

2000

Open Spaces and Recreation Plan: Berkley

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OPEN SPACE AND RECREATION PLAN

BERKLEY, MASSACHUSETTS

SUMMER 2000

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SECTION 1 – PLAN SUMMARY

The Open Space a Recreation Plan of Berkley is the result of much thought about, planning for, research into and distillation of the wishes of town's residents through the years. The major value underlying the goals (Section 6) is that preserving open space for wildlife habitat and for resident recreation enhances our community's quality of life. The converse is also true: that if Berkley were to build homes and commercial sites in the ways that some of our neighboring communities have, many residents would feel a distinct decrease in the quality of life here. The three major goals of this plan are: to preserve the country character of Berkley; to protect the precious resources of air, water, soil, and habitats; and to provide public access to the rivers, forests and fields.

SECTION 2 – INTRODUCTION

A. STATEMENT OF PURPOSE

Many people who live in Berkley do so purposefully because of its rural or country character. We define 'country' as a place for peace and quiet, for green and other living things, for a slower pace and more community connection. It is this aspect of our Town that is being threatened by rapid unplanned development and urban sprawl. We write this plan to make us more aware of the precious resources we may be taking for granted, and then to protect them before it is too late.

Berkley residents have been discussing these issues for more than twenty years, and have written statements of warning with regards to the need to protect water and land resources. Most recently, the Strategic Planning Grant Committee created a survey which reflected an overwhelming desire (93.4% of respondents) to 'keep Berkley rural'. This survey was sent to one thousand six hundred and ninety-one (1691) residents and was returned by approximately eight hundred and fifty (~850), achieving a very reliable response rate of fifty percent (50%). The work of that committee led to the creation of the Open Space and Recreation Committee (hereafter, 'the committee'), and the Master Plan Committee. A small land trust group began speaking with landowners to consider donating their land, or having conservation easements placed on their deeds. The issues of open space have been discussed on our local cable station, in our monthly newspaper, and at Town Meetings.

The residents, in their craving to retain the rural character, wish these things:

- To experience the quietness and feel the morning freshness
- Enjoy the sun as it appears over the trees
- Hear the birds sing in the wet meadows
- View the salt marshes and wetlands, teeming with wildlife
- Touch the soil that feeds the new plants
- See the stone walls which give us history and a sense of place
- Tread the dirt road that marks our path, as the river flows into our souls and we maintain the fields of our futures

- While we appreciate with awe and gratitude the beauty from the Unnamable Source

These are the unique opportunities that Berkley currently has to offer. Our purpose is to secure them by ensuring that future development is done in an environmentally sound manner that conserves precious natural habitats and resources.

B. PLANNING PROCESS AND PUBLIC PARTICIPATION

The Committee began meeting monthly in 1999 with the purpose of researching the Town's inventory of current land uses, the natural resources, and discussing goals and values related to those findings. The underlying motivation was to respond to the threat posed the close proximity of the newly built MBTA commuter rail station in Lakeville. By providing increased access to employment centers, the fear is that this station may bring further development prior to our Town's ability to prepare or plan. These meetings have been open to interested citizens and members from other Town groups.

Members of our committee have attended a joint Master Plan meeting with Dighton, an Open Space conference at Bridgewater State, lectures on town and regional planning sponsored by the Southeast Regional Planning and Economic Development District (SRPEDD), meetings with the Berkley Planning Board, the Master Plan Advisory Committee, and has reported periodically to the Board of Selectmen. The committee co-sponsored a Saturday morning "charette" with the Master Plan Committee. This brought two professors of planning from UMASS Amherst to work with 45 residents on the threats and opportunities to/for Berkley, with resulting recommendations for future action. The committee was successful in putting a warrant on the Town Meeting for funds to hire a writer from UMASS Amherst to work with the committee on the final plan, due on September 1st, 2000. The Town voted unanimously for these funds.

***One of the goals for the summer, in order to complete our plan, will be to spend most of our time on public meetings. These will be partly informational (to show where the Town's natural resources are, for example) and partly gathering information from the residents about which parcels in Town they'd like to see protected, and would be willing to work for; as well as their opinions on improving/creating recreation areas.* UPDATE**

People who serve on the committee are: Peter Gagnon, Doris Gracia, Bill Kelley, Jack McIsaac, Todd Pilling, Nancy Possinger, Tricia Sittig, and Helen Souza. Each person has contributed to the research and to the writing of this plan, and has spoken with numerous residents, officials, neighbors and allies in the resource protection fields. Three have researched, updated, and painstakingly created the maps for this plan.

SECTION 3- COMMUNITY SETTING

A. REGIONAL CONTEXT

Berkley lies southwest of Taunton, west of Lakeville, northwest of Freetown and east across the Taunton River from Dighton. Berkley is five (5) miles at its longest point from east to west, and seven (7) miles at its longest point north to south. Route 24 runs through north to south, and exit 11 is in Berkley. Route 140 runs somewhat parallel to the eastern border of town, and Route 79 is in the southern section, called Myricks.

SRPEDD, VISION 2020 INFO HERE

REFER TO OPEN SPACE PLANS OF SURROUNDING TOWNS HERE--

The vast majority of residents work out of Town. Since Berkley has little commercial and industrial development and is approximately 50 miles south of Boston and 30 miles east of Providence, residents find employment in the surrounding area and come home to a quiet and peaceful setting. People, or employees, could therefore be noted as a resource.

Berkley could be described as a middle-income, semi-rural town, though there are also low income to high-income households. Some of Berkley's residents have lived in this area all of their lives and help to make the sense of history, tradition and country character important to many more through their educational efforts. It is likely that newer homebuyers are looking for the same country character we hold so dear. Current residents know that preserving the open space NOW is the only option to save the rural character that's remaining for the benefit of present and future residents. Mary Andrews from the Council on Aging states that the semi-rural assessment is a present day judgment and long-term residents already say that it is not rural any more.

Five hundred and five (505) residents out of the total population of 5500 are age 60 and over, which makes the senior citizen community equal to approximately ten percent (~10%) of the Town's population. Land may need to be developed in the near future to provide a senior center and nursing care.

Berkley high school-aged students attend school in neighboring communities: Somerset High School, Bristol Agricultural High School, Bristol-Plymouth Vocational, Diman Vocational, private schools or homeschool. Berkley has one elementary/middle school and is presently building a separate middle school, near Town Hall. Existing school buildings cannot accommodate a fast-growing population.

Existing recreation facilities include a playground on The Common, softball/baseball fields in two locations, Dighton Rock State Park's facilities and hiking trails. As surrounding, more-developed communities look toward Berkley for its country-like landscapes, existing public use open space properties may become more necessary as a regional resource.

Please refer to the hand-drawn map (Title & Page #) to understand the location and significance of the Taunton River as Berkley's western border, and the Assonet and

Taunton Rivers' meeting to flow into and out of the Narragansett Bay as a tidal salt water river, becoming brackish at the Berkley-Dighton Bridge area. These estuaries create some precious environmental habitats along the edge of the rivers and their tributaries. Berkley shares these river resources with the surrounding communities of Taunton, Dighton and Freetown. Ship building in Berkley's early days grew out of its river location. On all sides, industry has used the rivers, but Berkley has not used them for industry other than the historical use of launching its ships.

There are Native American archeological sites along the Taunton River, and Dighton Rock has writings believed to be carved by Phoenician, Viking, Portuguese and/or Native American explorers. Both of these facts are evidence of the River's use in ancient times. Dighton Rock State Park is a wonderful resource shared with surrounding communities. It offers forested picnic areas on the Taunton River as well as hiking trails. More recently, there were summer cottages along the banks, some of which have been converted to year-round residences for owners to enjoy its scenic beauty and recreational opportunities.

Berkley has many farms with considerable tracts of land, giving an agricultural look to some of its open space. Despite the notably stony soils, the abundance of fresh water and rich topsoil have always supported agricultural enterprise, but recent economic downturn in the sector threatens both the way of life and the landscape. In recent years, growth has been rapid, and the ratio between the number of houses and the number of acres of farmland has changed drastically.

The Berkley-Dighton Bridge is also a shared resource. This one-lane, swing-span bridge may be the oldest of its type in the state. For this reason it could be considered historic, though it has had many changes made to it during its hundred-year life. The flow of traffic is greatly influenced by this connection to Dighton, which has led to a proposal to construct a new bridge. This construction and expansion of the linkage would greatly affect the character and habitats of the area and has the potential to increase traffic throughout town.

B. HISTORY

Native Americans settled in the area that became Berkley, due to its abundance of shellfish and waterfowl. These fish and game resources and the vast woodlands in time also attracted the first European settlers.

European Settlement in Berkley began with a community focused on agriculture and shipbuilding. Agriculture continues to be apart of the local economy, though the ship construction industry, mostly thriving as a livelihood from 1790-1866, left the area long ago. (see paragraphs from Rev. Enoch Sanford's book (1872). →(ATTACHED AS AN APPENDIX? IF SO, ADD APPENDIX #) The fact that the earliest schools in Berkley taught reading, writing, arithmetic and *navigation* serves as a testament to the importance of ships to the Town's history.

Berkley is rumored to have been the site of King Phillip's encampment during the time when the Wampanoag and other Native tribes declared war on European settlers in the mid seventeenth century. The town was soon abandoned by residents of European descent because of its vulnerability to Native or French attack at the outbreak of this war, known as King Philip's War. But, a marker on Berkley Street tells of Edward Bobbit, who met death at the hands of the Native Americans while trying to escape. Townspeople sought shelter and safety in Taunton during the wartime years of 1675 and 1676.

Assonet Neck is a site where Native Americans enjoyed their permanent camping ground, being close to the fisheries. This area holds important archaeological resources. Warren Goff, a local archeologist, has collected and documented evidence of campsites in the following locations:

1. Bear Swamp I
2. Bear Swamp II (attached Staple and Athearn report)
3. West side of Bayview Ave, opposite Bryant St.
4. Lois Dillinham's property
5. Smallpox Hill, Damon Clegg's fields in back
6. Petticoat Farm, Berkley St.
7. Bobbit's – across from plaque
8. Houtzager's area of 42nd St.

Also of archeological interest is a pre-historic skeleton found on Grassy Island, located near Dighton Rock State Park.

Conflict with Natives and the French delayed development of the community, as did the lack of waterpower to fuel the industrial mills of Colonial times. The discovery of clay deposits stimulated a small pottery industry for a time. Berkley also supported some commercial trading from 1799 to 1833, when it was home to a customs house for delivery only.

Myricks, the southern section of Town became a part of Berkley in 1879, handed over from Taunton. It was a bustling community of its own, with cottage industries, hat making and carpentry. A large agricultural show with picnics and events was held here for years, in the 1800's. The Myricks train depot served this part of town into the early 1900's. Fires destroyed many buildings, including the depot and Post Office, in 1922 and 1923. The old Myricksville School, used now as the local VFW post (Check facts), still exists as an example of late nineteenth century architecture.

Among the Town's notable historic resources, Berkley Street is an ancient road, having once been an old trail of rolling knolls and small vales. The Congregational Church is also an important historical landmark, serving as a reminder of early Congregationalists who led the way for the foundations of the Town.

Berkley residents have taken part in all of the Nation's wars.

(Some of this information came from the narrative included on the MA Department of Housing and Community Development Website - <http://www.state.ma.us/dhcd/iprofile/027.htm>)

C. POPULATION CHARACTERISTICS

Despite recent growth, Berkley remains the smallest community within Bristol County, as it has since 1800. Between 1800 and 1930, Berkley's population was nearly static. The first known count of residents came in 1765, when there were six hundred and fifty-nine (659) people living in town. The town's population grew to about eight hundred and fifty (850) in 1790 and swelled to 1,013 in 1800. By 1850, there were nine hundred and twenty-four (924) people living in town.

From 1930 to 1998, the state's population has increased forty-two percent (42%), growing from 4.25 million to 6.02 million people. During the same period, the population in Berkley has grown from 1,120 to 5,395, an increase of over three hundred and eighty percent (382%).

The density of the town has also changed dramatically, though is still well below the State average. With the current 6.02 million Massachusetts residents spread over 7,838 square miles, the State's average population density is seven hundred and sixty-eight (768) people per square mile. Since 1930, Berkley's population density has increased from sixty-eight (68) people per square mile to three hundred and twenty-six (326) people per square mile.

Much of the Town's growth came in a single decade. Between 1980 to 1990, the town's population increased from 2,731 to 4,237. Further, from 1990 to 1998, Berkley grew at the sixth highest rate of any town in the state, at just over twenty-seven percent (27.3%), according to estimates by the Massachusetts Institute for Social and Economic Research (MISER). The only communities growing faster were Boxford at forty-four percent (44.3%), West Tisbury at thirty-five percent (35.6%), Nantucket at thirty percent (30.5%), Franklin at twenty-eight percent (28.3%) and Hubbardston at twenty-seven percent (27.7%).

While Berkley's population growth has come in a large spurt over the last twenty years, it has actually grown more slowly than other rural communities in Bristol County since 1930. During the last sixty eight years of more slow and steady growth, Acushnet's population has increased from 4,092 to 10,111; Freetown from 1,656 to 8,834; Norton from 2,737 to 16,097 and Raynham from 2,136 to 10,789. Table 2 below is U.S. Census data for Bristol County and its towns each decade from 1930 to 1990, as well as MISER's population estimate for each area in 1998.

Table 2 Bristol County Population Figures 1930-1990 and 1998

	1930	1940	1950	1960	1970	1980	1990	1998
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Acushnet	4,092	4,145	4,401	5,755	7,767	8,704	9,554	10,111
Attleboro	21,769	22,071	23,809	27,118	32,907	34,196	38,383	39,557
Berkley	1,120	1,130	1,284	1,609	2,027	2,731	4,237	5,395
Dartmouth	8,778	9,011	11,115	14,607	18,800	23,966	27,244	28,503
Dighton	3,147	2,983	2,950	3,769	4,667	5,352	5,631	5,937
Easton	5,298	5,135	6,244	9,078	12,157	16,623	19,807	21,311
Fairhaven	10,951	10,938	12,764	14,339	16,332	15,759	16,132	15,937
Fall River	115,274	115,428	111,963	99,942	96,898	92,574	92,703	90,654
Freetown	1,656	1,584	2,104	3,039	4,270	7,058	8,522	8,834
Mansfield	6,364	6,530	7,184	7,773	9,939	13,453	16,568	19,244
New Bedford	112,597	110,341	109,189	102,477	101,777	98,478	99,922	96,353
North Attleborough	10,197	10,359	12,146	14,777	18,665	21,095	25,038	25,908
Norton	2,737	3,107	4,401	6,818	9,487	12,690	14,265	16,097
Raynham	2,136	2,141	2,426	4,150	6,705	9,085	9,867	10,789
Rehoboth	2,610	2,736	3,700	4,953	6,512	7,570	8,656	9,601
Seekonk	4,762	4,912	6,104	8,399	11,116	12,269	13,046	13,339
Somerset	5,398	5,873	8,566	12,196	18,088	18,813	17,655	17,710
Swansea	3,941	4,684	6,121	9,916	12,640	15,461	15,411	15,554
Taunton	37,355	37,395	40,109	41,132	43,756	45,001	49,832	52,553
Westport	4,408	4,134	4,989	6,641	9,791	13,763	13,852	14,156
Total	364,590	364,637	381,569	398,488	444,301	474,641	506,325	517,543
(Bristol County)								

Source: US Bureau of the Census

Population increases are expected to continue at least into the next decade. MISER's mid-level projections state that Berkley's population will reach 7,107 in 2005 and 8,467 by 2010. Table 1 below, breaks these projections down by age group (cohort) and includes the 1990 Census data and 1995 estimates on which these projections are based.

Table 1 Population by Cohort, Actual 1990, Estimated 1995 and Base-line Mid-level Projections 2000-2010

Age Group	Census 1990	MISER Estimate 1995	Baseline Mid-Level Projections		
			2000	2005	2010
0-19	1422	1698	2141	2489	2922
20-44	1886	2031	2317	2629	2988
45-64	680	840	1179	1635	2116
65+	249	292	324	354	441
TOTAL	4237	4861	5961	7107	8467

Source: Massachusetts Institute of Social and Economic Research

D. GROWTH AND DEVELOPMENT PATTERNS

1) Patterns and Trends (UNFINISHED)

2) Infrastructure

a) Transportation

Transportation access is a key element in how Berkley has grown and will continue to grow in the future. Situated in rapidly growing Southeastern Massachusetts, Berkley is served by two major highways (WHICH), one minor highway (WHICH), and commuter rail facilities in nearby Lakeville. It is within an hour's commute of Boston, Providence, Rhode Island and Cape Cod. Easy access to both regional employment and recreation activities makes our community very attractive to development. With rural character and available open space as additional attractions, Berkley may be on the verge major changes.

There are a number of hot spots related to transportation shown on the map below. (TITLE & PAGE#) These are areas of concern that affect the community and will substantially affect the growth of Berkley. Not all transportation issues are contentious or viewed as a negative. Highway access for example, is viewed as both an asset to Berkley as well as a contributor to its growth. Below is a brief outline of transportation-related issues and hot spots:

Bus Service:

GATRA, The Greater Attleboro Taunton Transportation Authority, operates Dial-a-Ride bus service to Berkley residents. Scheduled bus service is available in Taunton and provides access to various locations around Taunton and surrounding communities. GATRA also has commuter bus service to Providence Rhode Island. H&L Bloom Bus service, also based in Taunton, provides commuter bus service to Boston on regularly scheduled runs. In addition, American Eagle Bus Lines offers service to Boston and New Bedford. Each of these services make Berkley attractive as a bedroom community

Berkley Bridge: (a.k.a. the 'Berkley-Dighton Bridge')

The Berkley Bridge is a one-lane, swing bridge that was built in 1896 to span the Taunton River. Signal lights alternately let eastbound and westbound traffic use the bridge. Many aborted plans to restore or replace the bridge have come and gone, while minimal maintenance has been done to prevent the bridge from further decay. Rumor has it that repairs are scheduled for the coming years.

Many Dighton residents (also a growing community) and other commuters utilize the bridge traveling east on South Main Street through the Berkley Common to the Route 24 interchange at Padelford Street. Many Berkley residents fear replacement or expansion of the bridge will only encourage an increase in traffic with little or no benefits to the residents of Berkley. As the oldest one of only two remaining swing-bridges in the State, it surely has historic value and should be considered for preservation or restoration, despite structural and aesthetic changes during its lifetime.

Highway Access:

There is one Route 24 interchange at Padelford Street. As mentioned earlier, highway access is viewed both as an asset and a problem for open space issues in Berkley. Travel times to Boston and Providence (without traffic) are approximately fifty minutes and thirty minutes respectively. Rumors of Route 24 highway expansion plans are of a concern to open space in Berkley for two reasons. First, highway expansion almost always leads to increased traffic flow caused by new development. While most agree, traffic heading south on route 24 is a problem at the lane drop in Raynham, caution should prevail if an additional lane of traffic is continued through Berkley. Secondly, wildlife habitat is sure to be impacted by any expansion of Route 24. Rare Fen habitat is located just south of the Berkley/Freetown line that interact directly with Berkley ecology and wildlife. Any plans to expand the highway should be in concert with the Town of Berkley to conduct and review how those changes may effect open space directly or indirectly.

Commuter Rails:

An MBTA commuter rail station opened in the neighboring Town of Lakeville in 1998 and has been considered a great success with respect to commuting to Boston. However, it has possibly changed the character of that Town forever. Once a semi-isolated rural community, Lakeville is now considered a "bedroom community" of Boston. Most open space in Lakeville has been recently developed, property values have increased disproportionately and its natural environment and ecosystems face an uncertain future. The urban sprawl that has headed south from Boston is on Berkley's doorstep and will likely enter when the proposed commuter rail is extended to Fall River and New Bedford.

A plan to extend the rail to Fall River is in the works and scheduled for completion within the next five years. Plans include reactivation of the Myricks Station in Berkley as one of the commuter rail stops. Many in Town feel this station will have a huge impact on the future quality of life in Berkley if not handled sensitively and is probably, at least, indirectly, the number one concern of its residents.

If there is any issue that the residents of Berkley agree on, it is that transportation access is a key element with respect to the future of the Town's growth and development. Unless increased access is coupled with new development regulations designed to avoid sprawl, Berkley's rural character, farmlands, open space and small town feel will be lost forever.

b) Water Supply Systems

Except for few homes tied into Taunton's water lines, Berkley has no public water system. All supply of potable water, water for sanitation, commercial uses and much of

the water for agriculture is from wells. Some water for agriculture, particularly for cranberry bogs, is from surface water sources. Surface water from some designated ponds is used for fire fighting emergencies. The Town's reliance on ground and surface water for provision of needs makes the protection of the quality of these resources crucial.

c) Sewer Service

As with the water supply systems, excepting the few homes tied into Taunton's water lines, Berkley has no public sewer service. All homes and businesses use septic systems. Proper maintenance schedules for these systems is important given the Town's reliance on ground and surface water.

3) Long Term Development Patterns

A Zoning by-law was adopted in 1972 and updated in 1985 which requires all single family residences to be on a minimum of one and half acre lots, approximately half (30,00 square feet) of which cannot be delineated as wetlands. Further use regulations were added in 1990. Under these new rules two-acre lots are required for professional offices, educational facilities and government buildings. Only one principal permitted building is allowed on any lot. A special permit is required for any multi-family units and is restricted to four family dwellings or less. No density bonuses are given for these dwellings, meaning that a four family residence would have to be placed on six acres. Commercial and industrial buildings are also allowed under special permit with use restrictions and a limited site plan review process. A clause in the by-law states that building lots approved by the planning board before 1990 and transferred into new ownership before 1995 may be built upon for single family use at any time in the future. (ARE ANY OF THESE STILL OUTSTANDING?)

In 1996, a Rate of Development by-law was adopted to prevent heavy vehicular traffic, coordinate land development with the expansion of public services, and to preserve the rural character and natural resources of the town. Under this bylaw, unless a special permit is granted for rapid development, no more than ten building permits may be granted to one owner/principle developer involved in projects.

Minimum frontage is set at two hundred feet, setbacks at fifty feet and side yards at fifteen feet for one and half acre lots and thirty feet for two acre lots and special permit uses. As of July 2000, the frontage requirements have been seen by some as a hindrance to further development, prompting investigation into "flag-shaped lots" to allow access to backland.

Further residential development, which is assured judging by current population projections, if it were to continue under these existing regulations, would surely encroach on the last remaining open space accessible by roads. Flag-shaped lots, if relied upon to provide the necessary acreage, would create haphazard development patterns behind existing residences lining the main roads. The Rate of Development by-law would limit the speed at which the remaining visible and accessible open spaces were built on, as

long as new development corporations were not established or attracted from out of town. Significant areas of wetlands in town make available building lots relatively scarce and would also serve to limit development of some areas.

Residents have drafted new zoning regulations, are preparing a community Master Plan, preparing open space documents and other grassroots efforts to regulate or limit development and the destruction of open space. These efforts should help to better guide the residential growth that is projected for the coming years.

SECTION 4 – ENVIRONMENTAL INVENTORY AND ANALYSIS

A. GEOLOGY, SOILS AND TOPOGRAPHY

Geology

Like all of southern New England, Berkley is the product of the processes of the last glaciation of the late Pleistocene Ice Age. At that time, about twelve thousand years ago, a continental glacier that covered all of New England receded north, largely shaping the topography of Berkley into the geological landforms that exist today. Surface features, drainage patterns, groundwater, geological resources and indigenous vegetation, all largely reflect this glaciation and its recession.

With the exception of bedrock outcrops at the highest elevation points in Berkley, the glacier created virtually all of the surface geology in town by a process of grinding and depositing unconsolidated soils, sub-soils and stones in a wide variety of sizes and types. The result is a varied mix of soil types interspersed with many types of rocks that are deposited within a wide range from negligible to very high density. Perhaps the most notable rock type is Massachusetts Puddingstone, a very unique rock form which is an aggregate of pebble to small boulder size stones fused into a soft sandstone. Puddingstone can be seen at sites throughout Berkley. Interestingly, it is only found in southeastern New England and in certain areas of coastal West Africa. As it is certain that no glacier ever extended across the Atlantic Ocean, puddingstone is evidence in support of the theory of a primordial continental connection of New England and West Africa. This theory is now generally accepted in the science of continental drift movements known as *plate tectonics*.

At the highest elevations, the underlying pre-Pleistocene bedrock is exposed to the surface, as at the top of Bryant Hill. These outcrops are due to glacial scouring, which left such prominences of bedrock exposed. In all other parts of the town, glacial scouring and depositions resulted in low glacial drumlins, upland glaciated plains, glacial out-wash plains and depressions that have since evolved into today's drainage and wetland features.

Equally as important as glaciation, the Atlantic Ocean and its associated patterns of tidal inundation and coastal drainage shaped Berkley. It is an under-appreciated fact that Berkley is a seacoast community since its estuarine 'sea-fronts' at the mouths of the

Taunton and Assonet Rivers are not typical of a New England seashore. Nevertheless, the entire southern portion of the town is a peninsula between the Taunton River and the Assonet River and Assonet Bay.

Soils

From the time of European Settlement, Berkley has been a rural, agrarian community. However, much of the town was and is unsuited to normal agricultural use, due to steep slopes, poor soils, as well as both freshwater and saltwater wetlands. In response, active cranberry bog cultivation has developed as an alternative to standard dryland agriculture. More recently, a number of horse farms have been established that board, breed and train horses for recreational and show uses.

In the 1978 Soil Survey of Bristol County (Northern Part) produced by the USDA Soil Conservation Service, Berkley is divided into three main soil types for the purposes of most general planning. Those general soil types are as follows:

Paxton-Woodbridge-Ridgebury Type: Nearly level to moderately steep, well drained to poorly drained soils of glaciated uplands. In Berkley this soil type occurs generally on the Assonet Peninsula southwest of Shoves Neck and in a broad North-South band that straddles the Route 24 corridor through town.

Hinckley-Medisaprists-Windsor Type: Nearly level to steep, excessively drained soils that formed in glacial outwash and poorly drained organic soils. In Berkley such soils are found in a band along the Taunton River north of the Assonet Bay and in a narrow band along the town's SE border in Myricks.

Ryanham-Scio-Birdsall Type: Nearly level to gently sloping, well drained to very poorly drained soils that formed on old lakebeds. In Berkley such soils occur only in a small area in the NW corner of the town along the Taunton River north of its confluence with the Three-Mile River.

(See the map on the facing page for a graphic representation of the above.) (LABEL & PAGE #)

Detailed Soil Types and Locations:

A detailed list of specific soil types that can be found in Berkley is provided in Appendix 1 (IS THIS REALLY APPENDIX 1?) of this plan, which consists of excerpts from the 1978 Soil Survey previously mentioned. Included in this survey are the following texts, data, tables, and maps that relate to the Town of Berkley.

- A General Soil Type Map for Broad Land Use Planning.
- Excerpted Maps of Berkley Detailing Specific Soil Types.

- A brief Description of the Wildlife Habitat for the general area, including Berkley. It lists animal, fish and vegetative species indigenous to the area.
- Drawings of Typical Soil Type Deposition in relation to each other.
- A Temperature and Precipitation Chart for the area.
- A Freeze Dates Chart for the area.
- A Table of Yields Per Acre of Crops & Pasture, by specific soil type.
- A Table of Woodland Management & Productivity, by specific soil type.
- A Table of Building Site Suitability for specific soil type.
- A Table of Sanitary Facilities Suitability for specific soil type.
- A Table of Construction Materials and Building Suitability by soil type.
- A Table of Water Management Characteristics by soil type, with reference to the flow of water over, through and around each soil type in the area.
- A Table of the Recreational Development Suitability of each soil type.
- A Table of Wildlife Habitat Potential for each specific soil type.
- A Table of Engineering Properties and Classifications for each soil type.
- A Table of the Physical and Chemical Properties of Soil Types.
- A Table of Soil and Water Features Interaction by soil type, with reference to flooding, high water table, bedrock depth and potential frost action.
- A Classification of the Soils providing a brief, scientific description of each soil type.

As noted above, this data has been excerpted from the USDA Soil Conservation Service *1976 Soil Survey of Bristol County, Massachusetts, Northern Part*. It is quite old, but not data likely to be very effected in the time since its publication.

(Interpret some of the above information to answer the following questions:

- **How do soils affect development?**
- **How do they affect recreational activities?**
- **How do they affect erosion?**
- **Mention the abundance of gravel in some areas and the impacts of its removal.**
- **Are there any significant agricultural soils in town?**

Topography

The Town of Berkley is defined by water and wetlands. The Taunton River forms the entire western border of town. Its flow meets the Assonet River and Bay to the south and SE of town, to surround the Assonet Neck Peninsula. The borderline extends north along the Shoves Neck Brook into south-central Berkley. There, the border runs on a short NE line, before turning to a straight east-west line that extends to the Assonet River. This border separating Berkley from the Assonet Village section of Freetown is relatively dry, except where it crosses the wetlands area of Quaker Brook. The entire southeastern border of the town, in the Berkley village of Myricks, is a succession of low glacial outwash plains with a very high water table, wetlands and drainage features of the Assonet River. Only the NE and northern borders of the town, where it abuts Taunton,

are not clearly defined by water features. However, this area too contains some wetlands where the Cotley River and some lesser brooks flow into the Cotley and Taunton Rivers.

It is important to note that the whole of Assonet Bay and the Taunton River, as far inland as the confluence of North Dighton's Three Mile River, are tidal under normal conditions. In extreme tidal conditions due to storm surges, the Taunton River can be brackish along its full course through the town of Berkley.

Bryant Hill is located near the center of town, about one mile south-southwest of the Berkley Town Common. It has a maximum height above sea level of 154 feet. Its height and bulk determine much of the surface water drainage of central Berkley. About one and half miles to the east of Bryant Hill there is another hill of similar height located in a triangle formed by Padelford, Hill and Anthony Streets. This unnamed hill lies at the northern end of an upland ridge that runs down to the southern border of the town. Between this unnamed hill and Bryant Hill runs Quaker Brook and its associated wetlands and tributaries. Along the northeast border of the town, another ridge, only slightly lower extends from Cotley Street to Holloway Street. County Road in Taunton runs along the top of this unnamed ridge and the Cotley River flows around its southern contours.

In the southern section of town, at the start of the Assonet Neck Peninsula lies Hospital Hill. With a height of 78 feet overlooking the Taunton River, it has a strong influence on the drainage patterns for the upper peninsula. South of the hill, a ridge only slightly lower cuts diagonally first to the southwest then to the southeast across the peninsula, splitting the drainage for the area almost equally into Assonet Bay and the Taunton River.

The remainder of the town is an undulating patchwork of low hills and low upland plains that average about 50 feet above sea level. The numerous depressions descend to near or at sea level. The result of this topography is a good many catch basin areas that express themselves as wetlands or low plains with a high water table, such as the Myricks section of the town.

B. LANDSCAPE CHARACTER

The Town of Berkley is arguably the most rural and pastoral community in all of Eastern Massachusetts. It is a town without stoplights and has little or no commercial/industrial development. Open land and a few residences, not stores, currently surround the town common. Only one small corner of town, the Myricks section, can claim a national chain store, a new Dunkin Donuts. Furthermore, not a single apartment or condominium building exists in the town and no large business signs and billboards mar the pleasing vistas.

What Berkley does offer is a marvelous mix of quiet country settings that vary from farm fields and cranberry bogs to oak forests, tidal marshlands and freshwater swamps to the broad and serene Taunton River. Interspersed throughout these pastoral settings are a wide variety of single family homes, both old and new. Only a very limited number of

the newest homes are grouped into stereotypical suburban subdivisions and picturesque horse farms are at least as common.

Berkley is a place best appreciated by slow, quiet consideration. This approach reveals a town teeming with both natural and cultivated flora and fauna. Birds flock in the trees, foxes prowl, fish jump in the rivers and wildflowers are everywhere. Along the Taunton River the sight of Osprey, Mute Swans and Cormorants is common. Flocks of Wild Turkeys and Canada Geese routinely feed in the fields. Boaters seldom disturb Assonet Bay and there is not a hint of tourist exploitation to be seen anywhere in town.

In spite of a decade of booming development in Southeastern Massachusetts, the Town of Berkley has changed little from what it was 100 years ago. It is that precious and uniquely timeless quality that is Berkley's greatest asset, and the trait that its citizens cherish most. The greatest fear is that suburban sprawl is going to destroy the character of the town unless steps are taken to preserve it.

Further unplanned development will likely replace some of the natural beauty with man-made structures. The clear-cutting of forests and the removal of soil would strip away what nature has to offer while diminishing habitats, sometimes irreversibly. Conventional development threatens to fragment existing open spaces, the pieces of which are held by many owners. The effect would be a piecemeal, choppy appearance.

It is therefore a joint goal of the Open Space and Recreation Committee and the Town's Master Plan Committee to develop both the strategies and the means to preserve and enhance the best of Berkley. Careful management is the only answer to the growth and development that is inevitable.

Distinctive landforms and areas of particular scenic interest include but are not limited to the following:

- "Conspiracy Island" on the Assonet Neck;
- large open tracts of land along the Assonet and Taunton Rivers;
- Dighton Rock State Park and adjacent properties;
- Grassy Island;
- Berkley Common;
- Chamberlain Farm Stands and property;
- Berkley-Dighton Bridge area;
- three currently unprotected areas designated by the state as rare wildlife and plant habitats, the largest of which surrounds Interchange 34 on Route 24 (WH 383), there is a smaller one to the north before Interchange 33 in Taunton (WH 463), and another north of the Myricks section of town (WH 1100); and
- coastal marsh and vegetated wetlands along the smaller rivers, some of which are available with undeveloped land.

Many views of the Taunton River are beautiful, but many are not currently accessible by the public because buildings obscure and interrupt the line of sight. The few river views

that remain should be preserved. Furthermore, additional recreation areas, bike paths, walking trails, new nature reserves as well as fishing and boat ramp access need to be acquired.

C. WATER RESOURCES

1) Surface Water

Major Rivers

The Taunton River

General:

The Taunton River flows along the entire western perimeter of Berkley and joins with the Assonet River at the tip of the town's Assonet Peninsula. At Berkley, the river is actually an extremity of Mount Hope Bay, and the most northerly reach of Narragansett Bay into Massachusetts. Here, entering the sea, the river is tidal and brackish, with its primary characteristics best described as coastal estuarine.

The Berkley riverbank of the Taunton River is approximately seven and half miles long. At the northwest border of Berkley, the Taunton River is approximately 650-700 feet wide and it gradually widens all along its route past the town. At the Berkley-Dighton Bridge, about three miles downstream, the river width is approximately 1100 feet. As it passes the tip of Assonet Neck Peninsula the river is approximately 2000 feet wide, with the entrance to Assonet River on the other side of the peninsula about eight hundred feet in width. The convergence point of the river and the bay is over a half mile wide just south of the peninsula tip.

Before describing the Taunton River as it passes Berkley, it is essential to put it into a larger context, by considering the river upstream from Berkley. It is a major watershed drainage feature of southeastern Massachusetts, handling the outflow of water from thirty-five municipalities in major portions of Bristol, Plymouth and Norfolk Counties. The river is 36 miles long from where it officially starts at the convergence of the Matfield and Town Rivers in the Paper Mill Village of Bridgewater, Massachusetts. Its drainage area is five hundred and twenty-eight square miles, including at least fifty square miles of swamps and twenty-three square miles of lakes and ponds, of which more than fifty cover more than ten acres.

The approximate population in the Taunton River drainage area in the year 2000 is just over one million people, with rapid growth prevalent throughout the region. Outflow from the Taunton River drainage area, averaged over the period from 1931 to 1965, was approximately 280 billion gallons annually. The lower eight to nine miles of the river, including almost the entire Berkley frontage is a tidal estuary, and in storm surge conditions, the river can be affected by tides reaching up to fifteen miles inland. The drainage area for the length of the river is generally flat to gently rolling hill terrain with

a maximum height of four hundred and fifty feet above sea level. At Berkley the river's height ranges from only a few feet above sea level inland to sea level at the tip of the peninsula, with tidal variation the more consequential factor. Depth of the river ranges from one to four feet inland to one to ten feet as it passes the tip of the peninsula. Just below the peninsula, as it converges with the Assonet River, depths exceed fifteen feet. A narrow, eight to ten foot deep, man-made navigation channel near the middle of the river extends from its mouth to about a half mile north of Peters Point.

History and Character:

It is important to note that for over three hundred years the Taunton River has been used extensively for potable water, agricultural irrigation, sanitation, commerce, industry, fishing and recreation. In that time, myriad instances of input and extraction of water, waterpower, fish, bottom sediments, vegetation and riverbank have occurred, with very little usable, recoverable records. Throughout the same period, numerous mills, factories, farms, municipal sewers and surface/storm drains have all added wastewater. The volumes of such wastewater contributions and their exact chemical content has been largely unrecorded and can only be partially deduced by costly, detailed scientific testing. Fortunately, as a river with a very dependable outflow and tidal cleansing, the Taunton has been able to quite successfully flush itself and remain a relatively clean body of water. Recent state and federal programs have further assisted the river to be as clean as possible. However, localized areas of polluted bottom due to heavy metal deposition and accumulation do exist and a wide variety of debris can still be found in and along the river. Furthermore, development and new environmental threats in the watershed threaten the continued cleanliness of the Taunton River. For instance, the recent discovery that the gasoline additive MTBE required by the Federal Environmental Protection Agency since 1995 to protect the air, may be a significant threat to all surface and ground waters wherever it is in widespread use. That issue is just now being addressed and is of real consequence to our area, as MBTE treated gas is mandated for all of Massachusetts.

The Taunton River has always been a focal point of the Town of Berkley. For centuries before the arrival of European settlers Native Americans lived along the river, fishing it, traveling it and assigning it great spiritual significance. Their impact on it was negligible, but they may have contributed to the most notable historical artifact: Dighton Rock.

No mention of Berkley and the Taunton River would be complete without mention of Dighton Rock. It is a large boulder (9.5' x 11.5' x 5' high) that used to rest in the river just offshore from what is now Dighton State Park. The rock was quite low in the water and submerged with each high tide. What made it notable, was the discovery in colonial times of petroglyphic graffiti on the rock that have never been well deciphered or entirely explained. It is called Dighton Rock instead of Berkley Rock because at the time, the town of Dighton extended into the surrounding area, only later becoming part of Berkley.

In 1963, Dighton Rock was raised up so that it wouldn't submerge at high tide and a small museum was built over it. The Dighton Rock Museum in Berkley's small Dighton

Rock State Park provides weather and tide protected access to the rock, plus exhibits on its history and the theories it has generated.

Among the many theories that attempt to explain and decipher the engravings on Dighton Rock, the most generally accepted suggest a combination of contributors. One sage claims to have deciphered 'M. Cortereal 1511 V. Dei Dux Ind.' indicating the Portuguese explorer Miguel Cortereal, who sailed to the New World in 1502. In Portugal he was never heard from again but may have inscribed his own 'epitaph' on the rock in what was to become the Town of Berkley. It has also been suggested that Native Americans and Colonial pranksters also added their own marks to the rock, although nothing readable has been deciphered.

In recorded history, the Taunton River at Berkley is known to have been an active site of weir fisheries, shipbuilding, miscellaneous commerce and various agrarian pursuits. Ferry service across the river and inland lightering barges also were based in Berkley in times past. Except for minor logging/sawmills and small tanneries, no heavy industry has ever been on the Berkley riverbank, nor have there been any dams. However, above Berkley in Taunton and a dozen other towns, there were, and are, major mills and industry along the banks of the river.

Another notable feature on the Taunton River in Berkley is the Berkley-Dighton Bridge. Built in 1896, it is a swing bridge to allow boat passage -- one of only two such bridges extant in Massachusetts. Today, however, it no longer opens at all. For over a decade, it has been a one-lane bridge for vehicles of less than three tons gross weight. The bridge's low headroom limits boat access upriver to very small boats and canoes. Further information on the bridge is given in the transportation section above.

Today the Taunton River through Berkley is primarily noted for residential and limited agricultural use, with some areas protected as wetlands. The result is a very pastoral character to the river as it flows by Berkley.

Assonet River and Assonet Bay:

General:

Along the SE shore of the Assonet Neck Peninsula is the Assonet River and Assonet Bay. Following the course of the river in reverse, from its mouth to its source, the river runs from the tip of the peninsula for about a mile and a half before it opens up into Assonet Bay. A very well protected, shallow, inland bay it measures about 2000 by 6500 feet in size, with a few large coves adding additional area. From the southeast end of bay, the Assonet River continues inland into Freetown.

Berkley's Assonet Neck Peninsula shoreline along the Assonet River and Assonet Bay is about two and a half miles long and Shoves Neck, a blunt, lesser peninsula, extending into the bay, adds another 3700 feet of shoreline. This peninsula is created by two large brooks that enter Assonet Bay from Berkley. One flows only about 3000 feet from some

wetlands on the southeast flank of Berkley's Hospital Hill, at the inland end of Assonet Neck. The other, Shoves Neck Brook, runs about two miles into central Berkley, where it begins in a wetlands area on the SW flank of Bryant Hill, the highest point in Berkley.

Shoves Neck Brook forms the town line with Freetown until it turns north-northeast in the center of a small pond just south of Friend Street. That line goes only about 2100 feet until it becomes an arbitrary political boundary running due east for about two and three-quarter miles, where it ends at an inland portion of the Assonet River that bends into Berkley just east of Myricks Street (Route 79). From this point the Assonet River veers back into Freetown running parallel to Myricks Street for about 4000 feet. It then turns northeast and re-enters Berkley, extending for about a mile, crossing Pierce Street into wetlands south of Myricks Street between Pierce and Church Streets, which is its source.

The Assonet River, including Assonet Bay is a relatively minor tributary of the Taunton River, and yet it is an important drainage feature for the area. Its own most prominent tributary is the Cedar Swamp River which empties from Cedar Swamp in Lakeville, a major, protected wetlands area and wildlife habitat.

History and Character:

There is no record of any significant industry on the Berkley shoreline of the Assonet River or Bay. Historically, there were a few mills and a forge on the river in Freetown but very few traces remain, except for one mill building that is now used by a self storage firm and a small woodworking mill. An old mill dam by Locust Street in Freetown, constricts the river to form Forge Pond along Route 79. Otherwise, the banks of the Assonet River are now exclusively the domain of residences, farms, cranberry bogs, wetlands and woodlands.

Minor Rivers, Brooks and Streams

The Cotley River:

This river is a small tributary of the Taunton River that enters Berkley from Taunton just northwest of the intersection of County and Holloway Streets. It flows in an irregular arc through northeast Berkley for a distance of about two and a half miles before it returns into Taunton just northwest of Cotley Street. The Cotley, seldom more than two to three yards wide or two to four feet deep, is less a river than an oversized brook. Public access to the Cotley River is extremely limited because it flows almost entirely through privately held land. However, it is noted for recreational fishing and it does serve to drain several wetland habitat areas in Berkley.

Quaker Brook:

This brook starts at a point roughly halfway between that highways Padelford and Bryant Street Bridges in wetlands at the base of the northeast slope of Bryant Hill, with tributary brooks just east and west of Route 24. It flows an irregular course approximately two

miles before exiting Berkley into Freetown at a point about 1600 feet east of where Algerine Street ends at the Freetown line. It proceeds on into Freetown and empties into the Assonet River at Forge Pond. The Quaker Brook provides drainage for a significant part of central Berkley, with outflow from several important wetlands and wildlife habitat areas in the northeast watershed of Bryant Hill. The brook's name celebrates a Quaker community that existed in Berkley in the late eighteenth and early nineteenth centuries.

*'Charles Brook':

This brook is about three and half miles in length, starting in wetlands about five hundred feet north of the Berkley Commons, west of Porter Street. It flows an irregular course north until, just south of Jerome Street, it turns roughly west and flows in a 'lazy S' to the Taunton River. About eight hundred feet east of where it passes under Berkley Street, it is joined by an unnamed tributary about 4800 feet in length that drains an area between North Main Street and Berkley Street.

*'Cuds Brook':

This brook is just over two miles in length starting at a small pond at the north base of Bryant Hill about six hundred feet west of Locust Street. It flows west about 1500 feet before turning southwest and running parallel to Main Street. Near the intersection of Main Street and Bayview Avenue the brook turns under Main Street and runs due west to join the Taunton River just south of the Berkley Bridge.

*'Hospital Hill Brook':

This is half mile long brook that starts at base of the north slope of Hospital Hill. It runs due west to the Taunton River just south of Grassy Island, where it flows into the salt-marsh tidal flats that surround Grassy Island.

There are many other small brooks in Berkley, but they are too small to mention here. They are noted on the associated maps and drainage flow charts. (TITLE AND PAGE#)

(*Indicates that the name for this brook is not necessarily its official name, which could not be ascertained. The assigned name is one used by local residents.)

Lakes, Ponds and Vernal Ponds of Berkley

Berkley has no freshwater body of water that could be labeled as a lake, but it does have numerous small ponds. The 1985 Geological Survey Map of the U.S. Department of the Interior for Somerset (No. 41071-G1-TM-025) depicts all of Berkley and it shows approximately 62 small ponds. However, there is reason to believe that some of the 'ponds' are actually cranberry bogs. In addition, a very informal survey done by this committee indicated that there are many more ponds that are not mapped, with most being vernal ponds that form in the winter and spring and dry out during the late summer.

In a few cases, ponds very close to the Taunton and Assonet Rivers are known to have brackish water.

Public Use and Access to Surface Water in Berkley

At this time the one official and legal public access to a major body of water in Berkley is the riverbank of the Taunton River at Dighton Rock State Park. Even in this case, access is limited and problematical by circumstances beyond the control of the town. For one, there is no beach or boat ramp at the State Park. Even the Dighton Rock Museum is only open by appointment, or by chance, if a Massachusetts State Park employee happens to be present and available to open it. The park is officially open and staffed for limited hours in the spring/summer season, and not including early evening hours. The reputation of the park locally, is that it is only officially open and staffed during 'work-week / business hours', when most people and families are least able to visit. Fortunately, the gate to the park is generally left open, even when no staff is present, so residents may use the park at their own risk.

Except for incidental bridge right-of-ways where a public road crosses a river or brook, all other access to the rivers, bay, brooks and ponds is restricted due to being on privately owned land. The committee has identified this as a major problem and a goal has been set to identify and expedite increased river access for the general public.

Indeed, it has recently come to this committee's attention that Chapter 88: Sec. 14 of the General Laws of the Commonwealth of Massachusetts (copy attached) mandates that all towns in Massachusetts that have tidal shoreline must have and maintain a public boat ramp. Nevertheless, Berkley has no boat ramps, nor does it own land suitable for one. It is hoped that this Open Space and Recreation Plan will be the first step in a process that will result in a town boat ramp and generally improved access to the town's various shorelines.

2) Flood Hazard Areas

3) Wetlands

4) Aquifer Recharge Areas

The Aquifers and Groundwater of Berkley

The availability of sub-surface water by well digging and drilling is extremely variable from site to site in Berkley. This is due largely to the varied depositions and landforms that resulted from the effect of glaciation on the area. In addition to the obvious effect of ridges, high water table glacial plains, and a large aquifer located in the northwest to west central section of the town, micro-geologic conditions of bedrock fracturing, glacial till deposition and clay strata all effect the success or failure of wells in town. However, it is the general case that wells in all but the most geologically adverse sites will produce reasonable quantities of good quality water, though the depth at which it is reached may vary significantly.

Berkley's one major aquifer runs from just north of Jerome Street, near the Taunton line, south-southwest along the Taunton River to a point focused approximately at the location of the Berkley Bridge. From there it turns south-southeast and runs for approximately one and three-quarter (1.7) miles to just about the Freetown line at Friend Street. The overall length of the aquifer is about four and three-quarter (4.7) miles and its average width is about half a mile. It is primarily a medium yield aquifer, but it is a high yield aquifer in the area centered on the Berkley Bridge. That high yield portion measures about one and a half miles in length and averages about a quarter of a mile in width, extending from near the intersection of Berkley and Sanford Streets in the north to the intersection of Berkley Street and Swing Drive in the south.

A map provided by the Massachusetts Department of Natural Conservation is provided that indicates the location and shape of the aquifer. (TITLE AND PAGE #)

In addition, we have included in its entirety a copy of the Community Aquifer Protection Planning Study of June 1988. (APPENDIX #) It was professionally prepared by the firm of IEP, Inc., 6 Maple St., Northborough, MA 01532 and provides far more detailed and scientific data on the Berkley aquifer, Berkley wells, groundwater contamination and groundwater protection strategies. It also contains precipitation and seasonal climatic data for Berkley, in addition to a considerable amount of miscellaneous ancillary support data, including flood plain data. The flood plain data is further supported by inclusion of the January 1978 Flood Plan Insurance Study for the Town of Berkley provided to the town by the U.S. Department Housing and Urban Development's Federal Insurance Administration.

NEED SOME MENTION IN THE TEXT ABOUT SPECIFIC AREAS IDENTIFIED AS RECHARGE AREAS FOR THE AQUIFERS

D. VEGETATION

Fields and Meadows:

Berkley's open land is almost entirely due to historical and on-going agricultural clearing, yet many of the fields are no longer in active agrarian use. Other open fields are used as pastures for horses, donkeys, sheep, cows and even an Emu. In recent years subdivision developments have claimed some previously farmed fields. Those fields that remain in commercial cultivation produce a wide variety of crops, including: hay, alfalfa, clover, corn, squash, pumpkins, melons, tomatoes, miscellaneous plants, bushes and trees for nursery sales as well as Christmas trees. To a lesser degree an active cottage industry of truck gardening and mini-farm stand vegetable and fruit growing is prevalent in the town. These very small growers produce a very wide range of produce and floral plants in small lots. All of these fields sustain large flocks of Canada Geese, Wild Turkey, Rabbits and other fauna.

Open field small meadows that have been abandoned for agricultural use are in varying degrees of natural reforestation. Such fields can be found throughout town with vegetation ranging from weeds and wildflowers, to bush and brambles, to very new growth trees and shrubs. Remnants of agrarian cultivation persist in many of these fields including blueberry, rose and floral bushes, and a wide range of stubborn perennial vegetables such as rhubarb, etc.

Forests:

Much of Berkley is forested. There are a few cultivated and protected forest areas, but most of the forests are areas of re-growth in previously abandoned agricultural plots or in the hills, ridges, wetlands and swamps. Berkley State Forest, is a very small, state owned wood lot on Briggs Lane near Route 24 consisting of plantings of pine typical of the Works Progress Administration programs during the Depression. The Dighton Rock State Park is another small woodland area along the Taunton River that features, oak, pine, locust, beech and birch trees, plus a lesser percentage mix of locally indigenous trees and bushes.

Berkley also has several tree and bush farms that grow a wide variety of commercially desirable tree, bush and ground cover vegetation for sale to nurseries, homeowners and for Christmas tree use. Spruce, Hemlock, Pine, Rhododendron and Hollies are common.

Throughout the town there are innumerable small to medium size woodlots interspersed amid housing and agrarian sites. Some of these woodlots, particularly on hills, ridges and in wetlands are not re-growth areas, and include the full range of indigenous flora. However, most of the forested land in level and near-level areas is re-growth of land cleared for agriculture. Depending on soils, natural irrigation and the time elapsed since leaving farm use these areas follow the ecologically expected re-growth patterns for new vegetation. Near brooks birches prevail, while on upper slopes oak and pine take the lead. And yet, it is a rare circumstance that any one of the common species dominates such re-growth areas. The most prevalent species are oak and swamp maple.

Of particular note are two large woodland areas that flank Route 24 as it passes through Berkley. These areas extend out from the highway on both sides with widths ranging from a few hundred feet to over a mile. They are heavily forested with oak and pine as the predominant species. The areas are a mix of ridges, level glacial uplands and lower wetland areas. Because they are a relatively contiguous green belt running for as much six miles, they are well populated by deer and are well used hunting grounds in season. Fox, coyote, great horned owls, hawks, and turkey buzzards are all common to these areas, as are all the smaller sized mammals, reptiles, birds and insects upon which such predators feed.

Saltwater Marshlands:

Along the tidal estuaries of the Taunton and Assonet Rivers and around Assonet Bay there are thin strips of saltwater flats and marshes. Unfortunately, recent protections for

such areas were not able to save the entire shoreline, some of which has been claimed for private waterfront residential access. This is especially true for the land at the southern tip of Assonet Neck, but is true to some degree along all of Berkley's shorelines.

The most notable salt-water flats and marshlands in Berkley occur in a broad cove on the Taunton River between the shore and Grassy Island and on Assonet Bay in the area of Shoves Neck Peninsula. The Grassy Island saltwater flats extend for about one third of a mile along the Berkley shoreline and range from over a thousand feet to less than one hundred feet in width. A lesser-sized saltwater marsh area of about four to five acres lies midway between Ferry Point and Whale Rock along the Taunton River.

The saltwater marshlands on the Assonet Bay shoreline are fairly substantial and are contiguous with a similar sized area over the border into Freetown. (WORK WITH FREETOWN TO PROTECT ENTIRE AREA) All along the Taunton and Assonet Rivers a very narrow band of salt marsh can be found in areas that have not been disturbed by residential development.

In Berkley's tidal flats and saltwater marshes an amazing variety of birds can be found. The most notable examples include osprey, mute swans, cormorants, hawks, gulls and the full range of indigenous species common to such habitats.

Freshwater Wetlands:

Berkley has extensive freshwater wetlands that range from seasonally and perennially damp areas to swamps. These wetlands are nearly all found flanking our freshwater rivers and brooks, together forming a complex and ecologically healthy drainage pattern. One 'Cedar Swamp' exists in an area near the Cotley River by Holloway Street. (DESCRIBE THIS - SOUNDS ECOLOGICALLY IMPORTANT) Other significant wetland areas are located further along the Cotley River, the headwaters of the Assonet River in Myricks, and along the Quaker, Burt Street, and Shoves Neck Brooks. These areas support typical and thriving communities of wetland flora and fauna, and are notable as nesting and migration way-stops for a wide variety of birds. Sportsmen routinely use these areas during hunting and fishing seasons.

(TABULAR INVENTORY OF PLANT AND PLANT COMMUNITIES SIMILAR TO WILDLIFE ONE BELOW)

(TABLE OF RARE, THREATENED AND ENDANGERED FLORA WITH SHORT DISCUSSION HERE)

E. FISHERIES AND WILDLIFE

Many mentions of the fish and wildlife of Berkley are made in previous sections of this report. This was inevitable, as they are characters ingrained in the scenery that Berkley offers. In general, Berkley is a paradise for any fisherman, hunter, bird-watcher,

mushroom picker, or nature lover. It offers unspoiled, unpolluted and easy to reach natural wonders in the heart of southeastern Massachusetts. Berkley's natural and its cultivated fauna includes, but is not limited to the following species:

The Natural and Cultivated Fauna of Berkley

Mammals	Fish, Shellfish and Crustaceans	Birds	Reptiles	Insects
Horses Cows Pigs Donkeys Sheep Deer Foxes Coyotes Woodchucks Weasels Opossums Beavers Raccoons Squirrels Chipmunks Moles Mice Voles Shrews Bats Skunks Rabbits Rats Porcupines River Otter (*)	Trout Perch Large Mouth Bass Sunfish Carp Catfish Pickerel Pike Alewife (Herring) Shad Striped Bass Bluefish Mackerel Eels Minnows Porgies Menhaden Flounders Clams Mud Nassa River Mussels Snails Bay Scallops Oysters Crabs Lobsters and myriad more...	Ospreys Cormorants Mute Swans Gulls G. Blue Heron Turkey Vulture G. Horned Owl Screech Owl Barn Owl Hawk Robin Sparrow Starling Grackle Crow Blackbird Bluebird Oriole Cardinal Ducks (sev. types) Hummingbirds Woodpeckers (sev. types) Canada Geese Pheasant Terns Wild Turkey Chickadee Swallow Wren Mockingbird Thrush Warbler Finches (sev. types) and myriad more...	Frogs (sev. types) Toads (sev. types) Salamanders (sev. types) Snakes (sev. types) Turtles (sev. types)	Moths Butterflies Mosquitoes Bees Wasps/Hornets Flies (sev. types) Dragonflies Ants Beetles Termites Crickets Grasshoppers Aphids Mayflies Waterbugs and myriad more...

* Unconfirmed sighting report of a local resident

(ARE ANY OF THE ABOVE RARE OR ENDANGERED? EITHER A SEPARATE TABLE OR SOME MEANS OF HIGHLIGHTING THEM ABOVE, AS WELL AS A SHORT DESCRIPTIVE PARAGRAPH HERE)

F. SCENIC RESOURCES AND UNIQUE ENVIRONMENTS

Berkley is a low key, slow and natural environment, not noted for the spectacular or eye-catching scene. Instead it is a place that sneaks up on the psyche and the soul. Beyond the Dighton Rock Museum's draw for the intellectually curious, Berkley appeals more to a person's quiet introspection about the wonders of New England's nature.

In fall there is bright foliage and spring comes with lush greens. On most any morning a misty miracle hovers over the shorelines, and each sunset is unique for those who take the time to notice. There is an endless succession of small, diverse Berkley delights that add up to a totally enjoyable experience. The Town's limited development is a great treasure, for there is so little to distract a caring, conscientious observer. It is therefore an imperative that future development does not threaten this unique and fragile ambiance. Indeed, there is no better place to stop and smell the roses or the lilacs or the salty air.

The rivers and the bays can provide breathtaking vistas, especially at sunrise or sunset. Yet these are scenes that appeal most to the hiker, the canoe paddlers or the pensive watcher. It is this special quality, a timeless and eternal natural experience, that Berkley offers to those with the patience and openness to appreciate it.

It is the hope and goal of the committee to preserve, protect and enhance Berkley's special natural treasures. To that end, the hope is to secure land along the river and the bay—some for preservation in its natural state and some for public access and recreation. For local flora and fauna this is to include permanently conserved and protected shoreline and marshes. For residents this is to include walking paths, a boat ramp and possibly even a small beach area.

Elsewhere, the committee seeks to work with the Berkley Master Plan Committee and Planning Board to establish by-laws and zoning that will manage the inevitable growth in a way that will maximize open spaces and protection of the environment. As with the shorelines, the goal is to secure natural areas for both undisturbed conservation and other areas for public recreational use, including nature walks, field sports, fishing, hunting, hiking and horseback riding.

With limited resources purchasing enough land to do the whole job will not be possible. Therefore, the need has been recognized to attempt to direct and shape private development to be more environmentally friendly. With a well-considered and committed planning process, viable compromises will hopefully become apparent which can help to save the greatest amount of green space possible.

1) Scenic Landscapes

From DEM scenic landscapes:

(ARE ANY LISTED? INVENTORY MAY BE CURRENTLY UNDER REVIEW)

Notable sites from observations:

1. Point of Assonet Neck out to Conspiracy Island
 2. Hathaway property on Assonet River
 3. The corner of Elm Street at South Main Street all the way to Haskins Horse Farm
– provides country landscape when driving through town.
- 2) Major Characteristic and/or Unusual Geologic Features
1. Riverfront – all available properties with waterfront access
 2. Boat access at Assonet Neck (point) and Town Landing Road.
 3. Unusual rock out-cropping on west-side of Bayview Street, presently farmland.

3) Cultural, Historic, and Archeological Areas

Cultural and Historic

1. Dighton Rock State Park
2. Berkley Common (for its country town look), Andrew Carnegie Library and Old Town Hall with adjacent fields.
3. Myricks Village
4. Berkley-Dighton Bridge
5. OTHERS?

Archeological

Assonet Neck is a site where Native Americans enjoyed their permanent camping ground, being close to the fisheries. This area holds important archaeological resources. Warren Goff, a local archeologist, has collected and documented evidence of campsites in the following locations:

1. Bear Swamp I
2. Bear Swamp II (attached Staple and Athearn report)
3. West side of Bayview Ave, opposite Bryant St.
4. Lois Dillinham's property
5. Smallpox Hill, Damon Clegg's fields in back
6. Petticoat Farm, Berkley St.
7. Bobbit's – across from plaque
8. Houtzager's area of 42nd St.

Also of archeological interest is a pre-historic skeleton found on Grassy Island, located near Dighton Rock State Park.

4) Areas of Environmental Concern

(See Summary of Natural Features.... Attached) (PAGE #)

1. Tidal river, tidal brackish marshes and tidal freshwater marshes (SPECIFIC)
2. Wildlife and plant habitats shown on open space map (attached) (PAGE #)
3. Cold water stream – unnamed stream feeding into the Taunton River just south of the Bridge
4. Large unfragmented, contiguous parcels of land (SPECIFIC)
5. Successional old fields (SPECIFIC)
6. Vernal pools (some in process of being submitted (identified in March/April 2000) (SPECIFIC WHERE POSSIBLE)
7. OTHERS? ROUTE 24 Interchange and other rare wildlife habitats.

(IN THIS SECTION MAKE SURE TO HAVE AN EYE TOWARDS GROUPINGS OF HABITATS/AREAS THAT COULD BE NOMINATED AS AN ACEC. IN OTHER WORDS, VAGUE DESCRIPTIONS OR DISCONNECTED PARCELS WILL BE NO GOOD IN EFFORTS TO GET AN AREA LISTED WITH THE STATE AS AN ACEC. SEE INFO I HAVE PROVIDED FROM ACEC WEBSITE → www.state.ma.us/dem/programs/acec/overview.htm)

Please note: Nancy Possinger, author of this section, is the Biodiversity Days organizer (June 2000). The identified species listed during that weekend's activities will be forwarded to the State. This may help identify further areas of critical concern. *UPDATE/INCLUDE THIS INFO*

G. ENVIRONMENTAL PROBLEMS

1) Hazardous Waste Sites

There are no Tier 1 sites in Berkley on the Massachusetts Department of Environmental Protection's (DEP) list of reportable releases. Tier 1 sites are those that pose the greatest risk to human health and the environment.

Of the twelve sites on DEP's list at the time this report was compiled, only one is worthy of mention. SCA/Cal's Landfill on County Road (RTN 4-0000028) is currently in Phase IV, or remediation stage, of the regulated cleanup process for a release of hazardous materials. This property is on EPA's Superfund (CERCLIS) list, though not on the National Priorities List (NPL) **(FOR FURTHER INFORMATION ON THIS SITE MAKE AN APPOINTMENT TO GO TO DEP SOUTHEAST REGIONAL OFFICE AND LOOK AT THE FILE. HOURS: Mon&Tues 9-11:30, 2-4:30, Wed 9-11:30) MUST SUBMIT REQUEST FOR SPECIFIC FILE BY PHONE/WEB/FAX BY PRECEDING FRIDAY. MORE INFO AT→** <http://www.state.ma.us/dep/sero/foi.htm>)

A Response Action Outcome (RAO) statement has been submitted and the site has been given Class C status by the State. Class C sites are temporary clean-ups that do not present a "substantial hazard," though have not yet reached a level of "no significant risk." This site will be evaluated every five years to determine whether a Class A RAO (no significant risk) is possible. All sites undergoing remediation work are expected to eventually receive Class A status.

Another potential site is the Bog's Landing Site located off North Main Street. This property is listed on the EPA's Superfund list. Though it is not listed on the National Priorities List (NPL) it has undergone substantial investigation, records of which are available in the Berkley Town Library. The only action listed on EPA's website regarding this site indicates that a "Removal Assessment" was completed in April of 1998. Whether any removal of the hazardous materials was actually undertaken could not be determined.

2) Landfills

According to DEP's listing, there are four landfills in the town of Berkley. Of these only two are capped and none are lined-- a potential water quality issue. The above mentioned Cal's/SCA landfill, which is on EPA's Superfund list, has yet to be deemed entirely safe. So, placing recreational areas or conserving open space in the area should be avoided for the present. Future use should not be ruled out for this nineteen-acre property though, as open space is a common reuse approved by DEP for landfill sites.

The other capped landfill in town was formerly a demolition landfill occupying four acres and is located on Pedelford Street. As it abuts a wetland, purchasing this parcel may be an economical use of funds, especially if it can be used as part of a wildlife corridor to connect other conserved parcels in the area.

The two uncapped landfills are located on Church and Bryant Streets. Each of these two is listed by DEP as being less than one acre.

One landfill not listed by DEP was mentioned by Joe Callahan of the Taunton River Watershed Alliance--the former Bog's Landing, located off North Main Street. According to this source, tannery wastes were formerly dumped here. Water quality may need to be monitored in this area, especially since important wildlife habitats abound nearby. As mentioned above, this site is on EPA's Superfund list.

3) Erosion

Erosion has not been a serious problem anywhere in the town. Most erosion is temporary and is related to construction projects. One notable exception is Pedelford Estates, which continues to have erosion problems due to the disruption of a steep, forested slope for a housing development. This type of irresponsible development should be discouraged in the future.

4) Chronic Flooding

Though, according to the Federal Emergency Management Agency maps, significant portions of the town lies within the floodplain, no areas are subject to chronic flooding.

5) Sedimentation

Sedimentation has not been a problem in Berkley. However, removal of gravel has the potential to cause problems to both ground and surface water if not regulated properly.

6) Development Impact

Development at the rate Berkley has seen in the past decade will place great strain on the ability of the Town to provide services, including schools, police and fire. Without planning and new development controls, unplanned growth is likely to be at the expense of wildlife habitats, including some that are classified by the Wildlife Trust of Southeastern Massachusetts as "globally rare." Increased development also means an increase in paved areas, which often results in increased runoff, pollution, and flooding.

7) Ground and Surface Water Pollution

Inquiries at DEP's, Southeastern office revealed no records of water quality problems anywhere in town. Non-point sources are currently kept to a minimum due to the limited amount of pavement. Point sources within the town are also currently minimal due to the absence of industrial development. As discussed above, former unlined landfill sites, including the Bog's Landing may have potential to cause problems in the future. Agricultural sources of pollution are a possibility, though no data is currently available. Pesticide and nutrient runoff from cranberry bogs was one potential source of concern noted by Joe Callahan of the Taunton River Watershed Alliance. However, John Duke at the United States Agricultural Extension in Plymouth County noted that significant improvement has been made in recent years. Farm management planning services are available to help prevent/solve further problems. (See Section 4G-8 below)

EPA's Toxic Release Inventory was consulted for the region. The Town of Berkley had no submissions, but the search yielded some interesting results about past releases to surface water in surrounding towns.

EPA Toxic Release Inventory http://www.epa.gov/enviro/html/tris/tris_overview.html

Berkley 02779 – No Submissions

Lakeville 02347 - No Submissions

Freetown 02702 – Ninety-six submissions from one company were reported during the years from 1987-1998. Most were air emissions (point & non-point). Negligible releases to Taunton River were recorded, with none since 1995 (1 pound/year Chromium compounds due to storm-water overflow.)

ISP FREETOWN FINE CHEMICALS INC.
238 S. MAIN ST.
ASSONET, MA
02702-1699
Public Contact: MICHAEL CONWAY
Phone Number: 508-235-7140

Dighton 02715 – Seventy-five submissions from one company were reported during the years 1987-1994. Releases of over 11 million pounds of various toxic chemicals and heavy metals to Taunton River and Muddy Cove Brook were recorded in 1987. The company had a progressively cleaner record until 1994, when releases were reduced to five pounds of copper compounds. More information is available at the following website–

http://oaspub.epa.gov/enviro/tris_control.tris_print?tris_id=02715CMRCS333MA

ZENECA SPECIALTIES
333 MAIN ST.
DIGHTON, MA
02715
Public Contact: RICHARD D. SCOTT
Phone Number: 508-669-6731

Discussions with Bill Napolitano at SRPEDD revealed that this site has undergone significant environmental remediation and is planned to be re-opened as an aquaculture research and education center.

Taunton- 02718 – Twelve submissions (non-point air emissions only) from one company were reported for the years 1987-1989.

Taunton – 02780 – Two hundred and twelve (212) submissions from sixteen (16) companies were reported for the years 1987-1998. Most were air emissions (point and non-point) with only two (2) companies reporting releases to the Taunton River.

1) TAUNTON MUNICIPAL LIGHTING PLANT CLEARY FLOOD STATION
1314 SOMERSET AVE.
TAUNTON, MA 02780
Public Contact: JAMES PIROZZI
Phone Number: 508-824-5844

Release of 250 pounds of Chlorine to Taunton River in 1988.

2) TAUNTON SILVERSMITHS LTD.
90 INGELL ST.
TAUNTON MA 02780-9975
Public Contact: EUGENE F. LEDONNE
Phone Number: 508-824-6905

Release of 750 pounds of Copper to Taunton river 1987-89
Release of 750 pounds of Nickel to Taunton River 1987-89
Release of 500 pounds of Sodium Hydroxide (solution) to Taunton River 1987-88
Release of 500 pounds of Zinc (Dust) to Taunton River 1987-88

8) Other

Agricultural Management

Past problems with nutrient and pesticide loading of waterways by agricultural enterprises for the most part have been solved through efforts of the Plymouth County USDA Extension office to help farmers prepare and implement farm management plans. These plans include information on the costs associated with the use of synthetic chemicals, integrated pest management techniques to reduce the need for pesticide application and physical methods for recovering the nutrients and pesticides used. This service is only available to farms that are currently in operation. In order not to contribute to a recent glut in the cranberry market, extension services for new development of cranberry operations are not currently available.

New bogs are still being developed in Berkely, however. To ensure that water management is efficient they must be graded properly. This process often necessitates the removal of gravel. Gravel removal operations are regulated under different authority and concerns have been raised over the amount of earth that has been removed. Some residents are worried that since these areas are permitted for agricultural use and not as gravel pits, proper management techniques are not being implemented. If proper earth removal management practices are not followed, there is a higher potential that these activities will impact both surface and groundwater quality.

SECTION 5 – INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST

- A. PRIVATE PARCELS
- B. PUBLIC AND NONPROFIT PARCELS

SECTION 6 – COMMUNITY GOALS

A. DESCRIPTION OF PROCESS

B. STATEMENT OF OPEN SPACE AND RECREATION GOALS (Draft Suggested)

The Town of Berkley seeks to preserve the country character; protect its precious natural resources of air, water, soil, and habitats; ensure public access to the Taunton River, forests, and fields; and create neighborhood recreation areas. The permanent protection of and provision of access to open space significantly enhances the quality of country life. The Town's focus is on the protection and proper management of open spaces according to their use, rather than on land acquisition alone. Therefore, agricultural and forest lands should be permanently protected and managed to conserve air, water, soil, and habitats. Wherever possible, these lands should be considered in conjunction with appropriate protection and management strategies of wild lands to ensure that habitats are contiguous and large enough to maintain viable populations. Land acquisition efforts should be focused on parcels that cannot be preserved by any other means or on parcels that meet specific public needs, such as access or aquifer protection. New development should be planned so that impact on ecologically sensitive areas is minimized and aesthetics maintained. Active recreation areas should be created in both old and new neighborhoods to meet the social and recreational needs of a growing population. The town also seeks to preserve cultural and historic resources wherever possible. Finally, the Town of Berkley should work cooperatively with surrounding communities to meet these goals.

SECTION 7 – ANALYSIS OF NEEDS

Recreation in Berkley

A. SUMMARY OF RESOURCE PROTECTION NEEDS

Preservation of the Country Character

Protection of Precious Resources

Land Acquisition

Since Berkley has such diverse land types and purposes for saving specific areas, a variety of preservation techniques will be necessary. The sheer quantity of available open space compared to the resources available for acquisition points to the need to focus land acquisition efforts on parcels that can be preserved only through outright purchase or on land that serves a specific public need, such as waterfront access, aquifer protection, etc.

If specific lands currently preserved under Chapter 61 and 61A are targeted for these purposes or are found to have value for resource protection, a fund should be set up or money otherwise made available (for example, through the passage of bylaw that pre-approves a bond for the purpose of acquiring parcel x, y, and z) to purchase them within the 120 days allowed for first refusal.

Wildlife Protection

Berkley has significant undisturbed habitats and wildlife resources that could be endangered by unplanned development. Grouping some of these habitats into one or more areas for nomination as DEM designated Areas of Critical Environmental Concern (ACEC) may be the most efficient way to ensure that they will be protected.

B. SUMMARY OF COMMUNITY'S NEEDS

Creation of Neighborhood Recreation Areas

Provision of Public Access to River, Forests and Fields

C. MANAGEMENT NEEDS, POTENTIAL CHANGE OF USE

Communication Among Town Boards

New Development Controls

SECTION 8 – GOALS AND OBJECTIVES (DRAFT SUGGESTED)

(THE FOLLOWING ARE GOALS AND OBJECTIVES I PICKED OUT FROM THE MATERIALS YOU PROVIDED ME AS WELL AS SOME FROM MY OWN RESEARCH AND KNOWLEDGE. PLEASE NOTE THAT THE **UNDERLINED BOLDDED** POINTS ARE DIRECTLY FROM THE MATERIALS PRODUCED BY CHARETTE RUN BY JOHN MULLIN AND SHOULD THEREFORE ALREADY HAVE THE SUPPORT OF THE MAJORITY OF RESIDENTS.)

Goal: Maintain rural and unspoiled character

Objectives

Be specific here. Define what aspects of town contribute to this character and set out actions that can preserve the existing and promote future positives as well as help to avoid future negatives. e.g. list large street trees with Arbor Day Foundation, plant new ones, create a historic preservation district in Myricks, implement new land use and development controls, etc.

Goal: Preserve Berkely-Dighton Bridge

Objectives

Lay out the steps towards the goal. e.g. Identify agencies that can help, identify funding sources, gather local support, fill out necessary paperwork, etc. **Work with Dighton** on this issue.

Goal: Provide Recreation Access – be specific in your objectives. Do you want walking trails, biking trails, wildlife viewing areas, sports fields, tennis courts, swimming areas/pools?

Goal: Enhance Natural Resource Protection

Objectives

1. Map Vernal Ponds
2. Perform biological survey of areas identified by the state as containing rare wildlife.
3. Establish connectivity between wildlife reserves and contiguous open lands of diverse habitats. Look beyond your borders and **work with surrounding towns** on this issue.
4. Protect undeveloped shoreline and work with property owners to implement management plans that repair and restore ecosystems (e.g. limited use of fertilizer/pesticides, erosion/sedimentation control, limited disruption of the hydrology that creates wetlands, etc.) Again **work with surrounding communities** on this issue.
5. **Protect aquifer and wellheads.**

Goal: Acquire more land along the river

Again, be specific in your objectives. Do you want boating access, walking access, visual access, wildlife viewing areas?

Goal: Establish land-use and development controls to manage growth.

Objectives

1. **Reform zoning by-law.** Creation of a farmland protection zone(s), aquifer protection overlay district, and specific areas for mixed use development (i.e. residential / commercial / light industrial)
2. Establish Transfer of Development Rights program. Research and define at least two areas of town that could serve as transfer and receiving zones. Transfer zones should be areas where the town agrees should be protected from development. Receiving zones should be areas where the town would like to see development encouraged. Creating a receiving zone that is also a historical preservation district may be a good idea, especially if the old village center of Myricks is to be developed.

3. Amend subdivision regulations to require / include guidelines for conservation subdivisions.
4. Pass a site-plan review by-law that allows planning board to require new developments to abide by certain regulations for approval of permits. This type of by-law should set an achievable standard for new developments, and *should not* be designed to limit development.
5. Pass a phased growth bylaw that limits growth/targets specific areas to be developed until municipal services can be provided.
6. Implement new development impact fees that equitably distribute the costs attributable to new growth among new residents.

SECTION 9 – FIVE-YEAR ACTION PLAN

As this is the preliminary version of the Berkley Open Spaces Plan, only just compiled and needing additional data, it is not appropriate to address this section of the plan yet.

The collected data will be disseminated to significant parties in town government and will be made public for the study of all interested parties. After an open assessment and analysis of the Berkley's Open Space and Recreation needs have been determines, it will be possible to develop a Five Year Action Plan.

Unfortunately, a survey of Berkley's citizens that recently published in the Berkley Bridge, the one newspaper published in town, did not get a good response and the number of completed and returned questionnaires were regarded as insufficient to yield a statistically valid survey.

As an alternative to the survey, the committee is planning a number of 'coffee klatch' get-togethers as a means of getting some meaningful citizen input. Those are scheduled for the summer and early fall, when vacations will not reduce attendance. They will be announced at an up-coming town meeting in June. In addition, the committee will be actively and ardently soliciting attendees. Such get-togethers will be planned for each of the neighborhoods of the town.

In the meantime, an earlier 1995 Open Space Survey is included in this plan as an appendix, as is a synopsis of a Town Charette that occurred on February 5, 1999. That Charette, conducted by Professor John Mullin of the University of Massachusetts, was attended by over 60 citizens

Furthermore, the committee will be reporting to, and getting input from the Board of Selectmen and the Berkley Master Plan Committee after the special election on June 24, 2000, as previously mentioned.

SECTION 10 – PUBLIC COMMENTS

As this is the preliminary version of the Berkley Open Spaces Plan, only just compiled and needing additional data, it is not appropriate to address this section of the plan yet.

The collected data will be disseminated to significant parties in town government and will be made public for the study of all interested parties. It will serve as the basis of an open assessment and analysis of the Berkley's Open Space and Recreation needs upon which a five year plan of action can be formulated.

The committee regrets that this section cannot be available at this time. At this time, our Board of Selectmen has just undergone substantial changes. A new selectman has just been elected and one seat on the board is unfilled due to an abrupt resignation. That seat will be filled by a special election on June 24, 2000.

SECTION 11 – REFERENCES

The Berkley Open Spaces and Recreation Plan Committee regrets that at this time, it cannot provide a list of references and source documents for this plan. Due to the June 1, 2000 submittal deadline time was not available to compile a reference list / bibliography.

As mentioned earlier, this is a preliminary plan submittal and it will be expanded, updated and approved in the near future. At that time, the reference section will be done.

LIST OF APPENDIX DOCUMENTS

Excerpts from *Soil Survey of Bristol County, Northern Part*, November 1978,
USDA Soil Conservation Service & Massachusetts Agricultural Experiment Station

Town of Berkley Community Aquifer Protection Planning Study-June 1988
IEP, Inc., 6 Maple St., Northborough, MA 01532

Excerpt: *General Laws of Massachusetts, Chapter 88: Section 14- Landing Places*

1999 Commonwealth of Massachusetts 'Cherry Sheet' for the Town of Berkley
Massachusetts Dept. of Revenue, Division of Local Services, Municipal Data Bank

Summary of Natural Features and Potential Conservation Priorities / Town of Berkley
The Wildlife Trust of Southeastern Massachusetts, 1999

Excerpt: *Berkley Shipbuilding, History of Berkley* by Rev. Enoch Sanford, 1872

Excerpt: *Shipbuilding on the Taunton River*, *Taunton Daily Gazette*, 3/25/1961

Excerpt: *The Bear Swamp Site: A preliminary Report*, by Arthur C. Staples and

Roy C. Athearn, Massachusetts Archeological Bulletin, date and edition unknown.

Berkley Goals Project Summary and Final Report, June 6, 1995, with Appendix
Strategic Planning Grant Committee, in conjunction with the Massachusetts Executive Office of Communities and Development; and the Southeastern Regional Planning and Economic Development District

Map (10 plates): *Absolute Development Constraints for the Town of Berkley, Spring 2000 with Methods Statement, Legend and List of Housing Sub-Divisions in Berkley since 1990*
Commonwealth of Massachusetts Executive Office of Environmental Affairs and the Southeastern Regional Planning and Economic Development District