied to more than one goal. The objectives include:

- *Identify significant gateway-to-Town parcels both privately and publicly owned.*
- *Identify gateway parcels to each of the Town's unique neighborhoods.*
- *Develop plan to link these gateway parcels together through an attractive signage system and/or bicycle/walking trails. Plan to include strategies for acquiring key parcels identified.*
- *Develop landscaping and tree planting plan along major Town roadways.*

- *Means for improving north/south linkages within Hull should be pursued for public transit such as a local trolley, for bicyclists, and for pedestrians. Such improvements should acknowledge varying needs according to season and age groups.*
- *Initiate process to develop a master plan for the Town.*
- *Develop and initiate an improvement and ongoing maintenance plan for Hull's parks and significant open space areas. Plan should include budgeting considerations and assignment of maintenance responsibilities to appropriate Town departments.*
- *Protect scenic areas and wetlands and beautify the Town.*
- *Improve public street-ends to create mini-parks and scenic vistas.*
- *Develop a healthy balance of aquatic life in Straits Pond.*
- *Encourage a better understanding of Hull's landside open space and its relationship to the Town's identity, growth, and development.*
- *Hull should use the opportunity of this planning process to help prioritize capital and maintenance programs and inform its citizens of progress to increase understanding of the Town's efforts.*
- *A permanent and regular liaison process should be established between the MDC and the Town to ensure continued cooperation and coordination on both short-term and long-term issues and to allow conformance of MDC operations, maintenance, and improvements with town goals and initiatives.*
- *Develop a walking path through historic Hull village including appropriate signage.*
- *Develop a bicycle/walking path through the Town.*
- *Identify parcels appropriate to the recreation needs of the community. Such parcels may be adjacent to current recreational fields and may be privately or publicly owned. Develop plan for utilizing or acquiring parcels for recreational use.*
- *A community center should be created as a central meeting place for the town, and provide recreational, cultural, and educational opportunities year round for both adult and youth. This center should serve the greatest number and range of residents possible.*
- *The Town should identify appropriate locations and develop areas so as to increase the available passive recreational opportunities (parks, etc.) in the Town.*
- *Development of a marina at Nantasket Pier with public access to the waterfront should be encouraged.*
- *Beaches should be well-maintained, and beach access provided through a planned process.*
- *Visitors and the recreational activities that attract them are a major contributor to the Town's employment and tax base; new uses and users that minimally impact the community and enhance the quality of life should be encouraged and supported.*
- *Commercial and waterfront zoning regulations should be reviewed and revised where necessary. Addition of watersheet zoning to the Town's Zoning by-laws should be considered.*

- *The area in and around Nantasket Beach should be improved to create a more attractive pedestrian environment and reinforce the special qualities of this unique seaside destination.*
- *Protect developed areas from coastal storm damage and erosion through the development of a dune maintenance system.*
- *Hull should create a long-term maintenance strategy for Town facilities and communicate it to its citizens so that there is a greater understanding of priorities and appreciation for progress.*
- *Locations such as Pemberton Point and Nantasket Pier are special places which should have park-like improvements to accommodate residents and visitors seeking the vistas found there.*
- *Hull should improve public transit to and from Hull by working with the MBTA and others to increase access by bus, regional rail networks, bicycle, and passenger ferry. Any significant expansion of water transportation should be carefully coordinated with land use planning and other goals of the town.*
- *The Town should continue implementation of its ADA plan with special emphasis on providing access to Town beaches, parks, and other open-space facilities.*
- *The Town should continue its effort to make the A-Street Beach fully handicapped accessible.*
- *Hull should institute processes, such as workshops, forums, and newsletters, to encourage and continue broad public involvement in planning and town government.*
- *Create an ad hoc committee to identify support for such an effort including federal and state funding sources, university and research institutions, and other institutions such as museum and aquariums. Committee should include, at a minimum, representatives of the Hull Public School, the South Shore Charter School, and the Town's Community Development Office.*
- *Develop brochure/pamphlet/web site identifying Hull's special attributes.*
- *Consider creating different types of development/redevelopment areas within Town and establishing appropriate definitions and policies for each area (e.g. development areas, scenic development areas, residential areas, and conservation areas.*
- *Review and revise, where necessary, current zoning regulations.*
- *Develop guidelines for identifying environmentally sensitive parcels for protection/purchase by the Town.*
- *Since few undeveloped parcels, either private or town owned, are available, care should be taken in their disposition in terms of future use and benefit to the community. Consider creating different types of development/redevelopment areas within Town and establishing appropriate definitions and policies for each area.*
- *Review and revise current zoning regulations to encourage larger lot formation.*
- *Provide a wider variety of opportunities for long walks, jogging, and enjoyment of nature.*

Finally, a list of action items addressing each of the objectives was developed. Responsibility for each of the action items was assigned and implementaion of the items is phased in over the next five years. It is anticipated that as the items in each category are completed from year to year, additional items will be required and results of studies and implementation will indicate

new activities and directions not now envisioned. This open space and recreation plan is therefore viewed as a dynamic plan subject to modification as new conditions dictate.

Section 2

Introduction

Section 2

INTRODUCTION

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Purpose of Plan

Hull views open space planning as an important component of overall planning. The Planning Board is the responsible town entity for preparation of the Open Space Plan update and is coordinating activities with the Conservation Commission and the Parks and Recreation Commission as well as other town boards, commissions and departments.

Hull is at a crossroads. This is a time of regional and national economic change. For Hull, new environmental concerns and regulations are affecting the use and character of the water's edge. Changing real estate markets are affecting decisions about land and future development. Regional tourism and spending patterns are shifting. How should Hull respond to these and similar challenges?

The 1994 open space and recreation planning effort was targeted to updating the 1992 plan, conducting additional technical studies and making the necessary changes to the existing draft plan in order to present the plan in the format of the Executive Office of Environmental Affairs (EOEA) 1990 Open space and Recreation Plan Requirements. In summation, the task at that time was to form the plan into a workable document that could be understood. The plan was also redirected to be in accordance with the highly successful town-wide visioning process conducted during the first quarter of 1994. This 2000 update continues to use the vision as an overall guide but incorporates new developments, new conditions, and new goals in planning for Hull's open space and recreation needs. While most of the technical data and overall goals remains the same, this update places a greater emphasis on the actions necessary to implement the plan.

Planning Process and Public Participation

Planning for Open Space and Recreation concerns began in 1989 with the town planner at that time preparing various papers addressing open space issues and reviewing them with the Planning Board during its public meetings. Early in 1992 a draft plan was assembled based on those papers.

The plan was submitted to the EOEA Division of Conservation Services (DCS) in June 1992. At that time DCS identified five technical areas needing more work. Also, only one of the required maps was submitted and it was not legible. The Planning Board embraced the feedback from the DCS and approached the Town for funding to hire a consultant to assist in revising the Open Space Plan.

Concurrent with this activity, the Town of Hull was preparing a plan to facilitate the economic revitalization of the town. The Hull Economic Development Task Force (EDTF) was formed in 1993 from a cross section of elected and appointed public officials and interested residents to formulate the Master Economic Revitalization Plan for the town. The first step of the revitalization planning program by the EDTF was for the development of a shared single vision of the community. This vision is to define the broad outline of what the town wants to be and what the general components of the vision are made of. In other words, what the town will see itself as in the future.

Because the vision was to be comprehensive, the open space planning process for the 1994 update began with participation in the formulation of the Shared Single Vision. Two workshops were held on Saturday, January 22, 1994 and Saturday, February 5, 1994. Over 200 people from all walks of life participated in the workshops. After the second workshop, the written vision statement was prepared, reviewed by various workshop leaders and distributed to all participants. Written comments were received and an Open House was held on March 24th where written comments were reviewed and other verbal evaluations received. The Hull Vision Statement was then issued on April 8, 1994.

It is to be noted in that statement included in Section 6, that open space and recreation goals are embedded throughout the statements of "Principles for the Future" and "Objectives for Hull". The specific open space and recreation goals articulated in Section 6 are derived from this, the town's Shared Single Vision. With the issuance of the Vision Statement, the EDTF, in its responsibility to create an economic revitalization plan, lended its support to the request of the Planning Board for funding to prepare an Open Spzce and Recreation Plan and funding was approved.

An Open Space and Recreation Plan was then prepared by the consultant team of Kenneth M. Kreutziger, AICP and Eugene Peck working with the Planning Board. Public hearings were held on September 21, 1994 and June 8, 1995. After suggestions were reviewed and adjustments made to the plan, letters of review were prepared by the Planning Board, the Board of Selectmen (chief elected official) and the MAPC (regional planning agency). Comments by MAPC were addressed prior to submission to DCS. This 1995 Plan was officially approved by DCS and established Hull's eligibility for several State discretionary grant programs through June 2000.

In February 1999, the Planning Board began the process for updating the Open Space and Recreation Plan. The decision was made to prepare the update using Town staff. Revised sections were prepared and reviewed by the planning board and at public meetings. Conservation Commission members and Parks and Recreation Commission members were invited to public hearings on August 11, 1999, September 1, 1999, January 10, 2000, February 16, 2000 and May 8, 2000 to review and revise goals, objectives, and implementation schedule. Also at the May 8th meeting, the Town Manager, the Harbormaster, Department Heads from the

Highway Department, Building Department, Light Department, Sewer Department, and representatives from the Police and Fire Departments reviewed and commented on the implementation plan. A completed draft was presented at a public hearing on June 29, 2000. Comments were then incorporated and the draft update was submitted to the Metropolitan Area Planning Council for their review.

Upon receipt of the MAPC review letter final revisions were incorporated and the Planning Board presented the draft update to the Board of Selectmen. A final draft incorporating the comments of the Selectmen was then prepared and submitted to DCS for approval.

Section 3

Community Setting

Section 3

COMMUNITY SETTING

Figures and Tables

COMMUNITY SETTING

Regional Context

Hull is a L-shaped peninsula in a Coastal Zone which defines Boston Harbor. It is bordered by Cohasset and Hingham to the South. See Figure 1, Location Map on following page. Hull is a low-lying town, punctuated by hills. Hull was once an island, but since that time a causeway has been created to connect Hull to the mainland. As a barrier beach between Massachusetts Bay and the Atlantic Ocean, Hull can take quite a beating during stormy New England weather.

This seashore town has developed as a summertime resort with many seasonal homes and rentals. There has been an emphasis placed on waterside access, because it is close-in, yet it still retains a sense of remoteness. The hillside areas were the first to be developed and are high-density due to seasonal residential origins. Hull had a similar effect to living on an island, due to the access only by water and by causeway.

Many families have lived in the town for generations. Most residents of Hull work in Boston or on the South Shore. In recent years there has been an influx of young professionals from all over the country as well as other parts of this region. The growing realization of the beauty of the town attracts many new residents. Along with the younger generation there are a great many elderly residents living on fixed incomes. Within Hull there is a broad range of incomes. There is a growing trend of a larger year-round population and therefore fewer seasonal homes.

Weir River Estuary

Hull shares only about two miles of borders with Hingham and Cohasset and these are across the Weir River. There is a total of only three access routes and all traffic must come through the towns of Hingham and Cohasset. The Weir River estuary watershed and the scenic river corridor created by the Weir River are shared with these two neighboring towns. It is a regional environment resource seen as a future location for recreational and educational opportunities within a protected conservation area. Straits Pond is the other major body of water shared by these three communities.

Many actions have affected this shared Weir River Estuary resource. Hull's sanitary landfill, located in the wetlands across from Hingham, was closed ten years ago. A clay liner was installed and the landfill undergoes active monitoring by SEA Consultants. The monitoring conforms with all DEP regulations and includes gas monitoring and leach collection. Quarterly reports on the status of the landfill are submitted to the Department of Environmental Protection. Under existing conditions, it is expected that the landfill will be available for reuse in seven to eight years. The landfill is not considered to be a significant pollution source. The Highway Department garage and yard is also located at the town boundary along the wetlands. The twentieth century saw many locally unwanted land uses (LULUs) located along town boundaries throughout the country. These situations require cooperative action between adjoining communities.

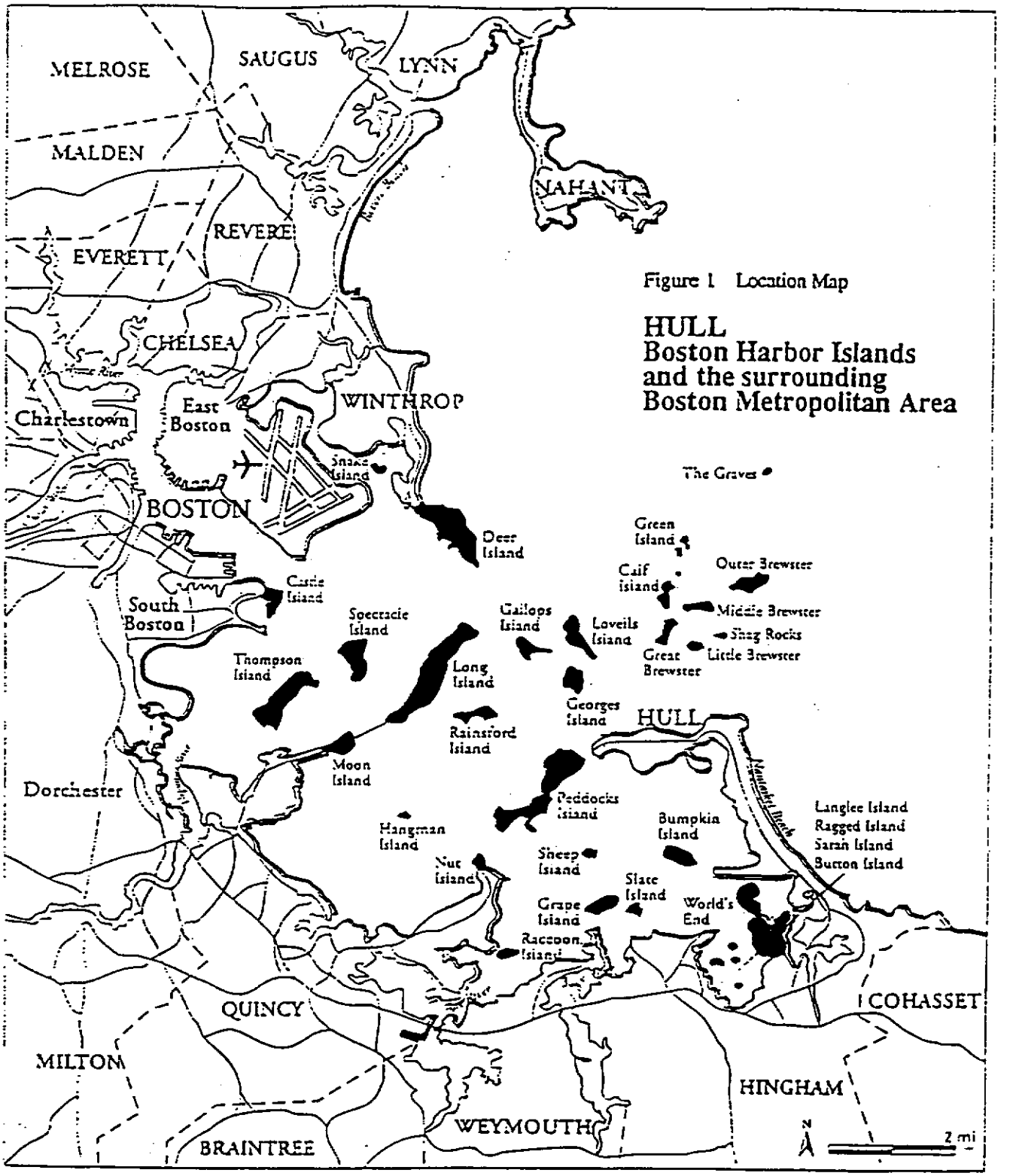


Figure 1 Location Map

HULL
Boston Harbor Islands and the surrounding Boston Metropolitan Area

Nantasket Beach and Boating

In the summer there is a large influx of visitors and seasonal residents, which generates crowds at the beaches in Hull. The beach is the magnet attraction for the town of Hull; it is what the tourism industry thrives upon. In the early days Nantasket Beach was a summer playground for the entire Boston area. The beach now provides a recreational resource to year-round and summer residents as well as nearby south shore towns. The Nantasket Beach area now operated by the MDC will continue to be a regional recreation resource. Impacts from traffic and parking in Hull need to be addressed. Since access to the beach is through Cohasset and Hingham, peak traffic periods also present impacts to these towns.

Another draw to the area is the clustering of restaurants within the town. Retention of family oriented amusements and recreation in the demise of Paragon Park has kept the town popular for families with young children. Along the shore of Hull Harbor there are a number of marinas, public boat launches as well as piers for pleasure cruises. Hull has become a regional facility drawing large crowds and this has led to an excess amount of black-top used for parking. Due to these conditions, there is an increasing need to encourage the establishment and use of convenient, affordable public transit.

Metropolitan Area Planning Council: MetroGreen

Hull is one of the 101 cities and towns in the Boston Metropolitan area who are voting representatives of the Metropolitan Area Planning Council, MAPC. The current regional development plan for the Boston metropolitan area is MetroPlan 2000 which was adopted by MAPC in May 1991. This plan includes five detailed elements. One of these is the Land Resources Protection Element, commonly referred to as MetroGreen. It was adopted at the May 1992 MAPC Council meeting.

In the broadest terms MetroGreen includes all the land area which contributes to the environmental health of the metropolitan region. These lands have been called the Land Resources Protection Area and are defined as "areas within the region to be preserved as part of a network of open space including critical environmental areas, unique landscape features, rights-of-way with scenic or recreational potential and areas required to fill regional open space and recreational needs".

The recommended network of areas shown on the Regional Land Resources Protection Element Map for Hull have been incorporated into this open space and recreation planning process. In addition, Hull has been represented on and working with other nearby communities on open space and other regional issues as part of the South Shore Coalition. Items in the Hull Five Year Action Plan work toward achieving both regional and local needs, many of which coincide.

MetroGreen sets forth 29 action recommendations to foster "the protection of environmental and recreational resources within the region to enhance the quality of life and protect the public health". Four of these recommendations apply to Hull and have been addressed within this plan. Comments associated with each of these four MAPC action recommendations relative to Hull follows.

- Action Recommendation LR#2
  Support critical land acquisition and protection programs.

  MDC has identified the Ft. Revere site in Hull as one of the areas important to the metropolitan open space system. Hull supports this acquisition and will continue to assist MDC. This area can also be a feature attraction of the future Boston Harbor Islands proposal because it is within easy walking distance of the proposed land access point at Pemberton Point on Hull which is near the geographic center of all the harbor islands.

- Action Recommendation LR#9
  Encourage implementation of local open space and recreation plans.

  Proposals and the Five Year Action Plan have been reviewed relative to MetroGreen. This open space and recreation plan is consistent with the open space and land resources recommendations of the regional development plan. Approval by the state Division of Conservation Services will complete Hull's local action to support this recommendation and make it eligible for related state funding programs for the next five years.

- Action Recommendation LR#14
  Preserve and protect areas identified in the Land Resources Protection Element.

  Items in the Five Year Action Plan work toward additional protection and improvement of identified areas. At Ft. Revere additional parcels are being acquired by the MDC and a future program to develop this site for tourist visitation will be supported by the town. The town continues to work with MDC to facilitate improvement of MDC facilities at Nantasket Beach, where the focus is the rehabilitation of a bath house that has been closed for ten years. Another project includes reuse of buildings no longer used by MDC located in the heart of downtown. A multi-agency agreement for the development of the Weir River Estuary which is an ACEC (Area of Critical Environmental Concern) will begin in the next two years.

- Action Recommendation LR#22
  Coordinate Master Plans and Open Space Plans with the Land Resources Protection Element

  Consultation with the open space planner at MAPC has occurred during the preparation of the original plan.

The History of Hull

A great natural breakwater, Hull was essentially a series of hills, dating to the ice age, connected to one another and to the mainland by barrier beaches, often overflowed by the tide. The hills or drumlins, densely wooded, contrasted sharply with the narrow barrier beaches, which appeared as arid plains.

In 1644 a decisive transformation of the landscape was set in motion when the State Legislature ordered one hundred and fifty tons of timber to be cut in order to build fortifications. The hills

were denuded and the beauty of the region was destroyed. With the clearance of the original forest cover, a rural agrarian and fishing economy began to emerge.

Hull Village Established

By 1657 twenty families were contributing to the revenue of Massachusetts with the money from their farms or their fishing. These residents of Hull had established a notable share in the government of the Bay Province.

Behind the homes closely lining both sides of the winding main street, beneath the shadow of the hills, long rectangular fields extended up the slopes as far as the coastal banks overlooking the bay to the south and to the open sea on the north. By 1760 there were some fifty families in Hull.

In the early eighteenth century novelist Susanna Rowson, who spent her childhood in Hull, described the area:

> On the left hand of the entrance to Boston Harbor is a beautiful little peninsula, called Hull. It consists of two gradually rising hills beautifully diversified with orchards, cornfields, and pasture land.
>
> In the valley is built a little village, consisting of about fifty houses and a rustic temple is situated by the side of a piece of water, nearly in the middle of the village.

The Village's land connections to the mainland were tenuous at best. The original road from Hull to the mainland was a grass grown track, lonely and still, flanked on either side by ruined fortifications and gnarled and wind-wrenched apple orchards. At it's highest point there was a scene of great delight as a sea-view opened out for travelers to gaze upon.

The quaint village had much more to offer than it's beautiful scenery. It had a rural/nautical ambiance, a pastoral setting as well as a very healthful environment. A great many literary figures lived here or visited this picturesque hamlet. A few of these figures are Susanna Rowson who lived in Hull in her childhood, John Boyle O'Reilly whose summer cottage is now the public library, and Samuel Smith whose poem "My Country 'tis of thee" became the national song.

There were a few early attempts at expanding the economic base of Hull. One of these attempts was made by the Tudor family in the early nineteenth century. In order to create jobs in town, they leased "The Point" with a view to extract salt from sea water on a commercial basis. Extensive salt works, artificial ponds, and dikes were established at great expense to the Tudor family. Unfortunately, the enterprise soon failed

The Beginning of Tourism

Summer visitors were soon attracted in larger numbers to this quiet and picturesque village. It was a place where families could escape the summer heat of the city. As demand rose, the three homes which rented rooms could no longer handle the flow of business. To meet this growing demand, a few boarding houses were opened in the early 1800's. The Nantasket, the Hayes House, The St. Cloud and the largest of all, the Oregon House were built to house summer visitors.

The first resort hotel was opened in 1840 by the Tudor family - "The Mansion" House. This pioneer summer hotel occupied the tip of the peninsula. Some thirty years later in 1871 the hotel burned to the ground. It was replaced with "The Tudor" which met with the same fate less than five years later.

Railroad Days

During the 1800's Hull experienced its greatest growth. Hull became the popular place for people to get away from the hot city summers. Much of the development took place in the mid to late nineteenth century. This surge of development involved additions, conversions and great amounts of new construction. Much of the growth was stimulated by increasing ease of access - a new steamboat pier, more boat runs and the new Nantasket Beach Railway. During the 1870's the proprietors of the Oregon made additions in order to be better able to face competition, to meet the growing demand and in anticipation of an upsurge in business from the new Hull Yacht Club completed in 1882. Many old homes were available as summer residences and Hull Hill began development. It was soon covered with summer cottages and villas, most of them affording a view of the bay.

Through the growth pressures the village was able to retain much of it's essential character, a blissful refuge from the frantic city. This was facilitated by a number of important factors. Most important, the new Nantasket Beach Railroad was routed to minimize impact, by-passing the village and avoiding visual intrusiveness. A church was built within the village in Carpenter Gothic Style in 1881 and it became a focal point as well as being compatible with the character of the town commons. While much development did occur on Hull Hill, it was, for the most part, sensitive to the context. Roads respected the former patterns of parcelization and public access to the shore was by stairs, easements or right-of-ways. Shade trees were planted on the hill. These trees helped to revert the hills back to a close approximation of their original appearance before the "denude" effect of the pastures and fields.

The advent of the railroad reduced pressure on the village by opening up other areas for development. Allerton Hill became a site for expansion and by 1888 the lower slopes were filled with cottages and many building lots were for sale since the passage of the railway along the side of the hill made it so easily accessible.

The Open Space Ethic

The village also benefited from a strong open space ethic. A major landowner refused to part with her property - Telegraph Hill. Another open space asset was the "handsome sheet of water", an area of ten square miles, almost fully enclosed by Nantasket, Peddocks Island, Houghs Neck and the mainland. This beautiful bay invited visitors and residents alike to participate in a range of recreational activities. One could learn to sail under the auspices of the Hull Yacht Club, the second largest in the country at the time or hire a boat for a long afternoon sail with the practiced hand of a local captain at the tiller.

An integral aspect of the overall open space experience was the journey by water to the town of Hull. The very affordable trip on capacious side-wheel steamboats was an experience in itself, highly educational, visually interesting and healthful. Once the steamboat reached Pemberton, a number of choices were available. Development there created in effect a major interface between numerous boat lines and land transit - an intermodal transportation hub. Among the choices, one could transfer to a boat of the Boston - Hingham line and continue to the town of Hingham, take a boat to Strawberry Hill, remain on board and end up at the Nantasket Beach pier, take the railway to Nantasket, or simply debark and enjoy the ambiance of the resort, the cooling breezes and the beautiful views. The Hotel Pemberton was the most elaborate resort in Hull and was a center of activities in the area. The architecture of the hotel was quite elaborate, with many gables, towers Sand piazzas cutting a distinctive silhouette over the low beaches of Windmill Point.

The "Cottage Movement"

By the 1880's there became a need to develop the plains as a number of trends became apparent. On the unoccupied headlands and along the reaches of Weir River as well as on Little Hog Island there were hundreds of people encamped in tents every week. Many people wanted to stay for extended periods during the summers, but the prices of the hotels were rather high for an average citizen to bear throughout a season. These conditions increased the demand for summer cottages. Families found it expedient to build or lease a cottage and transfer the housekeeping essentials from the city home to this summer residence.

This was the beginning of the "Cottage Movement" in Hull. The inauguration of service on the Nantasket Beach Railroad coincided with the start of a sustained development and construction boom. Located between the two intermodal transportation hubs at each end of town, the hills and plains which occupied the length of the peninsula, now conveniently accessible by rail, were targeted for development of summer cottages and villas. This movement manifested itself in a variety of ways in different parts of town. As well as the already developed Hull Hill and Allerton Hill, Sagamore Hill's far viewing crest was occupied by several cottages and a picnic garden. The southern part of town saw a different pattern. Access was easier due to the South Shore Branch of the Old Colony Railroad which ran through the south shore to Plymouth. Crescent Beach and Green Hill were largely occupied by the cottages of inland citizens of great wealth. During the late 1880's and the 1890's and through the turn of the century many well-to-do people came to Hull and built expensive estates and spacious summer homes.

Today's Alphabet section and Kenberma section were developed by the Nantasket Land Company at the end of the nineteenth century. Until 1840 these lands had been held as commons of the people of Hull. Once the Nantasket Land Company gained control of these lands, their goal was to develop the plains into a great cottage city. The company sought this location because it would be attractive to those looking to avoid the vast numbers of visitors overflowing other areas of Hull. The planned community was located approximately mid-way between the two transportation hubs at either end of the peninsula - Pemberton and Nantasket. In order to secure a more thorough quiet and decorum, several small hotels and restaurants in the area were closed and thousands of shade trees were planted along the avenues. Nantasket Beach was a selling point for the new cottages and these new areas of development. This four mile belt of wide and level sand stretching from Point Allerton to Atlantic Hill lured many families to buy cottage lots from the Nantasket Land Company. By 1880 this area of sand had developed into the summer park and playground of Boston.

Nantasket - A Summer Resort

The development of Nantasket as a summer resort occurred in an incremental manner through many decades. Different stages in the development have been largely a function of access. At the time of the American Revolution, no road traversed the length of the beach. By the end of the eighteenth century country roads led to the beach and old colony farmers would bring their families to the beach for day trips. In the early nineteenth century the South Shore Branch of the Old Colony Railroad connected with the main line at Braintree. The availability of train service from Boston prompted the establishment of the Rockland House Hotel in 1854. The late 1860's brought steamboats to Nantasket Beach, docking at the pier at the foot of Strawberry Hill. In 1868 the first steamboat ascended the narrow and crooked channels of Weir River and tied up at the new pier. The Nantasket Beach Railroad began operation in the 1870's from the South Shore branch of Nantasket Junction. The line was nine miles in length along the beach. The Hotel Pemberton was opened to coincide with the inauguration of train service. The line interfaced with the steamboat mode at three points - "The Point", Strawberry Hill and at Nantasket. Each area became a growth pole. In 1895 the railroad was electrified by overhead wires just in time for summertime service, and at about the same time trolley lines ran from Nantasket to Boston direct as well as connecting with lines all over south-eastern Massachusetts.

There were many recreational uses of Nantasket Beach and the surrounding area during the 1800's. This area was known for the thousands who sought enjoyment on the Southern mile of beach. Lovers of nature could ramble the beaches, families would settle on the sand with a crammed lunch-basket and one could find solitude on the rocks at the foot of Atlantic Hill. Although there were a great number of beachgoers, the beach seemed unchanged by their presence. It was as if the beach had room for "millions", but there was only several thousand occupying the long stretch of sand. In 1880 seven boats each way, to and from Boston, were hardly enough to handle the flow of summer visitors.

This surge in summer visitors created business for the big hotels as well as smaller hotels all over the peninsula. The Rockland Cafe, under the same management as the Nantasket Hotel, received immense amounts of business during the summer months. The cafe had a great many

attractions to lure travelers in, these included a dancing hall, bowling alleys, shooting galleries and swings.

Unfortunate Conditions

By the end of the nineteenth century the natural environment had undergone a decisive transformation. The beach now had a half dozen crowded hamlets, a score of hotels, an aquarium, a score of shops, avenues and parks. The beachfront had an appearance similar to an amusement park. Peddlers of candy and fruits, peanuts and popcorn, pink lemonade and foaming beer and red balloons as well as the flying horses and goat wagons common to city parks were well established all along the beach. A great deal of this hoopla was linked to the fact that from the mid 1870's on, the only place licensed for the sale of liquor, from Boston to the tip of Provincetown, was Nantasket.

At the end of the 1890's resentment ran so high against conditions in Hull due to illegal liquor sales, rampant gambling, prostitution, con games, and pickpockets, that complaints were lodged with the state and federal governments. Some of these complaints even requested that the town be occupied by the armed forces of the United States.

A series of legislative initiatives was launched in order to change the conditions in Hull. In February of 1899 two bills were introduced, one for the Metropolitan Park Commission (MPC) to take over Nantasket Beach, and the other was a bill to establish a board of police for Nantasket Beach. Both bills failed when they were voted upon. In April of 1899 a bill was introduced for the MPC to take over Nantasket Beach, Straits Pond and adjacent waters as a park reservation. The final act provided for an area of beachfront of 5,600 feet in length with no sale of alcohol and no liquor licenses to be granted within 400 feet of the land taken. The clause "Straits Pond and adjacent waters" was omitted and the bill was enacted into law on the second of June, 1899. There were a few amusements on the area taken over from the town by the MPC, but these were phased out since they were not compatible with the ambiance and type of recreational environment that the Commission wished to promote.

The Wonders of Paragon Park

Amusement in the area was not to disappear for very long. In 1904 the Eastern Park Construction Company was formed and plans were drawn up to construct a huge amusement park. This park was called Paragon Park and it opened on May 30th, 1905. Elements of the park included a 150-foot tower in the center of the park, a replica of Venice replete with a lagoon and gondolas and gondoliers imported from Italy, camels and camel drivers from Egypt, a Japanese Village with Japanese from Tokyo, a wild west show with riders and horses from a ranch in Oklahoma and many other attractions from all over the world along with the usual amusement rides of the time. The expense of running the huge park sometimes made it difficult for the owners to make a profit and during its first season the park lost $32,000. The park did provide amusement for many people who came to visit the beaches of Hull as well as providing business for the hotels and shops in the area until its close in 1984.

The End of the "Romantic Era"

As travel by automobile increased in the early twentieth century there was a correspondent decline in the other modes of transportation in Hull. In 1918 the trolley cars (inter-urbans) were discontinued. By 1932, the train line was abandoned. Worn-out steamboats were not replaced. In 1929 all but one of the remaining six of the original ten steamers of the Nantasket Beach line were destroyed by fire tied to the pier on Thanksgiving day.

After the fire the Nantasket Steamboat Company, faced with declining ridership, prepared to discontinue service. Local interests formed a new company which bought boats, wharves, and real estate in an effort to keep service going. After three disappointing summers, the new company decided to sell the properties to the town of Hull. The Massachusetts Legislature passed an act "Authorizing the Town of Hull to acquire Lands for Wharf and Recreation Center Purposes in Said Town". Town Meeting approved the acquisition in 1941.

With increasing suburbanization made possible by the automobile in the 1950's and 1960's, the automobile became the dominant mode of accessing Hull. Traffic soon became a problem due to the street structure of Hull. A portion of the old railroad bed along Nantasket Beach was soon turned into an ocean side drive, built at an elevation designed to reduce the effect of wave action. At the northern end of this street, at Phipps Street, a rotary was incorporated so that residential areas would not be impacted by traffic.

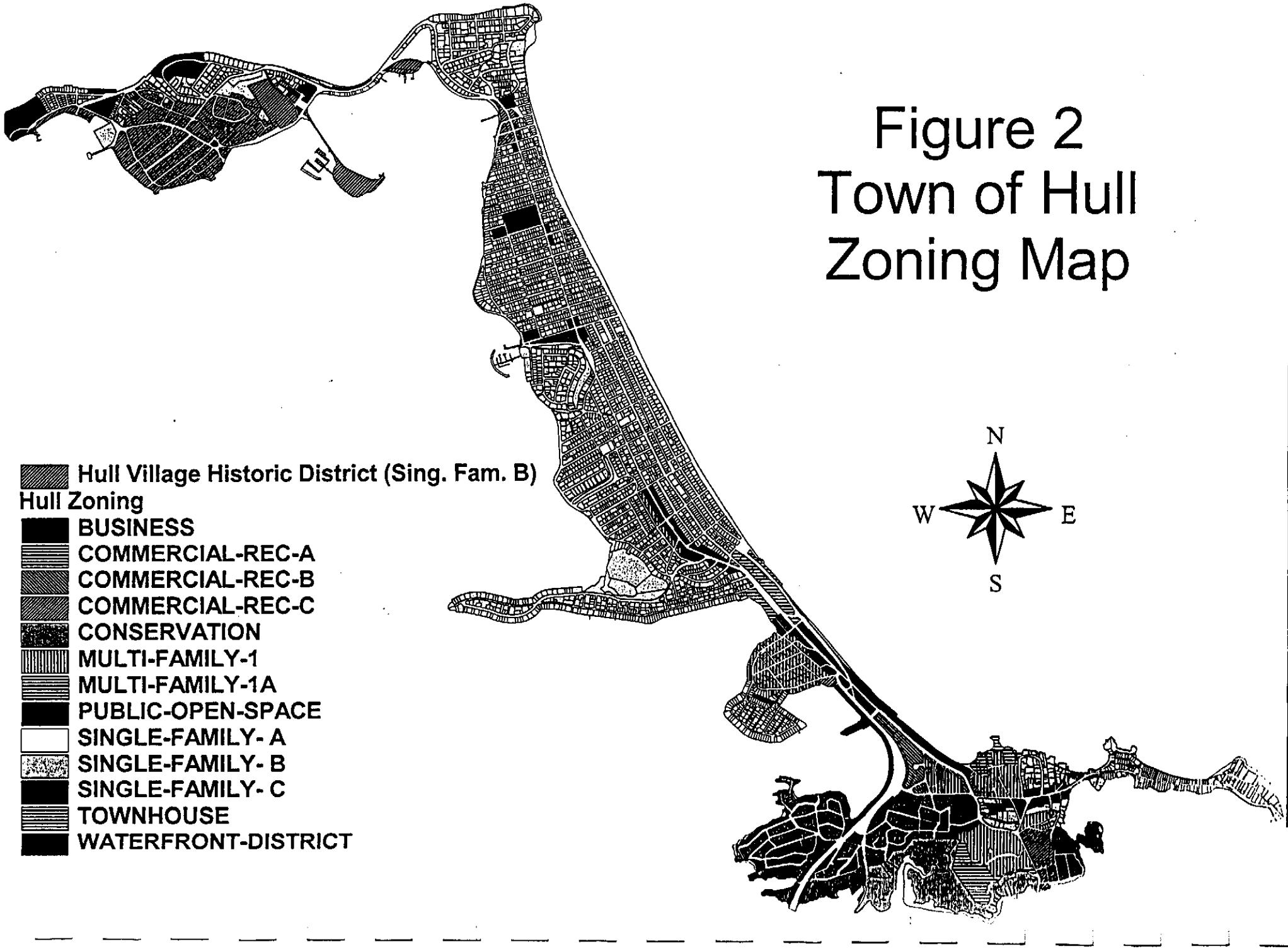
The town's circulation and parking problems were complicated by seasonal extremes of traffic volume.. Peak summer loads were primarily the result of out-of-town traffic bound for the Central Recreation Area. In 1960 peak summer flows on Saturday and Sunday were on the order of 20,000 vehicles per day. At this time the area along Nantasket Avenue was a mixed commercial-residential hotel area, catering to the needs of both seasonal visitors and year-round residents. The Surfside area included many hotels, stores, a supermarket, night club, post-office, bank and other commercial establishments as well as a few residences, mostly apartments above stores.

The Seeds of Urban Renewal

In the sixties urban renewal began. The town embraced the renewal project although many ambitious goals laid out in the plan of 1961 were not implemented. Much of this was due to changing attitudes about the environment and many of the approaches advocated were no longer acceptable from an environmental policy point of view. This urban renewal continued through the sixties, seventies and eighties with increasing focus on environmental concerns. During the 1980's a great number of condominiums were erected in Hull as once again people were looking for a summer getaway. Much of this new housing is not only for seasonal residents, but there are quite a number of year-round residents as well.

Hull in 1995 is a mature community with nearly all its land developed. The Hull Redevelopment Authority (HRA) site in the center of town, cleared for urban renewal in the sixties, is the only major site of undeveloped land in town besides parcels adjoining the Weir River Estuary. Therefore, the Zoning Map, Figure 2, reflects generally both the current and maximum development pattern.

Figure 2
Town of Hull
Zoning Map



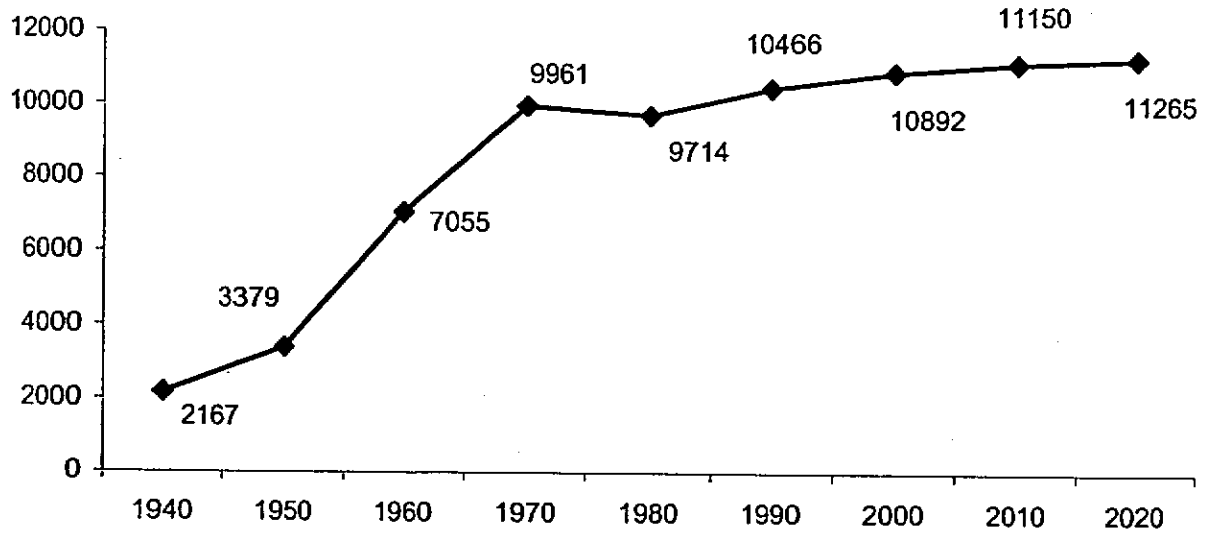
As the desire for urban renewal continues today, different options are being explored for the town as a whole as well as for the vacant land left by earlier clearance. Though the town established a vision for Hull in 1994 through a town-wide public participation process, consensus still remains to be achieved for the biggest issue of what to do on the HRA property in the center of town; what portion should be open space and what should be devoted to economic development? Not only is the environment a big concern, but beautification is an aspect that needs to be incorporated into the renewal process.

Population Characteristics

Town Growth

Today, Hull is a mature town with most of its land developed and an aging population. In 1940 Hull was a small town with slightly over two thousand residents (See Figure 3). After the Second World War the town expanded rapidly as people began to move from the city to suburban areas. Between 1950 and 1970 the population tripled from 3,379 to 9,961. Growth was rapid and steady throughout the two decades. Then, during the decade of the seventies, the population decreased slightly. However, construction of several large condominium complexes caused the population to increase during the eighties to 10,466 in the 1990 census.

Figure 3
Population: 1940-2020



The latest population forecasts by the Metropolitan Area Planning Council (MAPC, March 1999) project a slowly expanding population through the year 2020 at a decreasing rate for each decade. In 2020 a nearly steady state population is expected when the percentage increase from

the previous decade will have slowed to about one percent from the expected rate of increase throughout the nineties of four percent.

The town density of 4,137 persons per square mile makes Hull a moderately dense community (See Table 1).However, the area utilized in this calculation includes the islands off the coast of Hull which are predominantly unpopulated. Utilizing the land area of mainland Hull, the density of the Town increases to 5,233 persons per square mile. Density is calculated by dividing the population figure by the land area. Its neighbors of Cohasset, Hingham and Scituate all have densities between 700 to 1,000. Marblehead, Nahant and Swampscott have densities comparable to Hull, while the density of Winthrop is similar to that of Boston at approximately three times that of Hull. As the density of a town becomes greater, it becomes increasingly important to have public open space in order to have relief from urban development and to provide recreational resources. The higher the density of the town, the less likely it is that land is available for open space or other uses, which is the case in Hull. The projected increase in population up to 2020 from the 1990 population is 799 persons. At the present household size of 2.73 persons, this would be an additional 293 housing units. This number of people can be accommodated in two ways. First, according to the Town Assessor's records, there are 84 buildable lots available where some of the population could be housed in new construction. Secondly, in 1990 there were reported 28% or 1,468 vacant housing units, of which 979 are seasonal units that could become homes for year around residents. This is a decrease in the 40% of seasonal houses reported in the 1975 state census. Hence, if the trend toward greater year-around use continues, there is physical capacity for substantial increase in the town's year round population.

Historically, Hull has been a seaside resort community and many of the units were not lived in on a year round basis. According to the 1970 census, Hull had 9,961 year-round residents. Based on approximately 40% of the houses being seasonal, Hull had about 16,500 residents in the summer of 1970. However, by 1990 only 20% of the houses were seasonal (979 units out of a total 5,256 with an additional 489 vacant) resulting in an estimated summer population of 13,500.

Summer units typically are occupied by households that include more persons per household than most year-round households. At the weekend there is typically an influx of additional household members - children, adult children, grandchildren, other family members creating an expanded family, visiting friends, overnight guests and working husbands and wives. Assuming a larger average household size for seasonal units, the summer population is in the 15,000 range. This puts residential densities even higher than the 4,000 plus figure mentioned previously.

Although the increase in the summer population has declined as more housing units are converted to year round dwellings, there remains a significant increase in the summer population density . It should be noted however, that as year round growth consumes seasonal homes, the demand for services during the summer months will actually decline as the year round population increases.

However, there are no records to document to what extent summer residents use town recreation facilities or participate in town sponsored recreation programs. In order to determine such use of

recreation facilities and programs it is suggested that summer resident use be documented for the future planning purposes.

It should be noted that of all the towns studied in the comparison of population statistics, Hull is the only town to increase its population during the decade of the eighties having had an increase of nearly eight percent.

Table 1
Population Characteristics

	Area in Sq. Miles	Density Per Sq. Mile	1990 Census	1980 Census	% Change
Hull	2.53	4,137	10,466	9,714	7.7
Hull Mainland*	2.00	5,233	10,466	9,714	7.7
Cohasset	10.06	704	7,705	7,174	-1.4
Hingham	22.59	878	19,821	20,339	-2.5
Scituate	17.07	984	16,783	17,317	-3.1
Marblehead	4.42	4,519	19,971	20,126	-0.8
Nahant	1.06	3,612	3,828	3,947	-3.0
Swampscott	3.10	4,404	13,650	13,837	-1.4
Winthrop	1.63	11,121	18,127	19,294	-6.0

*Hull's mainland area was calculated utilizing assessor's records and length of roadway. The Town Assessor reports that the total number of parcels (public and private) sums to 1,100 acres. Subtracting the parcels from the islands belonging to Hull and adding the land area occupied by condominiums (49 acres) results in a total land area of 1,068.4 acres. Assessor's records to not include the area occupied by streets. Hull contains 49.93 miles of roadway at an average width of 35 feet. The area occupied is .33 square miles.

Household Economics

The median household income for residents of Hull is about two thirds of that in the other south and north shore communities compared in Table 2 with the exception of Winthrop which is similar. The same relationship exists for per capita income showing that Hull is below the averages of the South Shore Coalition, MAPC Region, and slightly less than the Massachusetts average, though slightly above the U.S. average. It could be expected that Hull residents also have less discretionary income than residents in other communities, indicating that recreation opportunities should be as economical as possible. As might be expected there is a direct correlation between per capita income and the level of education attained by the population as well as the percentage of the population employed as executives and professionals.

Another very informative economic statistic is the number of jobs in a community per person. It is noted that all the shore communities in Table 2 are below the average amount of employment in towns within the MAPC Region. Also, it was observed that Hull has the fewest number of jobs per person in the 101-town MAPC region, which is only 17% of the average. This means that most people have to commute some distance to find work and confirms the frequent complaint that employment opportunity for students in town is scarce.

Table 2
Economic Characteristics
(Source: 1990 U.S. Census)

	Median Household Income	Per Capita Income	% H.S. Grad	% Col. Grad	% Exec. & Prof.	Employment Per Pop.
Hull	37,683	16,907	85.4	19.7	29.5	0.10
Cohasset	62,933	31,166	94.4	54.6	49.4	0.29
Hingham	60,274	25,726	94.2	48.2	45.6	0.49
Scituate	52,044	22,156	93.3	39.9	41.3	0.17
Marblehead	53,333	30,615	95.6	53.7	47.6	0.23
Nahant	47,212	22,724	92.4	39.0	48.2	0.13
Swampscott	50,191	25,576	91.6	43.8	46.7	0.20
Winthrop	37,240	17,850	86.9	21.7	30.2	0.16
South Shore	N/A	20,220	90.2	31.1	34.0	N/A
MAPC Region	N/A	19,577	83.7	33.5	36.4	0.58
MA	44,367	17,224	80.0	27.2	32.0	N/A
US	35,225	14,420	75.3	20.3	26.4	N/A

Housing

Hull experienced greater growth in its housing supply than other shore communities during the eighties (See Table 3). The growth rate (17%) was greater than the average for the South Shore Coalition and for the state, but slightly below the U.S. average of 21%. This surge in housing supply for Hull was due to the construction of condominiums. Condominium construction is not as land intensive a use as development of single family homes and thus has only a minor impact of the available open space. However, as noted above, the Town has only 84 available buildable parcels. Therefore, the loss of even a small parcel has a significant effect of the Town's available open space. Additionally, the increases in population due to condominium development has added significant demand on the Town's recreation system.

Hull's older housing, that built before 1939, shows a similar percentage to other shore communities. It is less than on the north shore which generally developed earlier but greater

than its neighbors on the south shore because those towns include extensive interior lands which generally developed later. The tenure in the town by both owners and renters does not seem to differ substantially from other towns or the nation as a whole.

Finally, the median sales price for homes in Hull remains substantially below that in neighboring towns. The 1980's saw a trend for young urban professionals to purchase in Hull. Given its location and low relative cost for housing Hull is likely to remain an attractive bargain for prospective homeowners.

Disability

The statistics in Table 4 show that Hull has a greater percentage of its residents between 16 and 64 mobility challenged and with work disabilities than other shore towns. However, the percentage of disability is close to the U.S. average. There is less difference between towns for persons 65 and over. Part of the reason for greater disability of the younger population is likely a larger percentage of the work force in more physically dangerous occupations, i.e. fewer executives and professionals. This indicates potentially a greater need than other communities to focus on the needs of younger persons with disabilities.

Table 4
Disability of Civilian Non-institutional

	Persons 16 to 64 Years		Persons 65 and Over		
	Mobility or Self-Care	Work Disability	Mobility or Self-Care	Work Disability	Percent of Total Pop.
Hull	3.9	9.0	13.8	28.3	16.9
Cohasset	4.3	11.9	20.2	9.6	
Hingham	1.2	4.2	17.6	27.2	11.5
Scituate	2.3	5.3	18.0	30.7	14.0
Marblehead	1.5	3.6	15.2	25.1	11.2
Nahant	3.3	4.5	14.2	25.3	14.5
Swampscott	2.9	6.6	17.9	18.0	15.1
Winthrop	2.8	7.1	17.2	28.4	17.1
South Shore	3.0	6.0	16.9	27.3	13.9
MAPC Region	3.7	6.5	19.4	27.7	15.9
MA	8.7	7.2	31.0	27.9	22.9
US	4.6	8.2	20.1	32.8	19.2

Table 3
Housing Characteristics
(1990 US Census except where noted)

	Age of Housing Stock				Median Monthly Housing Costs		Owner Occupied Housing (%)	Median Sales Price (Banker & Tradesman)		
TOWN	% built before 1939	% built 1940-1979	% built 1980-1990	# of homes built 1980-1990	Mortgage Cost	Renter Cost		1997	1998	% change
Hull	**42**	**31**	**17**	**876**	**954**	**797**	**67**	**116,000**	**130,000**	**12**
Cohasset	43	29	11	298	1,430	776	80	265,000	308,500	16
Hingham	33	32	13	909	1,217	783	84	228,000	270,500	19
Scituate	30	31	11	803	1,142	627	81	211,600	224,000	6
Marblehead	49	36	6	502	1,385	760	72	244,000	267,000	9
Nahant	53	46	4	71	1,185	784	65	195,000	220,000	13
Swampscott	52	35	9	514	1,292	831	74	178,000	215,000	21
Winthrop	54	46	7	580	997	681	51	146,000	172,500	18
South Shore Coalition	27	58	15	10,902	N/A	N/A	76	N/A	N/A	N/A
MAPC Region	44	46	10	122,039	N/A	N/A	55	N/A	N/A	N/A
MA	39	44	14	N/A	985	580	59	N/A	N/A	N/A
US	18	26	21	N/A	737	447	64	N/A	N/A	N/A

Growth and Development Patterns

Historically, Hull has been a seaside resort community with many seasonal units. However, by 1990 less than 20% of the units were seasonal. Additionally, during the 1980's construction of several large condominium complexes contributed to the increase in year round residents. Today, Hull is a mature town with 97% of its land developed.

The Town is fully sewered which contributed to the condominium development during the 1980's. During the Spring of 2000, the Massachusetts Executive Office of Environmental Affairs along with the Metropolitan Area Planning Council completed a buildout analysis for the Town of Hull. Not surprisingly, given that the Town is nearly fully developed with infrastructure in place, the buildout analysis indicated little expected impact from future development. At full buildout under current zoning (see Zoning Map), the Town could expect 727 additional residents housed in approximately 203 additional units (see Table 4).

Table 5
Buildout Analysis Summary

	1990	Current	Buildout	Impact
Population	10,466	10,807	11,534	727
Households	3,788	4,018	4,301	283
Water use (gal/day)		972,140	1,069,265	97,125
Students	1,507	1,646	1,751	105

Source: 2000 EOEA & MAPC Buildout Analysis

Section 4

Environmental Inventory and Analysis

Section 4
ENVIRONMENTAL INVENTORY AND ANALYSIS

Figures and Tables

ENVIRONMENTAL INVENTORY AND ANALYSIS

Topography, Geology, Soils

Topography

Hull is located on a narrow, northwest-trending peninsula, which extends nearly five miles into Boston Harbor. Its shoreline, nearly straight in the north and intricately crenulated in the south, is nearly 27 miles long. Only a narrow sand spit at Black Rock Beach connects the 904-acre peninsula to the mainland. Four water bodies form Hull's boundaries: Straits Pond/Weir River in the south/southwest; Hull Bay in the west; Boston Harbor in the north; and, Massachusetts Bay in the east. Several offshore islands are within Hull's municipal boundaries, however only Spinnaker Island and the Black Rocks are controlled by the town. Peddocks and Bumpkin Islands are under Metropolitan District Commission jurisdiction, as are Calf Island, Little Calf Island, the Brewster Islands, and Green Island.

The peninsula is composed of several rounded, but steeply-sided hills, generally between 40 to 100 feet high, joined by nearly level land lying 10 to 20 feet above mean sea level (MSL). Telegraph Hill, Hull's highest point, reaches 121 feet (MSL). Nantasket Beach along Massachusetts Bay is wide, sandy and gently sloping, in contrast to the beaches south of Atlantic Hill and along the Boston Harbor shoreline which tend to be narrow, rocky or paved with cobbles. The protected Hull Bay and Weir River shorelines are characterized by tidal flats and salt marshes.

Geology

Hull's topography and its unique physical beauty are the result of a long and complex geological history which geologists have only recently begun to understand. Hull lies at the southern edge of the structural depression termed the Boston Basin (Rast and Skehan, 1990; Thompson and Skehan, 1992). Straits Pond and the upper Weir River east of George Washington Boulevard are the surface expressions of the deeply-buried Ponkapoag Fault which marks the edge of the basin. The southern part of Hull, Atlantic Hill, Rockaway and Rockaway Annex, contains a thin mantle of dense glacial till overlying bedrock composed largely of metamorphosed sedimentary and volcanic rocks which are more than 600 million years old (Hepburn, et.al., 1993; Cote and Katz, 1993). The metamorphosed sedimentary units, known to geologists as the Cambridge Argillite, underlie the Hull Peninsula as well as much of Boston Harbor. Calf Island, Little Calf Island, Shag Rocks and Black Rocks and the Brewster Islands, except for Great Brewster, also consist of this bedrock.

From Nantasket to Windmill Point, the surficial geology is product the last two glacial periods. The hills are drumlins, i.e. masses of glacial till oriented in the direction of the glacier's flow. Although debated for decades in the scientific literature, the origin of these structures still is not fully understood. Available evidence indicates that the Boston Harbor drumlins contain two layers. The lower, older "core" is composed of till material deposited during a glacial period about 100,000 years ago. During the last glacial period, beginning about 24,000 years ago and ending

about 14,000 years ago, the glacier streamlined the drumlins and deposited a layer of till on the older core.

The last glacier contained ice ranging from about 2,500 feet thick on the edges up to two and a half miles thick in central portions. So much of the ocean's water was stored in the ice that sea level was several hundred feet lower than it is today (Raymo and Raymo, 1989). When, as the ice retreated, sea level rose, Boston Harbor flooded, making the drumlins into islands, such as Great Brewster, Peddocks and Bumpkin Islands. As wind and waves attacked the drumlins, sand spits formed from the eroded debris (Johnson, 1925)(see Figure 1 - Evolution of Hull). These spits eventually bridged the gaps between neighboring drumlins creating structures called tombolos. What today is Nantasket Beach is a series of tombolos containing the sands of five completely eroded drumlins which were located east of Hull in Massachusetts Bay. Other tombolos connect Telegraph Hill to Allerton, Atlantic Hill to Green Hill and Green Hill to Cohasset.

The westward retreat of the Hull peninsula toward the future envisioned by Johnson has continued to the present time. Though the dynamics of the short-term changes in the Nantasket beach shoreline are not well understood despite numerous investigations (summarized by Peck, 1987), long term movements can be seen in the shoreline change maps developed by Massachusetts Coastal Zone Management which summarize 131 years of records. The maps indicate that between 1847 and 1978, Allerton Point retreated 145 feet, an average rate of 1.11 feet per year. During that period, Crescent Beach retreated 94 feet (0.71 feet per year). Interestingly, Nantasket Beach near Colburn Street did not erode; that area moved seaward 35 feet (0.26 feet per year) as did the shoreline north of the Jacobs School which gained 97 feet (0.71 feet per year). Further evolution, however, has been slowed by the seawalls at Point Allerton and at Nantasket Beach.

Soils

The glacial deposits have weathered into four main types of soils in two major associations closely reflective of the underlying geology. Based on Soil Conservation Service mapping Upham, 1969), these are a Bernardston-Dune association which formed on the drumlins and sand spits between Nantasket and Pemberton and a Charlton-Hollis-Tidal Marsh association in bedrock areas between Nantasket and the Hingham/Cohasset town lines (see Figure 2 - Soils). Soils present in Hull are described below; their characteristics are summarized in Tables 1 and 2.

Bernardston silt loam, (BbB: 3 to 8 percent slopes; BbC: 8 to 15 percent slopes) - These soils are well drained, gently to moderately steeply sloping silt loam that formed in the glacial till of drumlins. The topsoil is a very friable, dark brown silt loam about 10 inches thick. The 14-inch thick subsoil is a very friable yellowish-brown to light olive brown silt loam. Unaltered, these soils are very stony; usually they have been cleared to allow tillage. Directly below the subsoil, at a depth of 24 to 30 inches, is a platy layer of dense, firm and brittle glacial till termed a fragipan. Because of its texture, drainage and moisture retention, Bernardston soils are considered among the better soils in Plymouth County for many crops. Limitations result from the slowly permeable fragipan which restricts the vertical movement of water, forcing downslope seepage. Consequently, the soil is unsuitable for septic systems.

Figure 1
Evolution of Hull

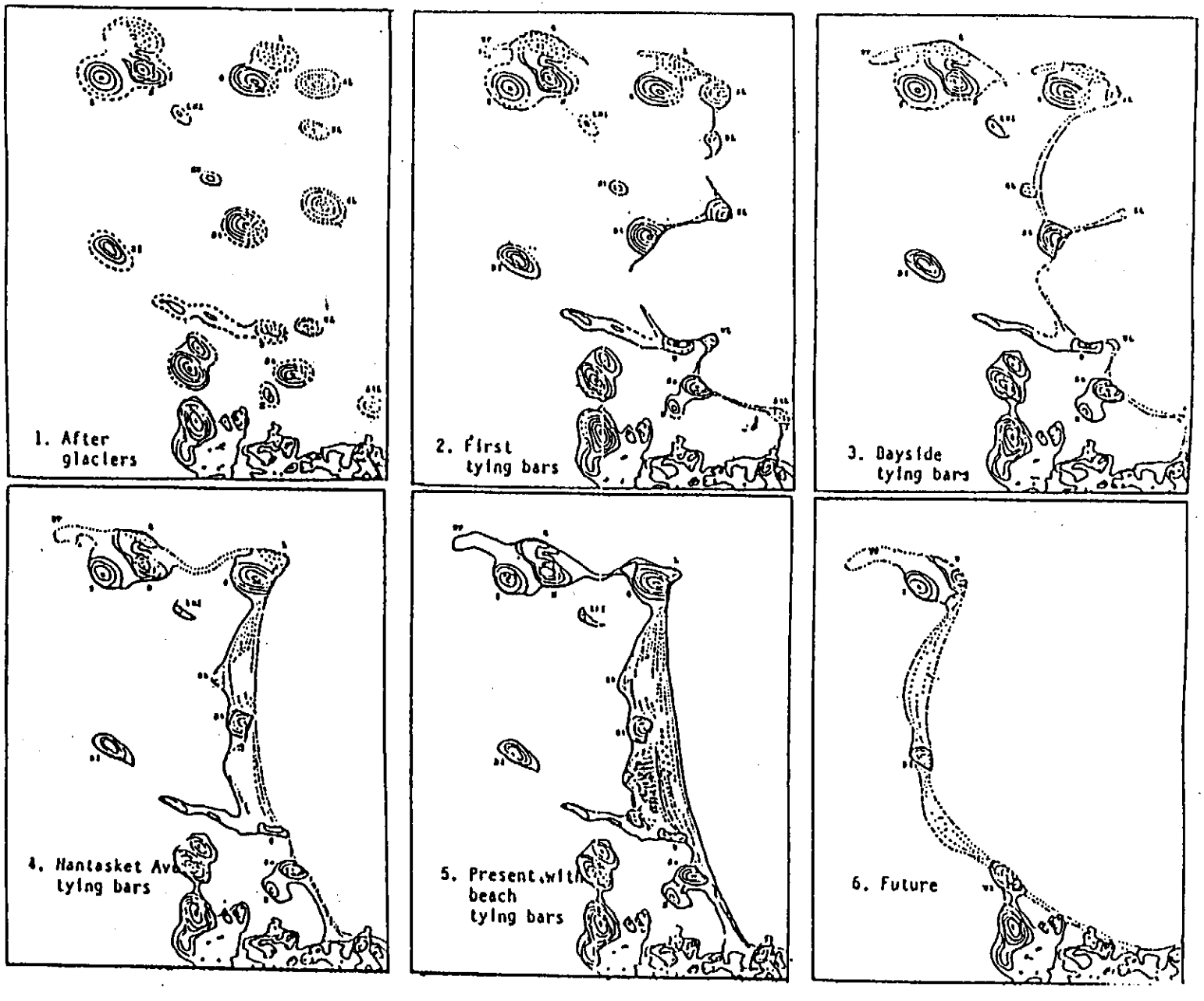


Figure 2
Soils

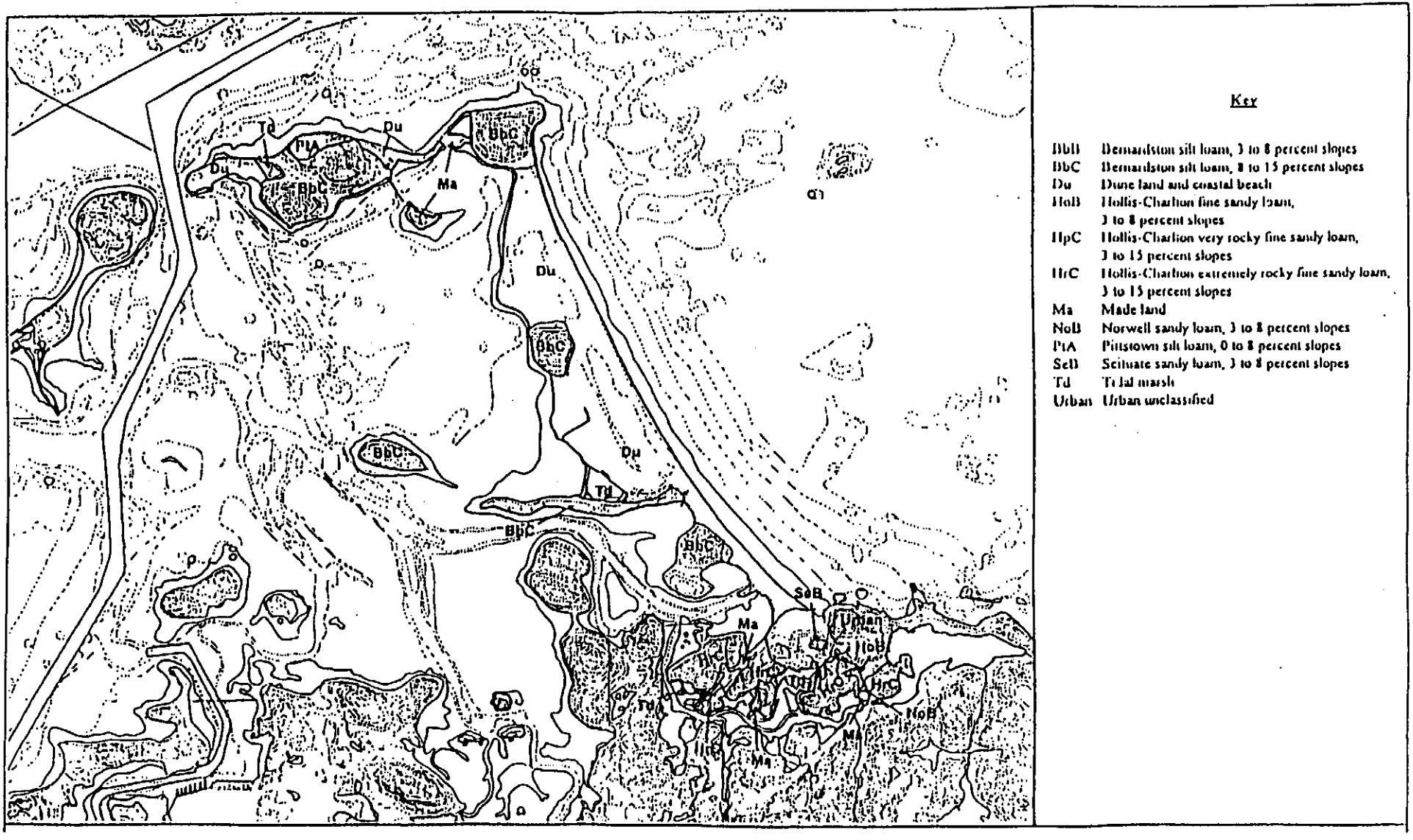


Table 1
Physical Characteristics of Hull's Soils

Soil Type	Drainage	Depth to High Water Table (ft)	Depth to Bedrock (ft)	Erodability (K-factor)	Depth (inches)	Substratum Character	Clay (%)	Rock Fragments (%)	Permeability (inches per hour)	Frost Action Potential	Shrink-Swell Potential
Bernardston	Well	3-5	3-30+	Moderate (0.28)	0-22	Silt Loam	< 25	10-20	0.63 -2.0	Moderate	Low
					22-36	Silt loam (Fragipan)	< 25	10-20	< 0.63	Moderate	Low
Charlton	Well	> 5	3-10+	Slight - Moderate (0.28)	0-20	Fine sandy loam	< 20	5-15	2.0-0.63	Moderate	Low
					20-25	Sandy loam	< 20	10-20	0.63-2.0	Moderate	Low
					25-36	Gravelly sandy loam	< 20	20-25	2.0-.63	Moderate	Low
Dune	Excessive	0-5+	3-10+	Varies	0-30	Coarse Sand	< 10	Variable	> 6.3	N/A	Low
Hollis	Somewhat excessively	3-5+	1-1.5	Moderate (0.20)	0-18	Fine sandy loam	< 20	15-20+	2.0-6.3+	Moderate	Low
					18	Bedrock				Moderate	
Made land	N/A	N/A	N/A	N/A		Fill	N/A	N/A	N/A	N/A	N/A
Norwell	Poor	0-1	3-10+	Moderate	0-8	Sandy loam	< 20	0-20	2.0-6.3	High	Low
					8-20	Loamy coarse sand	< 15	5-20	> 6.3	High	Low
					20-48	Sandy loam or loamy sand	< 20 or < 15	5-15	< 0.2-0.63	High	Low
Pittstown	Moderately well	1.5	3-30+	Moderate (0.28)	0-22	Silt loam	< 25	10-15	2.0-6.3	Moderate	Low
					22-30	Silt Loam	< 25	15-20	< 0.2	Moderate	Low
Scituate	Moderately well	1.5-3	5-30+	Moderate (0.24)	0-20	Sandy loam	< 20	5-15+	2.0-6.3+	Moderate	Low
					20-36	Sandy loam	< 20	5-15+	2.0-6.3+	Moderate	Low
					36-46	Loamy coarse sand (fragipan)	< 15	5-15+	<0.2-0.63	Moderate	Low
Tidal Marsh	Very poorly	0	Variable	Variable	Variable	Variable	Variable	Variable	Variable	Variable	N/A
Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 2
Limitations of Hull's Soils

Soil Type	Development Limitations			Source Suitability			Potential Lumber Yields			Wildlife Suitability		
	Septic Fields	Homesite (sewered)	Athletic Fields	Topsoil	Sand and Gravel	Fill	Upland Oak	White Pine	Red Pine	Open wildlife	Woodland Wildlife	Wetland Wildlife
Bernard-ston	Severe (fragipan)	Moderate (fragipan, wetness)	Moderate (wetness)	Good, poor for stony phaes	Unsuited	Fair	Fair to good	Fair	Good	Good	Good	Unsuited
Charlton	(see Hollis)	(see Hollis)	(see Hollis)	Fair, poor for stony phases	Unsuited	Good	(see Hollis)	(see Hollis)	(see Hollis)	(see Hollis)	(see Hollis)	(see Hollis)
Dune	Very Severe	Very Severe	Moderate	Unsuited	Unsuited	Unsuited	N/A	N/A	N/A	Fair	Unsuited	Fair
Hollis	Severe (shallow bedrock, outcrops)	Severe (shallow bedrock, outcrops)	Severe (shallow bedrock, outcrops)	Fair to unsuited	Unsuited	Unsuited	Poor to fair	Fair	Fair	Fair	Fair	Unsuited
Made - Land	N/A	N/A	N/A	Unsuited	Unsuited	Unsuited	N/A	N/A	N/A	Fair to unsuited	Unsuited	Unsuited
Norwell	Severe (wetness)	Severe (wetness)	Severe (wetness)	Poor	Unsuited	Fair	Fair to good	Good	Good	Fair	Fair	Unsuited
Pittstown	Severe (fragipan, wetness)	Moderate (fragipan, wetness)	Moderate (wetness)	Fair	Unsuited	Fair	Good	Good	Good	Good	Good	Poor
Scituate	Severe (fragipan)	Moderate (fragipan, wetness)	Moderate (wetness)	Good, poor on stony phases	Unsuited	Fair	Fair to good	Fair to good	Fair to good	Fair	Fair	Poor
Tidal Marsh	Very severe	Very severe	Very severe	Unsuited	Unsuited	Unsuited	Unsuited	Unsuited	Unsuited	Unsuited	Unsuited	Good
Urban	N/A	None	N/A	Unsuited	Unsuited	Unsuited	N/A	N/A	N/A	N/A	N/A	N/A

Dune Land and Coastal Beach (Du) - Dune lands consist primarily of quartz sand deposited by wind and waves. Areas of uniform gravel may be included. Throughout most of Hull, these areas are stabilized by buildings, roads, and landscaping protected by shoreline engineering structures. Otherwise, they would be easily eroded. The excessive permeability of these soils may preclude adequate filtration of the septic effluent resulting in pollution of ground and surface waters.

Hollis-Charlton fine sandy loams, 3 to 8 percent slopes (HoB); Hollis-Charlton very rocky fine sandy loams, 3 to 15 percent slopes (HpC); Hollis-Charlton extremely rocky fine sandy loams, 3 to 15 percent slopes (HrC) - These mapping units are complexes of small individual areas of two soils, Hollis and Charlton, which are closely intermingled and are managed together. Both soils formed from glacial till in areas of shallow bedrock. Charlton soils are deep, well drained, gently to moderately sloping soils that contain about 5 inches of topsoil composed of very friable black to dark brown fine sandy loam. The 24-inch thick subsoil is composed of yellowish brown fine sandy loam and overlies olive-grey gravelly sandy loam. Hollis soils are shallow, gently sloping to moderately steep, somewhat excessively drained soils occupying areas where bedrock frequently outcrops. It consists of friable dark yellowish-brown to yellowish-brown fine sandy loam which contains 10 to 30 percent rock fragments. Bedrock typically is encountered at depths of about 18 inches, making these soils unsuitable for septic disposal.

Made Land (Ma) - This mapping unit consists of filled areas. The composition, is highly variable and on-site investigation is required to determine the capabilities and limitations of individual areas.

Norwell sandy loam, 3 to 8 percent slopes (NoB) - Occupying a small low portion of the Hall Estate, this soil is a poorly drained, stony, sandy loam which formed from glacial till. A fragipan occurs at a depth of about two feet. Norwell soils typically are wet seven to nine months a year. Wetness and the fragipan limit this soil to wildlife habitat and other wetland uses.

Pittstown silt loam, 0 to 8 percent slopes (PtA) - This moderately well drained soil formed from glacial till and occurs in the vicinity of Ft. Revere. It has a profile similar to Bernardston soils, except that the subsoil shows mottling (i.e. evidence of a seasonally high water table). It is generally wet until late in the spring because of an underlying fragipan and because it occupies the lower part of the drumlin slope. The fragipan limits the soil for on-site septic disposal.

Scituate sandy loam, 3 to 8 percent slopes (SeB) - A small area of this gently sloping, moderately well drained soil occupies a portion of the Rockaway Annex area. Formed from glacial till, Scituate soils are very stony, unless cleared for tilling, and overlie a fragipan at 18 to 30 inches below the surface. The topsoil and subsoil consist of sandy loam which is mottled in the subsoil. Because the fragipan restricts drainage, the soil remains saturated until late in the spring. Consequently, uses such as septic disposal are limited. Unstabilized exposures may be highly erodible.

Tidal Marsh (Td) - Tidal marsh is composed of very poorly drained mixed organic and mineral material, predominantly salt marsh vegetation (*Spartina spp.*) and silt. It occurs in protected, tidally flooded areas. Tidal marsh is unsuitable for uses other than salt hay and wildlife habitat.

Urban Unclassified - These areas were not mapped because of they are paved, highly disturbed, or otherwise severely urbanized. On-site investigation is required to determine the capabilities and limitations of individual areas.

Landscape Character

Land Form

To begin, Hull is a very distinctive land form. As a L-shaped peninsula defining Boston Harbor to its west and north, Hull's geology is unique for Massachusetts. This readily visible geology of drumlins (or hills) connected by tombolos (or sand spits) began its formation over 100,000 years ago during the first of two glacial periods as diagrammed in the geology discussion above. The resultant topographic variation provides dramatic views from the hills to the rest of Hull as well as to nearby islands, the land forms along Boston Harbor, and the ocean. There are also distant views across the harbor of the downtown Boston skyline. See Figure 3, Land Form and Views.

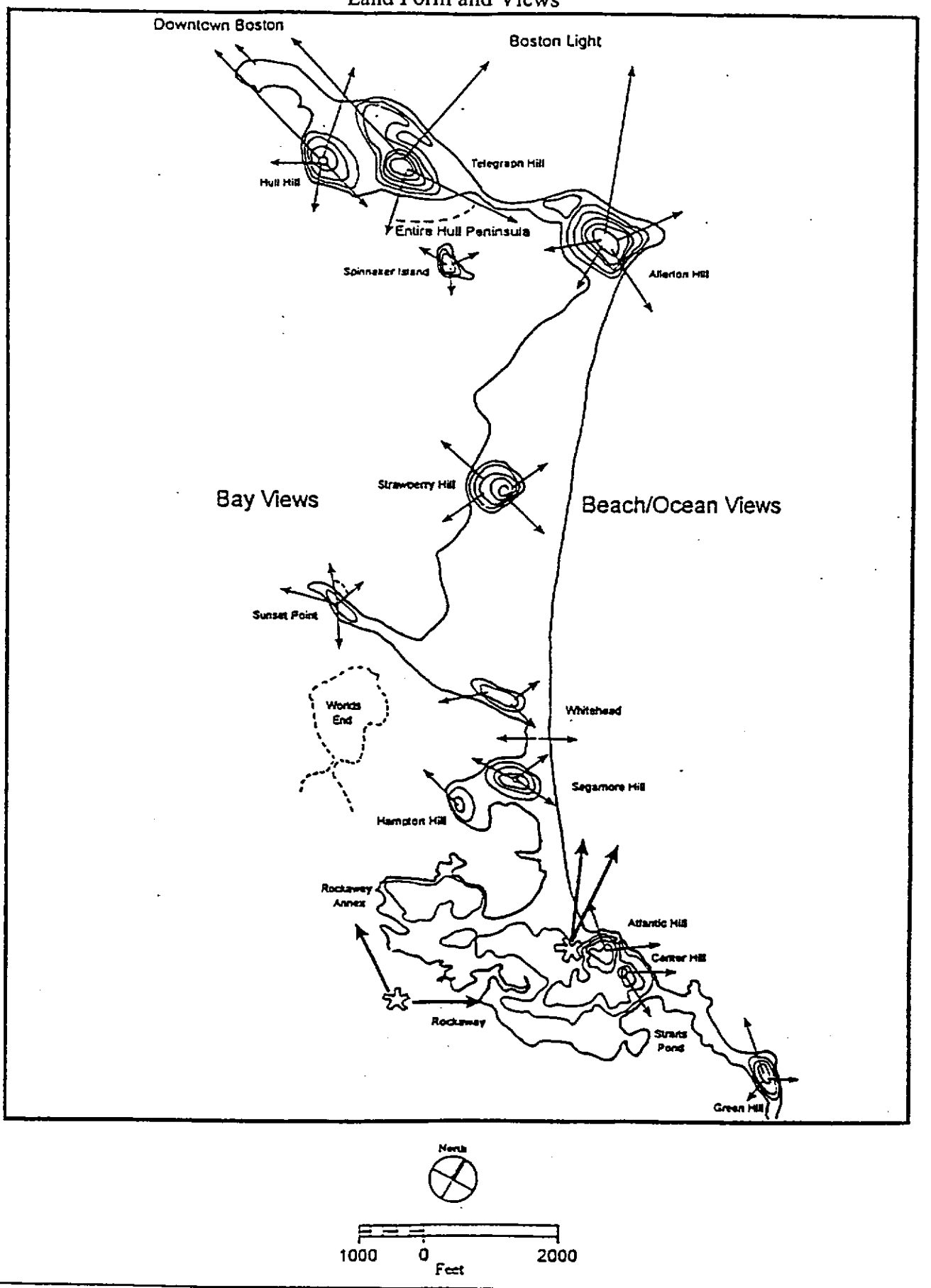
The sandy hills or drumlins deposited by glaciers which are approximately 10,000 years old include Hull Hill, Telegraph Hill, Allerton Hill, Spinnaker Island, Strawberry Hill, Sunset Point, Whitehead, Sagamore Hill, Hampton Hill and Green Hill. With the exception of Spinnaker Island, all of these hills are connected by tombolos (sand bars) formed only recently in terms of geological time. The southern shore portion of Hull known as Rockaway, Rockaway Annex, and including Atlantic Hill and Center Hill is part of a rock formation approximately 600 million years old, and therefore different from the drumlins. This topographic variation provides a wide diversity of dramatic views and different vegetative cover.

Vegetative Cover

Generally the hills are covered with trees and the intervening sand spits are naturally devoid of vegetative cover. The planting of trees and other decorative landscape materials occurs in many residential areas, but constant care is required by homeowners in the sand spit areas. One measure of quality residential areas by most New Englanders is that of substantial vegetative cover. Most areas of Hull require extra effort and maintenance procedures to establish and maintain this expectation. Also, housing is more dense in Hull than most other suburban locations and therefore the lack of average vegetative cover occurring in the region results in the density being perceived as even greater than it is. Efforts should be made to promote plant materials that are more vigorous in the sand and ocean environment of Hull.

There are a few internal marsh areas such as in the Hull village area. A more significant marsh area exists north of Sunset Point, including the Westinghouse property. However, the most significant marsh lands occur along the Weir River corridor at the southern boundary of Hull. The Weir River corridor is such a special marsh community. It deserves the special preservation attention that it has been given in recent years, and truly has a potential to be both an environmental and recreational resource to the town and region. It can become one of the major natural resources of the town and part of the positive new identity for which Hull is searching.

Figure 3
Land Form and Views



Water Resources

Surface Water

Water is the asset that defines Hull. Water attracted the first settlers and draws today's visitors. Although abundant, Hull's waters require careful consideration of their unique characteristics in order for the recreational potential to be fully developed. Careful management is necessary to ensure that the full benefits of this resource can be passed to the future.

Physical Characteristics

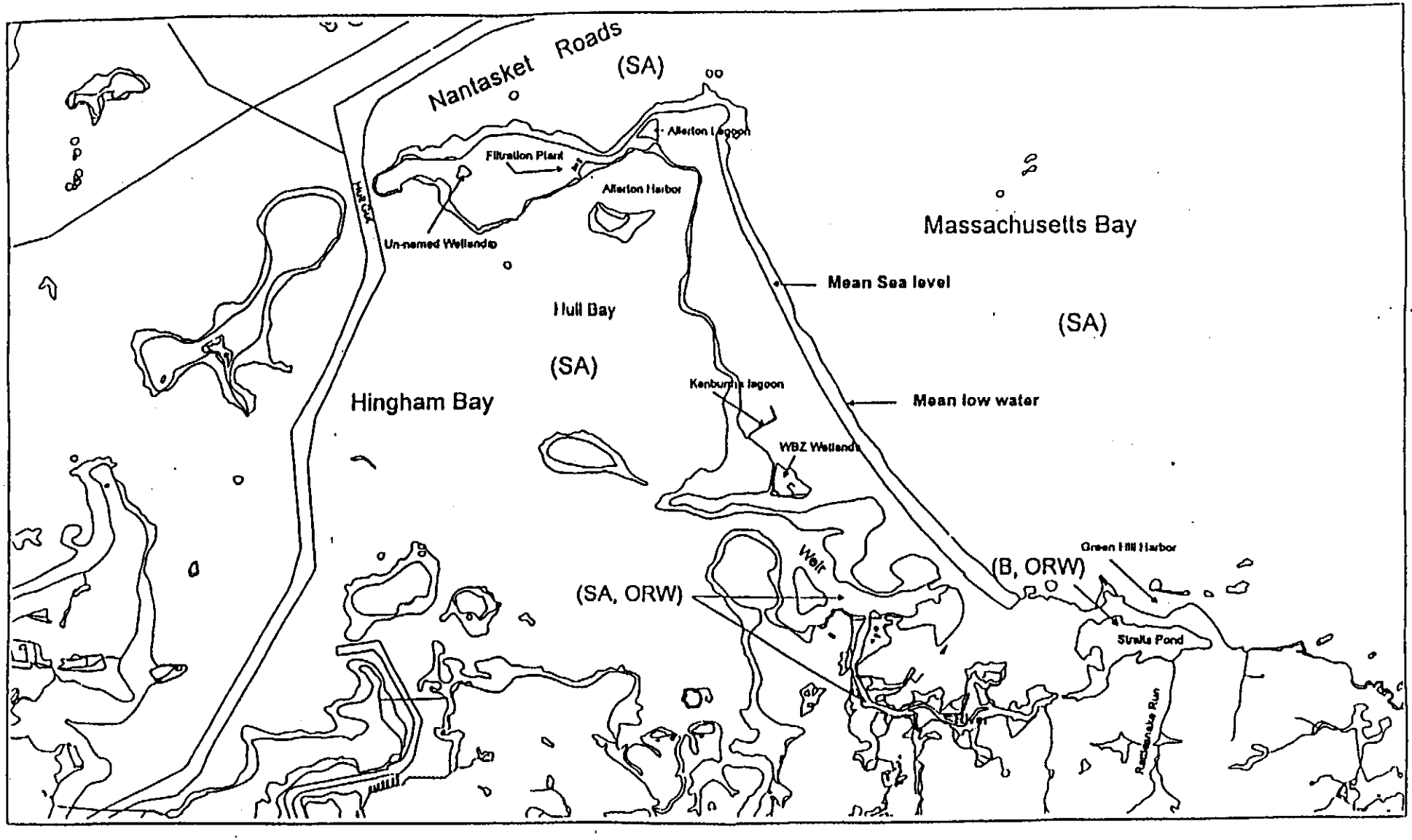
Hull is bounded by four water bodies which are subject to semi-diurnal tides: Weir River in the south/southwest; Hull Bay in the west; Boston Harbor in the north; and, Massachusetts Bay in the east (see Figure 4 - Water Resources). The tidal range on both sides of the peninsula is about 9.5 feet. Hull Bay and the Weir River estuary form the eastern side of Hingham Bay, which in turn is the southeastern part of the Boston Harbor embayment. Hingham Bay is landlocked except for the openings at the east and west ends of Peddocks Island: Hull Gut and East Gut, respectively. Because all tidal exchange occurs through these openings, peak currents through Hull Gut are spectacular as they reach 2.1 knots during the flood tide and 2.6 knots during ebb tide.

The bottom of Hull Bay is shallow and nearly flat. Its bottom sediments typically are sandy silt rich in organics ranging from a thin mantle to over 50 feet thick. This layer overlies post-glacial marine clay, glacial till, and/or bedrock. Depths at mean low water range between 6 and 9 feet. In the main channel which lies west of Bumpkin Island to Pemberton, the bottom drops to depths ranging between 20 and 62 feet (MLW). Hull Gut is contains a 500-foot wide channel dredged to 35 feet (MLW). Except for the central channel, the lower Weir River is dominated by intertidal mud flats. There is a dredged channel (9 ft (MLW)) serving Nantasket Pier.

Hull Bay is the center of recreational boating in Hull. It contains three federally designated Special Anchorage Areas, administered by the Hull Harbor Master, that have a combined mooring capacity of several hundred boats. It also is the site of Hull's marinas and yacht clubs. Though protected from the open ocean, Hull Bay is subject to the waves and weather from the southerly winds which prevail during the summer boating season. The fetch across Hingham Bay is sufficient that marinas outside of Allerton harbor, which is in the lee of Spinnaker Island, require breakwaters.

Straits Pond is about 100 acres in size and has a mean depth of 3.3 feet (IEP, 1980). Rattlesnake Run, the only tributary, drains a portion of North Cohasset containing the town sanitary landfill, the Cohasset Golf Club and a wooded swamp. Storm drains from North Cohasset residential areas and from Hull also are tributary to the pond. Tidal flows into the pond normally are restricted by a tidal gate. During the winter months, the pond is drained. Most of the bottom sediments consist of organic silt, although much of the eastern portion of pond contains sand deposited from the overwash of Blacks Beach by storm waves.

Figure 4
Water Resources



Water Quality

Water quality is of considerable importance to recreational opportunities in Hull. Under federal and state regulations, many water-based recreational activities may be restricted to protect against the potential health threats of contaminated waters. Shellfishing is most susceptible, but swimming, boating, nature watching and the general aesthetics of the shoreline can be affected. To protect and enhance water quality, Massachusetts Division of Water Pollution Control Regulations require that discharges to Massachusetts Bay, Hull Bay, and the Weir River must meet the criteria for "SA" waters, waters suitable for bathing, water contact sports and shellfishing without depuration. Straits Pond waters currently are of lesser quality and are rated "B", suitable for recreation and fish and wildlife habitat. In addition, the Weir River and Straits Pond are classified "Outstanding Resource Waters" for their outstanding recreational, ecological, economic, or aesthetic values. New or increased discharges to these waters are prohibited, and their watersheds are considered priority areas for the elimination of existing discharges.

Overall, Hull has the best water quality within Boston Harbor, and as the Boston Harbor clean-up progresses, water quality will continue to improve. The quality of ocean and bayside waters exceeds the state standards for swimming and boating. However, fecal coliform standards for shellfishing are not met in any part of Hull. Because of local domestic and industrial sources of pollution in Hingham Bay, this condition is expected to be improved, but not eliminated by the Boston Harbor clean-up.

Flood Hazard Areas

About 50 percent of Hull is located within the 100-year floodplain. The Boston Harbor and Massachusetts Bay shorelines are open to the ocean and are subject to storm waves. Accordingly, these areas are classified as "velocity zones" with base flood elevations ranging between 14 and 23 feet (NGVD). Calculated storm wave heights are included in these base flood elevations. Current recreational facilities within the velocity zone are limited to Massachusetts Bay beaches and Stony Beach.

Flood zones on the protected Hull Bay and Weir River shorelines are mapped as "A-zones" with base flood elevations range between 10 and 14 feet (NGVD) and as AO or AH zones where inundations of 1 to 3 feet are anticipated. Except for Hull High School, Jacob Elementary School, Hull Village Playground, Point Allerton Park and Fort Revere which are located above the floodplain, all other recreational facilities are located within this zone.

Wetlands

Hull's wetlands primarily consist of the coastal wetlands which ring the peninsula. These areas are of critical importance to the town. The beaches, marshes and water are an important part of the quality of life for Hull's residents and the foundation of Hull's economy. Additionally, these areas are of vital ecological importance as spawning, nursery, and feeding areas for fish and as feeding, resting, and wintering areas for birds. As described throughout this report, the protection and enhancement of these resources is a major focus of Hull's recreational planning.

Wetlands identified on the USGS quadrangle map for Hull are mapped in Figure 4. None of Hull's wetlands, either coastal or inland, have been mapped by the Department of Environmental Protection Wetlands Conservancy Program (formerly the Wetlands Restriction Program).

Coastal Wetlands

Hull coastal wetland resources include the ocean, Hull Bay and the Weir River/Straits Pond, as well as the extensive intertidal flats, beaches, dunes, rocky intertidal shores, and salt marshes. Though geologically a tombolo, the Hull peninsula is classified as a barrier beach by the state wetlands regulations.

These coastal wetlands are Hull's greatest recreational assets, providing a variety of recreational activities to both local and regional residents such as sunbathing, strolling/jogging, fishing, fowling, boating, bird watching, and special events. Nantasket Beach receives the heaviest use; the Metropolitan District Commission (MDC) beach/bathhouse and related facilities alone draw more than one million visitors annually. Other beaches such as Hull Village, Gunrock, Green Hill, Stony and the bayside beaches as well as the northern part of Nantasket Beach, have extremely limited parking, effectively reserving them for resident use only. Recreational use of beaches on the Hull Bay and Weir River shoreline is restricted by excessively stony or muddy sediments, seawalls or extensive salt marshes. Around Sunset Point, Hampton Hill, and Rockaway, extensive shorefront residential development limits beach access to the undeveloped "stub-ends" of streets. However, activities such as fishing, birding or viewing are readily available from several bayside piers and wharves. Most of these contain public parking.

Boat mooring/docking is provided in Hull Bay by three yacht clubs, several private firms offering marina and related services, and through the Harbormaster. Currently there are 485 moorings in Hull Bay with a waiting list. There is capacity for another 100 or more boats. Public boat ramps are located at Windmill Point, "A" Street Pier and at Nantasket Pier. Dredging to create a mooring basin at the Hull Yacht and Salt Water Clubs in Allerton Harbor and to improve boat access to the anchorage area is scheduled to begin in 1995.

The recreational potential and access to the upper Weir River will be enhanced by the 62-acre Weir River Estuary Park currently being developed. The park will provide hiking trails, a site for canoe launching and educational areas. Interpretive signs along the trails will help the visitors to understand and appreciate the natural assets of the estuary.

Straits Pond currently is unused for recreation. There is no public access to Straits Pond because its entire shoreline is privately owned, except for along a portion of Atlantic Avenue which consists of a steep revetment with a guardrail.

Inland Wetlands

Hull is unusual among eastern Massachusetts' towns in that it generally lacks freshwater wetlands. Freshwater streams and permanent ponds are absent due in large part to the highly pervious soils and the town's geography. Where present, freshwater wetlands typically form where groundwater seepage occurs at the base of slopes. Such areas have limited extent and may not be contiguous

with surface water bodies. Fresh/brackish water wetlands also fringe salt marsh and Straits Pond. Hull's freshwater wetlands have very little recreational value. Except for those along the Weir River, most are dominated by *Phragmites*, a tall reed which tends to crowd out native species. Very few vegetative communities have lower value to wildlife than *Phragmites*.

Aquifer Recharge Areas

Drinking water is supplied to the entire town by the Massachusetts American Water Company from wells and a reservoir located in Hingham. No portion of Hull is within the recharge areas or zones of contribution to Hingham supply wells.

Vegetation

Generalized Cover Types

Hull contains a wide variety of vegetative communities, ranging from coastal dune and marsh communities to upland forests and urban landscaping. Whether as urban plantings creating an aesthetically pleasing atmosphere or as beach grass that helps preserve the beach by trapping sand, each community performs functions critical to the health, value and preservation of Hull's open spaces and recreational potential.

Developed Areas

With most of Hull developed, the most prevalent habitat is a densely developed urban one consisting of residences and other structures surrounded by lawns and landscaping including various ornamental flowers, shrubs and trees. Such plantings obviously have little recreational potential but they can benefit some wildlife by providing cover, nesting/breeding habitat and food sources which often are more diverse than in many natural settings. Since shrub and thicket habitat is almost lacking in Hull, unmanaged growth in vacant lots are important, especially as resting and feeding areas to migratory birds. The areas of this habitat most useful to wildlife are the Village, Point Allerton, Strawberry Hill, Rockaway and Rockaway Annex where development is less dense than areas such as Sunset Point or the Alphabet section.

Salt Marsh

Salt marshes principally are comprised of Salt Marsh Cordgrass (*Spartina alterniflora*) and Salt Meadow Cordgrass (*Spartina patens*). The uppermost portions, which are flooded only during spring tides, contain species such as Blackgrass (*Juncus gerardi*), Sea Lavender, (*Limonium carolinanum*), Sea Pink (*Sabatia spp.*) and Salt Marsh Aster (*Aster maritima*). Many of the tidal channels are lined with High Tide Bush (*Iva frutenscens*).

Although visually pleasing and habitat for numerous species of wildlife, the recreational value of salt marsh is indirect. Salt marshes are extremely productive systems; in fact, the net production

may be about three times higher than the net production of a Missouri tallgrass prairie (MCZM, 1978). By producing and exporting large volumes of detrius (organic material), salt marshes provide food and nutrients needed by phytoplankton. The phytoplankton are a primary food source of the large populations of fish and shellfish in Hull Bay. In addition, salt marsh grasses help renovate water quality by trapping and removing sediment, heavy metals, and excess nutrients. Salt marshes also provide shelter to juvenile fish.

Beaches and Dunes

Although considered in this report as a single generalized cover type, "beaches and dunes" consists of four very different environments: intertidal flats, upper beaches, dunes, and rocky shores. The intertidal flats are unvegetated, though algaes such as Sea Lettuce *(Ulva sp.)* may occur. Vegetation of the upper beach and dunes often is dominated by American Beach Grass *(Ammophila sp.)*. Other common species include Rugosa Rose *(Rosa rugosa)*, Bayberry *(Myrica pensylvanica)*, and Poison Ivy *(Toxicodendron radicans)*. Rocky shoreline usually contain brown and green macroalgae. Rockweed such as *Fucus spp.* are the most common forms. The recreational value of beach and dune areas are high. Consequently, the upper beach and dune communities are under heavy pressure from foot traffic. Recognizing the importance of these communities in protecting residences against storm damage by storing and stabilizing the beach sands, the Hull Beach Management Committee has developed a management plan which includes a dune restoration project and measures to permit beach access without damaging the dune vegetation..

Upland Forest

Hull's forests are composed of successional oak-pine-mixed hardwoods, and are primarily located in the Rockaway/Rockaway Annex area along the Weir River. The six-acre Weir River Woods is the largest parcel of town-owned woodland. Under the control of the Conservation Commission, these woods are dedicated wildlife habitat areas and are not open for public recreation. The remaining undeveloped portions of the Hall estate and the Worrick mansion area contain approximately 15 and 10 contiguous wooded acres, respectively. Other woodlands include portions of Strawberry Hill and the Fort Revere area, where they occupy undevelopable slopes of drumlin. Such areas have little recreational potential except as wildlife habitat.

Rare, Threatened and Endangered Species

According to the Massachusetts Natural Heritage Program, the agency which oversees the protection of rare species, peninsular Hull contains no rare species habitat. However, Peddocks Island and Bumpkin Island may support two state-listed species of plants. Seabeach Dock (*Rumex pallidus*), was identified in 1912. Its occurrence at the original location has not been verified recently, but was identified at a second location in 1981. Primarily because it is at the southern edge of its normal range, Seabeach Dock is classified as "threatened" - a species likely to become "endangered" (in danger of extinction or extirpation) in the foreseeable future. Heavy pedestrian use of beaches are its greatest threat. The second plant, Broad Tinker's Weed

(*Triostuem perfoliatum*), was found in Hull in 1890, but has not been identified in Hull since. It is listed in Massachusetts as endangered.

Fisheries and Wildlife

Fisheries

Though commercial takes have declined over the past decades, Hull's fisheries remain highly productive and of statewide importance. Although closed for recreational use, tidal flats in Hull are a major commercial shellfish area. Hull's sport fishery has attracted tourists for over 120 years. Commercial landings of lobsters at Hull rank 18th in the state.

Shellfish

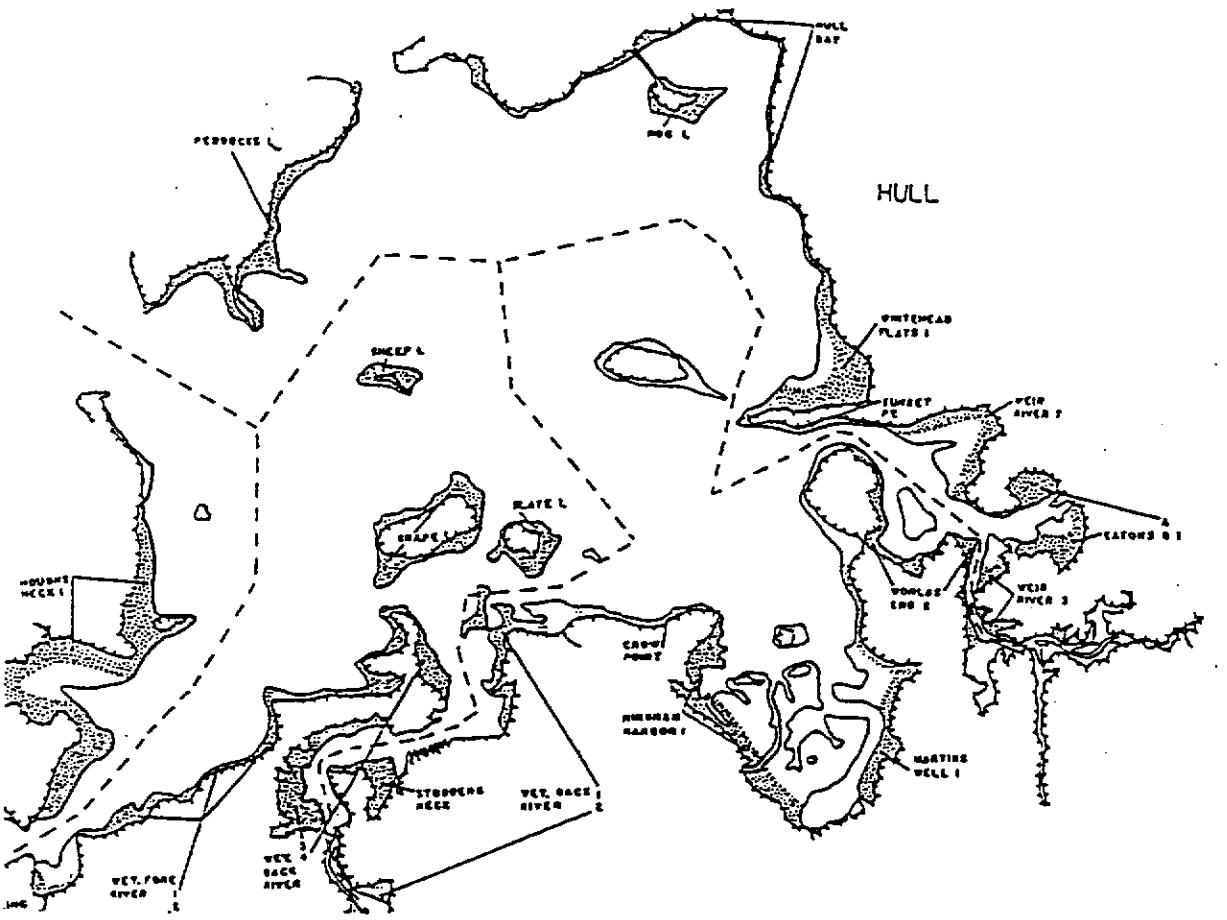
Hull has extensive shellfish resources as shown in Figure 5 - Soft-Shell Clam Flats. Hull Bay and the Weir River combined contain approximately 356 acres of soft-shell clam beds. Blue Mussels also are found in the Weir River. On the other side of the peninsula, Nantasket Beach contains surf clams. The acreage of soft-shell clam beds, together with shellfish densities determined by the Department of Marine Fisheries are presented below (see Table 3; source: Iwanowitcz, 1984). Hull's shoreline also contains numerous non-commercial shellfish such as ribbed mussels, periwinkle, little macoma, whelks, razor clams, and marsh snails.

Table 3
Soft-Shell Clam Resources

Bed	Acreage	Bushels per acre Intermediates	Legals
Weir River (3)	21.0	1,321	2,744
Eatons B	35.8	3,072	3,074
Eatons A	24.6	8,794	10,917
Weir River (7)	42.0	2,102	4,802
Sunset Point	19.4	0	264
White Head Flats	72.0	3,398	4,704
Hull Bay	50.2	1,508	3,007
Spinnaker Island	22.1	1,201	4,813
Peddocks Island (MDC)	68.9	3,547	3,939
Total	**356.0**	**24,943**	**38,264**
Total for Hingham Bay	1,457.9	101,055	146,250
% in Hull	24.4	24.7	26.2

Water quality, due in large part to Hull's highly urban setting, remains the major obstacle to the utilization of shellfish resources. Because of poor water quality, the Department of Marine

Figure 5
Soft Shell Clam Flats



Fisheries has closed all beds to recreational shellfishing. Shellfishing for bait also is prohibited. Commercial fishing for soft-shelled clams is allowed in certain areas provided that the clams are treated at the Newburyport depuration facility prior to sale. Commercial soft-shelled clam harvests for recent years are listed in Table 4, below.

Table 4
Soft-shelled Clam Harvest

Year	Harvest (lbs)
1989	9,191
1990	5,563
1991	2,951

Due to improvements in local water quality, it is anticipated that the Nantasket Beach surf clam fishery will reopen in the near future.

Lobster Fishery

Hull's commercial lobster industry is of statewide importance. The 299,253 lbs. of lobster landed by Hull lobstermen in 1992 rank 18th among the state's 48 coastal communities. At an average price of $2.98 per pound, the value of this catch was nearly $892,000. However, a comparison of Department of Marine Fishery data from 1987 shows that the numbers of fishermen from Hull and has declined more than five times the statewide decline (Table 5, below).

Table 5
Hull Lobster Fishery Statistics
(Source: Massachusetts Division of Marine Fisheries)

	1987	1992	1997	Change (%) 1992-1997	Change (%) 1987-1997
Number of Fishermen	43	28	23	-17.86	-46.51
Rank (Fishermen)	12	18	16		
Percent Statewide Total (Fisherman)	2.51	1.74	1.54	-11.49	-38.64
Fishermen Statewide	1,713	1,606	1,498	-6.72	-12.55
Total Landings (lbs)	339,587	299,253	264,491	-11.62	-22.11
Rank (Catch)	17	18	17		
Percent Statewide Total (Catch)	2.54	2.01	1.76	-12.44	-30.71
Statewide Catch (lbs)	13,369,285	14,897,161	14,990,805	+0.006	+12.13

Finfish

Protected estuaries such as Hingham Bay are well known to be highly productive areas of vital importance to the marine environment. Many species of fish use such areas for breeding and as nurseries. Moreover, these resources support a substantial recreational fishery. Common fish in the waters of Hingham Bay include sport fish such as: winter flounder, summer flounder, cusk,

cunner, striped bass, bluefish, Atlantic mackerel, Atlantic tomcod, Atlantic cod, pollock, red hake, skates, and numerous smaller fish such as anchovies, ninespine stickleback, northern pipefish (see Appendix 1).

The Weir River is significant as a anadramous/catadramous fish run. Anadramous fish (who mature in the ocean and return to freshwater to spawn) that use the Weir River include alewife, rainbow smelt, white perch, and blue-back herring. Only one catadramous fish (fish that spawn in the ocean but mature in freshwater) occurs in Massachusetts: the American eel. All of these have been found in Straits Pond by a 1978 Department of Marine Fisheries survey. The survey also found that Straits Pond contains Atlantic silverside, mummichog, striped killifish, threespine stickleback, and fourspine stickleback.

Wildlife

Much of Hull's habitats can be characterized as those typical of urban/suburban areas: man-made structures surrounded by lawns and landscaped areas composed of a wide variety of shade and ornamental trees, shrubs, gardens and various other plantings. Still, for its small area and high degree of urbanization, Hull contains an unusually diverse assemblage of habitat types. Most of the diversity occurs along the town edges where the peninsula is surrounded by three very different types of water bodies ranging from brackish pond to open ocean. Moreover, the shorelines vary from offshore islands of till or bare rock to rocky headlands, gravelly beaches, sandy beaches, tidal flats, salt marshes and brackish marshes. Two recent open space acquisitions, the upland oak forest of the Weir River Woods and the recently-capped landfill which contains several acres of gently sloping grassland, add to this diversity.

Though some of these habitats are limited in areal extent, they still are important because of their scarcity in Boston Harbor and because of Hull's location along major migratory routes. Migratory birds, particularly in the spring, may utilize areas for food and rest that would be too small for extended stays or nesting. In addition, the value of Hull's shoreline habitats, particularly the Weir River tidal flats and marshes, is enhanced because they are form large, contiguous stretches largely unbroken by development.

An inventory of vertebrate wildlife species which potentially may use these habitats is contained in Appendix 1. As many as about 200 species of birds, including transients, potentially use habitat in Hull; at least 60 of these are known to breed in Hull. Boston Harbor, Hull Bay and the Weir River are important wintering areas for scaups, eiders, brant and other ducks. Calf Island, Middle Brewster Island and Shag Rocks contain major rookeries for Double-crested Comorants, Black-crowned Night Herons, Glossy Ibis, Snowy Egrets, and Herring and Greater Black-backed Gulls, while Peddocks Island contains an historical coastal heron rookery that potentially may be re-colonized. The list of potential indigenous mammals contains over 25 species including harbor seals, common urban species and several that use marsh and riparian habitats. About 15 species of reptiles and amphibians may occur. These primarily are snakes because the occurrence of amphibians is limited by Hull's general lack of permanent bodies of freshwater and freshwater streams.

Hunting of waterfowl and shorebirds are allowed under federal, state and local regulations from Pemberton Point.

Rare, Threatened and Endangered Species

Two rare birds are known to occur in Hull: the Common Tern and the Common Barn Owl. Occurrences of Common Terns were first recorded in 1977. Spinnaker Island is known to be continuously used as a nesting site, though dogs and human traffic represent a significant threat to terns. The only recorded observation of the owl was in 1971. However, since several sightings have been made in Hingham and on the harbor islands and since they utilize abandoned buildings, steeples, and similar structures for nesting, they may still occur in Hull. Both species are listed as "special concern" - species that have suffered declines which, if unchecked, could threaten the existence of the species in Massachusetts.

Scenic Resources and Unique Environments

Scenic Resources

What is the most important component of a view in Hull? It includes water! The ocean, the bay, a river, an estuary, and a pond are all part of Hull. Water surrounds Hull and is a short distance from everyone. Even so, there are a large number of people who live in interior blocks so it is important to protect and enhance views of the water from the roadway and to maintain and increase where possible public access to the waters edge.

Two important views occur at or near the entry to Hull. One is when traveling north on George Washington Boulevard at the Weir River when entering Hull. Additional protection in perpetuity of this view is necessary and it is important to enhance the view along the roadway to Nantasket Pier and through the central area of town. The other view, probably more dramatic to most people occurs shortly after entering Hull on Nantasket Avenue upon descending the western flank of Atlantic Hill when a seemingly aerial view of Nantasket Beach and the ocean suddenly appears. The views today along Nantasket Avenue do not measure up to that expectation.

Hull abounds with great views from its hills beginning with sweeping views of the ocean from Atlantic, Center and Green Hills. From Atlantic Hill there is a dramatic view of the entire Nantasket Beach all the way to Point Allerton. Some sections of Center and Green Hills have good views overlooking Straits Pond. Hampton Hill, Sagamore Hill, Whitehead and Sunset Point all have special views of World's End and that portion of the Weir River Estuary. Though there are numerous vantage points to view a sunset, none is more talked about than those from Sunset Point. Depending on your location views of both the beach side and the bay side exist on Strawberry Hill, Allerton Hill, Telegraph Hill and Hull Hill. Boston Light is prominent to the north from Allerton and Telegraph Hills while Downtown Boston is particularly visible from Telegraph and Hull Hills. The views of Allerton Harbor and much of the bay side of Hull are noteworthy from virtually anywhere on Spinnaker Island.

There is one unsurpassed location for panoramic views of Hull and the entire Boston Harbor-Massachusetts Bay. That spot is Telegraph Hill. Views from the historic watertower on a clear day seem endless. Views from the top of the bunkers at Fort Revere above the cemetery are spell binding. It is fortunate that Hull and the MDC are working together to preserve this spot for the public. The location and its history are seen as an opportunity to both enhance the quality of life for residents as well as a supporting keystone for the economic revitalization of Hull.

Area of Critical Environmental Concern

The entire Weir River from Straits Pond to a line connecting Worlds End, Hingham to the tip of Sunset Point was designated an Area of Critical Environmental Concern (ACEC) by the Secretary of Environmental Affairs in 1986.

In making the designation, the Secretary found the estuary to be significant for its uniqueness as an extensive, highly productive estuarine/salt marsh ecosystem located in close proximity to a major metropolitan area. The additional protection derived from the designation was found to be warranted by the threats to the resources of irreversible impacts resulting from intense development on the Hull shorelines. At the time of the designation, approximately 1,000 new residential units and 56,000 square feet of new commercial space were proposed within the Weir River watershed. Possible threats to public health resulting from increased pollutant loading to shellfish beds were cited. Finally, the designation noted the potential for adverse economic impacts to the vicinity due to a decreased "quality of life" resulting from alterations to the estuary.

The ACEC designation has several effects on the potential future use of the Weir River for open space and recreational purposes as well as for other uses. First, all EOEA agencies are required to take action, administer programs, and revise regulations to ensure that activities in or impacting the area are carried out so as to minimize adverse effects on:

- marine and aquatic productivity;
- surface and groundwater quality;
- habitat values;
- flood control and prevention of storm damage;
- historic and cultural resources;
- scenic and recreational resources; and,
- other natural resource values of the area.

Second, the designation affects a number of state agencies by requiring regulatory programs to raise the standards of review for projects within the ACEC. The specific effects on regulatory programs are summarized below.

- *Massachusetts Environmental Policy Act (MEPA)* - Any state-regulated or state-funded project within an ACEC will trigger MEPA review.
- *Wetlands Protection Act* - The performance standards for work affecting wetlands resource areas within the ACEC is raised to "no adverse effect". For salt marshes, the standard is raised to "shall not destroy or have an adverse effect on the productivity of the

salt marsh". Maintenance dredging for navigation improvement must minimize adverse effects using best available measures.

- *Waterways (Chapter 91)* - The 1990 revisions to waterways regulations impose significant restrictions on the uses of tidelands within an ACEC. These include:
  - improvement dredging except for fisheries or wildlife enhancement is prohibited;
  - dredge material disposal is prohibited, except if non-degrading and used solely for beach nourishment, salt marsh creation, dune stabilization, or the enhancement of fishery or wildlife resources;
  - fill and structures are permitted only if they are on previously filled tidelands, or if they are for public pedestrian access on (presently) flowed tidelands (provided the location of such structures on piles or above high water is not feasible), or publicly-owned structures for water dependent use which are designed to minimize encroachment in the water, or non-industrial, privately-owned structures for infrastructure facilities which are consistent with an approved resource management plan and designed to minimize encroachment in the water.
- *Water Quality Standards* - Within ACECs the water quality classification is raised to SA, the highest standard. The Weir River also has been classified as an Outstanding Resource Water (ORW). Anti-degradation standards for ORW waters are no new discharges. However, the Division of Water Pollution Control currently is formulating policies on stormwater discharges to these waters.
- *Coastal Zone Management Consistency Review* - For any project in an ACEC requiring a federal permit or using federal funding, the proposed activities must be consistent with the purpose of preserving or restoring such areas for their conservation, recreational, ecological, or aesthetic values. This policy is included as departmental policy for Division of Water Pollution Control Regulations for Water Quality Certification for Dredging, Dredge Materials Disposal and Filling in the Waters of the Commonwealth.
- *Wetland Restriction Program* - An order of restriction prohibiting large-scale alterations of wetlands is automatically attached to the deeds of all properties containing wetlands within an ACEC.
- *Solid Waste Facility Site Assignment Regulations* - The siting of a new solid waste facility within an ACEC is prohibited.

Barrier Beaches

The Hull peninsula has been designated a "Barrier Beach" by Massachusetts Coastal Zone Management with a finer distinction that Hull is considered a "developed" barrier beach. State-funded projects are subject to Executive Order No. 181. The order directs that:

- Barrier beaches shall be given priority status for self-help and other state and federal acquisition programs and that status shall be incorporated into the SCORP. The highest priority for disaster assistance funds shall go towards relocating willing sellers from storm damaged barrier beach areas.

- State funds and federal grants for construction projects shall not be used to encourage growth and development in hazard prone barrier beach areas.

- For state-owned barrier beach property, management plans shall be prepared which are consistent with state wetland policy and shall be submitted to the Secretary of Environmental Affairs for public review under the provisions of MEPA.

- At a minimum, no development shall be permitted in the velocity zones or primary dune areas of barrier beaches identified by the Department of Environmental Protection.

- Coastal engineering structures shall only be used on barrier beaches to maintain navigation channels at inlets and then only if mechanisms are employed to ensure that downdrift beaches are adequately supplied with sediment.

- Dredge material of a compatible grain size shall be used for barrier beach nourishment, if economically feasible. and,

- The Coastal Zone Management Office shall coordinate state agency management policy for barrier beach areas.

Because of Hull's status as a developed beach, many of the above charges are not applicable. Proposed developments and beach management issues are determined on a case by case basis.

Environmental Problems

Though sharing many of the environmental problems as other communities bordering Boston Harbor, Hull is fortunate to have many residents who have taken an aggressive approach to find solutions. Most of the environmental problems cited here are well-known to both the residents and the town decision makers. In most cases, progress in being made. Among the environmental problems which directly impact open space and recreation include; degraded water quality, coastal erosion and flooding, sedimentation, and development impacts.

Water Quality - Degraded water quality in coastal waters surrounding Hull was chiefly the result of inadequately treated sewage discharges primarily from Boston and to a lesser extent from Hull. Water quality in Boston Harbor has significantly improved as a result of the Harbor cleanup. In addition, the Town's own activities have improved water quality to the point where the waters surrounding Hull are the cleanest in Boston Harbor. Hull has now completed sewering of the entire Town including the Rockaway and Rockaway Annex areas. Thus, the Town also insures a healthful water quality in the Weir River Estuary. Efforts by the Environmental Service Corps to study the potential restoration of year-round tidal flowage into Straits Pond should be supported.

Coastal erosion and flooding - Coastal flooding is a major problem in Hull. Measures to enhance natural protection, i.e., beaches and dunes, are already underway through the Beach Management Plan and the sacrificial dune project. Included in these projects are measures to promote dune regeneration and reduce pedestrian traffic on dunes through limiting access points and constructing elevated crossings. The dynamics of Nantasket Beach and the sand budget is being studied by the Environmental Service Corps.

Sedimentation - Sedimentation within Hull Bay and the Weir River creates shallow bottoms which limit boat accessibility to these areas. An improvement and maintenance dredging project in Allerton Harbor was completed in 1997. Improvement dredging in the Weir River is prohibited by the ACEC regulations, unless for fisheries and wildlife enhancement and except in the

immediate vicinity of Nantasket Pier. Dredging of the area surrounding the Pier is scheduled to begin in the Fall of 1999.

Development impacts - Development increases the demand for recreational facilities while reducing potential, and in some cases, existing publicly-owned open space. In addition, development pressures on the infrastructure may limit the construction of new recreational facilities. In Hull, a major constraint to the creation of new facilities is traffic and parking.

Section 5

Inventory of Lands of Conservation and Recreation Interest

Section 5

INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST

Figures and Tables

INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST

Results

Public lands currently used for open space and recreation and privately-owned lands with similar use or potential are inventoried in Table 1 and Figure 1. The list was compiled from the 1995 open space plan, interviews with town officials, field studies, and from a review of assessors maps. Table 2 summarizes the recreational facilities available at each inventoried site.

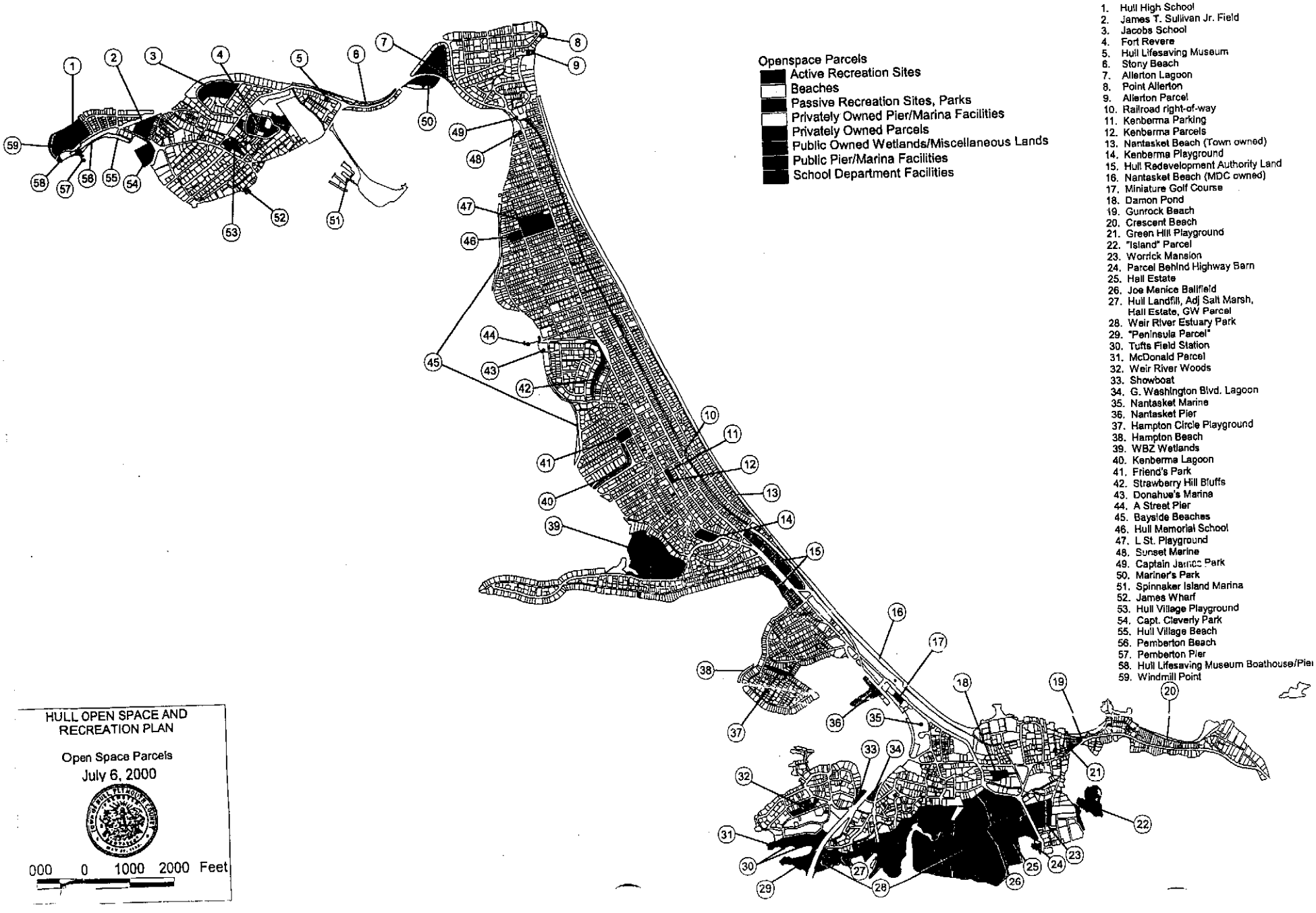

Openspace Parcels
Active Recreation Sites
Beaches
Passive Recreation Sites, Parks
Privately Owned Pier/Marina Facilities
Privately Owned Parcels
Public Owned Wetlands/Miscellaneous Lands
Public Pier/Marina Facilities
School Department Facilities
1. Hull High School
2. James T. Sullivan Jr. Field
3. Jacobs School
4. Fort Revere
5. Hull Lifesaving Museum
6. Stony Beach
7. Allerton Lagoon
8. Point Allerton
9. Allerton Parcel
10. Railroad right-of-way
11. Kenberma Parking
12. Kenberma Parcels
13. Nantasket Beach (Town owned)
14. Kenberma Playground
15. Hull Redevelopment Authority Land
16. Nantasket Beach (MDC owned)
17. Miniature Golf Course
18. Damon Pond
19. Gunrock Beach
20. Crescent Beach
21. Green Hill Playground
22. "Island" Parcel
23. Worrick Mansion
24. Parcel Behind Highway Barn
25. Hall Estate
26. Joe Menice Ballfield
27. Hull Landfill, Adj Salt Marsh, Hall Estate, GW Parcel
28. Weir River Estuary Park
29. "Peninsula Parcel"
30. Tufts Field Station
31. McDonald Parcel
32. Weir River Woods
33. Showboat
34. G. Washington Blvd. Lagoon
35. Nantasket Marine
36. Nantasket Pier
37. Hampton Circle Playground
38. Hampton Beach
39. WBZ Wetlands
40. Kenberma Lagoon
41. Friend's Park
42. Strawberry Hill Bluffs
43. Donahue's Marina
44. A Street Pier
45. Bayside Beaches
46. Hull Memorial School
47. L St. Playground
48. Sunset Marine
49. Captain James Park
50. Mariner's Park
51. Spinnaker Island Marina
52. James Wharf
53. Hull Village Playground
54. Capt. Cleverly Park
55. Hull Village Beach
56. Pemberton Beach
57. Pemberton Pier
58. Hull Lifesaving Museum Boathouse/Pier
59. Windmill Point
HULL OPEN SPACE AND RECREATION PLAN
Open Space Parcels
July 6, 2000
000 0 1000 2000 Feet

Table 1: Inventory of Open Space and Recreation Lands

Number (see Fig 1)	Parcel Name (*Map & Parcel No.*)	Size (Ac.)	Owner	Manager	Zoning	Protection (*see pg. 10*)	Public Access	Recreation Potential
Park & Recreation Department Facilities								
Active Recreation Sites								
47	L St. Playground *15-142*	6.05	Town	Park & Recreation Commission	Public Open Space	None	Yes	High
18	Damon Pond *49-55*	1.6	Town	Park & Recreation Commission	Single Family B	Limited	Yes	Low
21	Green Hill Playground *51-30*	0.5	Town	Park & Recreation Commission	Business	None	Yes	High
37	Hampton Circle Playground *35-138 & 36-48*	1.07	Town	Park & Recreation Commission	Public Open Space	None	Yes	High
53	Hull Village Playground *6-62*	1.89	Town	Park & Recreation Commission	Public Open Space	None	Yes	High
14	Kenberma Playground *28-025*	2.00	Town	Park & Recreation Commission	Public Open Space	None	Yes	High
41	Friend's Park *22-181 & 182*	1.35	Town	Park & Recreation Commission	Public Open Space	None	Yes	High
26	Joe Menice Ballfield *Map 40*	1.25	Town	Park & Recreation Commission	Multi-Family 1A	Recreation Easement	Yes	High
2	James T. Sullivan, Jr. Field *2-038*	3.15	Town	Park & Recreation Commission	Single Family B	None	Yes	High
Passive Recreation Sites								
54	Capt. Cleverly Park *2-01&02*	0.47	Town	Park & Recreation Commission	Single Family B	None	Yes	Moderate
50	Mariner's Park *9-44*	3.50	Town	Selectmen; (part leased)	Comm. Rec. C	None	Yes	High
49	Captain James Park *Map 12*	<0.05	Town	Park & Recreation Commission	Public Open Space	None	Yes	Low
8	Point Allerton *Map 10*	0.11	Town	Park & Recreation Commission	Single Family B	None	Yes	Moderate

Table 1: Inventory of Open Space and Recreation Lands (continued)

Number (see Fig 1)	Parcel Name (*Map & Parcel No.*)	Size (Ac.)	Owner	Manager	Zoning	Protection (*see pg. 10*)	Public Access	Recreation Potential
School Department Facilities								
1	Hull High School *1-01a*	2.8	Town	School Dept.	Public Open Space	None	Yes	High
46	Hull Memorial School *14-077*	1.24	Town	School Dept.	Public Open Space	None	Yes	High
3	Jacobs School *57-09*	6.0	Town	School Dept	Public Open Space	None	Yes	High
Beaches								
45	Bayside Beaches	20 (1.5 miles)	Town	Selectmen	Public Open Space	Limited	Yes	Moderate
20	Crescent Beach	0.50	Town	Selectmen	N.A.	Limited	Yes	Moderate
38	Hampton Beach	0.2	Town	Selectmen	Public Open Space	Limited	Yes	Moderate
55	Hull Village Beach	0.03	Town	Selectmen	Single Family B	Limited	Yes	High
19	Gunrock Beach	0.5	Town	Selectmen	Single Family A	Limited	Yes	High
13	Nantasket Beach	27 (2 miles)	Town	Selectmen	Single Family B	Limite	Yes	High
16	Nantasket Beach	26.5 (1.1 miles)	State	Metropolitan District Commission	Public Open Space	MDC	Yes	High
6	Stony Beach	20 (1.2 miles)	Town	Selectmen	Public Open Space	Limited	Yes	High
56	Pemberton Beach *1-01*	3.85	Town	Selectmen	Public Open Space	Limited	Yes	High
Public Pier/Marina Facilities								
44	A Street Pier *18-152*	0.15	Town	Selectmen	Comm. Rec. C	Limited	Yes	Moderate
52	James Wharf *9-96*	0.39	Town	Selectmen	Single Family B	Limited	Yes	High
36	Nantasket Pier *37-6*	3.4	Town	Selectmen	Waterfront	Limited	Yes	High
57	Pemberton Pier *1-02*	0.40	Town	Selectmen (part leased)	Public Open Space	Limited	Yes	High
Public Owned Wetlands/Miscellaneous Lands								
59	Windmill Point *1-06*	1.03	Town	Selectmen	Public Open Space	Limited	Yes	Moderate
7	Allerton Lagoon *Map 9*	4.8	Town	Selectmen	Single Family B	Limited	Yes	Moderate

Table 1: Inventory of Open Space and Recreation Lands (continued)

Number (see Fig 1)	Parcel Name (*Map & Parcel No.*)	Size (Ac.)	Owner	Manager	Zoning	Protection (*see pg. 10*)	Public Access	Recreation Potential
Public Owned Wetlands/Miscellaneous Lands (continued)								
4	Fort Revere *56-38 to 40, 42, 43b&c, 47, 48, 51 & 7-60 to 62*	7.25	MDC/ Town	MDC	Single Family B	MDC	Yes	High
34	G. Washington Blvd. Lagoon *43-23*	1.10	Town	Selectmen	Single Family C	Limited	Yes	High
5	Hull Lifesaving Museum *7-29*	0.28	Town	Lifesaving Museum	Public Open Space	Limited	Yes	High
58	Hull Lifesaving Museum Boathouse/Pier *1-04*	0.16	Town	Lifesaving Museum	Public Open Space	Limited	Yes	High
9	Allerton Parcel *10-104*	0.38	Town	Selectmen	Single Family B	None	Yes	Low
15	HRA Land *27-34 to 38 and 33-10, 67*	13.5	Hull Redevel. Authority	Hull Redevel. Authority	Comm. Rec. A	Limited	Yes	High
40	Kenberma Lagoon *24-106*	2.57	Town	Highway Department	Public Open Space	Limited	No	None
11	Kenberma Pkg *26-196&197*	.25	Town	Board of Selectmen	Parking Lot	None	Yes	Low
24	Parcel Behind Highway Barn *41-12(b)*	3.15	Town	Highway Department	Conservation	Limited	Yes	Moderate
10	Railroad right-of-way *(Thru Town)*	17.4 3.6 miles	Town	Selectmen	Various	EOTC	Yes/No	Moderate
42	Strawberry Hill Bluffs *Map 20*	2.5	Unknown	Highway Department	Single Family B	None	Yes	Moderate
28	Weir River Estuary Park	65.0	Town	Conserv. Commission	Conservation, Business, and Single Family IV	Conservation Restrictions	Yes	High
27	Hull Landfill Adj Salt Marsh Hall Estate GW Parcel *Begins 46-13; ends Map 40*	9.5 30.5 22 3	Town	Sewer Dept.	Public Open Space		Yes	High
33	Showboat *45-121*	1.3	To be gifted	Board of Selectmen	Waterfront	None	Yes	High
32	Weir River Woods *47-230, 250, 300, & 400*	10.6	Town	Conserv. Commission	Public Open Space	Conservation Restrictions	Yes	High

Table 1: Inventory of Open Space and Recreation Lands (continued)

Number (see Fig 1)	Parcel Name (*Map & Parcel No.*)	Size (Ac.)	Owner	Manager	Zoning	Protection (*see pg. 10*)	Public Access	Recreation Potential
Privately-Owned Lands								
Piers/Marinas								
43	Donahue's Marina *18-151*	0.90	Donahue	Donahue	Comm. Rec. C	Limited	Yes	High
35	Nantasket Marine *38-48*	3.0	Sandonato	Sandonato	Comm. Rec. A	Limited	Yes	High
51	Spinnaker Island *Map 60*	9.0	Spinnaker Island	Spinnaker Island & Yacht Club Assoc.	Comm. Rec. C	None	Yes	High
48	Sunset Marine *12-106*	0.10	Kelly	Kelly	Business	None	Yes	High
Other Parcels								
25	Hall Estate Buildable Wetlands Estuary Park *Map 42*	33 29.4 3.6 22	GID (Included	Conserv. Commission in WREP)	Conservation	Conservation Restrictions	Yes	High
12	Kenberma Parcels *26-198 to 201*	0.5	Miller	Miller	Business	None	Yes	Low
22	"Island" parcel *50-28*	6.36	Coleman	Coleman	Single Family C	Limited	No	Moderate
31	McDonald Parcels *47-02*	0.63	McDonald	McDonald	Single Family C Business	None	No	Moderate
17	Miniature Golf Course *37-03*	0.75	Levin	Levin	Comm. Rec. B	None	Yes	High
29	"Peninsula" Parcel *46-01*	4.00	CFR Rlty Trust	CFR Realty Trust	Single Family C	None	No	Moderate
30	Tufts Field Station *46-02 & 47-01*	3.96	Tufts University	Tufts University	Single Family C	None	No	Moderate
39	WBZ Wetlands *30-13*	20.60	Westing-house	Westing-house	Single Family B	Limited	Yes	Low
23	Worrick Mansion *49-34*	7.46	Gratta	Gratta	Single Family C	None	No	High

Total Publicly-owned Open Space and Recreation Land: 290 acres
(including 99.6 acres of beach)
Total Privately owned Open Space and Recreation Land: 92 acres

Table 2 Summary of Open Space and Recreational Facilities

Parcel	Active Recreation									Passive Recreation			Boating and Marine								Services				Other Facilities/ Comments
	Playground	Playfield	Softball Fields	Little League	Baseball Fields	Football Fields	Skating Ponds	Tennis Courts	Basketball Courts	Sitting Spots	Sandy Beach	Lifeguards	Pier	Boat Ramp	Moorings	Boat Slips	Fuel Dock	Boat Rental	Boat Repair	Boat Storage	Food Service	Bait/Tackle	Restroom	Parking Spaces	
A Street Pier										X			X	X	38									10	
Allerton Boat Works																		X	X	X		X			
Allerton Lagoon										X															Model Boat Sailing
Bayside Beaches											X														
Bayside Park ("L" Street)	X		2	1	1			3	1															25	Track
Capt. Cleverly Park										X															Bench; Picnic Table
Capt. James Park										X															Bench
Damon Pond							X																		
Donahue's Marina													X		20	30	X		X	X	X		X	39	Marine rail; crane; launch service
Fort Revere										X														5	Historic Site
Green Hill Harbor														X										5	
Green Hill Playground	X	X							1																
Gunrock Beach										X	X	X		X										10	
Hampton Beach											X													5	
Hampton Circle Playground	X	X						1																	
HRA Parcel																								500	
Hull Memorial School									1																Indoor Basketball/ gym/ volleyball court
Hull High School					1	1			1															75	Indoor Basketball/ gym/ volleyball court
Hull Lifesaving Museum																							X		Historic site; educational programs
Hull Lifesaving Museum Boat House													X	X					X	X			X		Educational programs; rowing races

Table 2 Summary of Open Space and Recreational Facilities

Parcel	Active Recreation									Passive Recreation			Boating and Marine								Services				Other Facilities/ Comments
	Playground	Playfield	Softball Fields	Little League	Baseball Fields	Football Fields	Skating Ponds	Tennis Courts	Basketball Courts	Sitting Spots	Sandy Beach	Lifeguards	Pier	Boat Ramp	Moorings	Boat Slips	Fuel Dock	Boat Rental	Boat Repair	Boat Storage	Food Service	Bait/Tackle	Restroom	Parking Spaces	
Hull Village Beach										X	X	X													
Hull Village Playground	X	X					X	1	1															5	
Jacobs Elementary	X	X							1															75	Indoor basketball/ gym/ volleyball court
James Wharf										X			X		15									10	
Kenberma Lagoon																									Storm drain
Kenberma Playground	X	X			1	1																		5	
Kingsley Road Playground	X	X																							Circular walk
Mariner's Park										X			2		299									25	Park; bandstand; clubhouses
Joe Menice Ballfield					X																			10	
Miniature Golf																					X		X		
Nantasket Beach										X	X	X											X	1126	Bathhouse; pavilion
Nantasket Marine																		X	X	X	X	X	X	300	Boat hauling; boat trailer parking
Nantasket Pier										X			X	X	10	15								110	
Pemberton Beach											X													10	
Pemberton Pier										X	X		X	X	25			X			X	X		2	
Point Allerton										X															Beach access
Spinnaker Island Y.C.													X			59		X					X	15	
Stony Beach											X														
Strawberry Hill Bluffs										X															Public access to bayside beaches
James T. Sullivan, Jr. Field	X		1			1			1															20	

Table 2 Summary of Open Space and Recreational Facilities

Parcel	Active Recreation									Passive Recreation			Boating and Marine								Services				Other Facilities/ Comments
	Playground	Playfield	Softball Fields	Little League	Baseball Fields	Football Fields	Skating Ponds	Tennis Courts	Basketball Courts	Sitting Spots	Sandy Beach	Lifeguards	Pier	Boat Ramp	Moorings	Boat Slips	Fuel Dock	Boat Rental	Boat Repair	Boat Storage	Food Service	Bait/Tackle	Restroom	Parking Spaces	
Sunset Marine													X		200	4	X		X	X				5	Boom
WBZ Wetlands										X															Walkway/ bikepath
Weir River															60										
Weir River Estuary Park										X			X	X										10	Trails; observation areas; educational facilities
Windmill Point																								15	

Protected Lands

All open space is not created equal, and the perpetuity of current open space and recreational lands may not be guaranteed. Many lands and facilities such as schools and private parcels are subject to sale or a change of use which might eliminate the recreational value. Public lands are protected against such changes when they are owned by the Conservation Commission, the Metropolitan District Commission, a non-profit land trust or if state or federal funds were used for the purchase or improvement of the property. Privately-owned lands require deed restrictions in perpetuity to be protected. Various state and federal regulatory programs such as the Massachusetts Wetlands Protection Act, the Wetlands Restriction Program, the Chapter 91 tidelands licensing program, and the Executive Office of Transportation and Construction railroad right-of-way permit program, among many others, provide limited protection by restricting alterations and uses and by establishing performance standards, but in most cases they do not ensure the permanent retention of land as open space.

The level of protection of the inventoried parcels is identified in Table 1. The importance of unprotected or under protected parcels should be reviewed. A number of mechanisms such as deed restrictions might be considered to increase the protection of existing open space and recreational facilities.

Additional Lands with Open Space or Recreation Potential

Other town-owned lands, such as tax-title parcels, may have potential as open space or for recreation, while the "stub ends" of streets can be important points of public access to the beaches. Unused municipal parcels such as these often become occupied by adjacent landowners to the point where landscaping, fences or other structures make them indistinguishable as separate parcels. The utilization of these properties is a management issue that must be based upon the inspection of each parcel individually and an assessment of the open space and recreational needs of the parcel's neighborhood. Parcels determined to be unnecessary for foreseeable recreation needs could be sold or leased to generate funds for the development of programs, the acquisition of other properties or for the maintenance and preservation of existing facilities.

Table 3 contains an inventory of town-owned "stub ends" of streets made from the assessors maps. Not included are private ways, some of which possibly could be acquired by the town should the need be indicated in the parcel's neighborhood.

Access for People with Disabilities

See Appendix 2 for the Section 504 Self-Evaluation Report of all recreational facilities under the jurisdiction of the Parks and Recreation Department and the Conservation Commission. Since the issuance of the 1995 Open Space and Recreation Plan no new lands have been acquired. The grievance policy (see Appendix 2) has been adopted by the Town.

Table 3
Town-Owned "Stub-ends" of Streets

Street	Assessor Sheet Number
Channel Street	2
Western Avenue	4
Vautrinot Avenue	5
Between 41 and 51 Highland Avenue	5
Spring Street at Douglas	6
Glover Avenue	9
Beacon Avenue	10
Beacon Road	10
Meridian Avenue	10
Beach Avenue	12
Circuit Avenue	20
Second Street	29
Fourth Street	29
Sixth Street	30
Eight Street	30
Tenth Street	31
Osmundsen Avenue	31
Beech Avenue	32
Between 46 and 47 Nantasket Road	32
Porazzo Road	33
Island View Road	35
Park Avenue	39
Rockview Road	39
Alsada Road	43
Onset Street	45
Rowley Street	45
North Truro Street (two public landings)	47
State Park Road	48
Pond Street	49
Stony Beach Road	51
Bath Avenue	53
Drift Way	54

Section 6

Community Goals

Section 6

COMMUNITY GOALS

COMMUNITY GOALS

Description of Process

In January 1994, the Town of Hull undertook an important step in planning its future. In 1994, Hull was at a crossroads. It was a time of regional and national economic change. For Hull, new environmental concerns and regulations were affecting the use and character of the water's edge. Changing real estate markets were affecting decisions about land and future development. Regional tourism and spending patterns were shifting. How should the Town respond to these and similar challenges?

A unique planning process was organized by the Town and an ad hoc committee, the Economic Development Task Force, to ensure a coordinated and imaginative response to the opportunities ahead. Two town-wide workshops were held to discuss the future and form clear goals for Hull. All interested individuals and organizations were invited to participate, including residents, merchants, business owners, students - anyone and everyone who wishes to contribute to the future character and quality of the town.

On January 22, 1994 at the Economic Development Task force's first town-wide workshop to plan for the future of Hull, participants listed over 450 issues that they thought needed addressing. The issues, which were compiled by 13 work groups of approximately 10 people each, were written on large sheets of newsprint. At the conclusion of the brainstorming, participants were asked to "vote" for those issues they thought were most important. The tally should be considered only suggestive of the level of importance attributed to each area by workshop participants. This provided an indication of some of the key areas of concern, and provided topics (the waterfront, town amenities, town image, and economics) for focus at the second workshop on February 5th.

After the first workshop, the newsprint lists of issues were sorted into major categories, and repeated issues combined. This comprehensive issues list was used as a resource for the EDTF. In general, the list provides an overview of the range and types of issues of concern in Hull. Together they represent well the physical, social, economic, and environmental concerns of the town, including both day-to-day problems with maintenance and upkeep and more long-range issues.

The summary list of issues, sorted by related topics was sent to all participants. It was suggested that they review the list in preparation for the second workshop held on Saturday, February 5th. At this workshop the focus was on ways to address the issues. Participants were encouraged to bring their ideas whether they were original or solutions they had read about or seen implemented in other communities.

The morning was devoted to four focus groups, with two groups meeting simultaneously in each of two work periods. The focus groups were: the waterfront, town image, economics, and amenities. The afternoon began with a brief review of the results of the first workshop and summation of the focus group efforts. Further exploration of the wide array of other issues generated on January 22nd was then conducted. After participants suggested solutions in seven categories, each participant was given three "hot spots" to affix to those solutions that he/she thought particularly important for consideration. Lists were then made of those answers in conjunction with all the other work as a basis for generating a draft vision statement, goals and objectives.

Over 200 people from all walks of life participated in the workshops. After the second workshop, the written vision statement, goals and objectives were prepared, reviewed by various workshop leaders and distributed to all participants. Written comments were received and an Open House was held on March 24th where written comments were reviewed and other verbal evaluations received. The Hull Vision Statement was then issued on April 8, 1994 and adopted by the Board of Selectmen in the fall of 1995.

Since the adoption of the Vision Statement, the Town has completed a Harbor Management Plan, an ADA Compliance plan, a market feasibility study of several large parcels in the Town, and the 1995 Open Space Plan. These plans along with input from the Parks and Recreation commission and the Conservation Commission have been utilized to update community goals.

Vision Statement

The vision statement covering the entire range of issues, concerns and aspirations of townspeople clearly shows an emphasis on the value of the Town's coastal location and concern for the towns natural environment.

> We the people of Hull seek to shape a future for our town that preserves and enhances its natural features and rich heritage, while providing the services and amenities that characterize a healthy, dynamic community. Hull's distinguishing characteristics are its spectacular coastal setting, its location in the harbor of a metropolitan region, and its small town identity. These characteristics molded the town's past, shape its present, and will provide the framework for its future. Although Hull's land area has been extensively

developed, the natural peninsular setting of the town, with its diverse topography, varied landscape and views, and extensive beach front, continues to be its dominant feature and great asset.

The Hull Harbor Plan adds to this by stating that "the future should protect and enhance the use and environment of the harbor in keeping with the character of the community." The plan continues with the following overall goals:

- Actions should be taken to maximize waterfront access for water-dependent and public use that is consistent with the existing land uses that border the harbor edges.
- The environmental qualities of Hull's Harbor must be appropriately protected and enhanced as change takes place.

Statement of Open Space and Recreation Goals

Out of the ten Goals or "Principles for the Future" listed in the Vision Statement three deal directly with open space and recreation. The fourth goal listed, by opposite implication highlights the importance of planning for open space and recreation uses now. The fifth goal emphasizes that we need to keep pushing toward the attainment of our goals in order to realize the vision we have for Hulls future.

We should:

recognize, protect and enhance the qualities of the natural resources that make Hull such an unusual and beautiful environment.

recognize that visitors and summer residents come to Hull for its waterfront amenities, which should be enhanced to improve the experience, value, and revenues to the town.

protect and enhance Hull's maritime character for commercial endeavors, marine recreation, and research.

consider each new development opportunity very carefully since relatively few opportunities for development remain.

establish a process that ensures predictable, steady, and visible progress toward our goals.

In relation to the areas abutting Hull's harbor, the Harbor Plan adds the following goals:

Planning for the harbor front should recognize the dual character of year-round residential uses and seasonal uses and seek compatibility among these uses.

Harbor improvements should reinforce the distinctive sub-areas of Hull with their special identities, while creating a consistent approach to access and connections among harbor areas.

Actions should consistently protect and enhance Hull's maritime character for productive economic uses such as commercial fishing, marine recreation and research.

Hull should be a significant gateway and a destination within the Harbor Islands network of Boston Harbor.

A goal articulated through the joint meeting of the Planning Board and Conservation Commission for the purposes of this update is to encourage a better understanding of Hull's landside[1] open space and its relationship to the Town's identity, growth, and development.

Finally, access by the public to the waterfront, to parks, to play fields, and to other public areas is a consistent goal throughout the various Town planning documents. The Town's ADA Compliance Plan recognizes this goal and includes an accessibility analysis of the Town's recreational facilities and fields, and the Town's parks and beaches.

[1] Landside open space refers to green spaces which may also be waterfront properties but are not considered beach front property.

Section 7

Analysis of Needs

Section 7

ANALYSIS OF NEEDS

Tables

Identification of Community's Open Space and Recreation Needs

Part of the town-wide visioning process conducted at the beginning of 1994 involved the identification of town needs. Lists of needs and issues were prepared in working groups of participants involved in the first of two workshops held in conjunction with the Hull Economic Development Task Force's planning efforts for the town's future. Over 250 people participated. Within each facilitated subgroup of 10-12 townspeople, needs and issues were recorded. Afterward all the lists were posted for everyone to review and designate their priorities. Compilation of this data identified items over the full range of town needs and issues. The key open space and recreation needs identified by this process, in priority order, were as follows:

- Community Center for Youth & Adults for recreation and cultural activities
- Determine Use of HRA Property
- Landscaping Beautification in Town
- Pier Control and Development
- Weir River Estuary Park Development
- Seawall Conditions
- More Marinas
- Beach Maintenance
- Additional Boating Facilities
- Establish a Marine Research Center
- Cultural Activities, Arts & Concerts
- Boating Programs and Activities
- Activities for Youth
- Address Beach Erosion
- Maintenance of Playgrounds, Parks and Other Open Space
- Golf Course Suggested at Hall Estate, Worrick Mansion and Island Area
- Pollution in Straits Pond

Table 1: Identification and Prioritization of 1999 Townwide Open Space and Recreation Needs

High Priority	Medium Priority	Low Priority
Town Beautification	Community Center	Weir River Estuary Park
Maintenance of Existing Open Space and Recreation Lands	Beach Maintenance	Pollution in Strait's Pond
New Recreation Fields	Identify Significant Private Vacant Parcels	Other: Bicycle Path, Small Parks
More Marinas and Boating Facilities		

For the purpose of this update, the Planning Board held public meetings with the Conservation Commission and the Parks and Recreation Committee. The purpose of those meetings was to review, modify and/or revise the list of needs. Several of the needs listed above were combined in a single category (e.g. More Marinas and Additional Boating Facilities were combined with Pier Control and Development). Rather than prioritize each individual need, needs were classed as high, medium, or low priority with no ranking assigned within a class. Table 1 summarizes the result of these discussions.

Town Beautification

Beautification of the town remains of great concern to many. Expressed at public meetings and interviews throughout the process of the open space and recreation plan preparation, it remains a high priority for this update. Specifically, issues were raised concerning the need to maintain public parcels and buildings, to improve the gateways into the Town, and to increase the number of trees in the Town.

The general lack of trees in Hull is apparent to the visitor as well as resident. Part of the reason is associated with the town's geology and type of soils. The hills where the soil is richer are the most densely vegetated areas whereas the larger connecting sand spits are sparsely vegetated by plant material that is dwarfed and visually stressed from lack of nutrients and water. Because of the soil conditions and exposure, special measures need to be taken to foster future growth of robust plant materials along the lower sand spit areas. People want trees along main roads, landscaping of public areas throughout town, and general town wide beautification. Specifically, Hull's gateway entrances on Route 228 and George Washington Boulevard.

Two other issues relating to Town Beautification include beach cleaning and disposition of vacant buildings.

Maintenance of Existing Open Space and Recreation Lands

The town recently, moved responsibility for the maintenance of its recreational facilities to the Town's Highway Department and approved an FY2000 maintenance budget of $58,300. Program Delivery continues to be the responsibility of the Parks and Recreation Commission and is budgeted at $66,700 for FY2000. The total recreation budget has increased 59% from FY1997 ($78,210) to FY2000 ($125,000). In addition to Town funds, there has been and continues to be a strong reliance on volunteer groups and organized sports leagues to maintain facilities and fund small capital projects.

Beginning in 1994 a review of the Park and Recreation Department's function, funding, and results was begun. As a result of this ongoing effort the Department has established a Sports Scheduling Committee to coordinate usage of fields to not only diminish scheduling conflicts but to also more evenly spread the wear and tear load to more sites. Additionally, the Town over the past three years has appropriated over $100,000 for fencing and paving at the L Street playground and to purchase new equipment for Friends Park and others. The increased recreation budget, the transfer of maintenance responsibility, the capital outlays, and the volunteer support

has resulted in recreational facilities that are in good to excellent condition and are well maintained.

An issue raised by several Planning Board and Conservation Commission members was the maintenance of open space parcels. Both boards support the Town's Harbor Plan for the improvement of stub ends of streets overlooking Hull's waterfront. Additionally, members voiced the need to improve parcels such as the Weir River Woods to better meet the green space needs of the Town.

New Recreation Fields

With the growth in popularity of soccer along with the traditional demand for baseball and softball fields, the town has a strong demand for recreational services. Shortage of materials, space and management capacity has fed an increasing level of frustration in recent years. For example, scheduled renovations to the L Street playground were postponed due to the inability to reschedule or cancel use of the field. There is vocal public concern regarding the availability of resources to adequately serve demand.

More Marinas and Boating Facilities

These priority needs, more marinas and boating facilities, are related to Hull's location as a town surrounded by water where the water's edge is no further than a few blocks from every resident in town. The relationship to the water is one of the first and most frequent characteristics people cite as liking about Hull. People see a need for more marinas, additional boating facilities, and more boating activities and programs. Additionally, these needs relate to future economic growth and development in the Town. Hull's waterfront and piers are underutilized resources. In 1995, development of the piers in town was of concern to a large number of people, but fully two-thirds just identified them as an issue. The town is currently evaluating its opportunities to improve the use of the piers. Dredging around Nantasket Pier has been approved and the Town is exploring possible development of a marina at this site.

Community Center

From the visioning process, a clearly identified need by the citizens was an indoor facility, a community center, that would provide for a wide range of recreation activities as well as arts and crafts. Need for a meeting hall and indoor pool was also listed. Separate but related high priority needs identified in the list above include educational, cultural activities (arts and concerts) and activities for youth.

Beach Maintenance

In 1994 the Town with the adoption of a Beach Management Plan, began to implement beach management strategies that are more consistent and environmentally sensitive. After consultation with the Massachusetts Department of Environmental Projection and Coastal Zone

Management a plan was developed to provide beach access and fencing that preserves the current dune system while providing recreational access to the town owned portion of Nantasket Beach. The fencing is now in place. Work is continuing on providing handicapped access to the beach. In 1999 with the assistance of State funds, the Town purchased three beach wheelchairs and is installing an emergency ramp at the 'A' Street Beach. In addition, a beach cleaning plan was developed that adheres to federal and state guidelines and promotes the preservation of the beach ecosystem.

Of concern to many residents is the accumulation of stones on the beach. Many residents question why neighboring Towns are allowed to remove rocks and Hull is not. Other residents have opposed the removal for fear of damaging the beach ecosystem. In 1994, the Town entered into an agreement with the Massachusetts Department of Environmental Management and the Army Corps of Engineers to conduct a feasibility study to prevent erosion of the town owned portion of Nantasket Beach as well as flood protection to back shore areas. Completed in 1996 the study recommended the development of sacrificial dunes built with imported sand. Opposition to the bringing in of sand arose almost immediately and the recommendation was not implemented. The Town is continuing to seek other alternatives to prevent erosion and flood protection to back shore areas.

Lastly, in 1995, the Town of Hull financed and completed a comprehensive survey of all foreshore protective structures. The study includes an inventory, ownership history, maintenance histories and current structural condition reports. The study has been utilized to prioritize seawall repair and maintenance and to secure funding from the State to pay for the repairs and maintenance. In 1999 work on the Pt. Allerton seawall was begun.

Weir River Estuary Park

Interest in the creation of a Weir River Estuary Park has waned over the past few years. The agreement for establishment of the park was finalized in 1994 between the Town, MDC, and the Executive Office of Environmental Affairs. The 1995 Open Space Plan noted that preservation of the Weir River Estuary with its park facilities for recreation and education along with the rehabilitation of the Fort Revere site by MDC would become the cornerstones of Hull's future open space system. A plan and notice of intent for the park was filed in 1995. However, since that time no progress has been made on the park's development. Today, the consensus is that the park area should remain open space but the Town has more pressing needs than the development of a WREP.

While development of the Weir River Estuary Park is not a high priority, doing something with the building on the George Washington Boulevard entrance to the estuary is a high priority. The Town is currently investigating the possibility of locating the studios for cable TV at this site.

Private Vacant Land

Within the context of the needs identified above, the use of several privately owned, vacant parcels was discussed. Land near the Sullivan playground and/or the Worrick mansion was mentioned for possible use as ballfields. There seems to be substantial sentiment that the parcel

of land abutting the Weir River Woods be of low-intensity use or open space, perhaps used as a small park or picnic area. Concern centers about how the parcel's future use will define the character of the town since it is at one of its two main entries.
Another frequently sited need was for the town to resolve use of the HRA (Hull Redevelopment Agency) property. This has been a hot issue of debate within the town for a long time. In 1995, half of the people indicated they wanted the issue resolved one way or another and the implied desire for something to happen so the town could move beyond this decision. The other half of the responses were almost equally divided between those who mentioned open space use and those that mentioned development. The possibility of constructing a new Town Hall/Community Center on the site has also been mentioned.

The HRA property is currently open space that has been rough graded and planted with grass. It is used in the summer to park cars for Nantasket Beach visitors. The town had a recent appraisal of the property in anticipation of issuing an RFP to solicit proposals for use of the property. The town thought they were past this decision when in 1990 the HRA designated developer was moving through the approval process for a hotel and conference center with retail along an open space strip at the narrow part of the site and condominiums on the northern part of the property. The developer followed the deterioration of the national economy and went bankrupt.

The HRA responded by mailing a survey to all registered voters in July 1992 and received 720 responses. The survey results offered several very consistent themes. Year round respondents focused on quality of life issues. In the section which dealt with general development goals the question on improving visual appeal of the area received a 91% favorable response; the question regarding improving the quality of life with a community center facility such as a pool, park, movie theater, etc. received the support of 556 respondents or a 77% favorable response; and preserving open space received a 72% favorable response.

In another section, the survey listed several possible uses and asked respondents to indicate how favorable or unfavorable they considered the proposed use. The questions which received the highest positive responses in the section on potential uses of the site were those which dealt with public recreation, both active and passive. The highest ranking idea received a favorable response of 55%. It was a regional commercial sports convention facility (with spa, swimming pool, ice rink or tennis or squash courts, etc.) with weekday times available for rental or use by community residents, schools or other agencies. Questions regarding mixed-use developments in various combinations of housing, commercial and retail uses all received a higher unfavorable than favorable rating. Of the mixed-use development proposals, one like the failed project got the highest rating with a favorable response of 43%.

To date, a sufficient community consensus has not been achieved.

Needs of Special Populations

Open space and recreational facilities require a special effort to insure that they are accessible to people with disabilities and the elderly. The study of population statistics in section three showed that Hull has a greater percentage of its residents between 16 and 64 mobility challenged

and with work disabilities than other shore towns even though the percentage is close to the U.S. average. The difference is less for persons 65 and over.

Recent progress Hull has made toward ADA compliance is reviewed in section nine, which documents recent accomplishments prior to outlining the new five-year action plan. The Section 504 Self-Evaluation for all public property owned by the recreation department or conservation commission is included in Appendix 2. Continued progress toward full ADA compliance is part of the five-year action plan. A detailed town-wide ADA compliance plan was completed in September 1995.

The Council on Aging building was renovated in 1992 in full compliance with ADA. This is the primary location for town-wide activities for senior citizens. The Lillian Jacob's elementary school was made handicapped accessible in 1998 and is now in compliance with ADA.

Existing Facilities Compared with Planning Standards

Planning Standards

The use of standards to determine whether or not a town has adequate open space and recreation is difficult due to changing trends in recreation, town location, demographics and socio-economic characteristics of the community. For instance, Hull is surrounded by water but not adjacent to a ski slope. It would therefore be expected that people would have a broader interest in water activities than winter sports. Analogies could be made for the other factors describing the recreational characteristics of a town. Nevertheless, comparison of existing facilities to planning standards is a useful exercise as a point of departure and yardstick.

The National Recreation and Parks Association (NRPA) developed the most widely used classification system and standards for park and recreation land. *This classification system is intended to serve as a guide to planning-not as an absolute blueprint.* Sometimes more than one component may occur within the same site (but not on the same parcel of land), particularly with respect to special uses within a regional park. Planners of park and recreation systems should be careful to provide adequate land for each functional component when this occurs.

Standards are given for three major categories: Local/Close-To-Home Space, Regional Park and Recreation Lands, and Space that May Be Local or Regional and is Unique to Each Community. The first category is the most relevant for local open space planning. It includes neighborhood parks and playgrounds providing active recreation, larger parks with more intensive recreational facilities and large parks with natural areas. NRPA suggests that a park system, at a minimum, be composed of a "core" system of parklands, with a total of 6.25 to 10.5 acres of developed open space per 1,000 population in this first category. The size and amount of "adjunct" parklands will vary from community to community, but must be taken into account when considering a total, well-rounded system of parks and recreation areas.

Table 1 provides a summary of how Hull compares with the NRPA system. The text following Table 1 provides definitions and comments on how the standards are viewed in relation to the unique properties and conditions of the town.

Close-To-Home Space

This category provides population-based acreage standards for various categories of parks with an emphasis on active recreational facilities. The standard is 6.26 to 10.5 acres of developed open space per 1,000 population. This is further broken down into standards for mini-parks, neighborhood park/playgrounds and community parks.

Mini-parks are defined as areas of one acre or less intended to serve a limited population or a specific group such as tots or senior citizens. Their service area is to be within a neighborhood at a recommended radius of less than one-quarter mile. Tot lots are part of playgrounds in Hull. Therefore, their area as part of mini-parks has been combined with neighborhood parks/playgrounds. Three small passive recreation sites include Captain Cleverly Park, Captain James Park and Point Allerton. Also, the Town has several neighborhood beaches that serve as passive recreation areas. Additionally, the Town has many Town owned stub-ends of Streets (see Section 5, Table 3) which are not included in the total mini park acreage. Many of these street ends function or could function as passive recreation areas. A reason that there may not be much mention of greater need for the mini park type of facility by residents is that the ocean is within a quarter mile of virtually every resident and is accessible via the street ends or the beaches.

Neighborhood parks/playgrounds contain sports fields and court games for active recreation. The density of development in Hull is relatively high and the towns total area is small, only 2.53 square miles (1,619.2 acres), which has resulted in playground areas much less than the recommended desirable size of 15 plus acres. The largest playground is six acres. The total acreage for mini- parks and playgrounds is 15.8 acres. The range of the planning standard is 1.25 to 2.5 acres per thousand population, which for 10,466 people is 13 to 26 acres. Hull has little useable active recreation open space and there is therefore, a need to protect and enhance what space and facilities exist.

The last component of close-to-home space is community parks. These may include indoor athletic complexes or developed natural areas for walking, viewing, sitting, or picnicking. The planning standard is five to eight acres per thousand. For Hull that calculates to an area of 52 to 84 acres. Including the beaches, Hull's has 76.3 acres classified as community parks. The three non-beach community parks in Hull; Bayside Park ("L" Street), Joe Menice Ballfield, and James T. Sullivan, Jr. Field; add up to 11 acres. Thus, the vast majority of community park land is beach and may explain why citizens at the 1994 visioning workshops and the Planning Board in 1995 believed there was a great need for these types of developed open space. The addition of the basketball and volleyball courts at Nantasket Beach has provided for more active recreation space.

Table 2
Hull Open Space Compared With National Standards

Type of Open Space	Acreage	National Standard Acreage Range[1]
Close-To-Home Space[2]		
Mini Parks, Neighborhood Parks/playgrounds, and neighborhood beaches	15.80	13 to 26[3]
Community Parks	76.30	52 to 84[4]
Total	**92.10**	**65 to 110[5]**
Regional Space:		
Nantasket Beach (State)	86[6]	
Blue Hills Reservation	5,800[7]	
Wompatuck State Park	2,877[8]	
World's End	251	
Total	**9,014**	**157 to 209[9]**
Unique Open Space:		
Weir River Estuary	65	
Weir River Woods	10.6	
WBZ Wetlands	20.6	
Total	**96.2**	**No Standard**

Source: Hull Assessor's records except as noted.

1 National Recreation and Parks Association (NRPA).

2 Miniparks include all active and passive recreation facilities listed in the inventory except for the following community parks. Community parks include Bayside Park (L-Street), Joe Menice Ballfield, and James T. Sullivan, Jr. Field. Also includes small beaches (<5 acres, and a 5 acre portion of the Bayside beaches)

3 Standard of 1.25 to 2.5 acres/1,000 population x 10,466 = 13 to 26 acres. Community parks includes the remaining 15 acres of Bayside beaches, Stony Beach, and the Town owned portion of Nantasket Beach.

4 Standard of 5.0 to 8.0 acres/1,000 population x 10,466 = 52 to 84 acres.

5 Standard of 6.25 to 10.5 acres/1,000 population x 10,466 = 65 to 110 acres.

6 Includes all upland facilities, 26 acres, for recreation, parking, and maintenance, plus approximately 60 acres of beach area exists at low tide along one and a half miles of shoreline.

7 Metropolitan District Commission Facility Guide

8 Department of Environmental Management

9 Standard of 15 to 20 acres/1,000 population x 10,466 = 157 to 209 acres.

However, there may still be a need for additional community park land that is separate from the beach.

Regional Space

Regional Space has two components: regional/metropolitan parks and regional park reserves. These categories encompass open spaces of 200 to 1,000 acres that are within one hour's driving time, serve several communities, and provide recreation and/or natural resource protection. The population-based standards of 15 to 20 acres per 1,000 population indicate Hull should have access to approximately 157 to 209 acres of regional/metropolitan parks. The MDC's Nantasket Beach in Hull and Blue Hills Reservation, Wompatuck State Park, and World's End in Hingham fulfill this need for Hull. Cohasset Annex is also a substantial natural environment preserved in Cohasset and Hingham that fits into this category.

Unique Open Space

This category includes linear parks, special use areas, and conservation areas. There are no population-based acreage standards provided for these categories. The definition of linear park includes hiking trails as well as canoeing. The Weir River Estuary Park and Nantasket Beach qualify as linear parks or recreation resources. The NRPA defines conservancy areas as lands set aside for the "protection and management of the natural/cultural environment with recreation use as a secondary objective". The Weir River Woods town forest lands fall within this category as well as town conservation lands.

The Weir River Estuary Park is 65 acres; the Weir River Woods town forest is 10.6 acres, and the wetlands surrounding the WBZ tower is 20.6 acres for a total of 96.2 acres. In addition, water bodies can be counted for swimming or canoeing. These figures do not count the beach or ocean area for swimming nor Straits Pond or the Weir River, where a canoe launching area is planned as part of the park.

Comparative Analysis of Open Space and Recreation Land

Not only is it helpful to compare a town's open space resources with national standards, but it is also valuable to compare them to that of other surrounding towns of equivalent land area, and in Hull's case, especially to other seaside communities. Twelve towns are analyzed and compared to Hull. The first three towns (Cohasset, Hingham and Scituate) are Hull's closest neighbors on the South Shore. Unfortunately all three of these Towns are considerably larger than Hull. The next five towns are ocean-front towns on the North Shore. All five of these towns are closer in land area to Hull as are the South Shore communities. Unfortunately, recent data is only available for Marblehead and Winthrop. The last four towns are in the western suburbs along Route 128 and are known for their generally superior open spaces and recreation facilities. They are presented here for information purposes only and it should be noted that the data comes from a 1987 survey which is likely to be inaccurate.

Components of Community Open Space and Recreation Lands

The components that comprise the community open space and recreation lands are shown in Table 2. The first six categories are local lands in some form of town ownership. Then there is land, which has conservation restrictions. The last seven categories are state, federal, or non-profit owned open space lands.

Hull's neighbors have considerably more open space. This is due to their size and the fact that their land extends inland away from the coast while Hull is narrow and surrounded by water. However, Hull's relationship to the water provides open views not available to inland areas. Hingham has an unusually high amount of open space due to 850 acres of conservation land and a 2000 acre state park.

Four out of the five North Shore towns have smaller amounts of open space like Hull. Common characteristics of these towns include development during the days of sailing ships when land was urbanized at generally higher densities, the movement to preserve open space in towns was still years away, and their seaside location provided long distance views which may psychologically compensate for the lack of green open-space areas. Another interesting observation is that the recorded percent of open space in Hull is similar to that of the five North Shore communities (see Table 3). Rockport is the one town in this group that has substantially more open space than the rest. One explanation is that Rockport has much more land area and extends inland more than the others with much of that land still undeveloped.

The four western suburb towns have much more extensive land area than Hull. They were developed at a later date as farming communities, with a scattered land development pattern of farms and small villages providing services. Today, all of them have more open spaces, trees on streets, and conduct good active recreation programs on generally superior playing fields

Types of Open Space Land Per Thousand Population

A more detailed method of comparison is to look at the number of acres of types of open space per one thousand persons (the national planning standard referred to earlier uses this method). When one evaluates the number of acres of open space and recreation land per thousand population the western suburb communities have two to three times more open space per individual.

From Table 3, 33 acres in Hull is park, recreation and playground space at schools, which is 3.2 acres per 1,000 population. While comparable to Nahant and Swampscott, most communities have 3 to 10 times that much active recreation space. Future playfield potential exists at the land-fill area, a 3.5 acre parcel off Shore Gardens Road, and at the Worrick Mansion property.

On the other hand, local conservation lands compares favorably with the North Shore seacoast towns and with three of the four western suburbs. At 2.8 acres per 1000 population, Hull's regional open space compares favorably with the other small towns. Also, as noted above, the presence of regional space in both Hingham and Cohasset fulfill Hull's needs.

The overall percent open space recorded for Hull at 14.3 percent can be further reduced because of the 26 acres recorded for MDC. Most of the MDC land is not open space, but a seven building maintenance facility and parking lots for beach visitors. Subtract the entire MDC acreage from Hull's Open Space calculations leaves 202 acres open space or 12.5 percent. The average for the other twelve towns surveyed is 18 percent., meaning that Hull has slightly more than two-thirds of the average open space in the other towns.

Summary of Resource Protection Needs

The environmental inventory, technical analysis of natural resources, and inventory of open space and recreation lands identified a list of resource protection needs. Many of these needs were identified by citizens as documented above in the town-wide visioning process and reaffirmed at the public meetings held for this update. Many of these needs described below have been given both priority in recent years and continue to be addressed in the five-year action plan delineated in section nine.

Use of Open Land

The Town is currently wrestling with options and opportunities revolving around several undeveloped parcels of land. The primary parcel, the Hull Redevelopment Authority land, is situated at the cross roads of the community and is currently grassed open land since being cleared in the 1960's of urban development under the federal urban renewal program. It is understood that the future quality of life in the community is tied to the choices that will be made in the next several years. There has been intense public discourse on the nature of future development, ranging from full scale commercial development of the property to designating the entire parcel as park land. An additional proposal for siting a Town Center at this location is also under consideration. The public debate has yet to reach a conclusion. The implications for the community cannot be underestimated.

The HRA property lies at the narrowest point of the sand spit, and at the seam between the commercial area to the south and the beginning of the single family residential area to the north. The southern half of the property is at the narrowest point of land, approximately 250 feet. At this location in its' presently open condition one can see the ocean and Nantasket Beach to the east and the bay with extensive salt marsh areas to the west and views to World's End. It is easy to see why many people advocate open space on this parcel. They point out that Hull is essentially completely developed at a relative high density with limited open space. Exploration of population characteristics in section three shows a modestly high density for Hull at five to seven times the density of its neighbors to the south, even though it is one-third the average density of Boston.

The statistical analysis of open space above shows that Hull's open space per total land area is 78percent of the average open space of the other twelve towns surveyed. Other open land that will be assessed for potential future uses includes the Weir River Estuary, Worrick Mansion, Weir River Woods, and Straits Pond island area.

Table 3
Components of Community Open Space and Recreation Lands

Town	Cons. Comm. Land	Other Town Cons.	Town Water Lands	Parks & Rec. Lands	Town School Lands	Town Forest	Cons. Rest.	State Park	State Forest	Other State Cons.	MDC	Federal Lands	Non-Profit Rec.	Non-Profit Cons.	Total
Hull	66	34	87	23	10	0	4	0	0	0	29	0	0	0	253
Cohasset	27	16	100	109	39	0	0	1,051	0	0	0	0	19	631	1,992
Hingham	583	52	166	72	197	108	0	2,051	0	40	21	152	14	475	3,931
Scituate	997	15	716	182	135	34	0	111	0	0	0	38	0	202	2,430
Marblehead	114	0	22	70	69	0	0	0	0	0	0	0	0	64	339
Winthrop	4	2	23	94	13	0	0	0	0	0	29	0	0	0	165
Rockport	87	58	120	217	23	0	0	56	0	29	0	29	0	45	664
Nahant	0	0	0	17	0	0	0	0	0	0	97	0	0	8	122
Swampscott	43	0	0	47	0	45	0	0	0	0	0	0	0	0	135
Lexington	1,080	268	107	159	204	0	148	0	0	0	0	215	28	7	2,216
Needham	398	66	15	351	173	85	0	0	0	0	505	42	20	29	1,684
Burlington	135	59	152	72	215	0	0	0	0	0	0	0	0	0	633
Wellesley	320	74	0	185	79	160	21	0	0	0	95	0	0	50	984

Source: Hull - see Section 5, Table 1
Cohasset - 1996 Draft Open Space Plan
Hingham - 1996 Open Spzce Plan
Scituate - 1998 Open Space Plan
Winthrop - 1997 Open Space Plan
Marblehead - 1999 Open Space Plan
All others - Metropolitan Area Planning Council, 1987 Open Space Survey

Notes: Beaches, Beach Access, Wetlands included under Town Water Lands
Cemetaries not included
Belle Isle Marsh in Winthrop not included, no acreage given

Table 4
Types of Open Space and Recreation Land Per Thousand Population

Town	Open Space & Recreation Total	Town Land Area	Percent Open Space	1990 Town Population	Open Space & Recreation Acres/1000	Park, Recreation & School Lands	Recreation & School Lands Acres/1000	Local Conservation Lands	Local Conservation Acres/1000	Regional Open Space Lands	Regional Open Space Acres/1000
Hull	253	1,619	15.6%	10,466	24.2	33	3.2	197	18.8	29	2.8
Cohasset	1,992	6,438	30.9%	7,075	281.6	167	23.6	774	109.4	1,051	148.6
Hingham	3,931	14,458	27.2%	19,821	198.3	283	14.3	1,384	69.8	2,264	114.2
Scituate	2,430	10,925	22.2%	16,783	144.8	317	18.9	1,964	117.0	149	8.9
Marblehead	339	2,829	12.0%	19,971	17.0	139	7.0	200	10.0	0	0.0
Winthrop	165	1,043	15.8%	18,127	9.1	107	5.9	29	1.6	29	1.6
Nahant	122	678	18.0%	3,828	31.9	17	4.4	0	0.0	105	27.4
Rockport	679	4,518	15.0%	7,487	90.7	240	32.1	265	35.4	174	23.2
Swampscott	135	1,984	6.8%	13,650	9.9	47	3.4	88	6.4	0	0.0
Lexington	2,501	10,643	23.5%	28,974	86.3	391	13.5	1,455	50.2	655	22.6
Needham	1,756	8,160	21.5%	27,557	63.7	544	19.7	564	20.5	648	23.5
Burlington	633	7,603	8.3%	23,302	27.2	287	12.3	346	14.8	0	0.0
Wellesley	1,239	6,726	18.4%	26,615	46.6	264	9.9	554	20.8	421	15.8

Source: Hull - see Section 5, Table 1
Cohasset - 1996 Draft Open Space Plan
Hingham - 1996 Open Space Plan
Scituate - 1998 Open Space Plan
Winthrop - 1997 Open Space Plan
Marblehead - 1999 Open Space Plan
All others - Metropolitan Area Planning Council, 1987 Open Space Survey

Notes: Beaches, Beach Access, Wetlands included under Town Water Lands
Town Water Lands included under Local Conservation Lands
Beaches not included under Park, Recreation & School Lands
Cemetaries not included
Belle Isle Marsh in Winthrop not included, no acreage given
Regional Open Space Lands credited to Town in which located only

Weir River Estuary Park

After many years an interagency agreement was signed in April 1994 by the Town of Hull, the Executive Office of Environmental Affairs and the Metropolitan District Commission. Approximately 62 acres of critical estuary lands are permanently preserved through conservation restrictions. Development of a park consisting of an estuary laboratory and educational center, a trail system with interpretive signage, sitting and picnic areas, and a canoe launch was under consideration. At the combined planning board/conservation commission meetings, development of a park was not a high priority. Rather, leaving the estuary in its natural state but renovating the building at the George Washington Boulevard entrance was considered.

Pollution in Straits Pond

This resource protection need is directly related to the Weir River Estuary because the outlet of the pond flows into the estuary. Currently a tide gate isolates the pond from tidal flow. The Towns of Hull, Cohasset, and Hingham have signed an intra-municipal agreement to sewer all areas that have an impact on the Weir River watershed and for the Town's of Cohasset and Hingham to connect to the Hull sewer system. The cost of this project is estimated at $6,000,000 with the State providing a portion of the funds through 0% interest loans. Currently, the Town of Hull has extended the sewer line through the Hull side of Straits Pond and homeowners are in the process of connecting. The Town of Cohasset is now designing their sewer lines and expected to begin construction this Fall.
Other considerations include opening the pond to tidal changes or periodically draining and refilling the pond.

Beach Maintenance, Seawall Conditions and Beach Erosion

Erosion by waves at the base of the seawall along portions of the MDC Nantasket Beach area are undermining the wall and causing it to settle and break apart. The town should continue to lobby the MDC to undertake the repairs necessary to solidify the seawall. Also, the town should encourage and work with the MDC to establish a beach enhancement program that will address beach erosion, improve open space and enhance regional tourism.

Seawalls at Gunrock beach and at Allerton Hill were identified in the 1995 study of foreshore structures as in need of major repairs. Work has begun on both these seawalls. Seawalls at James Avenue and at Pemberton require minor repairs. Once repairs are complete the Town will budget for a regular maintenance schedule to maintain the seawalls.

A plan to establish "sacrificial dunes" along portions of Nantasket Beach to provide a buffer to storm-induced erosion and to supply sediment to down drift beaches was recommended by the U. S. Army Corps of Engineers. However, the plan has not been received favorably by residents of the shore front and appears that it will not win local approval. The Town is now seeking other alternatives to prevent erosion. Beach erosion and storm damage are significant resource protection issues there is a need to develop interim management measures until a final is approved.

Fort Revere Restoration

In 1898 the U.S. Government bought 77 acres of land on Telegraph Hill and constructed a fort named after Paul Revere. Fort Revere served as part of the defense of Boston Harbor in both World Wars. This fort was deactivated in 1951 and ownership returned to the Town of Hull. The one-hundred-foot water tower with its observation deck is open during the summer for visitors to enjoy the spectacular panoramic view of Boston and the harbor islands. The MDC in cooperation with the town is purchasing property to establish a park and interpretive center at a restored Fort Revere. Currently, the Town and the MDC are in the process of negotiating a land swap where the Town owned portion of Fort Revere Park will be transferred to the MDC. The town needs to continue working with the MDC to move this project along to stem further deterioration of Fort Revere, add to the recreation resources of Hull, and provide added tourist attractions targeted to enhance economic development.

Right-of-Way Access to Water's Edge

Hull's most significant open space, its water's edge, is accessible to residents and visitors. Many public rights-of-way lead from public roads to the water's edge and have been identified in the Town's Harbor Management Plan. Public access is a valuable resource for the citizens as a whole. Access to the water's edge needs to be maintained. It is one of the advantages of living along the seashore. The 1995 Open Space and Recreation Plan noted that these rights-of-way should be kept as public property, landscaped, and maintained . The recently completed Harbor Management Plan echoed those sentiments calling for landscaping and signage improvements to the many access points..

Old Colony Railroad Right-of-Way

A number of options have been discussed within town for potential open space use. The Harbor Management Plan recommends the development of a bicycle path utilizing portions of this right-of-way. However, many private landowners backing up to the land have used it as part of their back yards. The railroad bed is a valuable public resource that should remain in public ownership in order for it to be available if and when an idea for its use gains consensus. By always remaining in public ownership different use can be made of this corridor as times and conditions change. Once abandoned, it could probably not be replaced.

Management Needs, Potential Change of Use

Management of active recreation facilities requires more emphasis to upgrade the poor quality of playfields and courts. Many of the courts in particular have cracks and uneven paved areas which likely cause additional injuries. Usually maintenance is more cost effective than allowing facilities to deteriorate to the point where replacement is required. A park and recreation committee established in August 1994, is charged with program oversight and management. The Hull Public Works Department is responsible for maintenance of the existing facilities. Over the

past several years, the Town has resurfaced tennis and basketball courts, provided fencing, and purchased some new equipment. A maintenance budget of $58,300 has been approved for FY2000. Overall, the recreation budget has grown from $78,210 in FY97 to $125,000 in FY00.

The beach management plan has been completed. It calls for the construction of sacrificial dunes with specially constructed access ways over the dunes and vegetation stabilization of the dune. Project approval for permits is underway. There is an immediate need for additional interim management measures prior to the date when the sacrificial dunes are in place.

Continued management efforts are needed to determine appropriate use of the building at the George Washington Boulevard entrance to the Weir River estuary. Construction of a studio for Cable TV production is currently under consideration for this building. Should the Town again pursue development of an estuary park, the renovation of the building should allow for its transformation to a Welcome Center, or another site on the parcel should be left open for construction of a Welcome Center.

The landfill site along the Weir River Estuary is in its final stages of being capped. The site has great views overlooking the Weir River Estuary Park and has the potential for a unique interpretive observation area accessed by pedestrians from the park and bicycles from adjacent residential areas and the intra-town bikeway to Hingham. The large flat area on top has the potential for a play *soccer* field and lower flat areas can be used for parking. Parking can serve spectators for sports events or as satellite parking for Nantasket Beach.

The Fort Revere site, abandoned since 1951, is now in the process of being formulated into a restored interpretive center by the MDC. The proposed new use as an open space for residents and visitors from throughout the region has commanding views of Hull and Boston Harbor.

Section 8

Goals and Objectives

Section 8

PRINCIPLES, GOALS AND OBJECTIVES

PRINCIPLES, GOALS AND OBJECTIVES

Description of Process

For the purpose of this update, the Planning Board held several public meetings to which Conservation Commission members and Parks and Recreation Commission members were specifically invited. These meetings were intended to jointly review and update the goals and objectives presented in the 1995 Open Space Plan. Additionally, since that plan was adopted, several events in the Town have made the Open Space and Recreational needs of the Town more visible. These events include: the development and permitting of an apartment complex on the Hall Estate, the two attempts at promoting development of the HRA parcels, a booming real estate market encouraging development of single family homes, and the initiative to develop a marina at Nantasket pier. This update therefore reflects the previous plan, the needs analysis presented in Section 7, and developments that have occurred since 1995.

The 1994 Vision Process described in Section 6 represented a re-evaluation of Hull's wants and needs, reflective of the changes in the community's composition over the past two decades. The goals and objectives developed through that process incorporate and supersede those developed by previous planning efforts. A clear outcome of the Vision Process was that the protection of open space and recreational opportunities in Hull has retained prominence in the residents' view of the future. Not only is it fundamental to the quality of life in Hull, but plans for future

economic growth and development center around the enhancement of recreational opportunities in and around Hull.

TheVision planning effort remains the guideline for all other plans including this update. Accordingly, 4 of the 10 principles as noted in Section 6, form the framework for the Open Space and Recreation goals developed at the joint Planning, Conservation, and Recreation Board public meetings. While the framework stems from the Vision Statement, the open space goals and objectives result from the public meetings held by the planning board with the invited input of the conservation commission and the parks and recreation commission.

In many planning processes, objectives are developed from stated goals such that the objectives relate only to a single goal. The Vision Process started from the bottom up, synthesizing goals and objectives through iterative refinements of the initial list of over 450 issues of concern identified by the workshop participants. Consequently, the objectives developed through this process relate to more than one goal. This approach has again been utilized in the development of this update.

PRINCIPLE 1: RECOGNIZE, PROTECT AND ENHANCE THE QUALITIES OF THE NATURAL AND BUILT RESOURCES THAT MAKE HULL SUCH AN UNUSUAL AND BEAUTIFUL ENVIRONMENT.

Goal 1.1: HULL SHOULD BEAUTIFY ITS ENTRY POINTS AND MAIN ROADWAYS WITH LANDSCAPING AND OTHER IMPROVEMENTS TO ENHANCE THE IMAGE OF THE TOWN, WELCOME VISITORS, AND LINK ITS DISTRICTS.

Objective 1.1.1: *Identify significant gateway-to-Town parcels both privately and publicly owned.*

Objective 1.1.2: *Identify gateway parcels to each of the Town's unique neighborhoods.*

Objective 1.1.3: *Develop plan to link these gateway parcels together through an attractive signage system and/or bicycle/walking trails. Plan to include strategies for acquiring key parcels identified in Objectives 1.1.1 and 1.1.2.*

Objective 1.1.4: *Develop landscaping and tree planting plan along major Town roadways.*

Objective 1.1.5: *Means for improving north/south linkages within Hull should be pursued for public transit such as a local trolley, for bicyclists, and for pedestrians. Such improvements should acknowledge varying needs according to season and age groups.*

Goal 1.2: **HULL'S BEACHES, PARKS, THE WEIR RIVER AREA, STRAITS POND, AND OTHER RESOURCES PROVIDE HULL WITH HIGH-QUALITY AND DIVERSE OPEN SPACE AREAS. HULL'S PLANNING SHOULD CONCENTRATE ON MAINTAINING, PROTECTING, AND ENHANCING THESE PUBLIC OPEN SPACES.**

Objective 1.2.1: *Initiate process to develop a master plan for the Town.*

Objective 1.2.2: *Develop and initiate an improvement and ongoing maintenance plan for Hull's parks and significant open space areas. Plan should include budgeting considerations and assignment of maintenance responsibilities to appropriate Town departments.*

Objective 1.2.3: *Protect scenic areas and wetlands and beautify the Town.*

Objective 1.2.4: *Improve public street-ends to create mini-parks and scenic vistas.*

Objective 1.2.5: *Develop a healthy balance of aquatic life in Straits Pond.*

Objective 1.2.6: *Encourage a better understanding of Hull's landside open space and its relationship to the Town's identity, growth, and development.*

Objective 1.2.7: *Hull should use the opportunity of this planning process to help prioritize capital and maintenance programs and inform its citizens of progress to increase understanding of the Town's efforts.*

Goal 1.3: **HULL'S PAST IS INTERESTING, IMPORTANT AND UNUSUAL; IT IS AN ATTRACTION TO VISITORS. OPPORTUNITIES TO ENHANCE THE UNDERSTANDING AND APPRECIATION OF THE PAST ARE ENCOURAGED.**

Objective 1.3.1: *A permanent and regular liaison process should be established between the MDC and the Town to ensure continued cooperation and coordination on both short-term and long-term issues and to allow conformance of MDC operations, maintenance, and improvements with town goals and initiatives.*

Objective 1.3.2: *Develop a walking path through historic Hull village including appropriate signage.*

Objective 1.3.3: *Develop a bicycle/walking path through the Town.*

Goal 1.4: **THE RECREATIONAL NEEDS OF HULL'S RESIDENTS ARE PARAMOUNT TO MAINTAINING THE LOCAL QUALITY OF LIFE. THE TOWN SHOULD INSURE ADEQUATE SPACE IS AVAILABLE TO MEET THESE NEEDS, NOW AND INTO THE FUTURE.**

Objective 1.4.1: *Identify parcels appropriate to the recreation needs of the community. Such parcels may be adjacent to current recreational fields and may be privately or publicly owned. Develop plan for utilizing or acquiring parcels for recreational use.*

Objective 1.4.2: *A community center should be created as a central meeting place for the town, and provide recreational, cultural, and educational opportunities year round for both adult and youth. This center should serve the greatest number and range of residents possible.*

Objective 1.4.3: *The Town should identify appropriate locations and develop areas so as to increase the available passive recreational opportunities (parks, etc.) in the Town.*

Objective 1.4.4: *Develop a bicycle/walking path through the Town.*

PRINCIPLE 2: RECOGNIZE THAT VISITORS AND SUMMER RESIDENTS COME TO HULL FOR ITS WATERFRONT AMENITIES, WHICH SHOULD BE ENHANCED TO IMPROVE THE EXPERIENCE, VALUE, AND REVENUES TO THE TOWN.

Goal 2.1: **OPPORTUNITIES SHOULD BE PURSUED THAT ENHANCE BOTH RECREATIONAL AND COMMERCIAL USES OF THE WATERFRONT. PROPERLY PLANNED IMPROVEMENTS SHOULD BE COMPATIBLE WITH RESIDENTIAL AND TOURISM USES. THIS MAY INCLUDE DREDGING OR WATER EDGE IMPROVEMENTS WHERE ENVIRONMENTALLY RESPONSIBLE AND WHERE ECONOMICALLY FEASIBLE OR WHERE STATE OR FEDERAL FUNDS MAY BE AVAILABLE AS ASSISTANCE.**

Objective 2.1.1: *Development of a marina at Nantasket Pier with public access to the waterfront should be encouraged.*

Objective 2.1.2: *Beaches should be well-maintained, and beach access provided through a planned process.*

Objective 2.1.3: *Visitors and the recreational activities that attract them are a major contributor to the Town's employment and tax base; new uses and users that minimally impact the community and enhance the quality of life should be encouraged and supported.*

Objective 2.1.4: *Commercial and waterfront zoning regulations should be reviewed and revised where necessary. Addition of watersheet zoning to the Town's Zoning by-laws should be considered.*

Objective 2.1.5: *The area in and around Nantasket Beach should be improved to create a more attractive pedestrian environment and reinforce the special qualities of this unique seaside destination.*

Objective 2.1.6: *Protect developed areas from coastal storm damage and erosion through the development of a dune maintenance system.*

Objective 2.1.7: *Hull should create a long-term maintenance strategy for Town facilities and communicate it to its citizens so that there is a greater understanding of priorities and appreciation for progress.*

Goal 2.2: HULL SHOULD JOIN IN THE INITIATIVES UNDERWAY TO ESTABLISH THE HARBOR ISLANDS AS A COMPREHENSIVE PARK SYSTEM BY PROMOTING ITSELF AS A GATEWAY TO AND FROM THE ISLANDS THROUGH WATER TRANSPORTATION CONNECTIONS, VISITOR INFORMATION, AND OTHER APPROPRIATE AMENITIES.

Objective 2.2.1: *Locations such as Pemberton Point and Nantasket Pier are special places which should have park-like improvements to accommodate residents and visitors seeking the vistas found there.*

Objective 2.2.2: *Hull should improve public transit to and from Hull by working with the MBTA and others to increase access by bus, regional rail networks, bicycle, and passenger ferry. Any significant expansion of water transportation should be carefully coordinated with land use planning and other goals of the town.*

Goal 2.3: ACCESS BY THE PUBLIC TO THE WATERFRONT, TO PARKS, TO PLAYFIELDS, AND TO OTHER PUBLIC AREAS IS A CONSISTENT GOAL THROUGHOUT THE VARIOUS TOWN PLANNING DOCUMENTS. THE TOWN'S ADA COMPLIANCE PLAN RECOGNIZES THIS GOAL AND INCLUDES AN ACCESSABILITY ANALYSIS OF THE TOWN'S RECREATIONAL FACILITIES AND FIELDS, AND THE TOWN'S PARKS AND BEACHES.

Objective 2.3.1: *The Town should continue implementation of its ADA plan with special emphasis on providing access to Town beaches, parks, and other open-space facilities.*

Objective 2.3.2: *The Town should continue its effort to make the A-Street Beach fully handicapped accessible.*

Objective 2.3.3: *Hull should institute processes, such as workshops, forums, and newsletters, to encourage and continue broad public involvement in planning and town government.*

PRINCIPLE 3: PROTECT AND ENHANCE HULL'S MARITIME CHARACTER FOR COMMERCIAL ENDEAVORS, MARINE RECREATION, AND RESEARCH.

Goal 3.1: THE HULL SCHOOL SYSTEM SHOULD BE ENCOURAGED TO DEVELOP CURRICULA THAT CAPITALIZE ON THE TOWN'S UNIQUE NATURAL SETTING.

Objective 3.1.1: *Create an ad hoc committee to identify support for such an effort including federal and state funding sources, university and research institutions, and other institutions such as museum and aquariums. Committee should include, at a minimum, representatives of the Hull Public School, the South Shore Charter School, and the Town's Community Development Office.*

Goal 3.2: ESTABLISH HULL AS A RECOGNIZED CENTER OF INFORMATION ON COASTAL AND MARINE ISSUES BY BRINGING ITS UNIQUE NATURAL RESOURCES TO THE ATTENTION OF AGENCIES AND ACADEMIC/RESEARCH INSTITUTIONS.

Objective 3.2.1: *Develop brochure/pamphlet/web site identifying Hull's special attributes.*

PRINCIPLE 4: CONSIDER EACH NEW DEVELOPMENT OPPORTUNITY VERY CAREFULLY SINCE RELATIVELY FEW OPPORTUNITIES FOR DEVELOPMENT REMAIN. WHERE SO FEW DEVELOPMENT OPPORTUNITES REMAIN, THE TOWN SHOULD ESTABLISH SOUND PRINCIPLES GUIDING EVENTUAL REDEVELOPMENT EFFORTS.

Goal 4.1: NEW DEVELOPMENT AND IMPROVEMENTS TO EXISTING PROPERTIES SHOULD ENHANCE THE CHARACTER OF THE DISTRICTS IN WHICH THEY OCCUR.

Objective 4.1.1: *Initiate process to develop a master plan for the Town.*

Objective 4.1.2: *Consider creating different types of development/redevelopment areas within Town and establishing appropriate definitions and policies for each area (e.g. development areas, scenic development areas, residential areas, and conservation areas.*

Objective 4.1.3: *Review and revise, where necessary, current zoning regulations.*

Objective 4.1.4: *Develop guidelines for identifying environmentally sensitive parcels for protection/purchase by the Town.*

Goal 4.2: HULL'S RESIDENTIAL CHARACTER IS IN LARGE PART DUE TO THE CONVERSION OF SUMMER HOMES. AS HULL BECOMES MORE AND MORE A SUBURBAN RESIDENTIAL COMMUNITY APPROPRIATE DENSITIES AND ZONING GUIDELINES SHOULD BE RECOGNIZED AND ESTABLISHED.

Objective 4.2.1: *Initiate process to develop a master plan for the Town.*

Objective 4.2.2: *Since few undeveloped parcels, either private or town owned, are available, care should be taken in their disposition in terms of future use and benefit to the community. Consider creating different types of development/redevelopment areas within Town and establishing appropriate definitions and policies for each area.*

Objective 4.2.3: *Review and revise current zoning regulations to encourage larger lot formation.*

Objective 4.2.4: *Provide a wider variety of opportunities for long walks, jogging, and enjoyment of nature.*

Section 9

Five-Year Action Plan

Section 9
FIVE-YEAR ACTION PLAN

Figures and Tables

FIVE-YEAR ACTION PLAN

Previous Open Space and Recreation Plans

Hull's first Open Space and Recreation Plan was written in 1979 by Paul Wiers Associates. The Hull Parks and Recreation Commission updated the plan in 1985. In 1992, the Hull Town Planner assembled a new Draft Open Space Plan which was sent to the Executive Office of Environmental Affairs, Division of Conservation Services (DCS) for review and approval. In 1995, a new plan was drafted. The 1995 plan was originally intended to be a rewrite of the 1992 draft to meet the approval requirements of DCS. However, because the 1994 Vision process described in Section 6 not only thoroughly revised the 1992 goals and objectives, but precipitated a new set of Five-Year Plan action items, the 1995 plan represented a major departure from the 1992 effort. The 1995 plan was approved by the Executive Office of Environmental Affairs, Division of Conservation Services. This current plan is an update of the 1995 plan.

Accomplishments Since the 1995 Plan

Since the completion of the 1995 Open Space and Recreation Plan, the Town of Hull has made consistent and significant progress towards improving the variety and quality of open space and recreational opportunities in Hull and consensus-building and planning efforts continue. Additionally, during the planning process for this update several of the 1995 Five-Year Action Plan items have been modified or discarded.

The 1995 Plan listed 37 action items. Those items that have been completed or have been modified or discarded are listed below. Those elements which have had no action or are underway are carried over into the update of the open space and recreation plan.

TRANSPORTATION – For the past two summers, the Town has subsidized the operation of a bus trolley from Pemberton Pier to Nantasket Beach on weekends. In the summer of 2000 this trolley times will be coordinated with the Harbor Islands ferry schedule. The Town is also served by a commuter ferry which operates during the weekdays, twice in the morning and evening. Pemberton Pier has been designated as an embarkation/debarkation point for the Boston harbor islands. A handicapped accessible float is currently under construction to serve this facility.

HARBOR MANAGEMENT PLAN – A State approved harbor plan was completed and accepted by the Town. The plan details a beautification and improvement program for Hull's bayside (western) coast including the development of a marina at Nantasket Pier. Increased access to the water edge will be provided through signage and enhancements of street ends abutting the coastline.

ALLERTON HARBOR – Dredge plan completed and dredging completed. New mooring plan developed and implemented.

PEMBERTON AREA – A land use plan including landscaping, parking improvements, and bicycle access was submitted under the Transportation Enhancements Program. The application was approved and funding set aside. The project is currently in the design phase with construction expected to start in Spring of 2000.

BOSTON HARBOR ISLANDS NATIONAL RECREATION AREA – The Town serves on the Islands advisory board and has had Pemberton Pier designated as a major stop on the islands transportation system.

NANTASKET PIER – Dredging plans have been completed and funding approved. Originally scheduled to begin November 1999, actual dredging postponed to Fall of 2000. Beginning feasibility study for development of a marina at the pier.

NANTASKET PIER – Through the harbor planning process, the Town decided to focus on a marina development and to not make changes to the existing boat ramp at Nantasket Pier.

PEMBERTON AREA – The Harbor Plan has recommended no changes to the boat ramp at Pemberton. Overall landscaping and enhancements to the area funded under the Transportation Enhancement Program will improve access to the ramp.

SPORTS RELATED RECREATION SPACE NEEDS – The Town has established a Parks and Recreation Commission to manage and oversee the youth sports program. Ongoing maintenance of all Town recreation facilities has been assigned to the Town's highway department.

HULL BEACHES – Installation of sacrificial dunes received considerable resident opposition and was abandoned as a flood control strategy.

WEIR RIVER ESTUARY – Development of the Estuary Park and associated management tasks is no longer a priority of the Town.

REVITALIZE THE MDC PROPERTIES – The State has completed the renovation of the Nantasket Beach bathhouse. Additionally, the State has built a basketball court and several beach volleyball courts. In 1999 the State added a playground for toddlers at the bathhouse complex. The maintenance complex has also been refurbished and painted adding to the improved appearance of the area.

STRAITS POND – Sewering of the Straits Pond area in Hull and Cohasset is complete. Most of the homes in Hull have now connected. Homes on the Cohasset side of Straits Pond have yet to connect to the main line. The gate at Straits Pond has been automated and a local resident now opens and closes the gate once a day to allow circulation of water. A Straits Pond Committee has been formed and is developing a long term strategy for improving water quality.

BEAUTIFICATION – The Town formed a quasi-municipal department, Enjoy Hull, that has taken on the task of promoting the Town. The Committee has worked with the local garden club to provide and maintain plantings at several key intersections in the Town.

HISTORIC DISTRICT – Ownership of the Fort Revere site was transferred to the MDC who now have all operation and maintenance responsibilities.

UPDATE OPEN SPACE AND RECREATION PLAN – The update was begun in June of 1999.

Priorities

As a result of the vision process, a public meeting held December10, 1999 by the Hull Planning Board for the purpose of reviewing the open space and recreation plan goals and objectives, and subsequent discussion, the following goals were established by the Town:

1. Hull should beautify its entry points and main roadways with landscaping and other improvements to enhance the image of the town, welcome visitors, and link its districts.
2. Hull's beaches, parks, the Weir River area, Straits Pond, and other resources provide Hull with high-quality and diverse open space areas. Hull's planning should concentrate on maintaining, protecting, and enhancing these public open spaces.
3. Hull's past is interesting, important and unusual; it is an attraction to visitors. Opportunities to enhance the understanding and appreciation of the past are encouraged.
4. The recreational needs of Hull's residents are paramount to maintaining the local quality of life. The Town should insure adequate space is available to meet these needs, now and into the future.
5. Opportunities should be pursued that enhance both recreational and commercial uses of the waterfront. Properly planned improvements should be compatible with residential and tourism uses. This may include dredging or water edge improvements where environmentally responsible and where economically feasible or where state or federal funds may be available as assistance.

6. Hull should join in the initiatives underway to establish the Harbor Islands as a comprehensive park system by promoting itself as a gateway to and from the islands through water transportation connections, visitor information, and other appropriate amenities.
7. Access by the public to the waterfront, to parks, to playfields, and to other public areas is a consistent goal throughout the various Town planning documents. The Town's ADA Compliance Plan recognizes this goal and includes an accessibility analysis of the Town's recreational facilities and fields, and the Town's parks and beaches.
8. The Hull school system should be encouraged to develop curricula that capitalize on the town's unique natural setting.
9. Establish Hull as a recognized center of information on coastal and marine issues by bringing its unique natural resources to the attention of agencies and academic/research institutions.
10. New development and improvements to existing properties should enhance the character of the districts in which they occur.
11. Hull's residential character is in large part due to the conversion of summer homes. As Hull becomes more and more a suburban residential community appropriate densities and zoning guidelines should be recognized and established.

Five-Year Action Plan

To accomplish the goals and objectives of this Update, the Planning Board met with the Town manager, Department heads, the Conservation Commission, and Parks and Recreation Commission members and developed a Five-Year Action Plan (presented in Table 1 below). The action items are grouped according to the priorities listed above. Year One is 2000. Not all of the objectives are addressed by the Action Plan. Since it is not within the Town's capacity to meet all of the objectives within the first five years, the Town intends to periodically revisit the Action Plan to either add or delete items.

Figure 1 (following Table 1) is a visual presentation of the geographic areas addressed in the Action Plan. The specific parcels highlighted and the depiction of the bike path are presented as guides to the areas under consideration. It should be noted that most areas considered for additional public open space or recreational purposes are near to the Weir River ACEC indicating the significance of this natural resource area.

The Planning Board, Town Manager, and Board of Selectmen are the responsible parties to establish, alter and facilitate the accomplishment of items listed in the Five-Year Action Plan. The entities responsible for carrying out (implementing) the individual action items are listed for each item.

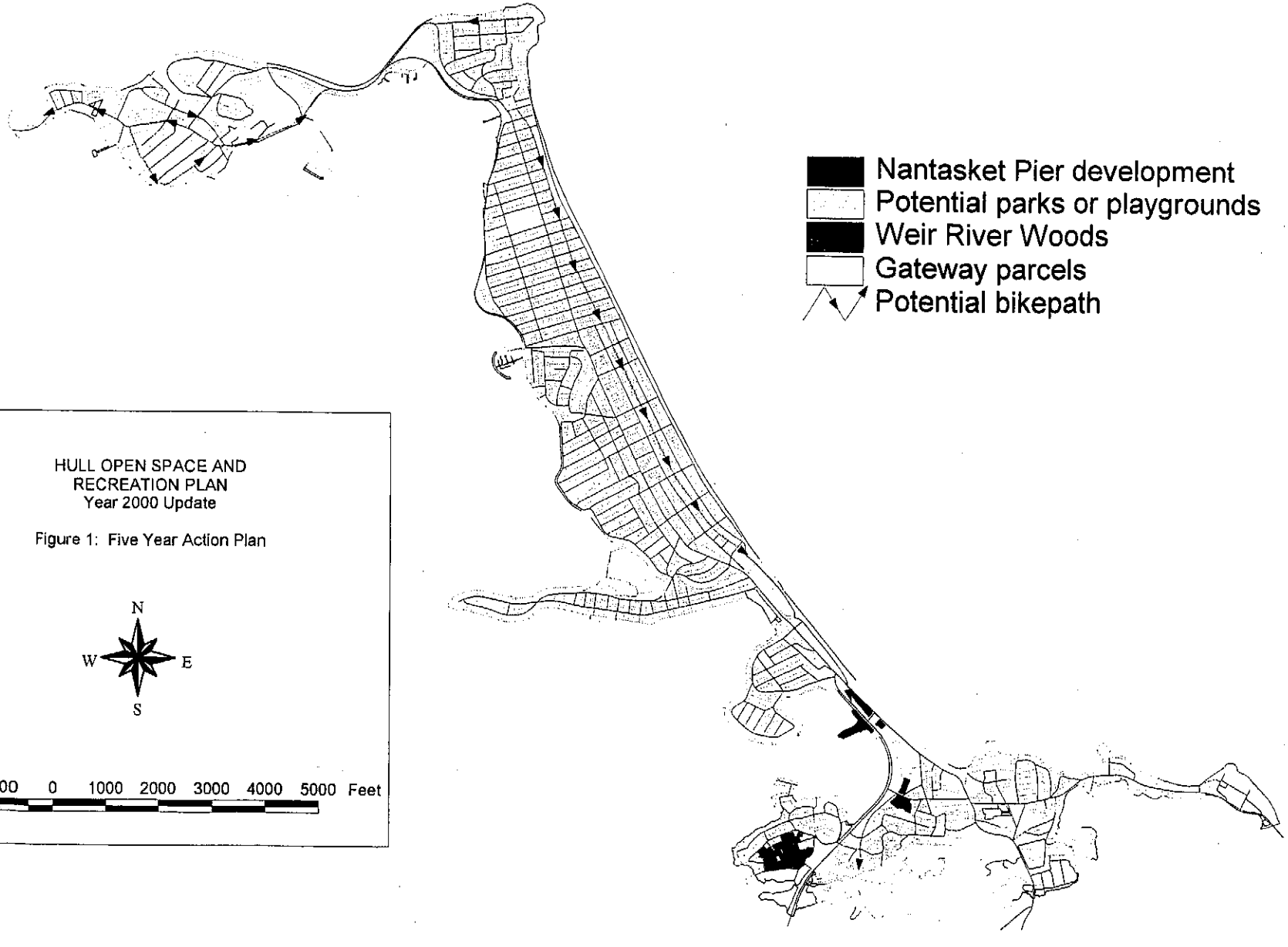
Table 1
Five-Year Action Plan

#	Objective (see Section 8)	Action	Responsibility	Year				
				00	01	02	03	04
Hull should beautify its entry points and main roadways with landscaping and other improvements to enhance the image of the town, welcome visitors, and link its districts								
1	1.1.1 & 1.1.2	Define "gateways" to Town and neighborhoods. Using Town's GIS system map appropriate gateway parcels, identify ownership, and identify parcels for acquisition where appropriate.	Planning Board Conservation Commission	X				
2	1.1.1 & 1.1.3	Identify acquisition costs and sources of funds and prepare grant applications as necessary to complete item 1.	Conservation Commission		X			
3	1.1.3	Develop a plan for a bike route to enhance recreation and tourism. Propose budget and seek funding.	Planning Board Community Development		X			
4	1.1.3	Establish bike path.	Community Development				X	
5	1.1.4	Develop cost estimates and strategy for landscaping and tree planting along Town roadways. Review with sewer plant.	Conservation Commission		X			
6	1.1.5	Continue to work on developing a full time linkage plan to improve transportation between the MDC Reservation, Nantasket Pier, Hull Historic District, Pemberton Pier, and the Boston Harbor Islands. This will assist Hull in becoming a regional tourist destination.	Town Manager	X				
Hull's beaches, parks, the Weir River area, Straits Pond, and other resources provide Hull with high-quality and diverse open space areas. Hull's planning should concentrate on maintaining, protecting, and enhancing these public open spaces								
7	1.2.1	Establish Master Plan committee and hire/contract for professional services.	Planning Board	X				
8	1.2.2	Assign responsibilities for various Town owned parcels to appropriate Town departments. Recommend appropriate uses and maintenance schedule for each parcel. Establish maintenance budget.	Planning Board Town Manager		X			
9	1.2.4	Evaluate and maintain public access to the waterfront throughout Hull along stub end streets and other rights-of-way.	Town Manager		X	X		
10	1.2.5	Continue effort to improve water quality at Straits Pond.	Conservation Commission	X	X			
11	1.2.6	Prepare an Open Space and Recreation map for the Town of Hull. Include significant environmental and marine resource areas.	Planning Board Conservation Commission		X			

#	Objective (see Section 8)	Action	Responsibility	Year				
				00	01	02	03	04
Hull's past is interesting, important and unusual; it is an attraction to visitors. Opportunities to enhance the understanding and appreciation of the past are encouraged								
12	1.3.2	Together with members of the Historic District outline a walking path from Pemberton Pier through Hull village including scenic vistas at Town owned ends of streets. Investigate cost and design and recommend appropriate signage.	Planning Board			X		
13	1.3.3	See items 2 & 3						
14	1.3.1, 1.3.2 and 1.3.3	Identify historic buildings and places and incorporate into Open Space and Recreation map (item 11).	Historic Commission			X		
The recreational needs of Hull's residents are paramount to maintaining the local quality of life. The Town should insure adequate space is available to meet these needs, now and into the future								
15	1.4.1	Develop a maintenance and enhancement program for sports recreation space.	Town Manager			X		
16	1.4.1	Develop a plan for maintenance and improvements of school facilities and playgrounds.	Town Manager School Committee Parks and Rec				X	X
17	1.4.1 & 1.4.3	Study the needs for increased park and recreation space relative to the population and resources. Identify specific needs such as types of fields (soccer, softball, etc.)	Planning Board Parks and Rec Community Development		X			
18	1.4.1 & 1.4.3	Establish process for determining appropriate use (active recreation, passive recreation, park, open space) of available parcels.	Planning Board Conservation Commission		X			
19	1.4.1	Develop a plan to address the needs identified in the park and recreation space study (item 17) including acquisition of additional parcels if necessary.	Planning Board Town Manager			X		
20	1.4.2	Evaluate the needs for community activities and a community center for youth and adult recreation and cultural activities, its feasibility, and alternative financing structures.	Selectmen					X
21	1.4.3	Develop a plan for Weir River Woods which includes establishing trails, refurbishing and reopening access road, parking and completing the planned acquisition of parcels. Investigate inclusion of showboat lot as addition to Weir River Woods	Conservation Commission Planning Board		X			
22	1.4.4	See items 2 & 3						

#	Objective (see Section 8)	Action	Responsibility	Year				
				00	01	02	03	04
Opportunities should be pursued that enhance both recreational and commercial uses of the waterfront. Properly planned improvements should be compatible with residential and tourism uses. This may include dredging or water edge improvements where environmentally responsible and where economically feasible or where state or federal funds may be available as assistance								
23	2.1.1	Dredge Nantasket Pier. This has regional importance and will provide a transportation link to the Boston Harbor Islands National Recreation Area. This project will enhance tourism, transportation, and recreation.	Town Manager		X			
24	2.1.1 & 2.2.1	Develop a land use and development plan for Nantasket Pier and the area surrounding the Pier which incorporates proposed marina development, includes a link to the Boston Harbor Islands National Recreation Area, and enhanced open space for fishing, wind surfing and sightseeing.	Planning Board Selectmen			X		
25	2.1.4	Study and propose watersheet zoning regulations.	Planning Board Conservation Commission		X			
26	2.1.4	Review and revise current zoning regulations.	Planning Board		X			
27	2.1.5	Facilitate the MDC to establish a beach enhancement program which will improve open space and enhance regional tourism.	Town Manager					X
28	2.1.6	Revise beach management plan to include interim management measures. Develop new beach management plan to include long term management and maintenance issues.	Conservation Commission		X			
Hull should join in the initiatives underway to establish the Harbor Islands as a comprehensive park system by promoting itself as a gateway to and from the islands through water transportation connections, visitor information, and other appropriate amenities								
29	2.2.1	Continue efforts to insure completion of Transportation Enhancement Program funded improvements at Pemberton Pier.	Town Manager	X	X			
30	2.2.1 & 2.2.2	Continue participation in the Harbor Islands Advisory Board.	Town Manager	X	X	X		
31	2.2.2	Continue to work with MBTA, Harbor Express, and Trolley bus to promote and advertise public access to and within Hull.	Town Manager	X	X			
32	2.2.2	See items 2 & 3						

#	Objective (see Section 8)	Action	Responsibility	Year				
				00	01	02	03	04
Access by the public to the waterfront, to parks, to playfields, and to other public areas is a consistent goal throughout the various Town planning documents. The Town's ADA Compliance Plan recognizes this goal and includes an accessibility analysis of the Town's recreational facilities and fields, and the Town's parks and beaches								
33	2.3.1 & 2.3.2	Continue program to bring all recreational facilities into ADA compliance.	Town Manager	X	X	X	X	X
The Hull school system should be encouraged to develop curricula that capitalize on the town's unique natural setting								
34	3.1.1	Establish standing committee to develop specific charge and workplan to accomplish this objective.	School Committee			X		
Establish Hull as a recognized center of information on coastal and marine issues by bringing its unique natural resources to the attention of agencies and academic/research institutions								
35	3.2.2	See item 10						
New development and improvements to existing properties should enhance the character of the districts in which they occur								
36	4.1.1	See item 6.						
37	4.1.4	Appoint committee to work with State officials to develop appropriate guidelines for identifying and protecting environmentally sensitive parcels.	Conservation Commission Conservation Agent	X				
Hull's residential character is in large part due to the conversion of summer homes. As Hull becomes more and more a suburban residential community appropriate densities and zoning guidelines should be recognized and established								
38	4.2.1	See item 6.						
39	4.2.4	See items 10 & 19						


Nantasket Pier development
Potential parks or playgrounds
Weir River Woods
Gateway parcels
Potential bikepath
HULL OPEN SPACE AND
RECREATION PLAN
Year 2000 Update
Figure 1: Five Year Action Plan
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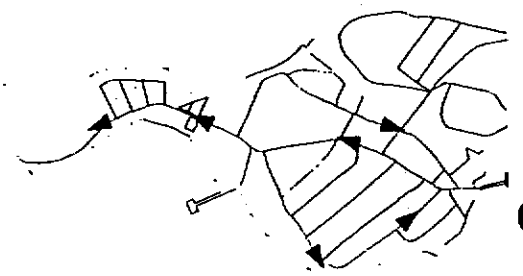

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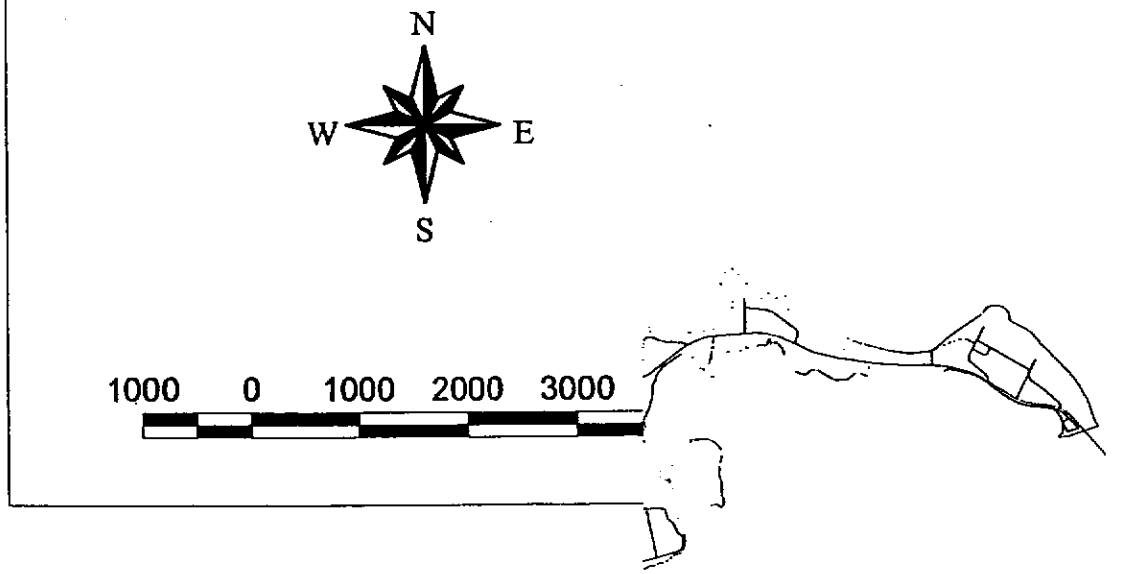
HULL OPEN SPACE AND
RECREATION PLAN
Year 2000 Update

Figure 1: Five Year Action Pl



State and Federal Funding Programs

Background - Applications for state and federal funding programs from towns and cities are due June 1 of each year at the Division of Conservation Services in the Executive Office of Environmental Affairs (EOEA). Grant packages are available from EOEA in February. The amount of money available for the various programs varies each year. Funding for the State programs comes from the Open Space Bond Bill passed by the Legislature in 1995 and approved by the Governor. For state funding there is no set ratio for dividing funds between the Self-Help Program and the Urban Self-Help Program. The split is reported to depend on the quality of applications. In 2000, Governor Paul Celluci issued Executive Order 418. EO418 requires that all State discretionary funds available to municipalities must be targeted at municipalities that have developed community plans addressing local open space and affordable housing issues. Specific implementation of EO418 is still under consideration.

Self-Help Program - This program, administered by the Division of Conservation Services, provides for up to 80% reimbursement of the costs of acquiring land for conservation and passive recreation. In order to be eligible, a municipality must have an established conservation commission and must have an open space/conservation and/or recreation plan approved by the Division of Conservation Services. The purpose of this program is to preserve lands and waters in their natural state. The funds cannot be used to develop recreational facilities.

Urban Self-Help Program - This program, administered by the Division of Conservation Services, provides funding to cities and urban towns for reimbursement of up to 90% of the cost of acquiring land for park and recreation purposes. The funds may also be used to develop outdoor recreational facilities. In order to be eligible, a city or town must have a Park or Recreation Commission and a conservation commission, as well as an open space/recreation plan approved by the Division of Conservation Services. Hull is only eligible for projects under this program that are "regional". The other three categories of eligibility are cities, towns in excess of 35,000 population, and any island.

Land and Water Conservation Fund Program - This is a federal program that is administered in Massachusetts by the Division of Conservation Services. The program allows for reimbursement of up to 50% of the costs of acquiring and/or developing land for outdoor recreation. Projects must be consistent with the SCORP (Statewide Comprehensive Outdoor Recreation Plan).