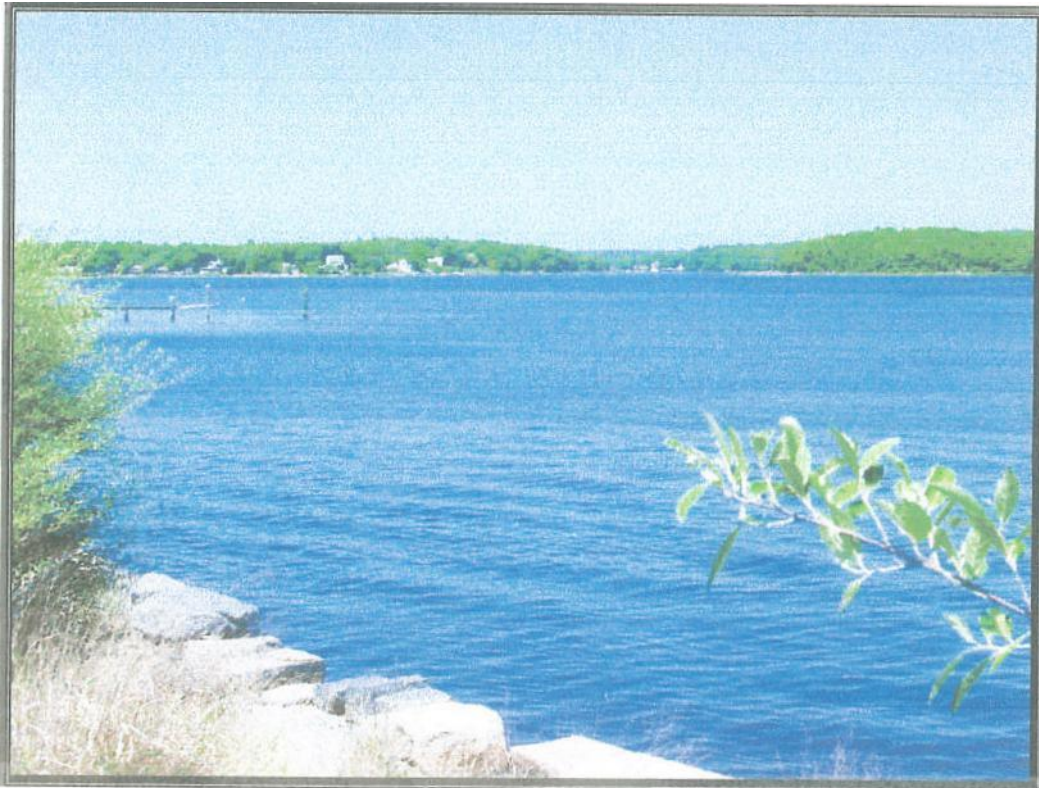


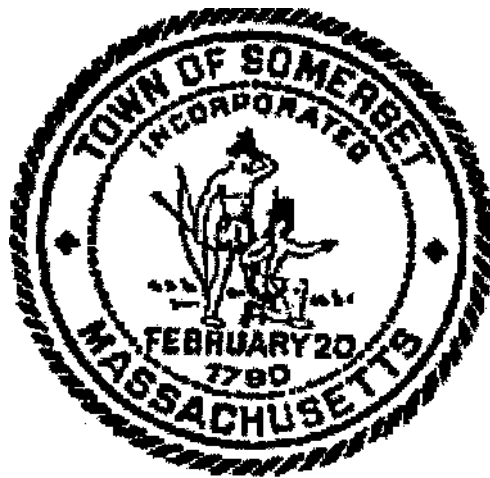
SOMERSET

CONSERVATION, RECREATION, AND OPEN SPACE PLAN



2017

SOMERSET
CONSERVATION, RECREATION, AND OPEN SPACE PLAN
2017



Prepared by the Open Space Committee with technical assistance from SRPEDD.
Special thanks to: John McAuliffe for his patience; Bill Aguiar for getting us started;
Nancy Durfee for all of her work and dedication to the rivers; Vanessa Farr for helping
to pull it all together; the Taunton River Wild & Scenic River and Taunton Heritage
River Programs; and, Chris Wordell, who has been there from the beginning and has
made every committee that she has served on so much better.

GIS color mapping by Karen Porter, SRPEDD
Cover photo by Greg Guimond, SRPEDD

TABLE OF CONTENTS

I.	PLAN SUMMARY.....	I - 1
II.	INTRODUCTION.....	II - 1
	A . S T A T E M E N T O F P U R P O S E	II - 1
	B . THE PLANNING PROCESS AND PUBLIC PARTICIPATION	II - 1
III.	COMMUNITY SETTING.....	III - 1
	A. REGIONAL CONTEXT.....	III - 1
	B. HISTORY.....	III - 1
	C. POPULATION CHARACTERISTICS.....	III - 4
	1 . A g e C h a r a c t e r i s t i c s	III - 5
	2 . R a c i a l a n d E t h n i c C h a r a c t e r i s t i c s	III - 6
	D. ECONOMIC CHARACTERISTICS.....	III - 7
	1 . I n c o m e	III - 8
	2 . E m p l o y m e n t	III - 8
	3 . U n e m p l o y m e n t	III - 9
	E. GROWTH AND DEVELOPMENT PATTERNS.....	III - 10
	1. Patterns and Trends.....	III - 10
	2. Infrastructure	III - 11
	a . T r a n s p o r t a t i o n	III - 11
	b . W a t e r	III - 11
	c . S e w e r	III - 12
	3. Long Term Development Patterns	III - 12
	a . Z o n i n g	III - 12
	b . B u i l d - O u t S c e n a r i o	III - 14
IV.	ENVIRONMENTAL INVENTORY AND ANALYSIS	IV - 1
	A. TOPOGRAPHY AND GEOLOGY.....	IV - 1
	1 . C l i m a t e	IV - 1
	2 . S o i l s P r o f i l e	IV - 1
	B. LANDSCAPE CHARACTER, VEGETATION AND WETLANDS	IV - 4
	C. WATER RESOURCES.....	IV - 10
	D. VEGETATION	IV - 10
	1. Plant Species (indigenous/observed).....	IV - 10
	E. FISH AND WILDLIFE.....	IV - 12
	1 . S h e l l f i s h . . .	IV - 12
	2 . F i s h (i n d i g e n o u s / o b s e r v e d)	IV - 12
	3 . A m p h i b i a n s a n d R e p t i l e s (i n d i g e n o u s / o b s e r v e d)	IV - 14

4 .	Mammalian Species (indigenous/observed)	IV - 14
5 .	Birds (indigenous/migratory)	IV - 14
6 .	Rare Species and Significant Natural Communities	IV - 14
7 .	Vegetative, Fish and Wildlife Resources Within the Taunton River Wild & Scenic River Corridor	IV - 15
F.	SCENIC RESOURCES AND UNIQUE ENVIRONMENTS	IV - 16
1.	Cultural and Historical Areas	IV - 16
2.	Scenic Resources	IV - 31

G.	ENVIRONMENTAL CHALLENGES	IV - 32
1.	Hazardous Waste Sites.....	IV - 32
2.	Landfills	IV - 34
3.	Erosion/Chronic Flooding/Sedimentation	IV - 34
4.	Inflow and Infiltration Problems	IV - 35
5.	Development Impacts	IV - 35
6.	Water Quality — A Regional Issue as Well	IV - 36
7.	Air Quality — A Regional Issue as Well	IV - 37
V.	INVENTORY OF LANDS OF CONSERVATION AND RECREATION	V - 1
A.	INTRODUCTION	V - 1
B.	INVENTORY	V - 1
VI.	COMMUNITY GOALS.....	VI - 1
A.	DESCRIPTION OF PROCESS.....	VI - 1
B.	STATEMENT OF OPEN SPACE AND RECREATION GOALS	VI - 3
VII.	ANALYSIS OF NEEDS	VII - 1
A.	RESOURCE PROTECTION NEEDS.....	VII - 1
B.	COMMUNITY/RECREATION NEEDS.....	VII - 1
C.	LAND USE REGULATIONS/REGULATORY NEEDS	VII - 4
D.	MANAGEMENT NEEDS	VII - 6
VIII.	GOALS AND OBJECTIVES.....	VIII - 1
IX.	ACTION PLAN	IX - 1
X.	COMMENTS.....	
XI.	REFERENCES/RESOURCES.....	
	SECTION 504 ADA COMPLIANCE AND TRANSITION PLAN	

APPENDICES

Appendix A: Open Space Survey

Appendix B: Glossary of Open Space Terms

Appendix C: Article 97 of the State Constitution

Appendix D: Funding Opportunities from State Agencies

Appendix E: Land Preservation and Prioritization Ranking Models

Appendix F: Chapter 61 Laws

Appendix G: "The Economic Benefits of Land Conservation"

Appendix H: Land Preservation Techniques

Appendix I: Community Preservation Act

Appendix J: Center for Watershed Protection: Codes and Ordinances Worksheet

Appendix K: Transfer of Development Rights

Appendix L: Taunton River Wild & Scenic River Stewardship Plan Summaries

Appendix M: Somerset Stream Team Survey, 2003

Appendix N: Narragansett Bay Plans — Watershed and Bi-State

MAPS

Somerset In A Regional Setting	III — 2
SRPEDD Region	III — 3
Geological Characteristics	IV — 2
Soils Map	IV — 5
Water Resources Map (Q — 3)	IV — 11
Watersheds and Habitat	IV — 13
Historic Resources Maps (series of maps)	IV 17 — 29
Scenic Views and Special Features	IV — 32
Sensitive Environmental Receptors	IV — 40
Land Use Changes Map	V — 2
Open Space Map	V — 3
Action Plan Map	IX — 10

I. EXECUTIVE SUMMARY

The 2004 Conservation, Recreation and Open Space Plan represent the results of approximately three years of locally led public planning efforts. It was the desire of our Open Space Committee to create a plan with utility...something that would and could be addressed in a timely and efficient manner. This plan is not a prescription by which to stop growth and preserve the moment, rather, a means by which the town might integrate its conservation, recreation and open space needs into a responsible growth management strategy.

Somerset is unique amongst the towns in southeastern Massachusetts. At 8.11 square miles, with a long, narrow profile, it is somewhat constrained by its geography in terms of open space planning possibilities. Somerset is also the most densely populated town in the SRPEDD region (and one of the most densely populated towns in the state). According to the 2000 U.S. Census, 18,234 residents, or approximately 2,000 per square mile, occupy Somerset.

Somerset is also unique in that between 1980 and 2000, the overall population has decreased by approximately 600, putting Somerset alone amongst towns in the SRPEDD region in experiencing a net population loss over the last 20 years (it should be noted that the population did increase from 1990 to 2000 by approximately 3%). Somerset has also seen its median age increase from 31 years in 1970, to 43 years in 2000 (the state median is approximately 36.7 years). The town has become older, an important factor to consider in recreation and open space planning. Correspondingly, the Action Plan portion of this document reflects the differing needs of Somerset's population based; on recent and historical trends and patterns of growth and development.

Since the completion of the last certified Open Space Plan in 1983, Somerset has made substantial strides in addressing that plan's prescribed action items. The Town has managed to accomplish a great deal through foresight and partnerships, particularly amongst its municipal departments. The ability of the Conservation and Recreation departments to obtain grants and promote volunteerism, along with the Public Works staff ability to address the physical needs of various town properties, has led to acquisitions and facilities improvements such as:

- Established a Land Acquisition Fund and Land Acquisition Committee with the proceeds from the sale of municipal land
- Repairs to the Angus Street Stairs in order to maintain safe coastal access
- Implementation of erosion control measures at Mallard Point
- Construction of a new bridge at Chace Preserve
- Improved restroom facilities at Pierce Beach
- New sand and improved facilities at Pierce Beach

- New landscaping at Waterfront Park
- Rehabilitation of all four (4) ball fields at South Complex
- New handicapped accessible restrooms at South Complex
- Completion of the Main Street Historic Area rehabilitation project
- Creation of the World War II Veteran's Memorial
- Creation of the park and waterfront access on Ripley Street
- Acquisition of property and the transfer of property from the state at Broad Cove
- The creation of the Broad Cove Boardwalk Plan and the development of the pending application to the ISTEPA Enhancements Program for funding
- The recent acquisition of 120+ acres of land from PG&E, done primarily with the Town's dedicated Land Acquisition Fund
- Worked with federal and state agencies to secure the development of public park land and access to and from the base of the new Brightman Street Bridge (to be completed in 2009 according to latest estimates).

Somerset has obviously not sat still during the twenty years between open space plans. But with the increased development pressures in southeastern Massachusetts, a steady transition in the local job market and facing the needs of an aging population, the challenges and opportunities are still numerous for the town. In a survey of open space and recreation issues, town residents saw the goals of a new open space plan as:

- Protecting the quality and quantity of Somerset's water resources — Somerset's 14.7 miles of coastline are one of its greatest recreation/quality of life assets. With the interior of the town largely developed and the geographic constraints inherent to its boundaries, maintaining existing coastal access and developing new opportunities will be a key recreational necessity both locally and regionally. Likewise, maintaining the quality of the rivers and streams flowing into the Taunton River is important to environmental health and safety.

Protecting the public water supply reservoir and the resources that feed it is also a major concern. Adequate buffers and up-to-date bylaws, rules and regulations must address water supply concerns.

- Preventing the loss of the remaining rural, cultural and historical qualities and resources of the town — Somerset's historical resources have been extremely well catalogued and chronicled over the years. Establishing historic register

districts and landmark areas should be pursued. Charettes addressing rehabilitation and revitalization projects in the downtown area, (like Main Street project), should be considered. Where limited open space opportunities exist, the town should explore developing connections between key municipal open space parcels and culturally and historically significant areas (knitting together of green space through available tools such as conservation restrictions, easements or set-asides in partnership with private land owners).

Somerset may also explore using the Community Preservation Act to help meet some of these needs.

- Improve and expand passive and active outdoor recreational opportunities for all of the residents of Somerset — Aside from using the tools described above, the town has three major opportunities to address this goal through federal, state and local partnerships.

The public park land at the footing of the new Brightman Street Bridge will provide an excellent opportunity to expand public access to the waterfront and provide walking, biking, fishing and other activities. The town can also provide links to nearby municipal properties, such as the new PG&E land, O'Neil Field and South Field with dedicated bikeways along connector streets. Read Street could also provide a regional connection to the new Swansea bike lanes.

The development of a boardwalk on Broad Cove on existing conservation land is also in the planning stages. This area would provide opportunities for nature observation, walking, etc. The town could also establish a link to the Swansea bike lanes along Elm Street.

A third opportunity is provided by the regional initiative to nominate the Taunton River to become part of the Federal Wild & Scenic River Program. Somerset is working with other municipalities on a nomination study and management plan, under a Congressionally authorized and funded program of the U.S. Department of Interior, National Park Service. A Wild & Scenic River designation would help Somerset promote its coastal resources, address its environmental challenges and address its resource and conservation needs within the Taunton River corridor. Somerset is currently working with Fall River, Freetown, Berkley, Dighton, Taunton, Raynham, Middleboro, Halifax, Bridgewater, SRPEDD, Save the Bay, MA Riverways Program, the Wildlands Trust of Southeastern Massachusetts and the National Park Service on the Taunton River study.

- Promote coordinated, responsible land use management and planning — The town took a major step towards achieving this goal with the recent hiring of a part-time land use specialist. The town should also pursue review and necessary revisions to the existing planning board rules and regulations and the initial commitment to establishing a GIS Program. This latter recommendation, in particular, would give the town the ability to tie into federal, state and local data as well as implement electronic filing for local development plans (this would provide the town with a more real-time look at street and infrastructure

improvements and development patterns and potential impacts). This could also provide future savings to the town in terms of data acquisition and out-sourcing of planning studies requiring GIS services (mapping, design, etc.).

This Open Space Plan provides a glimpse of the past and the promise of the future. It can take on a life of its own through the implementation of its Action Plan, and, provide a platform for the development of a new comprehensive Community Master Plan.

II. INTRODUCTION

A. STATEMENT OF PURPOSE

The purpose of the 2004 Open Space Plan is to provide a blueprint by which various town boards and departments and the appropriate local, state and federal organizations and agencies might work together with the citizens of Somerset to meet the current and future conservation, recreation and open space needs of the town.

The 2004 Open Space Plan has been built for a life other than "shelf life." The town has committed to exercising the utility of this plan through its hiring of a land use planning specialist; commitment to developing an in-house GIS Program, and; by becoming the first community within the Taunton River Corridor/Narragansett Bay Watershed to invest itself in the programs of the Taunton River Wild & Scenic River Study, the Rhode Island-Massachusetts Interstate Planning Initiative (focusing on the entirety of the estuary) and the Taunton Heritage River Program, within a local planning document.

B. THE PLANNING PROCESS AND PUBLIC PARTICIPATION

In the summer of 1999, after several months of discussion and the issuance of a "Request for Responses," Southeastern Regional Planning and Economic Development District (SRPEDD) was selected to provide technical assistance to the Town of Somerset's newly appointed Open Space Committee. The charge of the Open Space Committee was to update the 1983 Somerset Open Space Plan.

From January of 2000, through June of 2000, the Open Space Committee held five public meetings at the Somerset High School. The Committee met on an as needed basis thereafter. The Committee also hosted meetings in June and October of 2000 on draft goals and objectives and action plan, respectively.

Additional public input was derived from a survey distributed to residents in Somerset through the Town Hall, Library and an insert in the Somerset Spectator (newspaper).

Personal and telephone interviews were also conducted to supplement and/or verify data obtained through research and the above mentioned means and processes. Members of the Open Space Committee also made themselves available for extra sessions, as required (conservation and land use representatives, in particular).

An initial draft plan was produced in 2001 and was revised to include new data from the Conservation Commission and the Taunton Heritage River Program. A second draft was revised to include the 2000 U.S. Census data as it was compiled (Somerset had some drastic changes in population

between the 1990 and 2000 Census; the median age had risen almost 6 years from the mid-decade report) during 2002-2003.

During the 2002-2003 revisions, new land use data was incorporated into the mapping and analysis sections, which had not previously been available from the state (Mass GIS) or the federal government (NOAA and the USDA).

Final revisions to the plan were made during 2003-2004 to incorporate work done by the Taunton River Wild & Scenic River Project and the Massachusetts Riverways Program (regarding stewardship planning and stream team reporting on the coastline of Somerset, respectively). The current version of the Somerset Open Space Plan is entirely up-to-date with the best available data from federal, state and local sources as of 2004.

III. COMMUNITY SETTING

A. REGIONAL CONTEXT

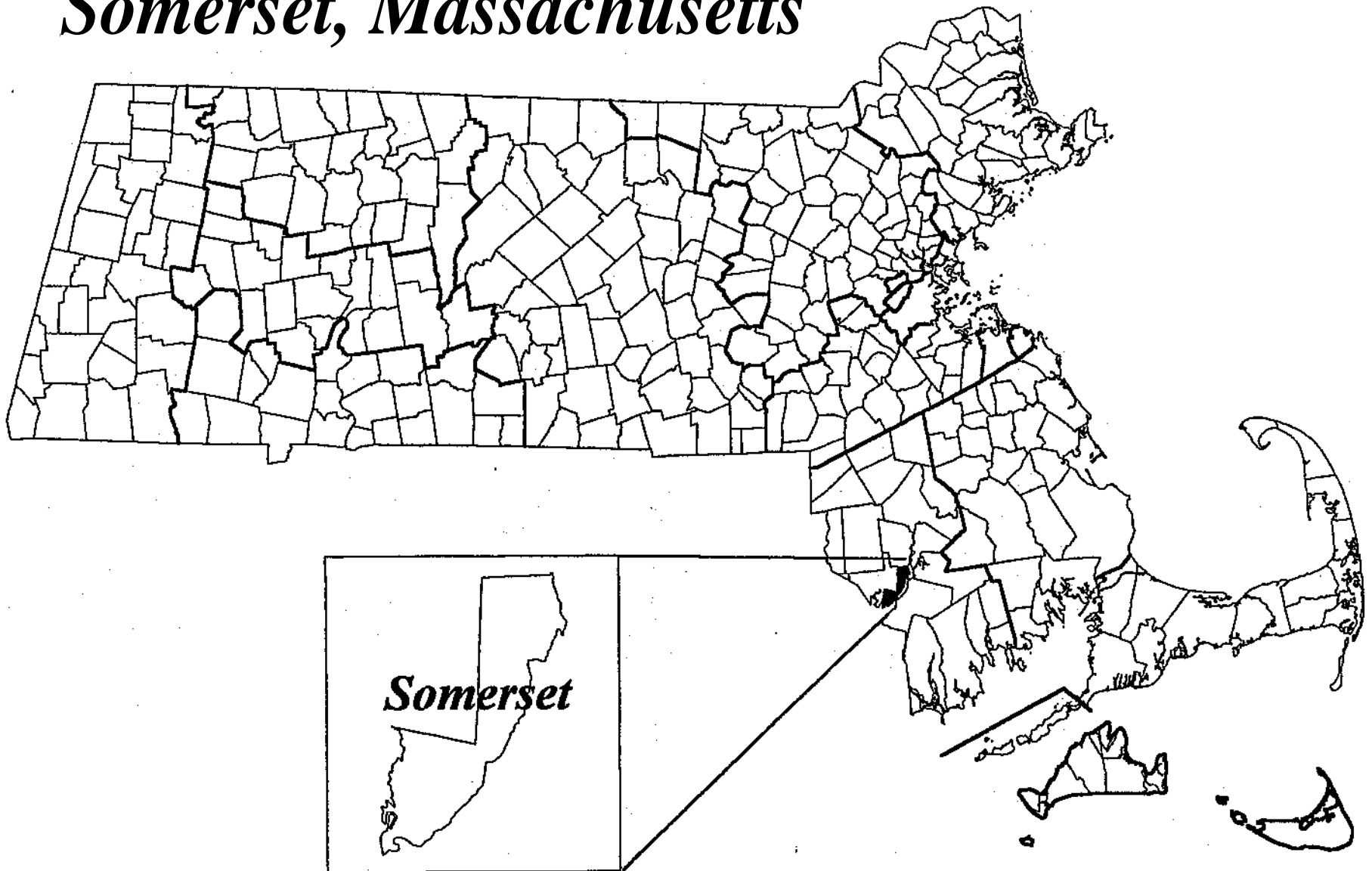
The town of Somerset is located in Bristol County and occupies an area approximately eight miles long and one mile wide on the west side of the Taunton River, the most extensive drainage system in southern Massachusetts. With the Taunton River on its east side, the town is also bordered by Dighton to the north, Mt. Hope Bay to the south, and the Lees River and Swansea to the west. It is within close proximity to major cities — forty-five miles south of Boston, twenty miles east of Providence, Rhode Island, and neighboring Fall River on the east side of the Taunton River. A significant and unique topographical feature of Somerset is its 14.7 miles of tidal shoreline. The southern half of the town is a peninsula reaching into Mt. Hope Bay with the land surface sloping in a northerly direction from the shoreline to an elevation of 180 feet above sea level. Good-textured loam prevails along the shoreline, and stony soil is prevalent in the western sections.

B. HISTORY

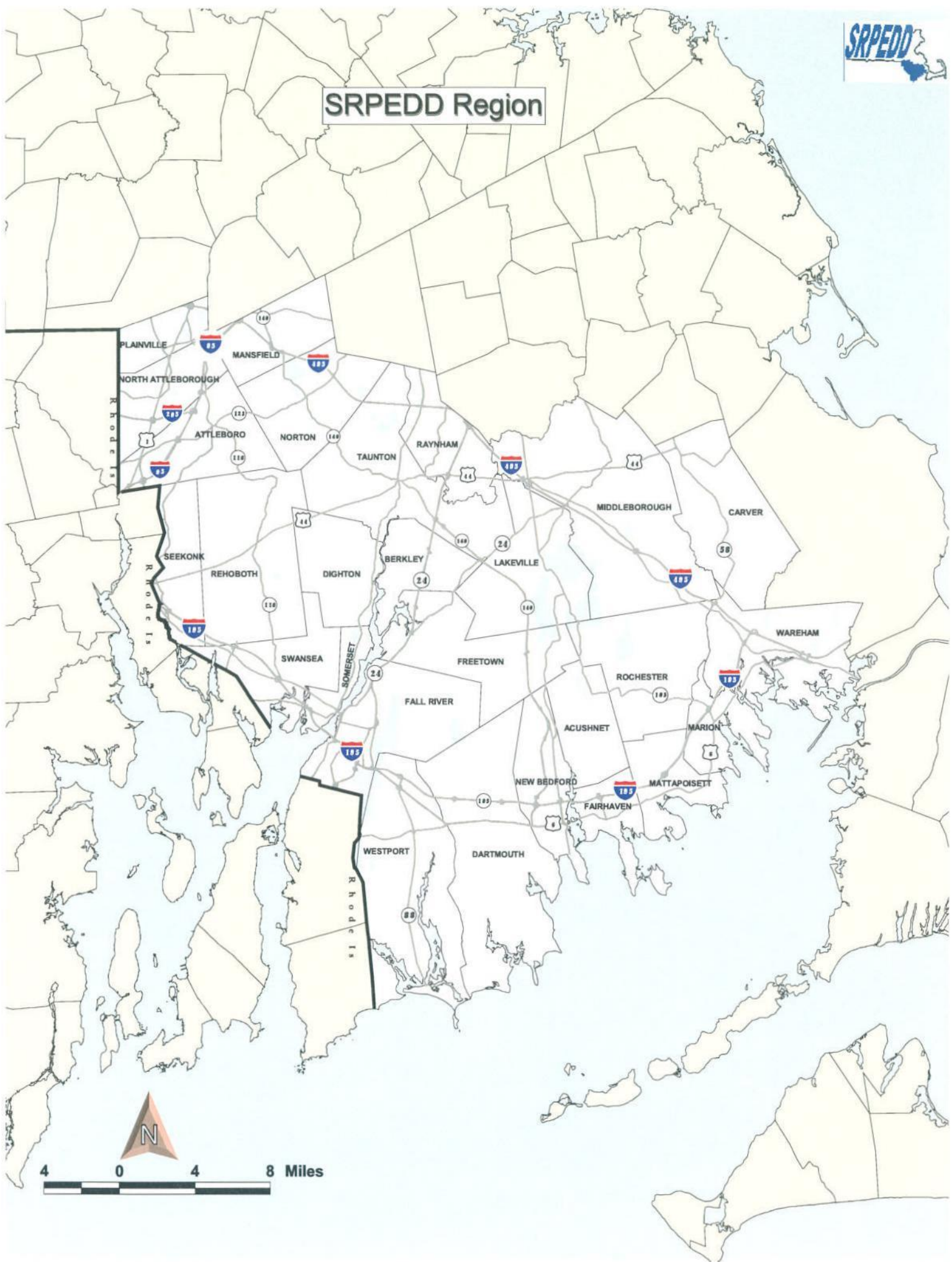
The Town of Somerset is a suburban community in Bristol County, on the west side of the Taunton River, across from Fall River, on the Mt. Hope Bay. This area was originally known as the Shawamat Lands and was incorporated as a town in 1790. Although there was a significant Indian population when colonists arrived, by the end of King Philip's war in 1677 English settlers dominated the Pocassetts, members of the Wampanoag tribe. The earliest colonists farmed and fished, both in the river and off-shore but the town developed shipyards, mercantile and shipping businesses early in its history. The first documented local shipyard was established between 1707 and 1712 on the Lee River by Samuel Lee. The dominant religious group in early Somerset were the Quakers, who established a meeting house about 1701, one of the few and earliest Quaker churches in southeastern Massachusetts.

After the War of 1812, Somerset became one of the chief distribution points in New England for foreign goods with trade to China, the West Indies, Europe and the Atlantic coast. By 1847, 138 vessels were built and registered in the town with many engaged in the coastal trade. The most important shipyard was that of James M. Hood, whose yard launched several important clipper ships. This industry boomed after the Mexican War and the California Gold Rush, and spawned shipping related activities such as a ropewalk and the Somerset Iron Works, which made anchors. Aside from shipping related businesses, the largest early industry in Somerset was the making of stoneware. When steam began destroying shipbuilding, the anchor works was taken over by Job Leonard who proceeded to develop a nailworks which, by 1865, was the largest single industry in town. Through all of this industrial growth, south Somerset remained largely agricultural. The opening of the Somerset and Dighton Railroad led to the establishment in the town of the

Somerset, Massachusetts



SRPEDD Region



Old Colony's major coal port in 1872, while an enterprising former potter created a cannery operation in the early part of the 20th century. However, as the industrial development of Fall River absorbed Somerset's industry, the community turned increasingly from shipping and iron manufacturing to suburban services. The dominant industry in Somerset since the First World War has been power generation with the erection of the Montaup Electric Company plant in 1923 and Brayton Point in 1963.

The dominant character of Somerset has been residential since the bankruptcy of Fall River in the Depression brought a flood of middle-class residents into the town. Unlike most communities in the area, Somerset increased its population by 74% during the Depression. The town is now a suburban community with some 14.7 miles of waterfront area primarily used for recreation rather than industry.

C. POPULATION CHARACTERISTICS

1. Population Trends

Since 1900 Somerset's population has grown steadily to its present total of 18,234. The rate of growth was rapid from 1940 to 1970, with increases of more than 45 percent recorded in each decade. Much of this growth was the result of new housing construction and new families moving into town. Since 1970, however, growth has slowed appreciably, and even declined 6.6% between 1980 and 1990. Despite a slight resurgence in the 1990's (a 3.2% increase for the decade), Somerset's population is still 2.0% below its peak population of 1980). Some of the slowdown can be attributed to the poor performance of the economy during the 1970's (when low growth and high inflation were prevalent) and the shifting economy of the 1980's when many mill and factory jobs were lost to relocation of local industries to the southeastern states. However, it also reflects other factors. Vacant land in Somerset has become scarce. There are only about 1,200 acres of undeveloped land remaining in town, and not all of that is easily developable due to various constraints (slope, soils, wetlands, etc.).

TABLE C -1
SOMERSET POPULATION GROWTH 1900 TO 2000

Year	Population	Population Change From Preceding Period	Percent Change
1900	2,241		
1910	2,798	557	24.9%
1920	3,520	722	25.8%
1930	5,398	1,878	53.4%
1940	5,873	475	8.8%
1950	8,566	2,693	45.9%
1960	12,196	3,630	47.4%
1970	18,088	5,892	48.3%
1980	18,813	725	4.0%
1990	17,655	-1,158	-6.6%
2000	18,234	579	3.2%

Source: U.S. Census.

The birth rate and family size have also declined with persons per household declining from 3.34 in 1970 to 2.57 in 2000. Thus, while land consumption for housing units slowly but steadily increased since the 1970's, the population increased by only 146 over the same period of time. While Somerset's growth may pick up in the future, it is unlikely to reach the rate of the past.

2. Age, Sex and Racial Characteristics

A comparison of data from the 1970 (peak growth period) and 2000 U.S. Census shows an aging Somerset population. The town's median age in 1970 was 31.2 years, compared with a median of 43 years in 2000. While this is consistent with national trends and reflects a declining birth rate and increased longevity, Somerset has aged, as a community, more rapidly than the other 26 municipalities within the SRPEDD region (as well as being approximately 6 years greater than the state median of 36.7 years). The current population is 8,635 male (47.4%) and 9,599 female (52.6%).

The largest change in population was the overall decline in residents aged 15 to 44 years (a net loss of 1,291). The greatest growth area within the population was in residents aged 75 and over (a net gain of 1,077). There was also a loss of 893 between the ages of 0-15 years, while there was an increase in those aged 60-74 years of 344. What this

data ultimately reveals is a population that is very different from the one planned for in the 1983 Open Space and Recreation Plan.

(Other factors contributing to these population statistics may include the loss of local employment opportunities for young people in the greater Fall River Area coupled with the increase in housing prices, particularly in southeastern Massachusetts; the development of quality long-term and assisted living health care facilities and programs, etc.).

TABLE C-2: SOMERSET AGE CHARACTERISTICS

Age	1970	2000	Change	% Change
0-14	3913	3020	-893	-23%
15-44	7813	6602	-1261	-16%
45-59	3729	3833	104	2.8%
60-74	2508	2852	344	13.7%
75+	850	1927	1077	127%

Source: U.S. Census.

TABLE C-2.1: COMPARATIVE AGE DATA 1970 AND 2000

Age	1970	% Population	2000	% Population
0-44	11,726	62%	9,622	53%
45-75+	7,087	38%	8,612	47%
TOTAL	18,813	100%	18,234	100%

TABLE C-3: RACIAL AND ETHNIC CHARACTERISTICS

Race	Number	% Population
White	17,909	98.2%
Black or African American	30	0.2%
American Indian or Alaska Native	22	0.1%
Asian	97	0.5%
Native Hawaiian or Pacific Islander	4	--
Some Other Race	28	0.2%
Two or More Races	144	0.8%

Source: U.S. Census.

3. Population Trends Compared to Other Municipalities Within the Proposed Taunton River Wild & Scenic River Corridor

Somerset is very uncharacteristic of the ten municipalities comprising the proposed Taunton River Wild & Scenic River Corridor. With the exception of Fall River, which has lost population (approximately 5%), the remaining eight communities have experienced growth rates between 28% (Taunton) and 184% (Berkley) since 1970. Bridgewater (95%), Raynham (75%) and Freetown (98%) have also experienced exceptional growth. The primary factor associated with this growth is the availability of land. While Fall River and Somerset were building-out along the coastal areas of the lower Taunton River at the dawn of the twentieth century, with the exception of Taunton, the other Wild & Scenic River communities remained relatively rural for decades.

With virtually all of east Fall River protected under the auspices of the Bioreserve, and Somerset at a premium for developable land, neither should experience the growth of their riverfront neighbors in the coming years.

D. ECONOMIC CHARACTERISTICS

1. Employment and Wages in Somerset

Since the completion of the 1983 Open Space and Recreation Plan, Somerset has remained fairly consistent in terms of numbers employed, employment by industry and number of employers/ establishments. During the same period of time, payroll and wages have approximately doubled, reflecting higher minimum wage and pay scales as well as the cost of living and costs of doing business (benefits, etc.).

The most significant changes in employment have occurred in construction, which peaked during the late 1980's building boom (220 in 1986) and bottomed out in 1992 (76 during the recession), but has made a moderate recovery during the recent building cycle (104 during 2001). Still, employment within the construction field is less than 50% of its 1986 peak.

The manufacturing employment cycle also peaked during the late 1980's building boom (436 employed in 1988) and, like construction, bottomed during the recession in 1992 (139 employed). Manufacturing has more recently been holding

**Commonwealth of Massachusetts
Division of Employment and Training**

Somerset

Employment and Wages in Somerset

				EMPLOYMENT								
Year	Total Annual Payroll	Avg Annual Wage	Establishments	Total	Agriculture Forestry Fishing	Govern -	Construction	Manufacturing	TCPU	Trade	FIRE	Service
1985	58551602	15001	286	3,903	conf	610	169	359	490	1,444	228	528
1986	66727797	15819	300	4,218	conf	596	220	343	498	1,659	248	583
1987	71807398	17067	321	4,207	conf	570	212	400	521	1,576	257	638
1988	80668102	18557	332	4,347	13	579	191	436	587	1,616	251	652
1989	89834730	20160	329	4,456	17	572	162	229	609	1,959	266	642
1990	83059729	21146	331	3,928	11	550	112	165	627	1,526	265	672
1991	78361752	21242	301	3,689	conf	551	93	150	600	1,461	219	605
1992	82427366	22460	285	3,670	12	559	76	139	574	1,450	228	632
1993	86088240	22667	294	3,798	13	557	89	145	590	1,462	250	692
1994	88280026	23281	308	3,792	22	559	100	161	537	1,460	263	690
1995	93870308	23995	326	3,912	25	587	134	202	518	1,446	243	757
1996	99693182	24756	326	4,027	24	638	104	202	506	1,542	238	773
1997	105384827	25874	308	4,073	21	599	104	238	conf	1,525	255	830
1998	116269103	28393	322	4,095	24	609	100	300	485	1,521	266	790
1999	109502267	26865	337	4,076	25	618	83	322	393	1,548	313	774
2000	121156690	28675	331	4212	29	618	93	339	381	1607	287	858
2001	123601080	29834	331	4143	34	642	104	312	383	1522	272	874

TCPU = Transportation, Communication and Public Utilities

FIRE = Finance, Insurance and Real Estate

conf = data suppressed due to confidentiality

Note: Changes in industry definitions occurred in 1988, so data prior to that year are not strictly comparable to the more recent data.

Commonwealth of Massachusetts, Division of Employment and Training (ES-202 Series)

**Commonwealth of Massachusetts
Division of Employment and Training**

Somerset

Laborforce, Employment and Unemployment in Somerset

Year	Laborforce	Employment	Unemployment	Unemployment Rate	Statewide Rate
1983	10,288	9,481	808	47.9%	6.9%
1984	10,327	9,719	609	5.9%	4.8%
1985	10,148	9,609	539	5.3%	3.9%
1986	9,968	9,432	536	5.4%	3.8%
1987	9,966	9,510	456	4.6%	3.2%
1988	9,659	9,298	361	3.7%	3.3%
1989	9,747	9,293	454	4.7%	4.0%
1990	9,693	8,974	719	7.4%	6.0%
1991	9,512	8,464	1,048	11.0%	9.1%
1992	9,484	8,504	980	10.3%	8.6%
1993	9,664	8,721	943	9.8%	6.9%
1994	9,516	8,774	742	7.8%	6.0%
1995	9,572	8,923	649	6.8%	5.4%
1996	9,531	8,916	615	6.5%	4.3%
1997	9,646	9,123	523	5.4%	4.0%
1998	9,561	9,184	377	3.9%	3.3%
1999	9,533	9,189	344	3.6%	3.2%
2000	9,332	9,058	274	2.9%	2.6%
2001	9,418	9,078	340	3.6%	3.7%

Note: Employment within this data series is measured by place of residence, rather than by place of employment as in the ES-202 Series.

steady between 300 and 322 over the four year period, 1998-2001.

2. Unemployment

With a fluctuation of only about 800 over twenty years, the number of people in the labor force in Somerset has been relatively consistent. Again, as with much of the previously reported economic and employment data, the years 1991 and 1992 were peak years for unemployment (between 10-11%) due to the recession. For several years following, Somerset exceeded the state unemployment average, even if slightly, during a period of moderate recovery. Since 2001, Somerset's unemployment rate has been lower than the state average (even as statewide unemployment has risen). Somerset's unemployment rate for 2003 is 5.1% compared to the state average of 5.8% (according to soon-to-be-released Mass. Division of Career Centers and Division of Unemployment Assistance Data).

3. Employment Trends Within the Taunton River Wild & Scenic River Corridor Communities

All of the communities within the proposed Wild & Scenic River Corridor have experienced, to various degrees, trends similar to those in Somerset. The exceptions have been the Towns of Middleborough, Raynham and Bridgewater, and the City of Taunton. The towns have added over 2,500 jobs while Taunton has added over 6,000. What these four communities have in common are large industrially zoned areas and the availability of land; infrastructure; growing populations; proximity to major transportation routes and rail, and; in the case of Raynham, an explosive amount of commercial growth along the Route 44 corridor (which runs parallel to the Taunton River). Likewise, the City of Taunton has one of the healthiest and most rapidly growing industrial parks in the Commonwealth.

E. GROWTH AND DEVELOPMENT PATTERNS

1. Patterns and Trends

Land use trends in Somerset reflect the steady growth and urbanization of the town. Since the last Open Space Plan was completed in 1983, the town has lost approximately: 106 acres of cropland (-27%); 7 acres of pastureland (-14%); 16 acres of open land (-3%); and 46.6 acres of urban open land

(-23%). This represents a net loss of 175.6 acres of agricultural/open land.

Over the same time frame, Somerset has increased its residential acreage by 205.4 acres (20%) and its commercial acreage by 26 acres (14%).

2. Infrastructure

a. Transportation

The main points of entry to the Town of Somerset are along Route 6 and Interstate 195. Traffic from the Boston metropolitan area typically follows 1-93 to Route 24 in Fall River, entering along Route 6 across the Brightman Street Bridge. Vehicular access via 1-195 enters Somerset at a local interchange at Route 103 in the Lee's River area. Entrance from the Town of Dighton to the north is along Route 138.

Somerset is served by the airport and port facilities of New Bedford. In addition, Interstate Route 195 provides access to the airport, port and intermodal facilities in nearby Providence and Warwick, Rhode Island.

There is no commuter rail service to the Greater Fall River Area at this time. Commuter service between Fall River and Boston and Logan Airport is provided by the Bonanza Bus Company. Somerset is also a member of the Southeast Regional Transit Authority (SRTA), which provides fixed route service between Fall River and Somerset. SRTA and the Council on Aging also provide paratransit services for the elderly and disabled.

b. Water

Somerset's water supply is dependent upon a surface water reservoir and a gravel packed well and an intake facility on the Segregansett River in Dighton. The Water Treatment Plant and reservoir are located off of Route 138 and Whetstone Hill near Labor in Vain Brook. The treatment plant supplies approximately 6,700 units.

Last year (2003), the Water Treatment Plant pumped 977,852,000 gallons of water. The town's #2 well

provided an additional 100,000,000 gallons. The Water Department supplied an average of 2,953 mgd to the town. During the year, the Segregansett Intake Station was operated for 75 days and provided approximately 750,000,000 gallons of water to the Somerset Reservoir.

c. Sewer

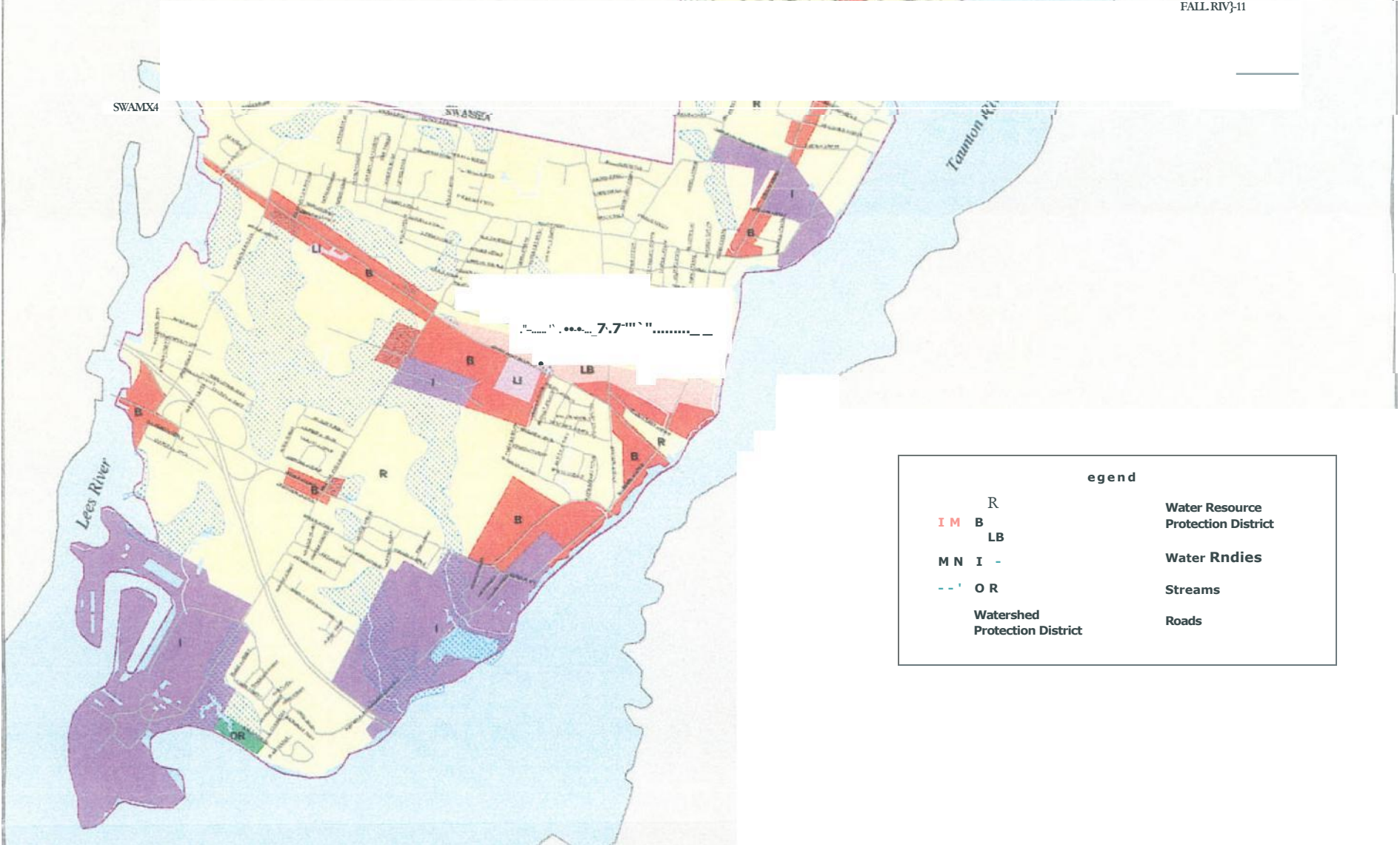
The Somerset Water Pollution Control Facility is located on the coast, along the Taunton River, midway between the present Brightman Street Bridge and the Braga Bridge. The treatment facility has a design capacity of 4.2 million gallons per day (mgd) average. Last year (2003) the facility averaged about 3.4 mgd, but also experienced periods of high increased flows through the facility. These problems are attributed to erroneous inflow and infiltration due to stormwater runoff, illegal sump pumps or illegal roof drain tie-ins. The treatment facility currently provides 6,141 sewer services.

3. Long-Term Development Patterns

a. Zoning

Somerset employs residential, business, limited business, light industrial, open recreational and industrial zones at a 20,000 square foot minimum. The town also has special protection overlay districts for watershed protection, water resources protection and flood plains.

The Watershed Protection District was established in September of 1978 to provide protection to the drainage area of the surface water reservoir in the northwest portion of town. The Flood Plain District, adopted in June of 1985, covers all special flood hazard areas on the Somerset Flood Insurance Rate Map (FIRM). The Water Resources Protection District was adopted in April of 1986 and covers waterways and related wetland resource areas. Where these protective zoning tools were adopted during periods of significant (late 1970's) and moderate (late 1980's) growth, shows that planners and town officials were considering the impacts of longterm growth on the town's natural resources. How to gauge the impact of growth on recreational needs can be more difficult to predict. It is not just the influx of new residents, but the shifting age of the existing population,



Zoning Map

L

that will create increased demands for specific recreation programs.

In terms of conservation and open space holdings and programs, one solution to the potential impacts of development stands out...the ability of the town to negotiate with private landowners to "knit together" existing publicly owned parcels. Somerset is constrained by its geography, being relatively long and narrow. There are also limited opportunities to secure the remaining large open space parcels in town. The pattern of open space and conservation holdings in town occurs in somewhat linear patterns on a map. The potential to use tools such as conservation restrictions, deeded easements or partner with other conservation organizations to acquire rights-of-way, does exist, and should be explored in the future. The town can also improve its existing planning rules and regulations and encourage set-asides, conservation development and possibly develop a Transfer of Development Rights (TDR) program to help meet open space goals and objectives.

b. Build-Out Scenario

Existing zoning and planning regulations, coupled with the town's current annual growth rate and amount of available land, could permit a considerable increase in the population of Somerset at full build-out.

SRPEDD, under the auspices of a contract with the Executive Office of Environmental Affairs, prepared an updated build-out study for Somerset in the spring of 2000. The study showed that the northern and western areas of town were particularly susceptible to growth. Building constraints such as wetlands, slopes, soils and waterways will have an impact on growth in these areas, but most likely not enough of an impact to preserve the remaining more rural and agricultural landscapes intact.

Buildout Projections

Population	1990	17,655
	1998	17,996
	Buildout	22,281
Households	1990	6,410
	1998	7,651
	Buildout	9,269
Watershed(s)	Taunton	
Students	1990	2,587
	1999/2000	2,587
	Buildout	3,584
Water Use (million gallons per year)	1998	2,905,000
	Buildout	9,269

Resources and Buildout Impacts

(Data from the Executive Office of Environmental Affairs.)

Additional Developable Land Area (sq.ft.)	50,398,920
Additional Developable Area (acres)	1,157
Additional Residential Units	1,618
Additional Residents	4,285
Additional Commercial/Industrial Buildable Floor Area (sq.ft.)	5,090,103
Additional School Children at Buildout	833
Additional Municipal Solid Waste (tons/yr)	2,198
--Additional Non-Recyclable Solid Waste (tons)	1,563
--Additional Recyclable Solid Waste (tons)	635
Additional Roadway at Buildout (miles)	17
Additional Water Demand at Buildout (gallons/day)	703,142
--Additional Residential Water Demand at Buildout	321,384
--Additional Commercial and Industrial Water Demand at Buildout	381,758

IV ENVIRONMENTAL INVENTORY AND ANALYSIS

A. TOPOGRAPHY AND GEOLOGY

The southern half of Somerset is a peninsula with the terrain of the land rising gradually on three sides from the shoreline up to an elevation of approximately 180 feet above mean sea level. This elevation occurs in the area near Hot and Cold Lane, in the vicinity of the Swansea town line. In the northern section of town the land slopes gradually westward to elevations of from 120 to 140 feet above mean sea level. Stony soils prevail in the western part of town, while good textured, well watered loam prevails in the eastern part.

1. Climate

The normal temperature ranges from 29.7 degrees Fahrenheit in January to 72.6 degrees Fahrenheit in July. The average annual precipitation of 45.3 inches is evenly distributed throughout the year.

2. Soils Profile

The following is a general profile of the predominant soils associations found within the Town of Somerset.

Paxton-Woodbridge-Whitman Association — This association consists of upland hills and ridges dissected by many small drainage ways. Stones and boulders cover more than three percent of the surface of many areas. The association is composed of about 25 percent Paxton soils, 15 percent Woodbridge soils, ten percent Whitman soils and 50 percent minor soils. This association is found in the northern part of Somerset and covers approximately 25 percent of the town's land area.

The Paxton, Woodbridge and Whitman soils range from nearly level to moderately steep. They are generally well drained but also have a firm substratum at depths ranging from 15 to 27 inches that restricts the movement of water and the development of roots.

The minor soils include Freetown (very poorly drained, consisting of organic material), Merrimac (excessively drained, gravely and sandy substratum) and Ridgebury (poorly drained, very firm substratum).

Urban Land Association — This association consists of areas that have been altered or obscured by structures and development activities with the result that the identification of soils is not practical. Slopes range from zero to 25 percent. These soils are 80 percent urbanized and 20 percent minor soils. The minor soils consist of Paxton, Woodbridge and Udorthents (areas formed by cutting and filling, usually during the construction of urban projects). This association is found in the central areas of Somerset and accounts for 39 percent of the town's land area.



Land U.baNzad a IV- eyn4n 1999
0.0.1 Source
MaalGIS
Expraama Mica W Enprarimanta- Alfias
IfaLLeaclaat hojawv/Py DepLaiieftl
Plodts.ad by
SRFEDO
GS Gam,. Sar,ca Cemor
The: latalati of frallag bouhdaPea VOW) en on rede
are intendeed ig plano: 0 purpeals awry I ras maps.
eel Ira pad. ter enpomanip, legal a, survey puma..



June 2002

05

Town of Somerset



Geological Characteristics Map

Newport-Urban Land-Udorthents — The association is composed of about 25 percent Newport soils, 25 percent urbanized areas, 10 percent cut and fill, and 40 percent minor soils. The association covers approximately 35 percent of Somerset and is located in the southern part of town, primarily below Route 6. In addition to the areas of Urban Land and Udorthents, this association consists of areas of upland hills and ridges.

The Newport soils, while deep and well drained, also have a very firm substratum at approximately 28 inches that restricts the movement of water and the development of roots. This is the main limitation on development in this area. The minor soils in this association are Ridgebury (very poorly drained, very firm substratum), Pittstown (moderately well drained, very firm substratum), Windsor (excessively drained).

Important Agricultural Soils in Somerset

Capability Class — The Soil Conservation Service has developed a concept called capability classification to assess the potential of soils for agricultural purposes. There are eight capability classes. Prime farmland is generally composed of class I and II soils. Class I soils have only slight limitations for agricultural use. Class II soils have moderate limitations that reduce the choice of plants or that require special conservation practices.

Farmland of statewide or local importance consists of Class III soils. Under some circumstances lower classes of soil may also be considered farmland of statewide importance. Class III soils have severe limitations that reduce the choice of plants or that require special conservation practices or both. Lower classes of soils are generally not suitable for agricultural purposes except in special circumstances. Swansea coarse muck (class IV) is suitable for raising cranberries and Newport very stony loam, 3 to 15 percent slope (class VI), which is not suitable for row crops because of the presence of stones and boulders, can be used for orchards or grazing land.

Within each class are subclasses which more specifically define the soils limitations. They are designated by adding a small letter, e, w or s. The letter e shows that the main limitation is risk of erosion unless close-growing plant cover is maintained; w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty or stony.

The undeveloped areas of Somerset contain fairly extensive areas of prime farmland and farmland of statewide importance. While class I soils are virtually non-existent there are large areas of class II soils. The

predominant prime agricultural soils are Newport loam, 3 to 8 percent slope (capability class IIe), Paxton fine sandy loam, 3 to 8 percent slope (IIe), and Pittstown loam, 0 to 8 percent slope (IIw). In the southern part of town there are large areas of Newport very stony loam, 3 to 15 percent (VI s) and Pittstown very stony loam, 0 to 8 percent slope (VI s) that are classed as farmland of statewide or local importance.

The Soil Conservation Services has developed estimates of the annual yields that can be expected from the prime agricultural soils when they are under a high level of management. The estimated yields range from 3.5 to 4.5 tons per acre for alfalfa hay, grass-legume hay and grass hay and from 20 to 24 tons per acre for corn silage. If the management effort is decreased the expected yield would also decrease.

<u>AGRICULTURAL SOILS IN SOMERSET</u>		
<u>Soil Symbol</u>	<u>Name</u>	<u>Capability Class</u>
AgB	Agawam fine sandy loam, 3% to 8%	IIe
DeA	slope Deerfield loamy sand, 0% to 5%	IIIw
GhB	slope Gloucester-Hinckley complex, very stony undulating	VI s
HgB	Hinckley gravelly fine sandy loam, 3% to 8% slope	III s
MeB	Merrimac fine sandy loam, 3% to 8%	II s
NeB	slope Newport loam, 3% to 8% slope	IIe
NfC	Newport very stony loam, 3% to 15%	VI s
PfA	slope Paxton fine sandy loam, 0% to 3%	
PbB	slope Paxton fine sandy loam, 3% to 8%	IIe
PfC	slope Paxton fine sandy loam, 8% to 15%	IIIe
PfB	slope Pittstown loam, 0% to 8% slope	IIw
PvB	Pittstown very stony loam, 0% to 8% slope	VI s
SdA	Sudbury fine sandy loam, 0% to 3% slope	IIw
WnA	Windsor loamy sand, 0% to 3% slope	III s
WrA	Woodbridge fine sandy loam, 0% to 3% slope	IIw
WrB	Woodbridge fine sandy loam, 3% to 8% slope	IIw

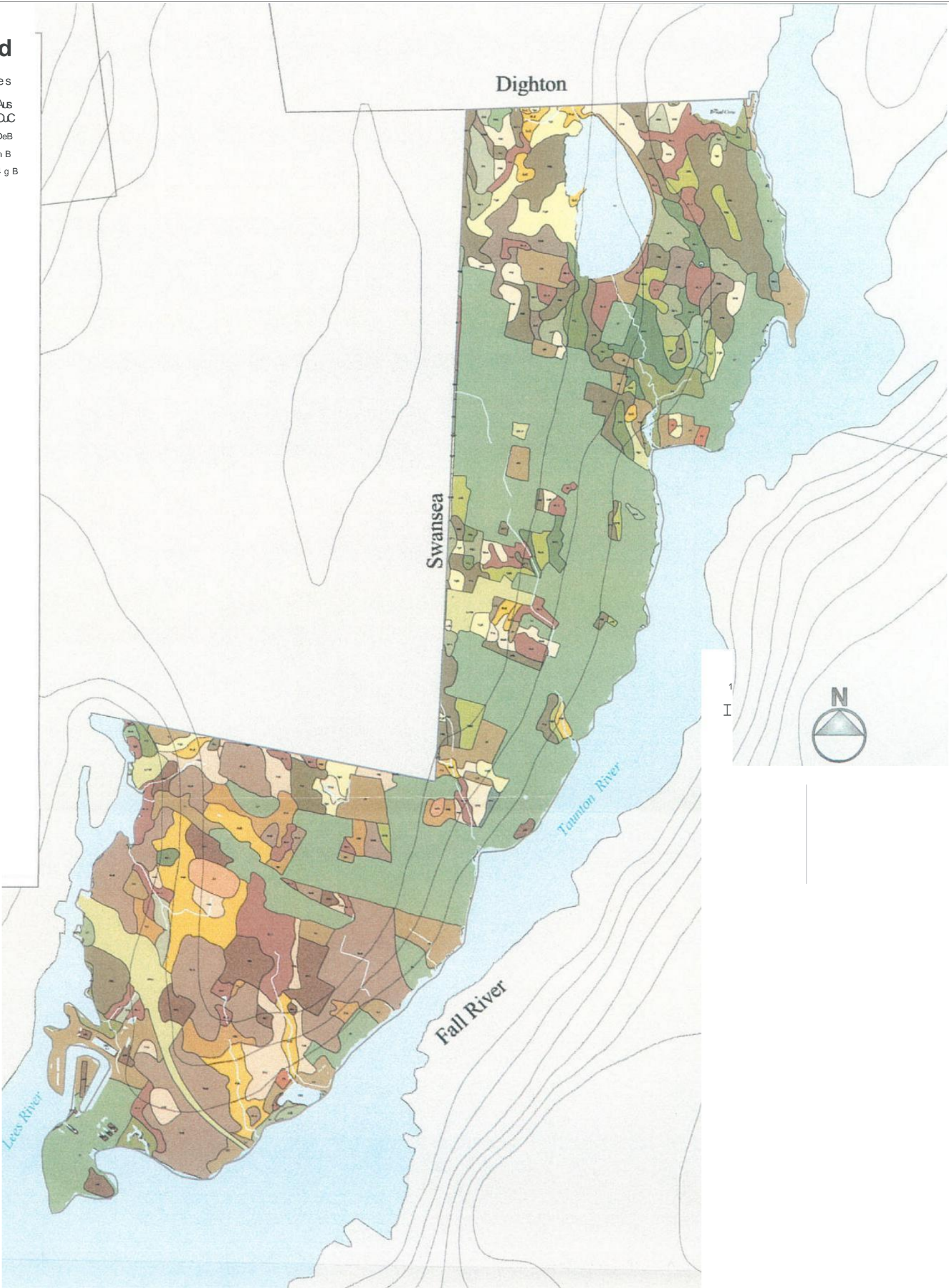
B. LANDSCAPE CHARACTER, VEGETATION and WETLANDS

Somerset's gently rolling landscape has become largely urbanized since the end of World War II. Over its 5,051 acres of land area, Somerset retains 814 acres of forestland, 97 acres of salt marsh and 23 acres of inland wetland areas. Over 90% of the forested land is made up of hardwoods, including white oak and red maple. The remaining forested land is made up of a mix of hardwood and softwood, including Atlantic white cedar and Eastern white pine.

Legend

Soil Types

- Als
- QC
- DeB
- C) Ou Gh B
- 4 g B



- Hg
- C
- WEI
- NeB
- NfC

CD P0
PfA
411111) PfB

PfC
C P9n
C I D P r g e

PgD
C : =) P h B
C D P h C

PhD
4.) P E

(E D P L B
PvB

RrlA
41111, RdB

ReA
(1) R e B

Sc
C Scrk

C D S W

Ud-Ur
(_____) Ur

w
411110W.
QEDWS

4111) WcA
41IP WhA

4WD W n A
O W r i C

C = D W r A
Wre

Ws3
WIB

3 Meter Conours



0.5 0.5 1 Miles

Soils Map

Soil Map Unit Legend for the Soil Survey of Bristol County, Southern Part

maitot coutri
MASSACHUSETTS
SOIL SURVEY



Note the published alpha legend are the map unit symbols used in the published survey, the State-wide numeric legend are the map units used for the digital soil maps when completed.

State-wide Numeric Legend	Published Survey Map Unit	Soil Map Unit Name	Hydric	Farmland Class
			Soil	
275A	AgA	Agawam fine sandy loam, 0 to 3 percent slopes	No	Prime
275B	A0 B ____,...._	Agawam fine sandy loam, 3 to 8 percent slopes	No	Prime
610	Be	Beaches		
705B	CtB	Charlton-Paxton fine sandy loamy, rocky, 3 to 8 percent slopes	No	Prime
705C	CtC	Charlton-Paxton fine sandy loamy, rocky, 8 to 15 percent slopes	No	
706C	CuC	Charlton-Rock outcrop-Paxton complex, 3 to 15 percent slopes	No	
706E	CUE	Charlton-Rock outcrop-Paxton complex, 15 to 35 percent slopes	No	
256A	DeA	Deerfield loamy sand, 0 to 5 percent slopes	No	
652	Du	Dumps	No	
52A	Fm	Freetown muck	Yes	
53A	Fp	Freetown muck, ponded	Yes	
449B	GcB	Gloucester-Hinckley complex, undulating	No	
446B	GhB	Gloucester-Hinckley complex, very stony,	No	

Soil Map Unit Legend for the Soil Survey of Bristol County South

		undulating		
446C	GhC	Gloucester-Hinckley complex, very stony, rolling	No	
242A	tigA	Hinckley gravelly fine sandy loam, 0 to 3 percent slopes	No	
242B	1-10	Hinckley gravelly fine sandy loam, 3 to 8 percent slopes	No	
242C	HgC	Hinckley gravelly fine sandy loam, 8 to 15 percent slopes	No	
242D	1-1g1)	Hinckley gravelly fine sandy loam, 15 to 25 percent slopes	No	
254A	MeA	Merrimac fine sandy loam, 0 to 3 percent slopes	No	Prime
254B	MeB	Merrimac fine sandy loam, 3 to 8 percent slopes	No	Prime
325B	NeB	Newport loam, 3 to 8 percent slopes	No	Prime
326C	<u>Nfc</u>	Newport very stony loam, 3 to 15 percent slopes	No	
276A	NgA	Ninigret fine sandy loam, 0 to 3 percent slopes	No	Prime
61A	Pa	Pawcatuck and Ipswich peats	Yes	
305A	PfA	Paxton fine sandy loam, 0 to 3 percent slopes	No	Prime
305B	PfB.	Paxton fine sandy loam, 3 to 8 percent slopes	No	Prime
305C	PfC	Paxton fine sandy loam, 8 to 15 percent slopes	No	
306B	PgB	Paxton very stony fine sandy loam, 0 to 8 percent slopes	No	
306C	P aC	Paxton very stony fine sandy loam, 8 to 15 percent slopes	No	
306D	<u>PgD</u>	Paxton very stony fine sandy loam, 15 to 25 percent slopes	No	
307B	<u>PhB</u>	Paxton extremely stony fine sandy loam, 0 to 8 percent slopes	No	
307C	PlIC	Paxton extremely stony fine sandy loam, 8 to 15 percent slopes	No	
307D	PhD	Paxton extremely stony fine sandy loam, 15 to 25 percent slopes	No	
37A	PoA	Pipestone loamy sand, 0 to 3 percent slopes	Yes	
601	Pr	Pits, quarry	No	

Soil Map Unit Legend for the Soil Survey of Bristol County South

617	Ps	Pits-Udorthents complex, gravelly	No	
345B	PtB	Pittstown loam, 0 to 8 percent slopes	No	Prime
346B	PvB	Pittstown very stony loam, 0 to 8 percent slopes	No	
70A	RdA	Ridgebury fine sandy loam, 0 to 3 percent slopes	Yes	
70B	RdB	Ridgebury fine sandy loam, 3 to 8 percent slopes	Yes	
71A	ReA	Ridgebury extremely stony fine sandy loam, 0 to 3 percent slopes	Yes	
71B	ReB	Ridgebury extremely stony fine sandy loam, 3 to 8 percent slopes	Yes	
39A	Sc	Scarboro muck	Yes	
260A	SdA	Sudbury fine sandy loam, 0 to 3 percent slopes	No	Prime
260B	SIB	Sudbury fine sandy loam, 3 to 8 percent slopes	No	Prime
60A	Ss	Swansea coarse sand	Yes	Unique
51A	Sw	Swansea muck	Yes	
702	UaD	Udipsamments, hilly	No	
651	Ud	Udorthents, smoothed	No	
602	Ur	Urban land	No	
31A	WaA	Walpole fine sandy loam, 0 to 3 percent slopes	Yes	
32A	WcA	Wareham loamy sand, 0 to 3 percent slopes	Yes	
72A	WgA	Whitman fine sandy loam, 0 to 3 percent slopes	Yes	
73A	WhA	Whitman extremely stony fine sandy loam, 0 to 3 percent slopes	Yes	
255A	WnA	Windsor loamy sand, 0 to 3 percent slopes	No	
255B	WnB	Windsor loamy sand, 3 to 8 percent slopes	No	
255C	WnC	Windsor loamy sand, 8 to 20 percent slopes	No	
310A	WrA	Woodbridge fine sandy loam, 0 to 3 percent slopes	No	Prime
310B	WrB	Woodbridge fine sandy loam, 3 to 8 percent slopes	No	Prime
311B	WsB	Woodbridge very stony fine sandy loam, 0 to 8 percent slopes	No	
312B	WtB	Woodbridge extremely stony fine sandy loam, 0 to 8 percent slopes	No	

Soils with Severe Limitations for Indicated Use

Use Limiting Factor	Dwellings without Basements	Small Commercial Buildings	Local Roads and Streets
sloe (Greater than 15% for dwellings and roads.Greater than 3% for commercial buildings.)	Hinckley-HgD Paxton-PgD, PhD	Charlton/Paxton-CuC Gloucester/Hinckley-GhC Hinckley-HgC, HgD Newport-NfC Paxton-PfC, PgC, PgD, PhC, PhD Windsor-WnC	Hinckley-HgD Paxton-PgD, PhD
Wetness (very poorly drained)	Ridgebury-RdA, RdB, ReA, ReB Swansea-Ss, Sw Wareham-WCA	Ridgebury-RdA, RdB, ReA, ReB Swansea-Ss, Sw. Wareham-WCA	Ridgebury-RdA, RdB, ReA, ReB Swansea-Ss, Sw Wareham-WCA
Ponding (standing water in depressions)	Pawcatuck/Ipswich-Pa Scarboro-Sc Whitman-WgA, WhA	Pawcatuck/Ipswich-Pa Scarboro-Sc Whitman-WgA, WhA	Pawcatuck/ Ipswich-Pa Scarboro-Sc Whitman-WgA, WhA
Frost Action (freeze/thaw problems)			Ridgebury-RdA, RdB, ReA, ReB Scarboro-Sc Swansea-Ss, Sw Whitman-WgA, WhA Woodbridge-WrA, WrB, WsB, WtB
Low Strength (can't support loads)	Pawcatuck/Ipswich-Pa Swansea-Ss, Sw	Pawcatuck/Ipswich-Pa Swansea-Ss, Sw	Pawcatuck/ Ipswich-Pa Swansea-Ss, Sw
Floods	Pawcatuck/Ipswich-Pa	Pawcatuck/Ipswich-Pa	Pawcatuck/ Ipswich-Pa

SOURCE: Soil Survey of Bristol County, MA, Southern Part, USDA, SCS, Table 10
Building Site Development, pp 96-99.

The wetland areas of the town are characterized by red maple, white cedar, sumac, spicebush and alder. Salt marsh vegetation is extremely valuable to the ecology of the Taunton River and Mt. Hope Bay Watersheds. Somerset's 97 acres of salt marsh are comprised of salt meadow cord grass and salt marsh cord grass. This is a limited and threatened resource on the landscape of the bay and has been targeted for preservation and restoration by the Taunton River Wild & Scenic River Study Committee and Save the Bay (RI). Large, contiguous areas of salt marsh are found along Broad Cove with more linear patterns occurring along the eastern coast of the town.

Somerset also has a wonderful scenic drive along its tidal eastern coastline. The drive along Route 138, Riverside Drive, South Street, High Street and Pleasant Street, roughly parallels the Taunton River. This route is highlighted by views of the coastal marsh, shade covered roadways, river scenes and historic homes.

C. WATER RESOURCES

Somerset lies within the Lees River Subwatershed, part of the Mt. Hope Bay Watershed, to the west, and, the Lower Taunton River Watershed, part of the Taunton River Watershed, to the east. Approximately 83% (4,208 acres) of Somerset's land area is located within the Lower Taunton River Watershed.

Inland waterways tend to be narrow and low to moderate flow (such as Buffinton Brook, Labor in Vain Brook), draining the town to the larger, tidal, Taunton River. Wetlands and marsh border these streams, as do the significant inland flood plain areas of the town.

The Taunton River coastline is home to Pierce Beach and Waterfront Park, two heavily used recreation areas in Somerset. These coastal amenities provide fishing, swimming and boating opportunities. There are several areas along the coast that provide excellent passive recreational and scenic viewing opportunities, such as Broad Cove, Anchor Drive and Mt. Hope Bay Vista Park.

The only large water body within the town is the Somerset Reservoir. This surface water impoundment lies off of Whetstone Hill Road, Elm Street and North Street. The reservoir has a capacity of 1.4 billion gallons and a watershed of approximately 1.8 square miles, almost fifty percent of which is located in the Town of Dighton, to the north.

D. VEGETATION

As previously mentioned, Somerset's mix of coastal and inland wetland habitat and well drained upland areas supports various types of vegetative communities.

Some of the vegetation common to Somerset includes:

Red maple	Eastern hemlock
Elm	Eastern white pine
Atlantic white cedar	Red oak
Sumac	Maple
Spicebush	Salt meadow cord grass
Alder	Salt marsh cord grass
Black oak	White oak

E. FISH AND WILDLIFE

1. Shellfish

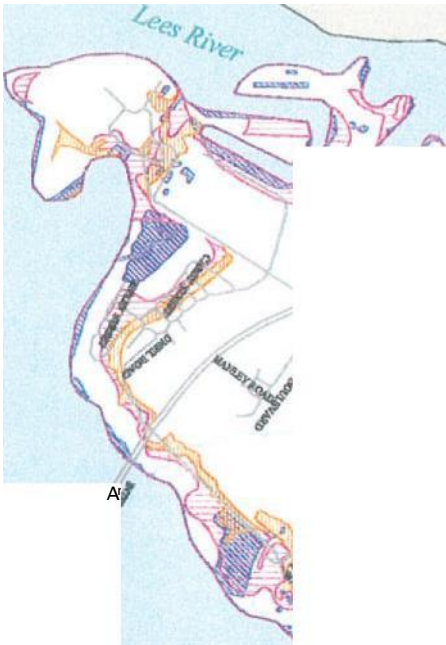
According to a report prepared by the Massachusetts Division of Marine Fisheries in 1906 (Belding), the estuarine waters of the Taunton River produced the finest oysters (*Crassostrea virginica*) in Massachusetts. The river was the mainstay of the Commonwealth's oyster fishery from the mid 1800's until it was closed to protect public health due to pollution in 1907. Prior to its closure, the river yielded approximately 38,000 bushels of oysters a year as well as countless bushels of quahogs (*Mercenaria mercenaria*) and soft shelled clams (*Mya arenaria*). After the 1907 closure, several aquaculture leases were granted in Dighton, Berkley and Freetown to growout oysters. Once the oysters reached legal size, they were relayed to leases in clean waters for depuration.

The Commonwealth also used the Taunton River as an oyster contaminated relay from 1910 to 1985. In 1985, the Massachusetts Division of Marine Fisheries permitted the relay of nearly 12,000 bushels of oysters to other towns for depuration. The Division is presently conducting a sanitary survey of the Taunton River to reassess the potential reclamation of the area for the safe harvest of shellfish. Based on observations during the survey, the oyster population is estimated to be more than 20,000 bushels.

2. Fish

The waters of the Taunton River, Lees River and Mt. Hope Bay, off the coast of Somerset, provide excellent sportfishing for a number of species, including:

Striped bass	White perch
Bluefish	Tautog
Winter flounder	Eel
Squeteague	Alewife



4.014*
AN

li i , , . 4 , , , , L . . . /

4 : , /

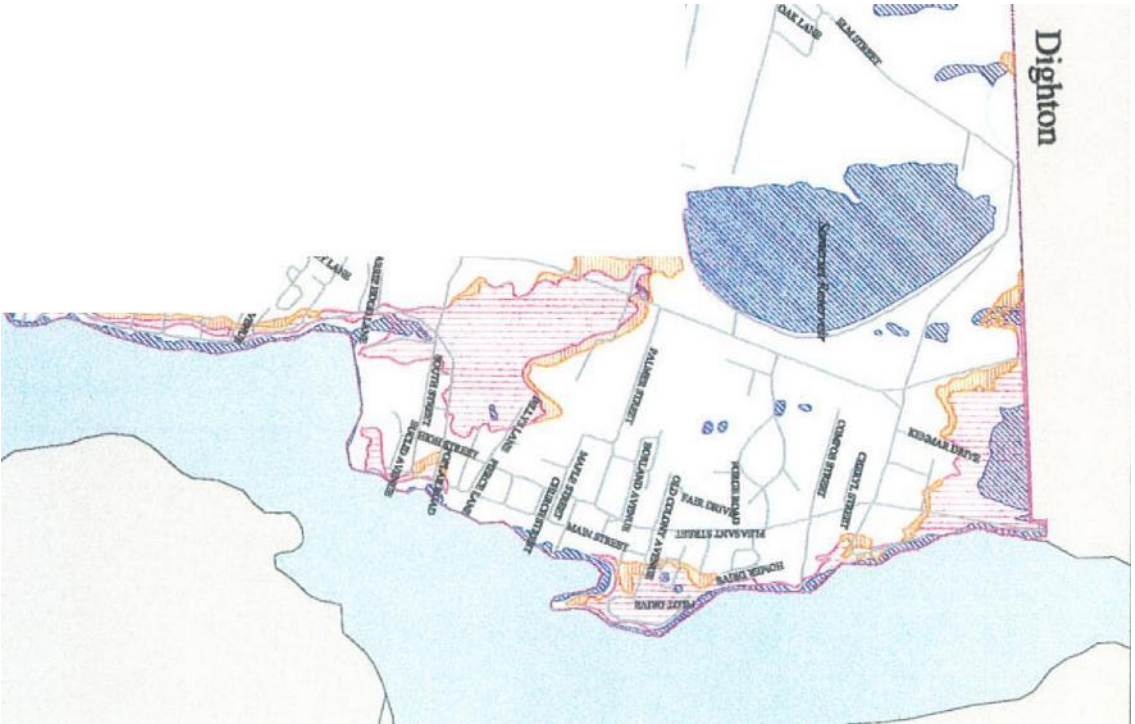
I , ' " ,

/

i l f f i l 4 1 * P i n i

147
Lai
if
I
i !

.i-44,1 414)G24



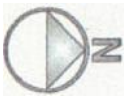
&315112

duw saamosaN Jo Tum

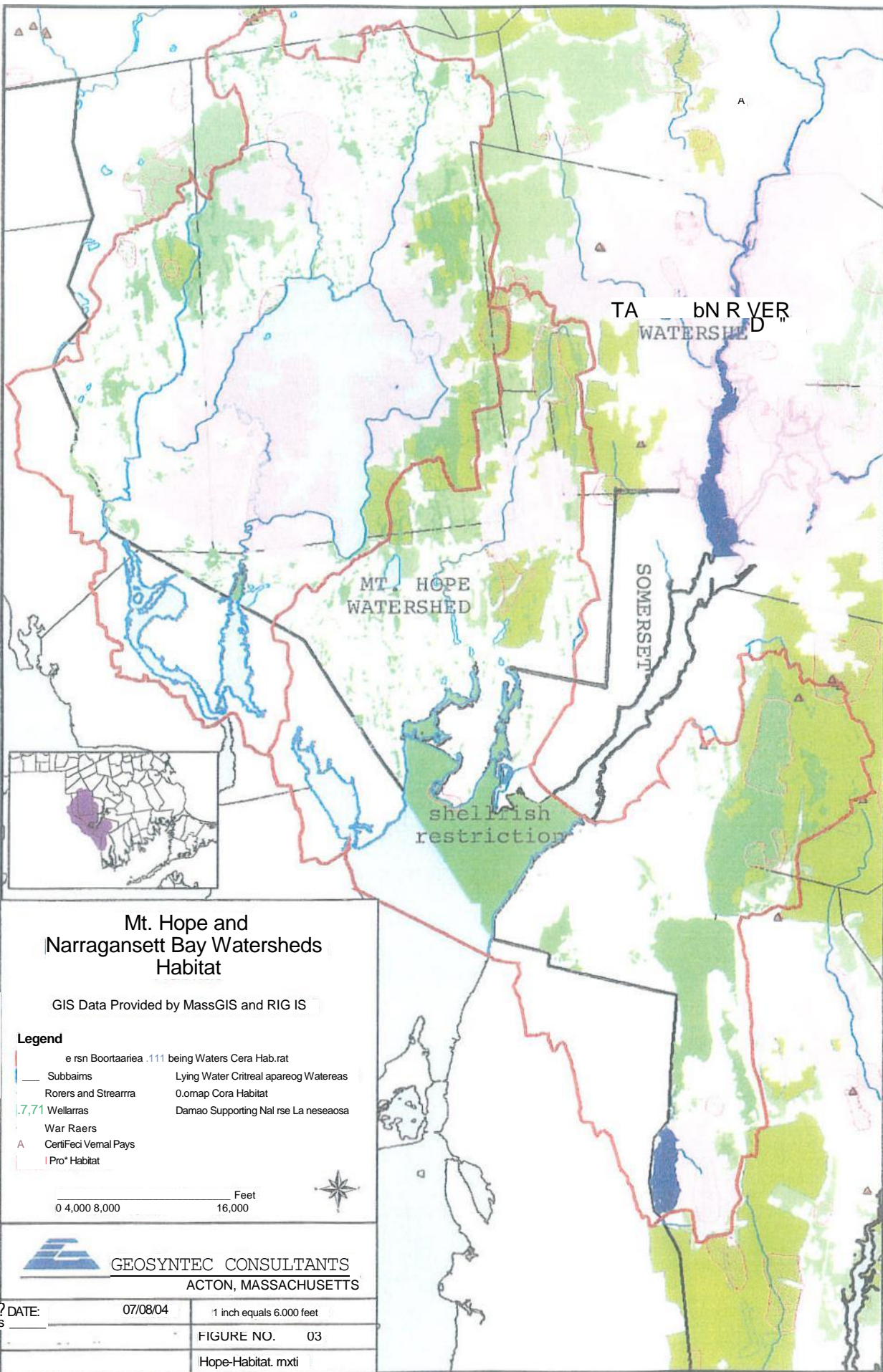


jaslatuos Jo UMO1

/9°w4(wAvet.4



ThysopZia



3. Amphibians and Reptiles

The inland wetlands provide habitat for various reptiles and amphibians common to, or observed in Somerset, including:

American toad	Spotted salamander
Spring peeper	Newt
Bullfrog	Northern leopard frog
Spotted turtle	Wood frog
Eastern garter snake	

4. Mammals

Mammalian species common to Somerset include:

Muskrat	Eastern chipmunk
Mink	Red fox
Striped skunk	Gray fox
Snowshoe hare	Eastern gray squirrel
Opossum	Eastern mole
Woodchuck	House mouse
Raccoon	Red squirrel
Weasel	Short tail shrew
Eastern cottontail	Little brown bat

5. Birds

Some bird species common to Somerset include:

Ruffed grouse	Black capped chickadee
Quail	Monk parakeet
Pheasant	Red tailed hawk
Blue heron	Cardinal
White heron	Cedar waxwing
Canada geese	Red-winged blackbird
Tree swallow	Common grackle
Blue jay	Tree sparrow
Common crow	Northern oriole
Osprey	American goldfinch

6. Rare Species and Significant Natural Communities

The Massachusetts Natural Heritage and Endangered Species Program (NHESP) maintains an atlas of all vertebrate and invertebrate species that are endangered, threatened or are of special concern in the state. The term "Special Concern" implies that these species could easily become threatened in the near future. The NHESP states that Somerset currently

(2004) has only two species of special concern, the Spotted Turtle and the Purple Tiger Beetle. While the Spotted Turtle was only added to the atlas in 2003 (based on a 2001 observance), the Purple Tiger Beetle is a historical record, having last been observed in 1907.

Somerset also contains a small area of "Core Habitat" on the NHESP BioMap. This area in Somerset is located in the northwest corner of the town, near the reservoir, and is part of a larger area that extends predominantly north into Dighton and slightly west into Swansea.

The BioMap identifies those areas of Massachusetts most in need of protection in order to conserve biodiversity for generations to come. Core Habitat consists of the most viable habitat for rare plants, rare animals and natural communities.

Northeastern Somerset, from Broad Cove along the coast of the Taunton River to the Waterfront Park area, contains Critical Supporting Watershed Land, according to the NHESP Living Waters Map. The Taunton River, along this same stretch of Somerset's coastline, contains Core Habitat (that extends north and east over the course of the river).

On the Living Waters Map, Core Habitat is defined as identifying important habitats for rare aquatic plants and animals and exemplary freshwater habitats. Critical Supporting Watershed is the portion of a Core Habitat's watershed with the greatest potential to sustain or degrade Core Habitat ecosystems.

These locations in northeastern Somerset reflect the tidal influence of the bay and the strong freshwater contribution to the estuary by the Taunton River. —

7. Vegetative, Fish and Wildlife Resources Within the Taunton River Wild & Scenic River Corridor

Taken as a whole, the natural resources of the ten communities comprising the Taunton River Wild & Scenic River Corridor Study area are truly outstanding. The diversity of occurrences reflects the freshwater and estuarine mix of the corridor, the remarkably intact quality of the corridor and the vast tidal and non-tidal wetland and edge habitats.

Some of the outstanding attributes of this corridor include:

- Over 154 species of birds including the bald eagle;
- 45 species of fish including the endangered Atlantic sturgeon;
- More than 360 identified plant species, including three which are globally rare;
- Globally rare freshwater tidal marsh within the estuary; --One of the largest and most prolific alewife runs in the Commonwealth.

Somerset, as a community that is a gateway to the Narragansett Bay and a point of entry into the upper reaches of its estuary, is a valuable partner in any planning and preservation to be done on a regional (with the other nine communities) and interstate (with Rhode Island) basis.

F. SCENIC RESOURCES AND UNIQUE ENVIRONMENTS

1. Cultural and Historical Areas

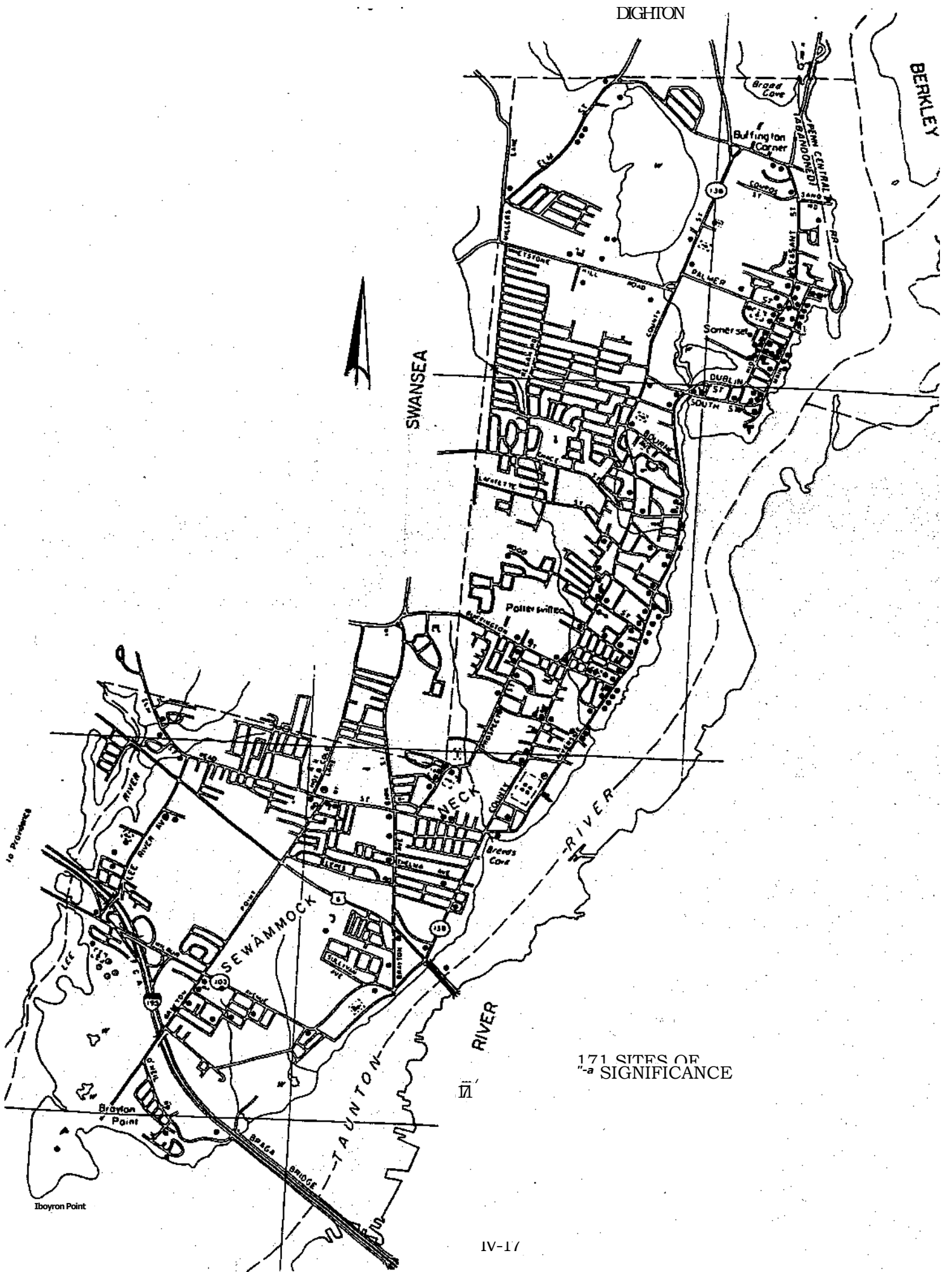
Somerset was among the first group of cities and towns that responded to the Massachusetts Historical Commission's request to adopt legislation enabling cities and towns to appoint local historical commissions (M.G.L. Ch. 40, Sect. 8d, 1963). The Somerset Historical Commission was established in March, 1964.

In 1983, concurrent with the publication of Somerset's last Open Space Plan, the Somerset Historical Commission received a matching grant of \$2,500 from the National Park Service through the Massachusetts Historical Commission to complete an inventory of the town's historic properties. A professional preservation consultant, Katherine Flynn, completed the project in June, 1984. A total of 218 properties were inventoried and forms were submitted to the Massachusetts Historical Commission for inclusion in the Inventory of Historic Assets of the Commonwealth.

The 218 sites identified by the survey include over 100 buildings, some of which date back to the early 1700's. There are also examples of many different architectural styles, including Colonial, Georgian, Victorian, Italianate and Gothic. Included among the important buildings are the Daniel Wilbur house (Georgian Colonial construction, circa 1740), Brayton Homestead farm (Georgian Colonial 1796), Captain John Lee house (Colonial Gambrel 1730), Edward Slade house (Dutch Colonial 1724), Benjamin Bowers house (Georgian 1734), and Hiram Gardner house (Colonial 1742). Unfortunately, only a few of the important non-residential structures are still in existence. The foremost example is the remains of the Mount Hope Iron Works, part of which date back to 1694.

In 1986, the Historical Commission led the development of an historic preservation plan in pursuit of a National Register Multiple Resource Nomination. The report, Historic Somerset: A Plan for the Preservation of Community Character, was completed by SRPEDD in 1986.

The Historical Commission has been working steadily over the years to promote Somerset's attributes through education and awareness activities. The Commission's top priorities recently have been to have the Somerset Village registered as a National Historic District and to gain passage of a local Demolition Delay Bylaw (to give the town a time frame under which it can negotiate alternatives to the loss of historic properties).



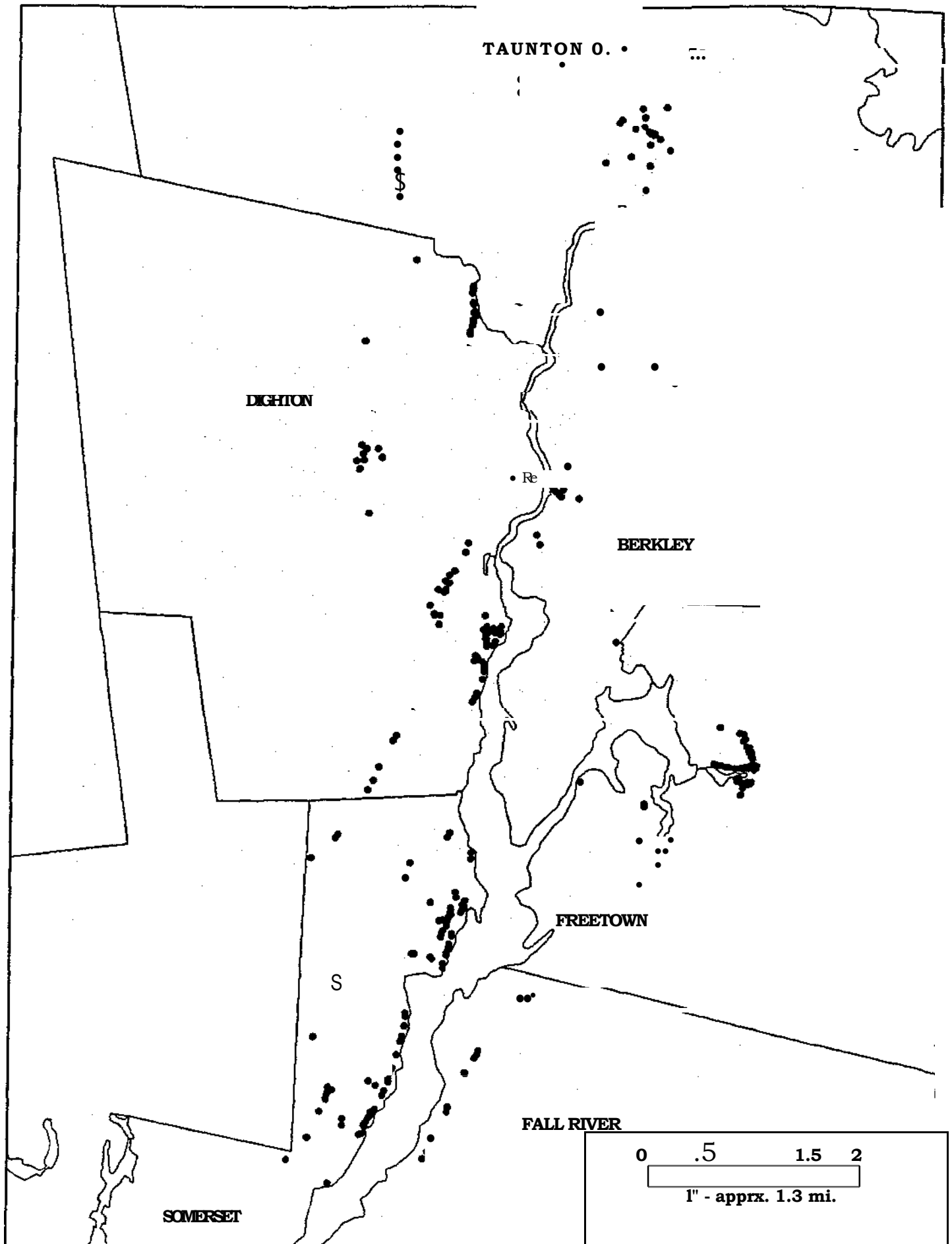
DIGHTON

BERKLEY

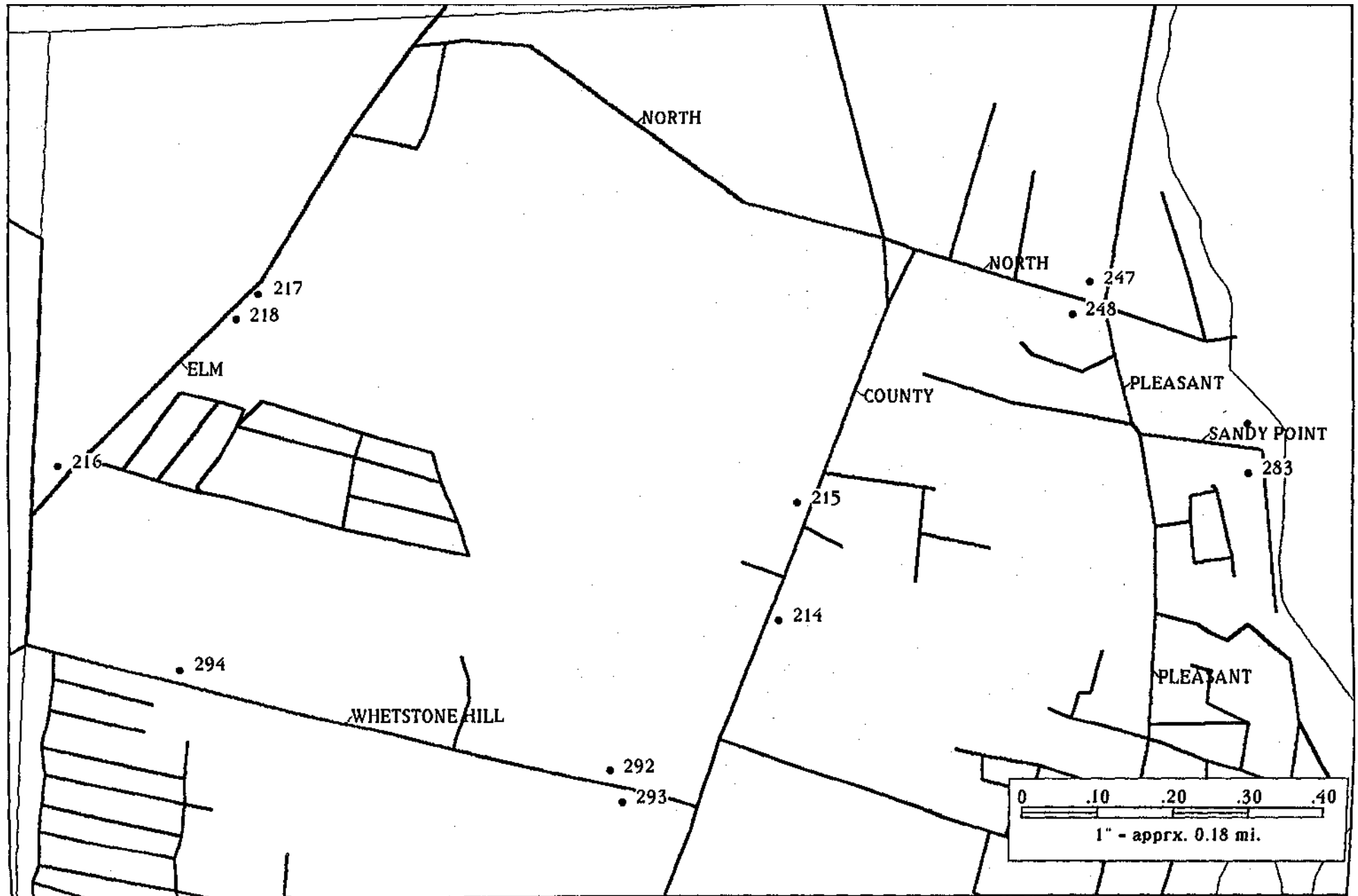
SWANSEA

171 SITES OF
SIGNIFICANCE

HISTORIC SITES WITHIN THE WILD & SCENIC CORRIDOR

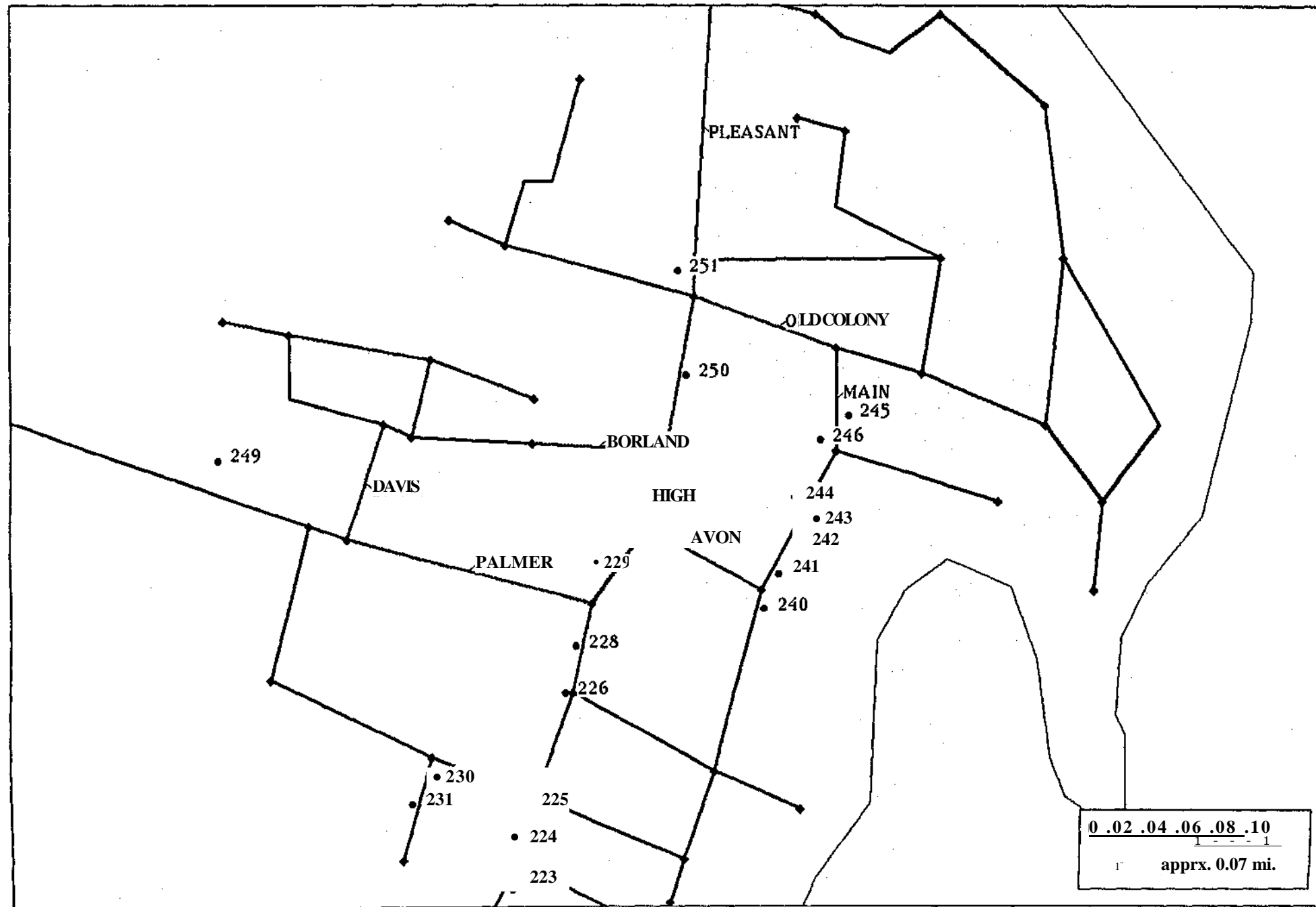


Somerset Historic Sites—Northern Somerset



ID	Site Location	Number	Street	Type
214	St Patrick Cemetary	3340	County	ST
215	Buffington Cemetary	3671	County	ST
216	Stage Coach Inn	209	Elm	ST
217	Hanging Rock Farm	642	Elm	ST
218	Baptist Chapel	692	Elm	ST
247	J. Buffington H.	170	North	ST
248	Streetscape	201	North	ST
282	Streetscape	36	Sandy Pt.	AVE
283	Streetscape	37	Sandy Pt.	AVE
292	Harrington Farm	372	Whetstone	ROAD
293	D. W. William H.	373	Whetstone	ROAD
294	un-named site	826	Whetstone	ROAD

Somerset Historic Sites—High, Main, Palmer & Pleasant Sts.



ID	Site Location	Number	Street	Type
228	J. Carmichael H.	503	High	ST
229	Lydia Manchester H.	543	High	ST
240	Surbinas Marble	550	Main	ST
241	B. Bowers/ Andrews	616	Main	ST
242	N. Davis H.	634	Main	ST
243	George A. Marble	646	Main	ST
244	Simmons H.	665	Main	ST
245	George A. Marble	710	Main	ST
246	Suspiro's Big Block	717	Main	ST
249	R. B. Marble	206	Palmer	ST
250	L. P. Davis H.	66	Pleasant	ST
251	Masonic Temple	145	Pleasant	ST

Somerset Historic Sites—High/Main Sts. & Vicinity

0 .02 .04 .06 .08 .10

1" - apprx. 0.08 mi.

226

• 231, 230



225

224

223

222

• 221

220

219

SCHOOL

239

284

4 1 4 1 1 1 1 1 , 2 3 6

235

• 234

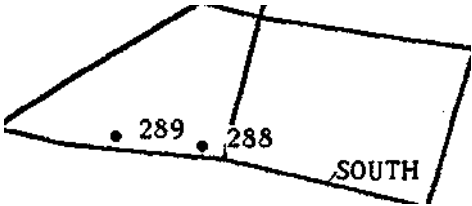
SOUTH

1 2 !

MAIN

• 237

238



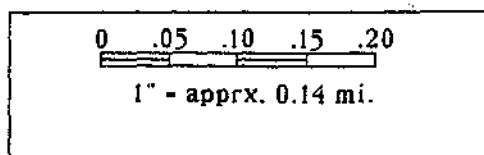
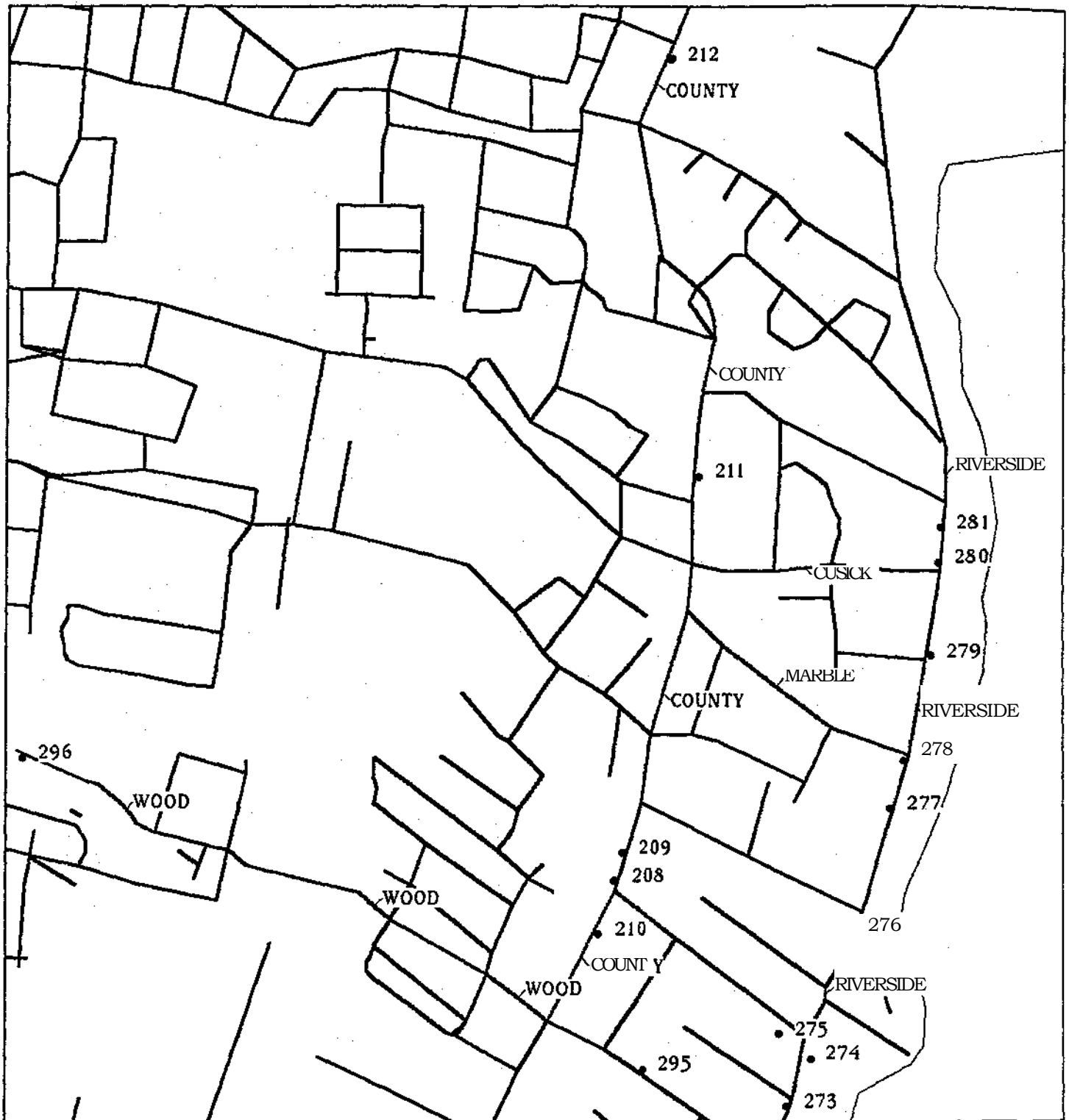
287

• 286

|

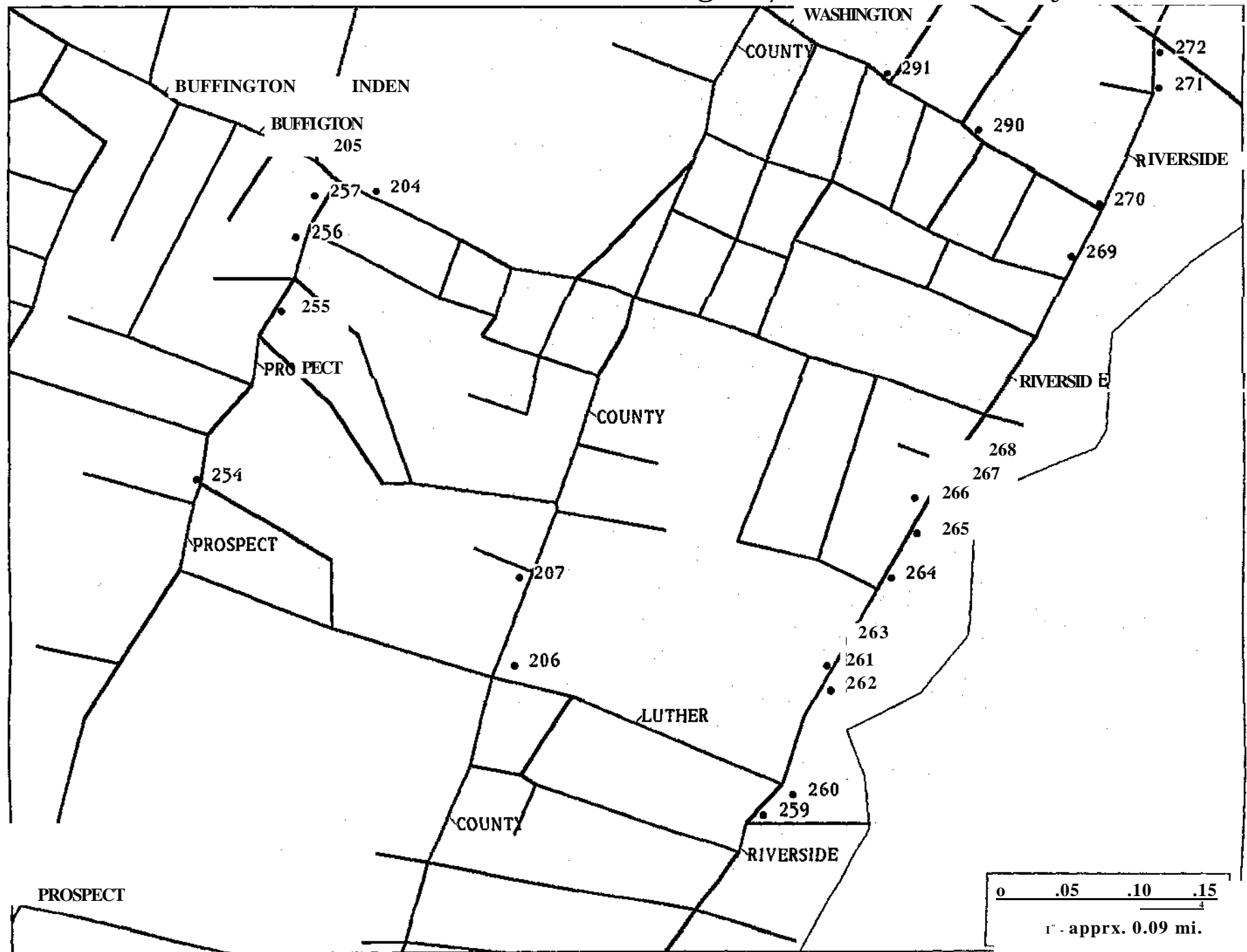
ID	Site Location	Number Street
219	Owen Eagan	235 High
220	Hood Library	265 High
221	Dr. Bowker H.	273 High
222	Bradford Simmons H.	301 High
223	Dr. Shutleff H.	360 High
224	Baptist Church	363 High
225	C. Fields H.	407 High
226	Capt. B. Davis H.	475 High
227	Thrasher/ Tallman H.	490 High
230	J. H. Holland	20 Hood
231	E. J. Holland	49 Hood
232	Old Colony Iron Co.	2 Main
233	Issac Pierce H.	23 Main
234	E. Bowers/ D. Eddy	93 Main
235	Capt. D. Eddy	107 Main
236	E. T. Bowers H.	143 Main
237	A. Bowers H.	159 Main
238	H. Bowers H.	247 Main
239	B. Bowers H.	329 Main
284	F. Staples H.	74 School
285	L. Borden H.	88 School
286	William Bowers H.	117 South
287	M. Leonard H.	134 South
288	St Patricks Church	310 South
289	un-named site	346 South

Somerset Historic Sites—Wood St to Riverside Ave.



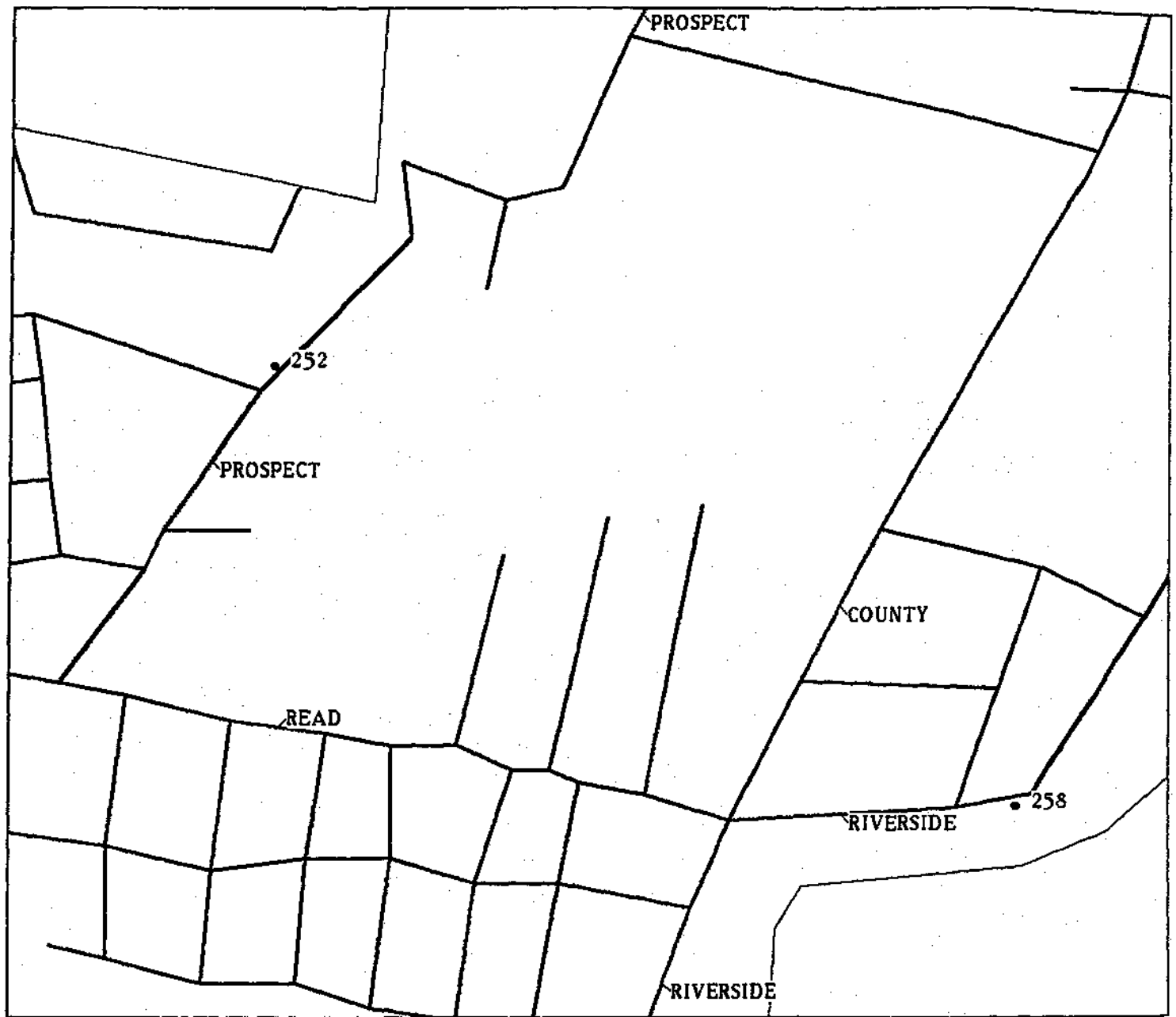
ID	Site Location	Number Street
208	Christian Church	1415 County
209	The Octagon Hous	1457 County
210	Old Town Hall	1480 County
211	Butterworth H.	1980 County
212	Hood Estate	2482 County
213	Hood Estate	2484 County
273	C. Perry	2907 Riverside
274	D. M. Hanson H.	2980 Riverside
275	Brown Homestead	3011 Riverside
276	W. F. Hathaway	3155 Riverside
277	M. L. Printon	3275 Riverside
278	Hiram Gardner H.	3335 Riverside
279	Adam Gifford	3470 Riverside
280	Simmons H.	3555 Riverside
281	Dr. Allen Poole	3611 Riverside
295	R. C. Slade H.	74 Wood
296	Farm	859 Wood

Somerset Historic Sites—Buffington/Riverside Vicinity



ID	Site Location	Number Street
204	Capt. G. Gage	506 Buffington
205	Dr. G. Rice	564 Buffington
206	The Spectator	780 County
207	Medico-Chi Building	833 County
253	Ruth Slade H.	679 Prospect
254	John P. Slade	903 Prospect
255	Hathaway Store/ H.	1042 Prospect
256	Edward Slade H.	1109 Prospect
257	H. Buffington H.	1161 Prospect
259	David Brightman	2196 Riverside
260	J./ S. Luther	2220 Riverside
261	Charles E. Hathaway	2301 Riverside
262	Mary A. Long	2322 Riverside
263	Streetscape	2333 Riverside
264	Thomas Rounds H.	2396 Riverside
265	Brown/ Hindell H.	2430 Riverside
266	John Bourne H.	2457 Riverside
267	A. Brown H.	2468 Riverside
268	Stage Stop	2488 Riverside
269	Capt. Alfred Pratt	2667 Riverside
270	Syran Market	2711 Riverside
271	Warren Sanford	2812 Riverside
272	Samuel Purington	2852 Riverside
290	un-named site	110 Washington
291	un-named site	172 Washington

Somerset Historic Sites—Prospect & Riverside Ave.



0 .02 .04 .06 .08 .10

1" - apprx. 0.08 mi.

ID	Site Location	Number	Street	Type
252	Friend's Meeting	223	Prospect	ST
258	Montaup Electric	1606	Riverside	AVE

The Commission worked with staff from the Massachusetts Historical Commission (MHC) to determine the eligibility of the Village area for the National Register of Historic Places. MHC informed the Commission, after tours of the area and review of data, that the Village area did qualify and that a professional consultant should be engaged to help complete the process.

MHC staff also provided technical assistance in the development of a Demolition Delay Bylaw. The bylaw was adopted by the town in the Spring of 2004 and could impact up to 80 properties in town.

The town also has a Historical Society which was incorporated in 1955. The Historical Society maintains a local museum, The James Bradbury Museum, chronicling the rich cultural, historical, and archaeological past of the Somerset area. The museum is located at 272 High Street, in a former school building at the top of the Waterfront Park area. One of the outstanding exhibits at the museum is the Native American artifacts collection. Historical information and exhibits on the clipper ships' history on the Taunton River is also a highlight of the museum.

Somerset currently has two properties listed on the National Register. The Montaup Site (19-BR-131), was listed in 1978 under a Determination of Eligibility (DOE) by the Secretary of the Interior. The Borden Flats Lighthouse was listed as an individual property and as part of a Thematic Group Nomination of 42 properties (lighthouses) in 23 towns, in 1987.

Maps following this section of the report highlight the significant historic areas with the Town of Somerset as well as Somerset's historic resources within the proposed Taunton River Wild & Scenic River Corridor.

2. Scenic Resources

Somerset's scenic assets largely correspond with its tidal coastline along the Taunton River and its points of access to views of the Mt. Hope Bay. Many of the town's riverfront drives and public land holdings provide both residents and visitors from throughout the region a glimpse of some of the area's most beautiful waterfront views and vistas.

The sites below were recognized by the Taunton Heritage River Program for their aesthetic and cultural resource values.

Broad Cove and Taunton River Boat Ramp, Route 138

Somerset/Dighton, MA — A small gravel parking area is available for access to a rough trail out to Broad Cove. The cove area was the site of the 19th century "salt hay" harvests. Salt hay is a grass that flourishes in marshes that irregularly flood with brackish waters. It was cultivated as feed and mulch, and is especially resistant to rot. Across the street and to

the north, there is an unmarked roadway leading to the Taunton River and an improved public boat ramp with parking for boat trailers.

Scenic Railroad ROW, Anchor Drive — Nestled at the end of a quiet residential neighborhood is a public right of way, maintained by the Somerset Conservation Commission. This was the site of the Fall River railroad crossing, and today a walk to the river's edge reveals old granite bridge abutments and scenic views of the sweep of the river north and south.

Somerset Village Waterfront Park, Main Street — Along the historic Main Street area that was recently improved with sidewalks and lighting, is a jewel of a waterfront park. This site includes parking for boat trailers, an improved public boat ramp, tables, and a playground.

Somerset Historical Society: James Bradbury Museum, 274 High Street — This museum, located in an old school, features the work of the nine local potteries of the 18th century. Also includes Native American artifacts and other historical memorabilia. Admission is free. Open 2nd and 4th Sundays of the month. Closed December through February (508) 675-9010.

Pierce Beach and Playground, Riverside Avenue — This is a municipal facility that serves local residents with an exceptional playground featuring a two story covered slide, active and passive recreational space, and a small beach. In season there is an admission fee to the park. Ample parking and facilities are on-site.

Mt. Hope Bay Vista Park, Massasoit/Ripley Streets — This land is located on the lower Taunton River, at Massasoit and Ripley streets. As its name implies, the land comprising the site affords a beautiful, sweeping view of both the Braga Bridge and Mount Hope Bridge, as well as the bay, the City of Fall River and Brayton Point Power Plant.

G. ENVIRONMENTAL CHALLENGES

1. Hazardous Waste Sites

There are currently five (5) sites listed with the Waste Site Cleanup at the Department of Environmental Protection's (DEP) Southeast Regional Office in Lakeville. Approximately one-half of these listed sites are a result of petroleum related contamination. These sites are, for the most part, confined to urban areas. Although there may be some concerns in terms of planning urban multi-use trail facilities, the principal, desired open space and recreation areas considered in this open space plan will not be affected by any of the listed sites.

® SCENIC RIVERFRONT DRIVE

Somerset / Dighton

Along this stretch a 6 14 mile ride presents estuary grasses. shade-covered roadways, river scenes, and historic homes. The route is described here for traveling north. In Somerset headed north on Route 138, take a right on Riverside Drive and follow along the river to the South Street intersection. Turn right onto High Street, which turns into Pleasant Street and continues north, paralleling the river. Go past Broad Cove into Dighton, where Pleasant Street rejoins Route 138. Continue north to the traffic light at Center Street; turn right and travel east to the oldest swing bridge in the state.

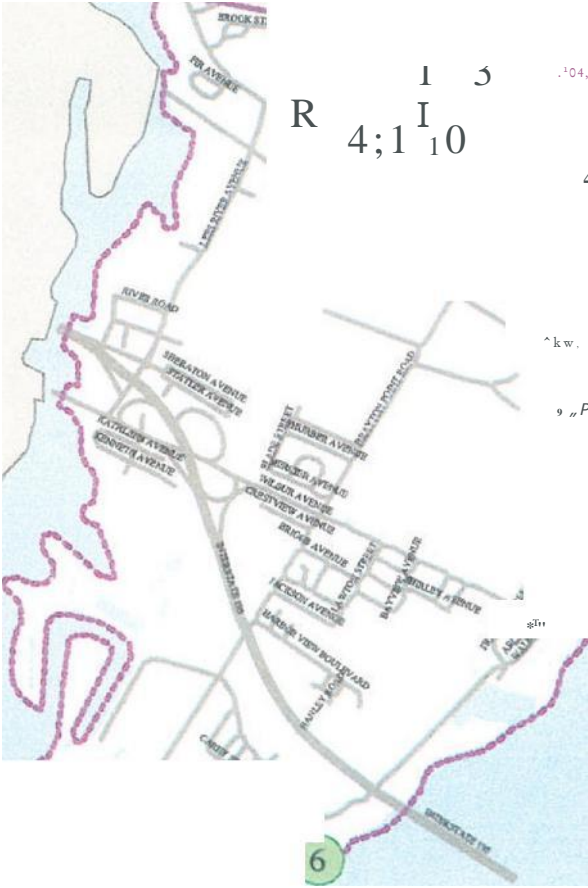
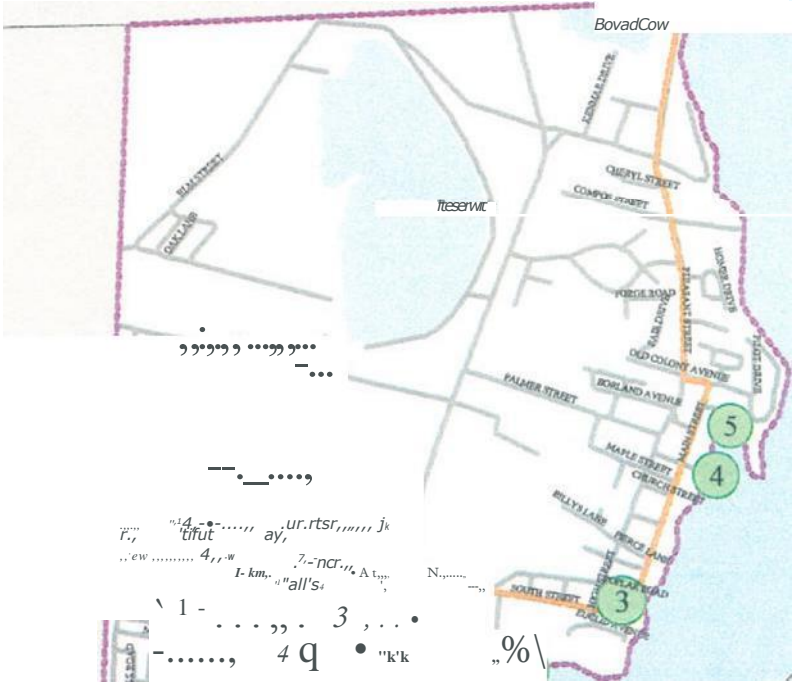
(I) PIERCE BEACH

Local residents enjoy the exceptional playground at this municipal facility,which features a two-story covered slide, active and passive recreational space, and a small beach. Ample parking and facilities. Seasonal admission fee.

®JAMES BRADBURY MUSEUM
SOMERSET HISTORICAL SOCIETY

274 High Street Somerset.This museum, located in an old school, features the work of nine local potteries of the 18th century. Exhibits also include Native American artifacts, clipper ship history, and other historical memorabilia_ Open 2nd and 4th Sun. of the month; closed Dec:Feb.; free admission. (508)675-9010.

Dighton



(SOMERSET VILLAGE
WATERFRONT PARK

Main Street, Somerset Along the historic Main Street area that was recently improved with sidewalks and lighting is a jewel of a waterfront park This site includes parking for boat trailers, an improved public boat ramp, tables, and a playground.

®SCENIC RAILROAD
RIGHT-OF-WA Y

Anchor Drive, Somerset. Nestled at the end of a quiet residential neighborhood is a public right-of-way maintained by the Somerset Conservation Commission.This was the site of the Fall River railroad crossing, and today a walk to the river's edge reveals old granite bridge abutments and scenic views of the sweep of the river north and south.

®MOUNT HOPE BAY VISTA PARK
Messasoit Street at the end of Ripley Street. Picnic sites and parking available; excellent views and vistas of the Mt. Hope Bay.



Maps posted by SRPEDD are for the sole purpose of informing regional Spring dammers and are not intended for any other use. This map is not a warranty or representation of any kind.

Date: 5/16/2009
Author: 5/16/2009

Legend

Streets

Scenic Riverfront Drive

Special Features

CID Water Bodies

Town of Somerset



Scenic Views and Special Features Map

2. Landfill

In 2003, the town entered into a ten year agreement with SEMass to handle its municipal waste (which was estimated at approximately 16.38 tons per day, at approximately \$77 per ton). The town also contracts out its recycling services. Somerset had expressed interest in utilizing the Fall River Incinerator if that became a viable option once again.

3. Erosion, Chronic Flooding, Sedimentation

Somerset has a long, narrow flood plain area bordering the Taunton River and Mt. Hope Bay. Somerset's shoreline is generally well defined by moderately steep banks and only includes several low lying areas such as Fox Hill Cove, Broad Cove and Brayton Point Beach. Flood plain development in Somerset is mostly residential. Other development in the flood plain includes the loading docks for both power plants and several small industrial and commercial establishments.

The flood of record for the portion of the Taunton River upstream of Somerset occurred in March, 1968. Although a substantial amount of rainfall fell during the storm, only a minimal amount of damage occurred in the lower portion of the river, especially in the vicinity of Somerset. This good outcome can be credited to the water storage capacity of the systems of swamps and wetlands that exist throughout the watershed.

Various locations in Somerset also experience minor flooding. This type of flooding usually occurs after storms of great intensity and short duration. The condition is aggravated by inadequate or blocked drainage culverts.

In 2002, the Conservation Commission addressed a serious erosion problem at its Mallard Point land. This site had been experiencing significant erosion at its southern exposure to Mt. Hope Bay. The problem was addressed by riprapping the exposed area.

A chronic and more persistent flood related problem exists at Labor in Vain Brook, at the intersection of Whetstone Hill Road and Route 138. Regular flooding at the culvert carrying Labor in Vain under Route 138 caused the sidewalk in the area to deteriorate. In 2003, a sidewalk replacement project was undertaken by Mass Highway during which time the bank area around the culvert was cut back and riprapped. The problem, however, still persists during heavy rain.

A recent survey of the site revealed: clogged channels; sediment in the culvert, which appears to be undersized to carry water during storm surges; a sediment build-up in the pond on the Water Treatment Plant property (which handles and detains stormwater from upgradient residential areas on Whetstone Hill Road, near the reservoir), and; a delta

effect created by sediment slugs carried through the culverted Labor in Vain Brook to a wetland area on the east side of Route 138. Increased residential development around the reservoir area has also greatly contributed to the stormwater problem in this area.

4 Inflow and Infiltration

Last year (2003) the Somerset Water Pollution Control Facility experienced a 27% increase in flow through the facility. Town officials attribute this increase to inflow and infiltration into the wastewater collection system. Amongst the principal sources of contribution are stormwater run-off, illegal sump pumps, roof drain tie-ins, etc. Connecting drainage structures to the town sewer system is illegal and subject to penalties and fines. A key issue here is enforcement and awareness of potential areas with drainage problems. Promoting homeowner awareness of infiltration gardens, rain barrel recycling and alternative landscaping could help. Also, an assessment of stormwater structures and facilities in areas experiencing chronic drainage or flooding problems, large concentrated areas of impervious surfaces and health of brook and stream channels that serve to drain areas, should also be investigated as part of a comprehensive stormwater management plan for the town.

5 Development Impacts

The most obvious, physical impacts of development in the Town of Somerset are the loss of working agricultural lands and forestland. When the last Somerset Open Space Plan was completed, Somerset had less forestland than any town in the SRPEDD area...this remains the case twenty years later (although Somerset's geography, its size, has also worked against it as development has increased).

Another impact of development is not so apparent to the eye, but is gleaned in a statistical analysis of Somerset. As previously mentioned in Section III of this plan, Somerset's median age has risen dramatically. At the same time, the average household size has decreased by almost one person and land consumption for development has outpaced population increase. This tells us that Somerset has: an aging population that is staying at home, in town; an aging housing stock that is little improved over several decades; fewer people in more homes, and; a look at population statistics reveals that Somerset is fast approaching a 50-50 split amongst those aged 0-44 and those aged 45 and over (with the greatest increase in those aged 75 and over). All of these factors may lead Somerset to experience gentrification in the coming years (gentrification involves the restoration and upgrade of deteriorated urban property by the middle classes often resulting in a displacement of the lower classes).

A fiscal and structural impact of development has arisen in the town's north end sewerage infrastructure. Increased demands of development in this more environmentally sensitive part of town have created capacity issues. The town is working with the Massachusetts Department of Environmental Protection (DEP) to help solve these problems.

6. Water Quality — A Regional Issue as Well

The Taunton River is designated as a Class B water by the State of Massachusetts. This means that it should meet the requirements of a warm water fishery and the criteria for primary and secondary contact recreation (this is often called a "fishable and swimmable" standard). In reality, the river often does not meet this designated use standard. High levels of nutrients and bacteria, excessive plant growth and low dissolved oxygen have placed several sections of the Taunton River and its tributaries on the state list of impaired waters under section 303(d) of the Clean Water Act.

The majority of the nutrient and bacteria load to the Taunton River comes from sewage treatment plant discharges. Several sewage treatment plants discharge treated wastewater to the Taunton River and its tributaries, degrading water quality and aquatic habitat while causing the closing of shellfish beds in the lower river. The Taunton River from the Route 24 bridge in Taunton to the Berkley Bridge is on the 303(d) list for pathogens and the Taunton River below the Berkley Bridge to mouth of the river is listed for pathogens and organic enrichment/low dissolved oxygen. The Assonet River is listed for pathogens from the Route 24 bridge in Freetown to confluence with the Taunton River.

Water quality in the lower river has also been severely impacted by the discharge of heated effluent from the Brayton Point power plant in Somerset. This water-cooled, coal-fired plant discharges to Mount Hope Bay, resulting in the loss of groundfish such as winter flounder. The EPA has issued a draft permit calling for a 95% reduction in heated water discharged to the bay.

The Town of Somerset also participated in a Stream Team Survey of the town, including the coastal Mt. Hope Bay and Taunton River areas, as well as inland streams, brooks and tributaries. The survey was carried out in conjunction with the Massachusetts Riverways Program and the Taunton River Wild & Scenic River Study Committee. In general, the survey yielded several areas in need of clean-up because of debris, some areas of minor erosion and sedimentation, several pipes (some of which were discharging to the river) that need further investigation, and a few areas of compromised stormwater conveyance structures (pipes, culverts, etc.). The most glaring problem was found on Mallard Point, where an area of exposed fly ash was discovered. Children frequently play in this town-owned area.

(The complete text of the Stream Team Survey along with a summary of some of the major recommendations of the Taunton River Wild & Scenic Stewardship Plan are found in the Appendix of this report.)

7. Air Quality —A Regional Issue as Well

Somerset is home to two electric power plants, Brayton Point Station, at Brayton Point, and Montaup Electric on Riverside Avenue. Both plants have caused concerns over air quality in the region in the past, particularly over the last twenty years. Currently, the Brayton Point facility has been the focus of local, state and interstate attention as the federal EPA has grappled with air and water quality issues related to the plant's operation.

Background (excerpted from the Secretary of Environmental Affairs Certificate dated 5/22/03, concerning proposed air and water pollution control measures to be taken at the plant).

The Brayton Point Station site consists of approximately 250 acres of land on Brayton Point, a peninsula in Somerset. The site is bordered by the Lee River to the west, the Taunton River to the east, a residential neighborhood and U.S. 195 to the north, and Mount Hope Bay to the south. This existing industrial facility, which has been operating since the 1960's, generates approximately 1,600 megawatts (MW) of power. It consists of three boilers fired primarily by coal and one boiler fired by fuel oil and natural gas (Units 1, 2, 3 and 4 respectively), and associated air pollution control systems, including four emission stacks. The power plant uses a fly ash separation system to process 260,000 tone of coal fly ash from Units 1, 2 and 3. Fifty percent of the fly ash, which is low-carbon ash, is sold as a product for concrete manufacturing. The remaining high carbon ash is disposed of in landfills or sent to cement kilns.

The facility includes a coal pile, a pier for barge deliveries, five storage domes, an electrical distribution system, a stormwater treatment system, wastewater treatment system, access roads and parking lots. The significant water demand generated by the facility is met by withdrawals from the Taunton River and from the Somerset Water Department. Discharge of water into Mount Hope Bay includes once-through cooling water, metal cleaning waste, low volume waste such as boiler blowdown and water treatment wastes and intake screen sluice water.

Air Quality

DEP has noted in its Proposed Conditional Approval that the emissions estimates for PM₁₀, NH₃, and VOCs are conservative. The estimates do not account for these pollutants being captured and treated by the new emission control systems. DEP also indicated that post construction emission testing, included as a condition in the draft permit, will define the control efficiencies and emission rates for the various air pollution control systems and it is anticipated that the data will reveal that emissions will be substantially lower than the estimates noted here.

The emission control systems will require new construction and material handling and storage facilities. A new emissions stack will be constructed south of the existing facility to support the FGD system and will be approximately 500 feet tall. Storage domes, fully enclosed conveyors and transfer points and fabric filter particulate collectors will be used to minimize particulate emissions during transport and storage of urea pellets, limestone, and fly ash.

The project includes the replacement of the facility's ash separation system with an Ash Reduction Process (ARP) that will enable the proponent to recycle 100% of the fly ash. Coal ash will be re-burned to produce a high quality ash with low carbon content that can be used as a replacement of Portland cement in the production of concrete. •

In addition, the proponent has proposed to meet approximately one-half of its increased water demand with fully treated gray water from the Town of Somerset's publicly owned treatment works (POTW). Existing water demand generated by the air pollution control equipment is approximately 1 million gallons per day (gpd) and is supplied by the Town of Somerset. The new air pollution control system will require an additional 870,000 gpd of water. This element of the project will require construction of a new, approximately 1.8 mile long water main to convey gray water from the POTW to the Station, and on site improvements to the existing piping system. Process water will continue to be treated and discharged through the existing wastewater system. The increase in discharge will be approximately 100,000 gpd.².

2 Most of the water is evaporated during processing resulting in less discharge than water demand. '

Water Quality

Coastal Zone Management (CZM) has raised concerns about the potential discharge of NH_3 or other nitrogen species in the Station's wastewater flow. Research on Mount Hope Bay indicates that it may already be suffering from eutrophic condition⁶ due to excess nutrient loads and that a significant increase in the amount of nutrients being discharged could exacerbate this problem. Based on information provided to EPA by the proponent, the presence of NH_3 in the treated discharge will raise the level of nitrogen to 5 milligrams/liter (mg/l) annually.

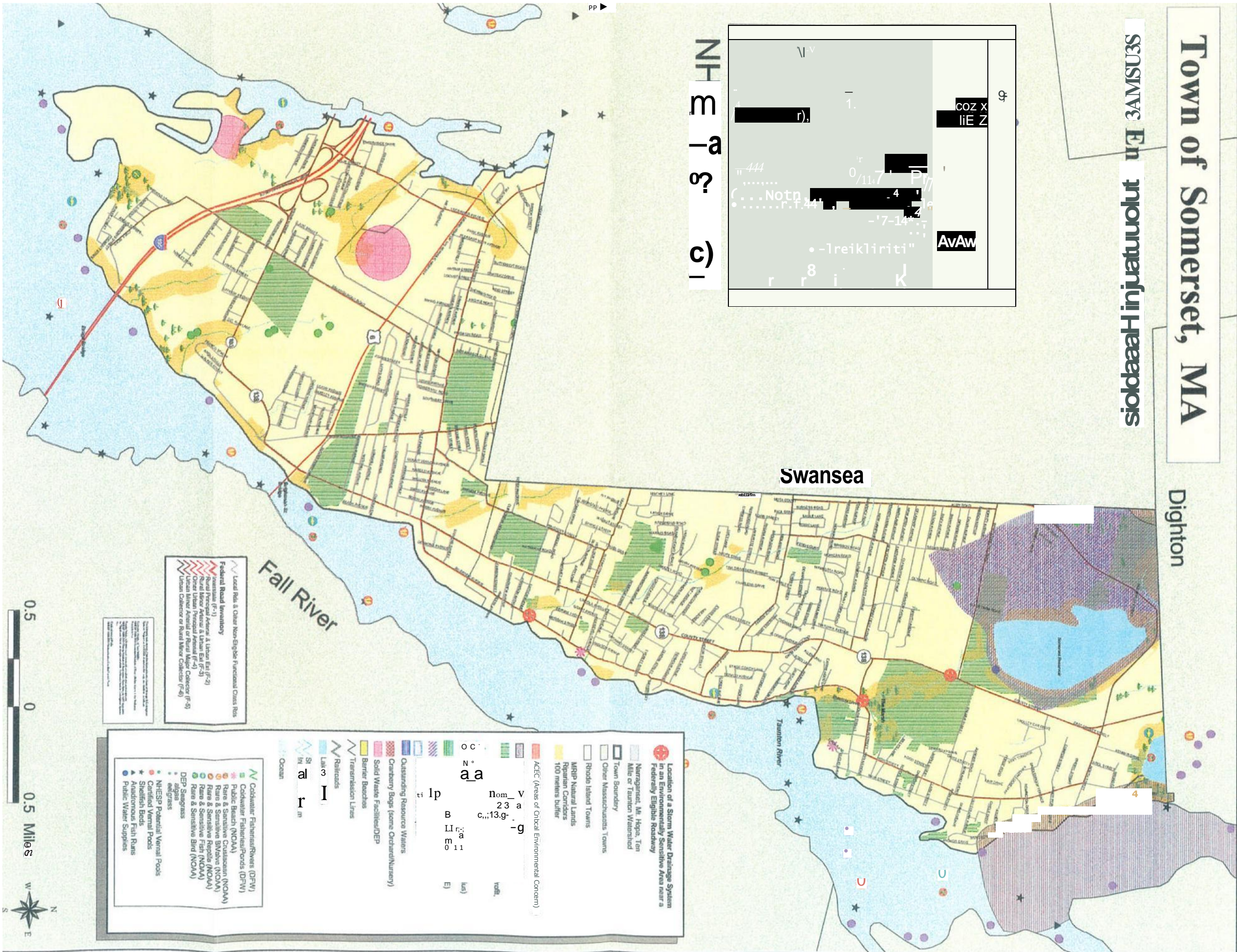
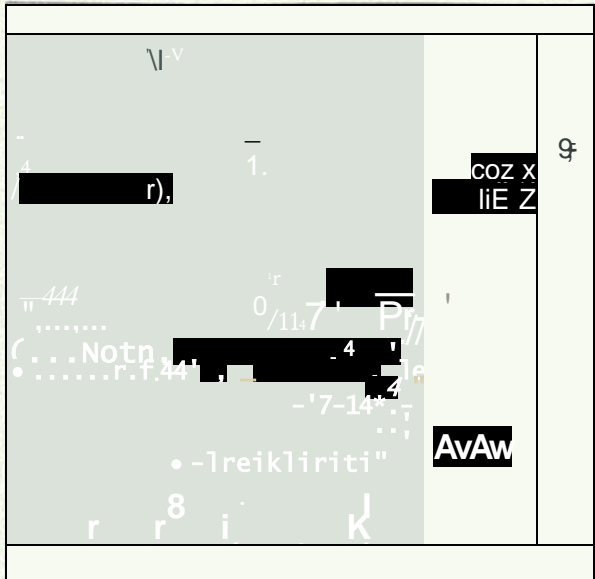
Brayton Point is the largest industrial discharger to Mount Hope Bay. The station withdraws a total of approximately one billion gallons of water from the Taunton River and/or the Lee River intake structures and circulates it through the facility to condense the steam used to produce electricity. The water is then discharged back to the Bay at elevated temperatures of up to 95⁰ Fahrenheit. The NPDES permit for Brayton Point expired in 1998. Its renewal has been the subject of intense review by EPA, DEP, the Rhode Island Department of Environmental Management, Coastal Zone Management, the Division of Fisheries and Wildlife, Conservation Law Foundation, Save the Bay and many other state and federal agencies and public advocacy groups.

EPA, in close coordination with DEP the RI Department of Environmental Management (DEM), has developed and issued a draft NPDES permit to ensure compliance with state and federal water quality standards and address the facility's impact on Mount Hope Bay. The decision establishes limitations on the volume, temperature and composition of the discharge, and establishes monitoring and reporting requirements. The draft permit does not authorize continued use of "once-through" cooling water (except for a limited number of hours per year) and is based on the assumption that the facility will convert to "closed cycle" and use mechanical-draft cooling tower technology to meet the permit's flow and heat load allowances. The volume of water and generation of waste heat will be reduced by over 95%. Elements of the air pollution control system, including a summary of the estimated wastewater characteristics expected to result from the air pollution control equipment, were included in the proponent's December 2001 NPDES submittal. The draft permit includes monitoring and reporting requirements of the discharge from the air pollution control equipment, which EPA considers to be a low volume waste stream, to determine whether it will cause or contribute to an exceedance of ambient water quality standards.

Town of Somerset, MA

SEUSMWE En tnpontenjuHææppois

NH E 3 1 a 3 ? (c)



V. INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST

A. INTRODUCTION

Somerset has been fortunate over the years since the completion of its last Open Space Plan to have very active Conservation and Recreation staff. The Conservation Agent has been able to work with the state and private landowners to steadily increase the Conservation Commission's land holdings and work toward achieving its goal of increasing public waterfront access. Likewise, the former Recreation Department Director worked very well with the state agencies and on the political front to significantly add to and upgrade the town's recreational facilities and holdings. Areas like Pierce Beach, Waterfront Park, the Chace Reserve and Broad Cove all stand as a testament to these efforts.

Somerset is also fortunate to have had the vision to create a land acquisition fund with the proceeds of the sale of the Stop & Shop property many years ago. These funds enabled the town to finally secure one of the last large open space parcels in town, the 120+ acre PG&E site, in 2003. The Land Acquisition Committee had been negotiating for this property for several years.

As successful as these other efforts have been, the town has lost much of its living, working landscape in the form of small, working farms. An historical lack of farmland participation in Chapter 61 programs has limited the town's ability to negotiate when these lands become available. In many cases, former agricultural land is remembered only in the names attached to residential development.

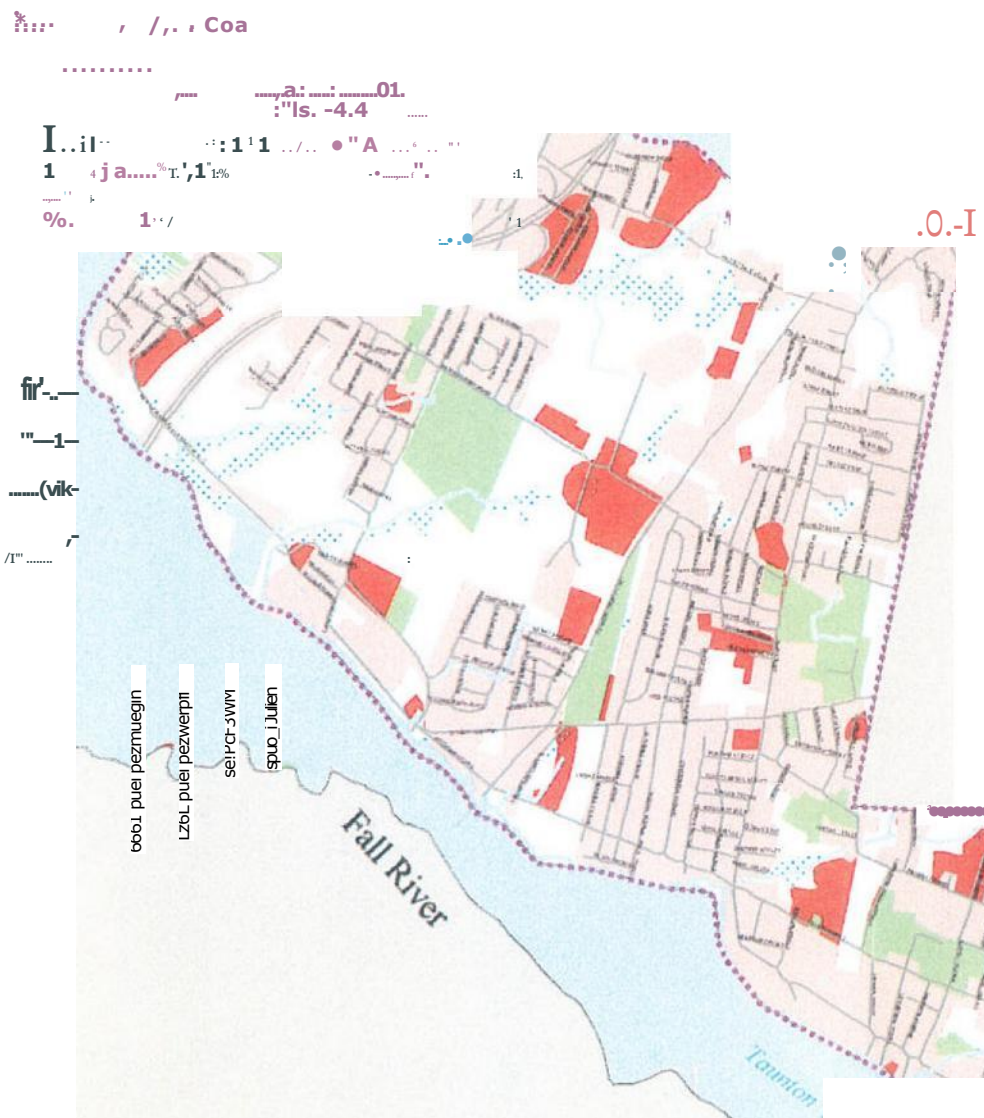
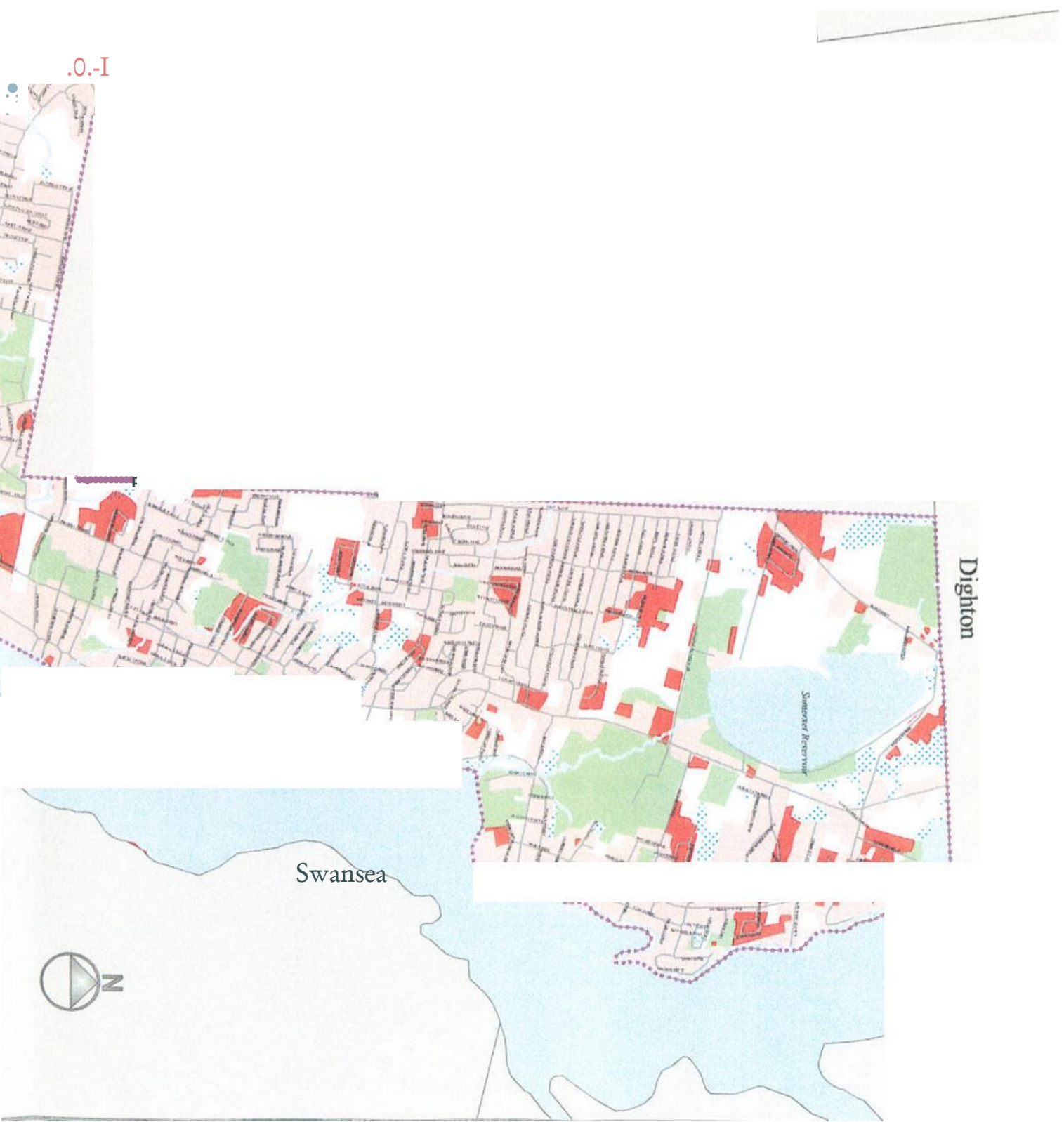
TABLE V-1
LAND USE CHANGES, IN ACRES, 1985 TO 2000

	1985	% of Total	2000	% of Total
Forest	762.5	15.1%	814.0	16.1%
Agricultural & Open	1,149.48	22.7%	986.0	19.5%
Water and Wetlands	300.16	6.0%	284.4	5.6%
Outdoor Recreation	140.0	2.8%	90.0	1.7%
Mining and Waste	114.48	2.2%	34.0	0.7%
Urban	2,584.88	51.2%	2,842.6	56.3%
TOTAL ACREAGE	5,051	100%	5,051	100%

B. INVENTORY

The following inventory corresponds with the Open Space Map. Each parcel inventoried has been identified by Assessor's Number as well as a Polygon Identification Number (POLY ID#) and color coded, as part of the Geographic Information System (GIS) mapping process.

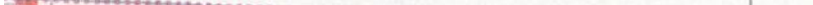
A narrative inventory follows the map and print-out.



de w sagLimij as fl purl

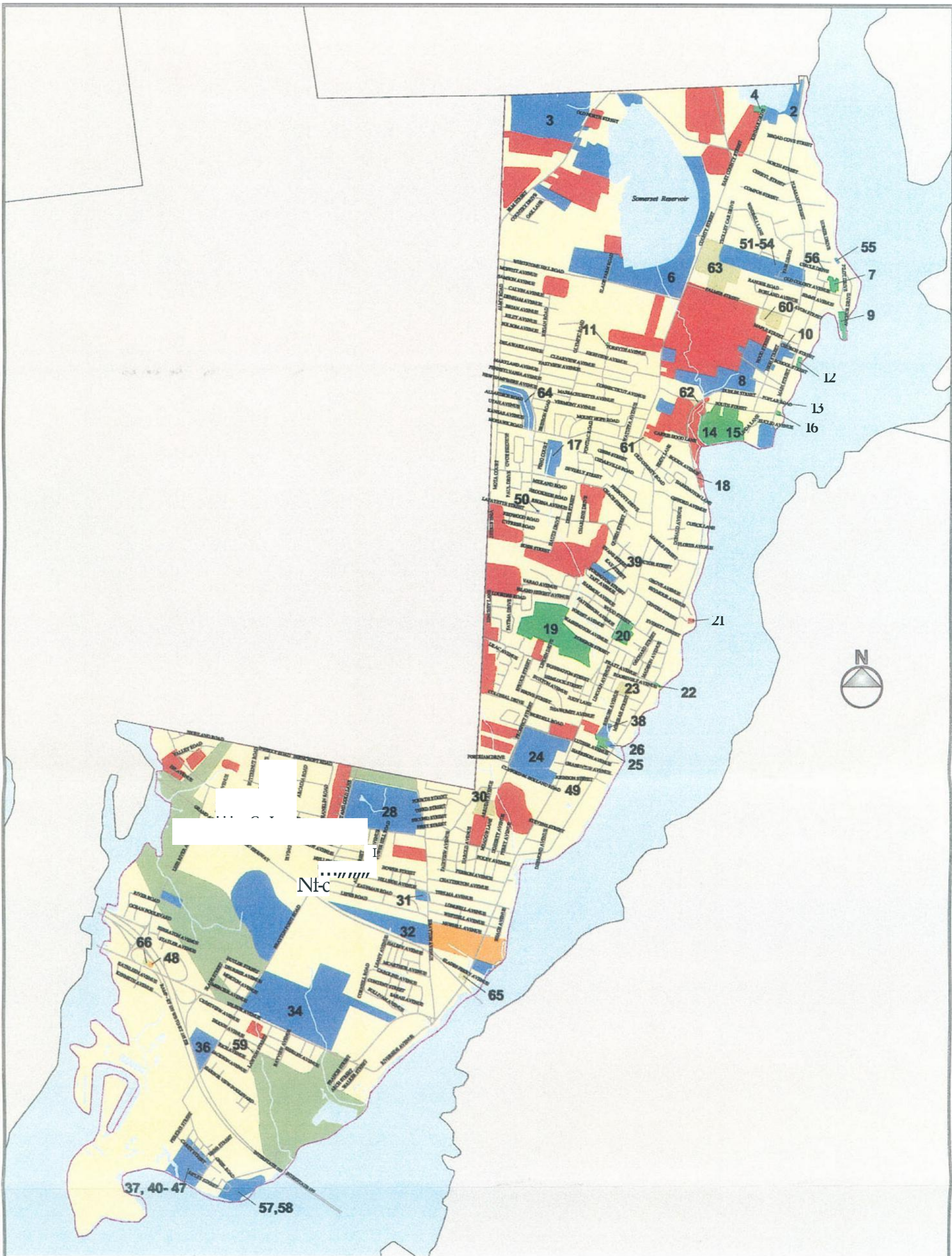


lasiatuos jo umoi



• 4 1 / 1 1 : 2

Qpaz



Maps prepared by SRPEDO are for informational aid* regent planning Calcskaa and amp mat imariamlad IWO* caber Mlk Pas ma la nal lalwadi Ire orgkining, NW vs arm myopla

Data SO
Iiarachumea MO's* Ospanarant
iimmaexaslia Emespas On= Eraldenrerdsl
Scallalsawn %owall Manding O. Emus& Deraiaapprit District

0.5 4 0.5 1 mile

Legend

- Open Space
- Cemeirry
- Casomon
- N.E.P.
- Pad'ivy.. & COL COLlad.
- Trivale ?manly
- 5C.50.01.W3lor;TawaXecr
- Savr0.
- Ricca B Samoa
- Wanadadlas

Town of



Open Space Map

Somerset Open Space

ID	Assessors	Assessors	Comments	Theme	Status Fee		Site Name	Area Acres	Area Sq. Ft.	Primary Purpose	Level of Protection	Assessed Acres	Conservation Restriction APR	Ch61	Ch61a	Ch61b
	Map	Lot			Fee Owner	Owner										
73	C2	60		Cemetery	M273		BUFFINGTON CEMETERY	2.6	113267.31	H	P	4	0	N	N	N
65	B4	00		Cemetery	M273		SLADE CEMETERY	0.00	00000.00	H	P	0.00	0	N	N	N
30	135	347		Cemetery	M273		NATHAN SLADE CEMETERY	3.88	168976.02	H	P	10.75	1)	N	N	N
59	A5	142		Cemetery	M273	RA	LAWTON STREET CEMETERY	0.14	6099.29	X	P	0.14	0	N	N	N
60	02	315		Cemetery	M273		PALMER STREET CEMETERY	4.74	206553.95	X	P	5	0	N	N	N
51	D1	158		Cemetery	M273		HOOD CEMETERY	0.34	14753.7	X	P	0.34	0	N	N	N
62				Cemetery	M273			0.00	00000.00	X	P	0	0	N	N	N
66				Cemetery	M273			0.00	00000.0	X	P	0.00	0	N	N	N
63	05	370		Cemetery			ST. PATRICKS CEMETERY	0.00	00000.00	X	P	0	0	N	N	N
4	EI	82,63		Park Dept. & Con. Comm.	M273	AA	BROAD COVE	1.48	64344.64	C	P	0.79	0	N	N	N
7	E2		ASSESSOR LOT# 227,228,229,230,231,232,216	Park Dept & Con. Comm.	M273	M	CONSERVATION LAND	1.79	78209.88	C	P	2 85	0	N	N	N
9	D2		ASSESSOR LOTS# 9,10,21. ON DCS-QUAD33D	Park Dept. & Con. Comm.	M273	M	MALLARD POINT	2.76	120102.68	C	P	1.34	0	N	N	N
11	E5	17		Park Dept. & Con. Comm.	M273	M	ASHTON PLAYGROUND	0.15	6538.41	R	T	0	0	N	N	N
12	D2		ASSESSOR LOTS# 109,110,111 ON OCS-QUAD33C	Park Dept. & Con. Comm.	M273	M	VILLAGE WATERFRONT PARK	0.76	32966.46	R	P	0.38	0	N	N	N
13	D1	8	ON DCS-QUAD33C BUT RETAINED OS POLYGON	Park Dept_ & Con. Comm.	M273	kil	CONSERVATION LAND	0.22	9350.98	C	P	0.37	0	N	N	N
14	D1	50	ON DCS-QUAD33C BUT RETAINED OS POLYGON	Park Dept & Con. Conan.	M273	M	PIERCE BEACH	12.13	528201.57	R	P	0	0	N	N	N
15	D1	49	ON DCS-QUAD33C BUT RETAINED OS POLYGO	Park Dept. & Can. Comm.	M273	N	PIERCE BEACH PLAYGROUND	10.89	474190.45	R	P	10	0	N	N	N
16	Di	6	ON DCS-QUAD33C BUT RETAINED OS POLYGON	Park Dept & Con Comm	M273	M	CONSERVATION LAND	0.32	14093.24	C	P	0.32	0	N	N	N
19	C8		ASSESSOR LOT# 161,162,C5,160A	Park Dept. & Con. Comm.	M273	tut	BUFFINGTON PARK	34.33	1495486.15	R	T	26_88	0	N	N	N
20	C3	68		Park Dept. & Con. Comm.	M273	M	POTTERVILLE SCHOOL PLAYGROUND	5.51	239934.14	R	T	1.8	0	N	N	N
22	C2	18		Park Dept & Con. Comm.	M273	RA	PRATT AVE BEACH	0.23	9894.77	S	1	0.1	0	N	N	N
25	CI	159		Park Dept. & Can. Comm.	M273	M	CHACE PRESERVE	1.88	82085.5	C	P	3.22	0	N	N	N
37	AI		ASSESSOR LOTS# 160,241,242,248,244,245,243	Park Dept. & Con. Comm.	M273	S	BRAYTON POINT SALT MARSH	2.73	118801.41	C	P	0.84	0	N	N	N
40	AI	247		Park Dept. & Con. Comm.	M273	M	CAREY STREET	0.23	10065.53	X	P	0.2	0	N	N	N
41	AI	240		Park Dept & Con. Comm.	M273	M	CONSERVATION LAND	0.1	4140.42	C	P	0.05	0	N	N	N
42	AI	249		Park Dept. & Con. Comm.	M273	M	CONSERVATION LAND	0.11	4979.16	C	P	2.25	0	N	N	N
43	AI	235		Park Dept. & Con. Comm.	M273	M	CONSERVATION LAND	0.32	13705.76	C	P	0	0	N	N	N
44	AI	236		Park Dept. & Con. Comm.	M273	M	CONSERVATION LAND	0.32	13752.79	C	P	0	0	N	N	N
45	AI	237		Park Dept. & Coal Comm.	M273	M	CONSERVATION LAND	0.35	15479.23	C	P	0	0	N	N	N
46	AI	232		Park Dept. & Con. Comm.	M273	Rh	CONSERVATION LAND	0.02	1016.64	C	P	0.07	0	N	N	N
- 47	AI	233		Park Dept. & Con. Comm.	M273	1.4	CONSERVATION LAND	0.07	3148.53	C	P	0.19	0	N	N	N
57	AI	231		Park Dept. & Con. Comm.	A.4273	RA	MASSASOIT STREET CONSERVATION	0.04	1918.75	C	P	0.09	0	N	N	N
sa	AI	205		Park Dept & Con. Comm.	M273	C	MASSASOIT STREET CONSERVATION	0.03	1080.4	C	P	0.27	0	N	N	N
18	C9	301		Private for Pratt	P	P	SOMERSET MARINA	1.31	57250.36	R	N	0.5	0	N	N	
21	C9	21,22		Private for Profit	P	P	SOMERSET YACHT CLUB	0.38	16433.5	R	N	0.32	0	N	N	
2	EI		ASESSOR LOT# 1,2,3,7,8,9,10,11,15,64,65	School,Water,Town,Other	025005	C	BRISTOL COUNTY LAND	9.9	431187.39	W	P	7.79	0	N	N	N
3	E4	29A	ON DCS-QUAD33C BUT RETAINED OS POLYGON	SchootWated,Town,Odier	A.1273	AA	ELM ST ACRES	52.44	2284165.79	C	P	0	0	N	N	N
5	E4	68	ON DCS-QUAD33C BUT RETAINED OS POLYGON	SchootWater,Town,Other	M273CC	AA	QUIRK MELLO CONSERVATION AREA	9.39	40897924	C	P	21	0	N	N	N
6	E3		ASSESSOR LOT# 18,19,21,22,27	Scheal.Water,Town,Clither	M273	M	SOMERSET RESERVOIR AREA	71.9	3131909.68	W	P	468.7	0	N	N	N
8	02		ASSESSOR LOTS# 31,T4,T5,T8,T9,110,196,287,277	School,Water,Town,Othar	M273	M	MARSH SKATING AREA	37.00	1611720.00	R	T	24.58	0	N	N	N
10	D2	123		Schoei,Water,Town,Other	M273	M	HISTORIC SITE - FORMERLY VILLA	3.17	138069.45	H	P	3	0	N	N	N
17	D12	1		School,Water,Town,Other	M273	M	CHACE ST SCHOOL	7.32	318670.79	R	T	12	0	N	N	N
24	C4		ASSESSOR LOT#106,L4-16	School,Water,Town,Other	M273	RA	SOMERSET HIGH SCHOOL	34.52	1503775.98	R	T	20.6	0	N	N	N
26	CI	163		School,Water,Town,Other	M273	RA	BLACKLEDGE	0.88	38496.73	C	X	1.1	0	N	N	N
26	137	344		SchoolWater,Tovm,01fier	M273	M	SOUTH COMPLEX	5227	2276767.30	R	T	2.46	0	N	N	N
31	B4	103		School,Water,Town,Othar	M273	M	PLAYGROUND	1.96	85502.16	R	T	1	0	N	N	N
32	134	231		School,Water,Tovm,Othar	M273	M	SLADE FARM LAND	19.99	870880.25	A	X	0	0	N	N	N
34	A6A9	2,229	ALSO PP-ORESTRY	School,Water,Town,Other	M273	M	TOWN	120.00	522720.00	A	N	122	0	N	N	N
36	A14	1A		School,Water,Town,Othar	M273	AA	O'NEIL PLAYGROUND	10.91	475233.26	R	T	6	0	N	N	N
38	CI	35		School,Water,Town,Other	M273	AA	BERDBE AVENUE	1.98	86150.00	X	T	6.15	0	N	N	N
39	CI		ASSESSOR LOTS# 119,122,121,444	SchootWater,Town,Other	M273	M	MORELAND STREET	2.86	124351.23	X	T	1.74	0	N	N	N
49	CI	134		School,Water,Town,Qther	M273	M	JOHNSON STREET	0.27	11741 95	X	T	0.4	0	N	N	N
50	CI	51		School,Weter,Town,Other	M273	AA	IAFAYETTE STREET	0.12	5357 81	X	T	0.25	0	N	N	N
51	D5	54		SchootWater,Town,Other	M273	M	OLD COLONY AVENUE	0.21	9167.06	X	T	0	0	N	N	N
52	D5	89		School,Water,Torm,Other	M273	M	OLD COLONY AVENUE	0.22	9457.83	X	T	0	0	N	N	N
53	D5		ASSESSOR. Lot # 66,67	School,Water,Tovm,Other	M273	M	OLD COLONY AVENUE	0 27	11679.47	X	T	0	0	N	N	N
54	05	64		SchootWater,Town,Other	M273	M	OLD COLONY AVENUE	0.23	10091 06	X	T	0	0	N	N	N
55	E2		ASSESSOR Lot # 231,232,228	SchootWater,Town,Other	M273	M	SEAM EW DRIVE	0 23	1014707	X	T	0	0	N	N	N
56	E2	144		School,Water,Town,Olha	M273	M	CIRCLE DRIVE	0.23	10089.7	X	T	0	0	N	N	N
64				School,Water,Town,OLher	M273	M	BUFFINGTON BROOK	0.00	00000.00				0	N	N	N
48	AI2	95		Commonweath	M273	M	LEES RIVER AVENUE	0.35	15467.58	X	T	0.1	0	N	N	

Inventory of Athletic and School Facilities

I. Athletic Facilities

O'Neil Field

Location: Brayton Point Road (South of Wilbur Ave)

Map/Lot: A14-29

Ownership: Town of Somerset

Jurisdiction: Board of Selectmen

Zoning: Industrial

Management: Highway Department

Area: 6 acres

Amenities:

1 Tennis Court with lights

1 Basketball Court with lights

1 Softball Field with lights

Playground with swings, slide, and merry-go-round

Restroom Facilities

Storage Area

The property is located on Brayton Point Road, in the southern part of Somerset.

The site, overall, is in a poor state of condition and does not comply with ADA standards. The surface of the tennis court renders it unusable. In addition, the surface of the parking lot needs milling/resurfacing, striping, and demarcation of handicapped spaces. Sections of chain-linked fence are leaning/falling down. While the majority of equipment is old, some new equipment has been added. Lighting fixtures are old, mounted high on poles, transmitting stray light into the night sky. Washroom facilities are in good condition.

The Recreation Department has been pursuing funding to construct a skateboard park in the space now occupied by the tennis court. A citizen-sponsored warrant may appear at the next Special Town Meeting, if the Board of Selectmen do not choose to fund the park.

Secured funding for restroom improvements: \$18,000. Desired funding for skateboard park: \$70,000.

South Field

Location: Read Street/Hot and Cold Lane

Map/Lot: B7-139

Ownership: Town of Somerset

Jurisdiction: Recreation Department

Zoning: Residential

Management: Highway Department; Regular Maintenance

Area: 7.01 acres

Amenities:

- 1 Tennis Court
- 1 Basketball Court
- 1 Little League Baseball Diamond
- 2 Softball Diamonds
- 1 Minor League Baseball Field
- 1 Baseball Diamond
- Playground with swings, slide, and merry-go-round
- 2 Restroom Facilities (handicap accessible)
- Concession Stand
- Storage Area
- Electric Scoreboard

Located on Read Street, immediately west of South School, the primary use of the property is for baseball. With exception to the Little League field, all baseball diamonds were improved within the past two years and are in excellent condition. The site contains a mix of new and old fencing, and additional replacements have been scheduled for 2004. Basketball court surfaces are in good condition, however the surfacing of the courts and the backboards need painting. The court serves as a volleyball court, although it is not appropriately striped for such use. The parking facilities include a mix of asphalt and gravel surfacing. The site does not contain sidewalks or pathways for pedestrian travel.

Village Waterfront Park

Map/Lot: D2 Lots 109, 110, 111

Ownership: Town of Somerset

Zoning: Open Recreation

Management: Highway Department; Regular Maintenance

Area: 3.4 acres

Amenities:

- Boat Ramp
- Fire Museum
- Historical Society Building ("Ironworks")
- Restroom
- Harbor Master Office
- Picnic Area w/ grills
- Playground Area
- Vista Water View
- Pavilion
- Park Benches

Village Waterfront Park is located on Main Street in the historical village of Somerset, on the western bank of the Taunton River. This location affords beautiful views and vistas up and down the river and of undeveloped areas of the Fall River Area. Nearby town

facilities include the Bradbury Museum (including open fields with views to Village Park), and the "Ironworks" historical building (Old Town Hall). Users of the park may picnic here by the river or under the pavilion, as well as fish from the seawall.

The boat ramp is highly utilized, however it needs some improvements. Concrete blocks in the ramp (visible at low tide) have settled, creating a significant rut that catches the tires of the trailers. The playground equipment, consisting of painted wood structures and includes tires, dates 1983. This facility is the central site of the Spirit of Somerset Festival, a new, annual celebration begun in 2001. While the upper level of the property is accessible for all persons, those who are mobility-challenged may find it difficult to access the lower park area due to steep slope of the sidewalk and driveway.

Ashton Field

Map/Lot: E5-17

Ownership: Town of Somerset

Jurisdiction: Recreation Department

Zoning: Residential

Management: Highway Department, Volunteers.

Area: 5.25 acres

Amenities:

2 Softball Fields

1 Minor League Field

Playground with swings, slide, and merry-go-round

Restroom

Concession Stand

Primarily used for baseball by the Somerset Girls Softball League, this site is located in a residential neighborhood off Whetstone Hill Road. Condition of the fencing is good, however, fences contain large wooden signs advertising businesses. Lighting of the facility includes spotlight fixtures, mounted high on poles. The bleachers and the play equipment are old, however volunteers have painted the equipment. Note: signs erected and maintained by Softball League, and all rents go directly to the league. The league also holds their own liability insurance.

Separating the upper fields from a lower field on Place Street is a large row of trees. The grass is regularly cut in this area, however no use has been assigned here. In addition, the property abuts a previously tract of farmland that may have a view of the Taunton River. There may be a potential to link Ashton Field to the Morris Preserve and North Elementary School via drainage easements and road easements located at ends of cul-de-sacs in new home developments within the area.

Hillside Avenue

Map/Lot: B4-103

Ownership: Town of Somerset

Jurisdiction: AMVETS

Zoning: Residential
Management: Highway Department
Area: 1 acre

Amenities:

2 Bocci Courts
1 Basketball Court with lights
Horseshoe Pit
2 Picnic Tables

Historically, this site used to be a school property, and the building was a one-room schoolhouse. The property, while town owned, is under the sole jurisdiction of the AMVETS. AMVETS maintains the building and the Highway Department maintains the grounds. The basketball court and play equipment are in good condition, and the bocci courts were recently improved. The front of the property is mostly asphalt, the surface of which is not striped and is in poor condition. The site could aesthetically be improved with street trees and landscaped islands in the parking lot to provide shade to the front portion of the property.

Leahy Avenue

Location: Leahy Avenue/Rt. 6 (east of Home Depot)
Map/Lot: A9 Lots 227, 223
Ownership: Town of Somerset
Jurisdiction: Board of Selectmen
Zoning:
Management: Highway Department; Regular Maintenance
Area: .59 acres

Amenities:

1 Basketball Court (Convertible to Skate Rink)
2 Small Swings
Playground
Picnic Area

Located in a small post-World War II development commonly referred to as the "Spinelli" development, neighborhood children primarily use Leahy Park. The site is visible from Route 6, and is adjacent to the Home Depot shopping complex, however it is not accessible from either place. Metal play equipment is old, but recently improved with paint and new chains. The site does not offer much in terms of shade, and there is no off street parking here.

To increase accessibility to Leahy Park, future connections with the Home Depot complex as well as the newly acquired 120-acre parcel, located south of Leahy Park may be explored. In addition, provision of shade through the planting of trees and/or construction of a pavilion would provide needed protection from the sun.

Mount Hope Bay Vista Park



Location: Massasoit/Ripley Streets
Map/Lot: AI Lots 205, 231
Ownership: Town of Somerset
Jurisdiction: Conservation Commission
Zoning:
Management: Highway Department; Regular Maintenance
Area: .36 acres

Amenities:
Parking
Picnic Benches
View Nista of Bridges, River, City and Bay

This land is located on the lower Taunton River, at Massasoit and Ripley streets. As it's name implies, the land comprising the site affords a beautiful, sweeping view of both the Bragga Bridge and Mount Hope Bridge, as well as the bay, the City of Fall River, and Brayton Point Power Plant. The site is unimproved in terms of ADA accessible pathways from the parking lot to the waters-edge, however amenities include small gravel parking area, a few picnic benches, and some shade trees.

Bradbury Museum

Location: High Street
Map/Lot: D2-123
Ownership: Town of Somerset
Jurisdiction: Somerset Historical Commission
Zoning: Residential
Management: Highway Department; General Maintenance
Area: 3 acres

Amenities:
1 Minor League Baseball Diamond
Playground Area
1 Basketball Court
Open Field for Passive Recreation

Located in the old Village School, the Somerset Historical Commission operates the Bradbury Museum. Asphalt areas associated with the previous usage remain in place, and the surfacing is in poor condition. Recreational amenities remain on the site, utilized by children living in the neighborhood. The basketball court is in good condition, as are the old iron play structures.

The eastern portion of the property is especially scenic, as it affords views of historical Main Street, Village Park and the water. Potential exists to connect the Bradbury Museum property with Main Street and Village park with a prominent, nicely landscaped and ADA accessible walkway.

Pottersville Field

Location: County Street (south of Town Hall)

Map/Lot: C3-68

Ownership: Town of Somerset

Jurisdiction: Board of Selectmen

Zoning:

Management: Highway Department; Regular Maintenance

Area: 1.81 acres

Amenities:

6 Basketball Courts with lights

1 Baseball Field

Playground

Restroom

1 Bocci Court

The site is located within walking distance of several municipal services (Town Hall, School, Library, Council on Aging). The old school on the site houses the Town Nurse, Council on Aging, and the Little Red School House daycare (private, for profit). Residents of the adjacent neighborhood (east, south) may conveniently access the field. Basketball courts are in excellent condition, with smooth, freshly painted surfaces. Conditions of baseball diamond and parking lot are good, however sections of chain-linked fence need maintenance (rusted sections). A row of street trees, planted approximately 25 feet apart along County Street, provides a visual edge to the site, and will eventually provide shade.

Pathways from adjacent neighborhoods are not ADA accessible. Parks and Recreation Department has indicated a need for a facility of their own, and has suggested exploration of the feasibility of occupying a portion of the building.

Buffington Park

Location: Linden Drive

Map/Lot: C5-300, 160A; C6-161, 162

Ownership: Town of Somerset

Jurisdiction: Board of Selectmen

Zoning: Residential

Management: Highway Department; Regular Maintenance

Area: 37.78 acres

Amenities:

Playground

Picnic Area w/ Grills

Open Field for Passive Recreation

Wooded Walking Trails

Centrally located, Buffington Park is highly utilized by residents, and it is the site of the town's annual Easter Egg Hunt. Some of the town's oldest play equipment is located on this site, however perimeter fencing in the play area is new. Formal access to the site is via Linden Dr., and some trail users access the site via Swazey. Both Lorraine and Washington Streets terminate at/near Buffington Park, however no formal access to the park has been provided at these locations.

The Marsh

Location: Dublin/Marsh Streets
Map/Lot: Various lots on map D4
Ownership: Town of Somerset
Jurisdiction: Board of Selectmen
Zoning:
Management: Highway Department (see below)
Area: 37 + Acres

Amenities:
Skating on Area of Marsh with Lights
Bird Watching

The Town of Somerset obtained land in the marsh through donation from area landowners.

In a small area located at end of Marsh Street, Highway Department cuts back marsh grasses to allow for winter ice skating. Ice is flooded regularly, and area is lit by several flood lights to allow for night skating, however the town posts a sign stating that users of the facility do so at their own risk. A large gravel parking area services the winter skating area.

Conservation Commission has noted that increased spread of fragmytes through the marsh due to reduced tidal flow of salt water and increased runoff of freshwater into the marsh threatens its ecosystem. It is unknown whether the location and construction of the gravel parking area adjacent to the marsh has negatively affected the marsh. Secondly, Conservation Commission has suggested investigating the impact of the 12" culvert under the road, connecting the marsh to the river, and the potential for enlargement or maintenance to improve flow.

Pierce Beach Complex

Location: South Street
Map/Lot: D1 (Various)
Ownership: Town of Somerset
Jurisdiction: Recreation Department
Zoning: Open Recreation
Management: Highway Department; Regular Maintenance
Area: +- 18 acres

Amenities:

Beach

- 1,000 s.f. Beach Area with Lifeguards**
- Concession Stand**
- Restroom and Outdoor Shower**
- Pathways/Walkways**

Bluffs

- Nature trails on 50' Bluff**
- View Nista of River**

Recreation

- 1 Tennis Court**
- 1 Basketball Court with Lights**
- 1 Beach Volleyball Court**
- 1 Minor League Baseball Field**
- 1 Little League Baseball Field**
- 2 Playground Areas**
- Large Tube Slide**
- Picnic Area w/Grills**

Located on the Taunton River, Pierce Beach and Park facility is by far one of the most prized and picturesque. The town holds a high standard of maintenance for the site, which features beautiful landscaping, new beach sand, and excellent parking and path facilities. Large, wood play structures, constructed in 1983, are in excellent condition, and modern lighting fixtures (shielded box lighting) minimize stray light pollution.

Unnamed Parcel

Location: Brayton Point Road/Wilbur Avenue

Map/Lot: A6-2; A9-229

Ownership: Town of Somerset

Jurisdiction: Board of Selectmen

Zoning: Residential/Business

Management: To Be Determined

Area: 120 acres

The site is located in the southern part of Somerset. The previous owner cleared and farmed several areas of the site, and those fields have become overgrown meadows. A good portion of the site is wooded.

The Town will be considering future uses of the property, including the potential development of a portion of the property to fund acquisition of additional open spaces.

II. School Facilities

The Parks and Recreation Department, to operate recreation programs, use the following school facilities: Wilbur School, Middle School, Somerset High School, and North Elementary School. The School Department maintains and schedules use of all school facilities only.

Wilbur School

Location: Brayton Point Rd/Wilbur Ave. Map/Lot: A5-61
Ownership: Town of Somerset
Jurisdiction: School Department
Zoning:
Management: School Department
Area: 5.07 acres

Amenities:

1 Baseball Field
Playground (swings, slides)
1 Basketball Court

The site, similar to many of Somerset's properties, contains a mixture of old and new. One of two swing sets are new, and one of two slides are new; and, new basketball nets but an older playing surface that is in fair condition. The site also has new fencing and gravel pads under the play equipment.

South School

Location: Read Street
Map/Lot: B7-139
Ownership: Town of Somerset
Jurisdiction: School Department
Zoning: Residential
Management: School Department
Area: 7.01 (includes Middle School property)

Amenities:

Play Structures
Picnic Benches
1 Basketball Court

The site contains a mixture of old, refurbished iron play structures, and new, modern play structures and picnic tables that are in excellent condition. Basketball nets are in good condition, however surface of court is in fair condition and the court needs painting

and striping. A new walkway crosses the play area, linking the school to the computer center. The walkway is not ADA accessible.

A rubber chip material has recently been laid under the play structures. The area has not been edged to contain the material and the thickness of the material is not sufficient. The material is not aesthetically pleasing; at first impression, the rubber chips resemble ground asphalt.

Middle School

Location: Brayton Avenue

Map/Lot: B7-139

Ownership: Town of Somerset

Jurisdiction: School Department

Zoning: Residential

Management: School Department

Area: see "South School"

Amenities:

Abutting the South School complex to the northeast, the Middle School facility contains several playing fields of excellent condition. Pathways allow students to access the property from Read Street and Brayton Avenue. Pathways are sufficient in terms of width and slope to meet ADA requirements, however sloped curbing should be replaced and crosswalks delineated.

Pathway connecting Read Street is lit with appropriately designed fixtures, however the path has become somewhat overgrown. This may be a good location for an emergency pole.

The Parks and Recreation Department has run their summer day program out of this facility.

Somerset High School

Location: County Street

Map/Lot: C4-108

Ownership: Town of Somerset

Jurisdiction: School Department

Zoning: Residential

Management: School Department

Area: 20.6 acres

Amenities:

6 Tennis Courts with Lights

Football Field and Bleachers
Football Practice Field
Track
Concession Stand

A large site located in a primarily residential neighborhood, the property provides many recreational amenities. The majority of chain-linked fencing and grass fields on the property are in excellent condition. The dug-out was recently constructed, and the grass portions of the field are in excellent condition. Sand at the baseball field needs to be redone. The wood bleachers are in good condition.

Much debate has taken place in town regarding the scope of repair needed to the track. While some residents desire a track that is all-weather, others feel that the cost of such a facility is too high. A user feasibility study has not been conducted. In the interim, the track was recently refurbished.

The tennis courts are being regularly maintained with paint and crack sealer, however the surface of the tennis court is in poor condition. Sections are cracked, separated, lifted and/or hold water. The football field, track, and tennis courts are all lit with old, floodlight-type fixtures.

The Parks and Recreation Department use the high school the most of all school facilities, holding baseball, football, softball and tennis camps annually. Use of property is mostly school-related.

Chace Street School

Location: Chace Street
Map/Lot: D12-1
Ownership: Town of Somerset
Jurisdiction: School Department
Zoning: Residential
Management: School Department
Area: 8.0 acres

Amenities:
1 Baseball Field
Playground

This site contains brand-new play structures with wood chips for padding under the structures. The baseball diamond is neither used nor maintained (the rusted fence is leaning significantly). In the winter, a sloped area of the site provides opportunity for sledding.

A non-ADA compliant pathway and stairs connect neighboring Mohigan Street to the school, and a sidewalk in fair condition runs along Chace Street.

North Elementary School

Location: Whetstone Hill Road
Map/Lot: E3-20
Ownership: Town of Somerset
Jurisdiction: School Department
Zoning: Residential
Management: School Department
Area: 17.99 acres

Amenities:
Playground
Soccer Fields

The play structures here are of the old iron type, albeit freshly painted, as commonly found around town. The surfacing material under the play equipment is sand. The baseball fields are in very poor condition, needing new sand and fencing. Old lighting fixtures flood the site with light.

A unique element to this site is an outdoor classroom located in a small stand of trees, consisting of a podium and rows of wood benches set up classroom-style. This site hosts large soccer tournaments annually, commanding need for rental of portable toilets and parking enforcement.

Inventory of Conservation Lands

Chace Preserve

Map/Lot: C1 — 159

Ownership: Town of Somerset

Jurisdiction: Conservation Commission

Approximately 5 acres

Trees

Parking Facilities

Bridge over Buffinton Brook

Walking Trails

Chace Preserve is governed by the Somerset Conservation Commission and maintained by the Department of Public Works and with the aid of volunteers. Residents east of the preserve use it for access from the bridge to the center of town. It has a system of walking trails, most heavily wooded, one along the bank of Buffinton Brook. There is a paved parking area and open grassy area for sitting and carry in — carry out picnicking. It has accessible grade from the parking area to the open picnic area and the bridge for viewing the brook. Trails are rough.

Mallard Point

Map/Lot: D2 — 9, 10, 21

Ownership: Town of Somerset

Jurisdiction: Conservation Commission

Approximately 3 acres

Seaside Vista

Limited Street Parking

Bird Sanctuary

Fishing

Benches

Mallard Point is governed by the Conservation Commission and maintained by the Department of Public Works. Excellent seaside vista area looking up and down Taunton River, good fishing access, bird watching. Recently riprapped by the Town to prevent coastal erosion. Accessible parking on public street. Grassed trail at flat grade accessible to benches, vista and fishing point.

Massasoit Street

Map/Lot: A1 — 205, 231

Ownership: Town of Somerset

Jurisdiction: Conservation Commission

Approximately .5 acres

Mt. Hope Bay Vista

Fishing

Picnic Area

Area is governed by Somerset Conservation Commission, maintained by the Department of Public Works. Beautiful waterfront vista looking out onto Mt. Hope Bay to Sakonnet and Bristol, RI. Paved parking lot. Rocky beach, established picnic site in summer, access to waterfront walking. Walk along rocky beach for fishing. Accessible parking on grade with vista viewing in paved parking lot and access to picnic site.

Broad Cove

Ownership: Town of Somerset
Jurisdiction: Conservation Commission
Approximately 26 acres
Wildlife habitat
Fishing, kayaking, canoeing
Waterfront
Parking area
Trail to water

Broad Cove is governed by Conservation Commission maintained by Department of Public Works. It is in excellent, pristine condition, exceptional for bird watching and vista viewing from on grade, gravel parking lot. Boats must be carried in along trail, no boat ramp.

Elm Street Acres

Map/Lot: E4 — 29A
Ownership: Town of Somerset
Jurisdiction: Conservation Commission
Approximately 54 acres
Trees
Walking Trails (which can be used for hiking and cross-country skiing)
Parking

West side of Elm Street, good condition, hiking, trail biking, picnicking, scouting bivouacs, cross country skiing, outdoor classroom, pond, wetlands, uplands, huge rock formations. Accessibility issues for physically challenged, rugged trails, parking lot on site.

Mello Farm

Map/Lot: E4 — 68
Ownership: Town of Somerset
Jurisdiction: Conservation Commission
Approximately 9 acres

East side of Elm Street, good condition, active agriculture, view of reservoir, limited public access leased to farmer.

Windsor Property

Map/Lot: E2 — 231, 232, 228

Ownership: Town of Somerset

Jurisdiction: Conservation Commission

Approximately .25 acres

Tide Street, Seacrest, Circle Drive, fair condition, disturbed area by sewer installations, some blacktop, swamp, wildlife habitat.

Morris Preserve

Ownership: Town of Somerset

Jurisdiction: Conservation Commission

Approximately 10 acres

North side Whetstone Hill Road, good condition, birding, wildlife, passive recreation, natural conditions. Parking area, but limited access, no trails; established wildflower garden with Somerset Garden Club.

Ken Mar Drive (at Broad Cove)

Map/Lot: E1 — 82, 83

Ownership: Town of Somerset

Jurisdiction: Conservation Commission

Approximately 2 acres

Ken Mar Drive, east and west sides at north end approximately 2 acres of land, containing wetland vegetation in its natural state. Parking at end of street, limited access but part of Boardwalk plan around Broad Cove provides vista to cove, bird watching, and nature study, walking around cove.

Fastino/Holy Ghost Land

Ownership: Town of Somerset

Jurisdiction: Conservation Commission

Approximately 8.5 acres

Fastino/Holy Ghost Land located on the north side of Billy's Lane total of 8.5 acres of land, natural condition, wildlife habitat, and access by walking, has limited access. Floodplain of Labor in Vain Brook and unnamed intermittent stream.

County Street Bird Sanctuary

Ownership: Town of Somerset

Jurisdiction: Conservation Commission

County Street, north of RS Rental, fair condition, road run off and litter a problem. Walking access for bird watching. No parking at site.

Main Street Conservation Land

Ownership: Town of Somerset

Jurisdiction: Conservation Commission

Approximately 5 acres

Main Street, good condition, vista, fishing, canoeing, kayaking river access, potential picnic site. No parking.

DeCambra Bird Sanctuary

Ownership: Town of Somerset

Jurisdiction: Conservation Commission

West end of Compos Street, natural conditions, birding. No parking except on street.

VI. COMMUNITY GOALS

A. DESCRIPTION OF PROCESS

Between January and July of 2000, the Open Space Committee hosted five public meetings to define the goals and objectives of the conservation, recreation and Open Space Plan. These meetings involved citizen input in the general areas of greatest interest to the Open Space and Recreation planning effort — Environmental Concerns (Watershed/Water Quality Protection, Wetlands, Wildlife), Trails, Athletic Facilities, Park, Scenic and Historic Sites, and Land Acquisition Strategies. Additional public comments were sought on draft materials presented at the town library in October of 2003.

The Open Space Committee had also sought input from town departments, neighborhood groups, and environmental groups through the distribution of an Open Space and Recreation Survey during June and July of 2000. The survey was also sent randomly to 4,500 households through the Somerset Spectator, the local newspaper. Surveys were also made available through the library and Recreation Department at Town Hall. The information obtained in the 314 total responses was used as one of the primary means of gauging the public's needs and concerns.

The following section seeks to summarize the major recommendations distilled from public meetings and comments: as they relate to open space and recreation objectives.

Primary Services

Continue the delivery of the highest possible quality potable water (which surpasses all the requirements of the "Safe Drinking Water Act"). Continue to address improvements to the water supply delivery system (treatment, land acquisition in Zone II's, etc.).

Community Services

The acquisition of land suitable for community services, i.e., Park, recreation facilities, schools, and public safety, should receive priority consideration. Methods should be devised to encourage developers to make suitable lands available for public use (density bonuses, design flexibility, open space provisions, etc.). Mandatory dedication should be considered only as a last resort.

Developers should be encouraged to provide recreational opportunities and open space within or in close proximity to residential areas. Such amenities enhance quality of life in residential areas and offset the need for extensive public Park, recreation and open space investments.

Environment

The town should plan in a manner that would enhance the urban and natural environment of Somerset. Minimize the effect of environmental hazards, development and their impacts upon the natural and man-made environment.

New development should be designed in the best practical manner to utilize natural drainage systems for stormwater management. Natural drainage systems are in most instances less costly, have less impact on area-wide drainage problems, preserve the natural environment and provide open space amenities. Drainage regulations should be designed to provide incentives for stormwater management techniques that utilize natural drainage and encourage environmental preservation.

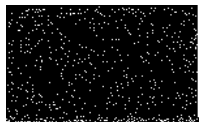
Areas of unique natural importance should be preserved and enhanced. Particular attention should be placed on preserving topographic features, stream beds, unique vegetation, prominent rock outcroppings and views and vistas. Designation of a Wild & Scenic River Corridor along the Taunton River should be pursued.

Progress Report from the 1983 Open Space Plan

In the course of developing the Action Plan for the 2004 Open Space Plan, there was a great deal of discussion and review undertaken by the Open Space Committee in order to assess the progress made in implementing the 1983 Open Space Plan's Action Plan. To its credit, the town, through its various departments and the efforts of several individuals, has been able to address and implement many of the 1983 Action Plan items.

Progress made to date on the 1983 Action Plan includes:

- Angus Street Stairs
- Erosion Control Measures at Mallard Point
- Bridge at Chace Preserve
- Bathroom facilities at Pierce Beach
- New sand on the beach at Pierce Beach
- Painted all of the equipment at all playgrounds
- Resurfaced the basketball court at Pottersville
- Re-Landscaping of Waterfront Park



- Additional sand cover at all playground facilities
 - Rehabilitation of all four (4) ball fields at South Complex
 - New handicapped bathrooms installed at South Complex
 - Rehabilitation of Historic Area, Main Street, including gas-style lamps and "brickscape" sidewalks
 - Creation of World War II Veteran's Memorial
- 9 Creation of small park with waterfront access on Ripley Street
- In the process of a complete replacement and upgrade of rubber based asphalt track
 - Plans are complete, and we are in the process of developing a financing proposal for an elevated boardwalk along the waterfront on Broad Cove
 - The town has acquired one of the last open space lots in town; 120+ acres of land
 - We are exploring the possibility of adding a walking trail and vista outlook south of the existing Brightman Street Bridge. (The existing Mass Highway Plans are to leave the bridge abutment as a fishing pier.)

B. STATEMENT OF OPEN SPACE AND RECREATION GOALS

The town's greatest challenge, at this point, appears to be maintaining the pace and efficiency with which it has addressed the Action Plan items in the 1983 Open Space Plan. In 2003, with fewer financial resources with which to operate, and more competition for those remaining financial and natural resources, the town and its citizens appear committed to meet future open space, conservation and recreation needs in the following manner:

- Goal 1: Protect the quality and quantity of Somerset's natural and water resources
 - Goal 2: Prevent the loss of rural, cultural and historical qualities of the town
 - Goal 3: Improve and expand passive and active outdoor recreation opportunities for all residents of Somerset
 - Goal 4: Promote coordinated, responsible land use management and planning
-

VII NEEDS ANALYSIS

A. RESOURCE PROTECTION NEEDS

The Conservation Commission has worked diligently over the years to protect, preserve and acquire important scenic and natural resource areas throughout town. One of the keys to the Commission's success has been the ability of the Conservation Agent to partner with the state, local industry, civic groups and regional conservation groups in creating opportunities to improve the town's natural resource area holdings.

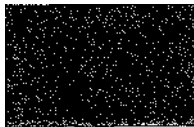
Over the years, the Commission has focused its efforts on meeting the needs for: multi-purpose open spaces that provide views, vistas, wildlife shelter and trail opportunities (the Chace Preserve and Broad Cove are past successes that can be built upon, particularly Broad Cove); additional waterfront access/property to provide fishing, swimming, boating and other recreational opportunities as well as coastal habitat conservation (relatively little coastal public access is afforded residents at this time; the creation of a new waterfront park area under the new Brightman Street Bridge will help considerably); accessible nature preserves for public education, and; multi-purpose easements along side surface waters, brooks and streams as well as on properties that serve to "knit" or connect municipal conservation and recreation areas (these areas also help to protect the water quality of receiving waters that drain into the larger coastal rivers).

The Conservation Agent and other town appointed volunteers have worked to meet these needs by also taking part in the Riverways Program Stream Team Surveys and serving on the Taunton River Wild & Scenic River Study Committee. The Wild & Scenic River Study Committee will be developing a Taunton River Stewardship Plan, in conjunction with the National Park Service, for a proposed Wild & Scenic River Corridor (of which Somerset will be a gateway to the Narragansett Bay and the upper limit of the estuary in the Taunton-Dighton area).

The town should also better document its biodiversity and natural resource base with the appropriate state agencies, particularly NHESP. Somerset currently has only two listings in the NHESP atlas, one being historical (dating back 97 years), and the other only added within the last two years. Accurate and adequate documentation and registration is necessary to help protect rare species and communities. The Nature Conservancy has recently launched a Taunton River Watershed Initiative and may be an excellent partner in a "biodiversity day" type of survey.

B. COMMUNITY/RECREATION NEEDS

The Recreation Department continues to supply a diverse assortment of programs to residents of all ages at facilities throughout the town. In order to assess the town's recreational needs, a facilities survey and assessment was undertaken during the development of this Open Space and Recreation Plan.



The facilities survey also yielded an evaluation and transition plan in order to determine use and accessibility problems for physically challenged users.

While survey results indicated that there are adequate facilities and recreational opportunities within the town, several of the facilities were in need of improvements in order to comply with the Americans with Disabilities Act (ADA Section 504) standards. Several facilities have been improved over the years, but with its aging population, Somerset must prioritize its facilities' needs in order to meet its citizens' needs. (Somerset is the oldest community within the 27 city and town SRPEDD region, with a median age of 43 years; by comparison, the median age for the state of Massachusetts is 36.7 years.)

Because of the increased age of the population served, issues such as accessibility, comfort, ease of use, and location become more important. Addressing these types of issues can also put a strain on financial resources. Historically, the Recreation Department has been the beneficiary of a great volunteer network and the ability of the Highway Department to maintain its facilities and undertake improvement projects when necessary.

There is a real cost associated with all of these activities. With the completion of the new Brightman Street Bridge (slated for 2009), there will be additional waterfront parkland, multi-modal trails, opportunities for increased public access and the potential to link municipal recreation and conservation holdings. In order to meet growing recreational needs, the Recreation Department should prepare a five (5) year Capitol Improvements Plan (CIP) which takes into account the true dollar costs of upkeep, maintenance and improvements/development of all recreational holdings. This plan should be developed with the Town Manager, Highway Department Superintendent and the Land Use Specialist. Assistance can be provided by the state's Public Access Board (for projects involving public access on town-owned land), the Division of Conservation Resources (DCR) and the National Park Service's Rivers and Trails Assistance Program. National Park Service involvement could become particularly important in terms of a Wild & Scenic River designation for the Taunton River and local projects that are consistent with the accompanying Taunton River Stewardship Plan (providing links to funding and technical assistance).

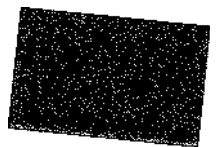


TABLE VII-1
RECREATIONAL NEEDS ANALYSIS (PER NRPA STANDARDS)
SOMERSET, POPULATION 18,234

<u>Facility</u>	<u>Recommended # of Units per Population</u>	<u># of Community- Open Fee Accessible Facilities</u>	
		<u>Currently in Somerset</u>	<u>Future Needs</u>
Biking	1 Mile Per 2,000	7.5 Miles (on road)	3.5 Miles
Basketball	1 Per 5,000	14 0*/	
Ice Hockey /	1 Per 100,000	i†	
Skating Field	1 Per 20,000	0	
Hockey	1 Per 2,000		
Tennis	1 Per 3,000	9..0	
Volleyball	1 Per 3,000	15	
Baseball / Softball	1 Per 20,000	2	
Football % Mile	1Per 20,000	0*	
Track Soccer	1 Per 10,000	6	
Swimming Pool	1 Per 20,000	0	
Nature/Hiking Trails	1 Mile Per 2,500	2.5 Miles	4.5 Miles
Golf Course	18 Holes Per 25,000	1*	

Regional facility is utilized

Field hockey/multi-purpose fields along with a % mile track are located at Somerset High School

Town has 4 multi-purpose areas which can be utilized

† Marsh provides outdoor skating with lighting

The following quote from the Subdivision and Site Plan Handbook is an important reminder to any community assessing the adequacy of its recreational facilities.

"Ideally, the national standards should stand the test in communities of all sizes. However, the reality often makes it difficult or inadvisable to apply national standards without question in specific locales. The uniqueness of every community, due to differing geographical, cultural, climatic and socioeconomic characteristics, makes it imperative that every community develop its own standards for recreation, parks and open space." ¹⁾ (taking into account such factors as population, density, average age and income, average land values, etc.²⁾

1) Subdivision and Site Plan Handbook, David Listoken and Carole Walker, New Jersey: Rutgers University, 1989, p. 229-230.

2) Recreation, Park and Open Space Standards and Guidelines, National Recreation and Park Association; National Park Service Standards.

C. LAND USE REGULATIONS/REGULATORY NEEDS

In 2003, the town hired a part-time land use specialist to work on special planning projects and initiate the town's Master Planning efforts. The town also committed to implementing a Geographic Information System (GIS) program in order to develop an electronic parcel-level data base for the town and further aid land use planning efforts, amongst various other anticipated tasks.

The specialist position(s) are a very positive step in helping to meet the goals natural resource (land and water) protection, water quality improvement, stormwater management and developing an up-to-date Master Plan for the limited remaining developable areas in town. These positions and the skills that they bring will also help to plan for transitional areas/uses around the new Brightman Street Bridge. These staff will also be key to developing responsible planning and growth management strategies.

Equally important to these processes, are the regulatory tools with which staff has to work. Local by-laws, rules, regulations and policies provide the guidelines by which informed, responsible decision-making can occur.

A review of the current Somerset Zoning By-laws and Subdivision Rules and Regulations yielded the following suggestions in order to better meet the planning and natural resource protection goals of the town:

Zoning By-Laws:

- Amend the purpose statement (Section 1) to include language covering water quality issues.
- Add water quality related definitions to the definition section (Section 2).
- Add language in the general provision section requiring compliance with DEP Stormwater Management Standards.
- Amend the Off Street Parking and Loading Space Requirements by adding a new sub-section addressing parking drainage design standards.
- Modify the Planned Developments (Section 6.10) by requiring compliance with DEP Stormwater Management Standards.
- Modify the Limited Business and Light Industrial Districts (Section 6.11) by requiring compliance with DEP Stormwater Management Standards.
- Amend the General Provisions section of Special Permits (Section 7.5.1) to require compliance with DEP Stormwater Management Standards and add conditions to protect water quality.
- Expand the purpose section of Open Space Community By-law to include protection of water quality and control of drainage, erosion and sedimentation.
- Modify the Streets, Drainage and Utilities (Section 8.6.2) by requiring compliance with DEP Stormwater Management Standards.
- Provide minimum water quality design standards in the Watershed Protection District By-law (Section 9.15).

- Create water quality related review criteria in the Watershed Protection District for the special permit granting authority.
- Replace the existing findings section in the Watershed Protection District with language that addresses water quality protection.
- Restructure the existing Shared Housing for the Elderly (Section 10) by numbering the sub-sections and adding a findings sub-section.
- Modify the site plan requirements of the Shared Housing for the Elderly By-law (Section 10.3) by requiring compliance with DEP Stormwater Management Standards.
- Expand the information required for Shared Housing for the Elderly plans to cover water quality issues (Section 10.3).
- Create a Land Clearing and Grading Bylaw.
- Create a Transfer Development Rights Bylaw.

Subdivision Rules and Regulations:

- Replace the existing purpose statement to address a number of issues including compliance with DEP standards and address erosion/sedimentation control (Section 1.1).
- Add water quality related definitions to the definition section (Section 2.1).
- Expand on list of required information for preliminary plans to include zoning districts, existing and proposed topography, well and septic system locations and flood plain data (Section 5.2).
- Expand the required information for definitive plans to include: drainage calculations, soil information, pre/post development drainage patterns, percolation tests for roadway cuts and drainage areas and emergency response numbers and maintenance schedule for sedimentation/erosion control plans (Section 6.2).
- Amend the Design Standards (Section 7.11) to require the volume and rate of Stormwater Management Regulations.

Another regulatory tool to consider in preserving sensitive or unique areas of a town is a Transfer of Development Rights (TDR) bylaw. Transfer of Development Rights are the conveyance of development rights by deed, easement or other legal instrument authorized by local law on a parcel (sending or donor parcel) to another parcel of land (receiving parcel) and the recordation of that conveyance among the land records of that municipality/county. This zoning amendment allows a community to direct growth away from either environmentally sensitive or historically/socially important sites to areas that have the infrastructure to accommodate additional growth.

(A more in-depth discussion, illustrations and a model TDR bylaw are included in the Appendix of this plan.)

A final regulatory tool that may help Somerset preserve some of its important cultural and historical features is the Community Preservation Act. The Community Preservation Act (CPA) is a local option. It enables communities to

establish a municipal Community Preservation Fund by local referendum. Monies collected for this fund are from a surcharge of up to 3% on local property taxes. The state will offer matching grants from the Community Preservation Trust Fund. Monies in the Community Preservation Fund may only be spent on open space, historic preservation, and community housing.

The CPA may work in a very complementary fashion with Somerset's new Demolition Delay Bylaw, which provides a time frame for exploring alternatives to the loss of historic properties. CPA could provide the funding while Demolition Delay provides the forum for negotiation. (A more in-depth discussion, illustrations and examples of how the CPA works are contained in the Appendix of this plan.)

D. MANAGEMENT/OVERSIGHT

Good interdepartmental working relationships have helped to keep the town's conservation, recreation and open space facilities in relatively good shape over the years. The work of the Highway Department, in particular has been exemplary in the areas of maintenance and construction.

The new land use specialist and GIS specialist positions can only make this team approach even better and more thorough. Clearly defined roles and management would help provide direction and points of contact for these positions, as well.

The town should also create a permanent Open Space Committee to oversee implementation and updates of the Open Space Plan. Somerset should never again go 15-20 years without an up-to-date Open Space Plan. With the current plan, maps and new data being available electronically, the Open Space Committee could meet periodically to update sections of the plan as change occurs. The Committee could also make sure that priority projects are kept to task and schedule. In other towns, this type of Committee has been made up of town department heads and local volunteers and usually meets at least, quarterly.

VIII GOALS AND OBJECTIVES

Goal 1: Protect the quality and quantity of Somerset's natural and water resources

- Objective 1: Assess and eliminate possible pollution sources in the most practical and efficient manner possible (refer to the 2001 River Aware report and the recent Taunton River Stream Team report for site specific problems)
- Objective 2: Support natural resource conservation and protection in important water resource and watershed areas, including the proposed Taunton River Wild & Scenic River Study Corridor and areas highlighted in Rhode Island-Massachusetts Narragansett Bay Planning Commission Report
- Objective 3: Continue to work with federal, state and local interests and, the Brayton Point Power Station, to improve air and water quality
- Objective 4: Establish estimated species habitat records for the town and the NHESP database (Somerset is the only town in the SRPEDD region with such limited records in the NHESP database)

Goal 2: Prevent the loss of the rural, cultural and historical qualities of the town

- Objective 1: Support the preservation of open space and the retention of the working landscape through various traditional, innovative and creative means; work with the DCR Heritage Landscape Inventory Program (in conjunction with the Taunton River Wild & Scenic River Study).
- Objective 2: Promote cultural and historical preservation and renovation projects, historic district designations, etc.
- Objective 3: Promote public awareness through charettes, workshops, development of materials, speakers' series, etc.

Goal 3: Improve and expand passive and active outdoor recreational opportunities for all residents of Somerset

- Objective 1: Increase the availability and improve the condition of recreational facilities throughout the town, including waterfront and multi-purpose fields
- Objective 2: Secure land necessary to meet passive and active recreation needs

Objective 3: Work to develop local and regional multi-purpose trail system

- Pursue funding for the Broad Cove Boardwalk and multi-model trail connections via Elm Street
- Develop links to the Swansea bike lanes (this could provide an eventual tie-in to the East Bay Trail in Rhode Island)
- Continue to plan for the park land and potential walking/ biking connections in conjunction with the new Brightman Street Bridge

Goal 4: Promote coordinated, responsible land use management and planning

Objective 1: Review the existing plans and tools (particularly planning board regulations) available to town departments dealing with land use, acquisition, conservation, open space and recreation to ensure compatibility and coordination of intent and effort.

Objective 2: Follow through with the initial commitment to establishing a GIS (Geographic Information System) Program for the town. This would enable the town to tie into federal, state and local data as well as implement electronic filing for development (allowing the town to track development, street construction, improvements to utility infrastructure, etc., in a real-time manner).

IX ACTION PLAN

Goal 1: Protect the quality and quantity of Somerset's natural and water resources.

Objective 1: Assess and eliminate possible pollution sources in the most practical and efficient manner possible (refer to the 2001 River Aware report and the 2003 Taunton River Stream Team report for site specific problems).

<u>ACTION</u>	<u>RESPONSIBLE PARTY</u>	<u>IMPLEMENTATION YEAR</u>
1 a Review the recommendations of the River Aware, Taunton River Stream Team, SRPEDD GRRIP Maps, the forthcoming Taunton River Stewardship Plan (Wild & Scenic), the Narragansett Bay Comprehensive Management Plan (Narragansett Bay Program, RI) and other recent environmental issue reports and prioritize the most sensitive, at-risk areas for remediation or corrective action (i.e.—Labor in Vain Brook at Route 138, salt marsh habitat areas, etc.)	All municipal boards and departments dealing with land use issues, environmental issues, stormwater management, etc. Potential partners include the State Riverways Program, DEP, the USDA Natural Resource Conservation Service, SRPEDD, Save the Bay, TRWA and the Taunton River Wild & Scenic River Study Committee.	Should begin immediately and be monitored for progress at regular intervals (quarterly, semi-annually or annually).
1 b Assess town-owned properties for potential environmental issues, particularly around water resource areas, drinking water supply areas, and recreation areas/facilities, and address concerns as required (i.e. — remediation of the exposed fly-ash problem at Mt. Hope Bay Vista Park, inflow and infiltration issues at the Water Pollution Control Facility, etc.)	Board of Selectmen, Water Department, Water Pollution Control Superintendent, Conservation Commission, Board of Health, Highway Department, Recreation, Land Use Specialist.	Begin an immediate review of facilities and environmental challenges outlined in this plan and explore effective and efficient ways to address these issues (through a timetable and prioritization approach).

1 c. Review and improve, as necessary, the existing Watershed Protection and Water Resource Protection provisions of the Zoning Bylaws

Water Department, Land Use Specialist, Conservation Commission, Planning Board, others as needed (SRPEDD, etc.)

2004-2005

Objective 2: Support natural resource conservation and protection in important water resource, wetland, coastal land, and watershed areas, including the proposed Taunton River Wild & Scenic River Study Corridor.

ACTION

RESPONSIBLE PARTY

IMPLEMENTATION YEAR

2a Continue to work with the Taunton River Wild & Scenic River Study Committee towards the nomination of the Taunton River to become part of the Federal Wild & Scenic River network; continue work on the accompanying Taunton River Stewardship Plan.

Town representatives to the Wild & Scenic River Study Committee; Board of Selectmen in conjunction with appropriate municipal departments; Partners in the Wild & Scenic River Study Committee from: Bridgewater, Halifax, Middleboro, Raynham, Taunton, Dighton, Freetown, Berkley, Fall River, SRPEDD, TRWA, Save the Bay, MA Riverways Program, National Park Service.

Ongoing with a nomination/management plan target of 2005-2006.

2b Secure open land adjacent to important water supply areas, conservation, recreation or coastal access holdings, using various tools (conservation restrictions, deeded easements, purchase, etc.)

Board of Selectmen, Conservation Commission, Planning Board, Land Use Specialist, Land Acquisition Committee, Water Department, potential partners could be regional land trusts or conservation organizations.

Ongoing

2c. Promote public education on land and water related issues through outreach, media, printed materials, charettes, workshops, seminars

Municipal departments and boards; local media and newspapers; federal, state and regional conservation partners, etc.

Ongoing

Objective 3: Continue to work with federal, state and local interests, and the power plants, to improve local and regional air and water quality.

<u>ACTION</u>	<u>RESPONSIBLE PARTY</u>	<u>IMPLEMENTATION YEAR</u>
3a. Promote a public dialogue on the ongoing studies and appropriate clean strategies, benchmarks for measurement of environmental quality improvements, and monitoring issues, associated with federal and state permits and investigations of pollution issues (NPDES and air quality permitting issues at Brayton Point)	Board of Selectmen in conjunction with the EPA, DEP, Governor's Office, federal and state legislators (MA and RI), environmental groups (MA and RI), universities (MA and RI) and others as appropriate.	Ongoing.

Objective 4: Work to document species habitat records for the town and the NHESP database (Somerset is the only town in the SRPEDD region with such limited records in the NHESP database).

<u>ACTION</u>	<u>RESPONSIBLE PARTY</u>	<u>IMPLEMENTATION YEAR</u>
4a. Begin a comprehensive survey and registration process of species, habitats, unique natural communities, rare, endangered or	Conservation Commission; NHESP staff, Environmental groups and organizations, colleges and universities, DCR,	Immediately and Ongoing.

threatened communities, etc.; pay particular attention to those areas highlighted on EOEA's BioMap and Living Waters areawide resource maps.

Riverways staff, Land Use Specialist, GIS Specialist

Goal 2: Prevent the loss of the rural, cultural and historical qualities of the town.

Objective 1: Support the preservation of open space through various traditional, innovative and creative means.

<u>ACTION</u>	<u>RESPONSIBLE PARTY</u>	<u>IMPLEMENTATION YEAR</u>
1 a Establish a prioritization process and plan for acquisition of open space; acquisition/retention/enrollment of farmland into Ch. 61 and APR programs.	Land Use Specialist, GIS Specialist, Conservation Commission, Assessors, Land Acquisition Committee, Parks & Recreation; Planning Board; potential partnerships with Basin Team, Trustees of Reservations, Wildlands Trust, SRPEDD, etc.	2004 and Ongoing.
1 b Review existing land use and planning regulations in terms of exercising options such as limited development plans, transfer of development rights (TDR), or conservation development, etc.	Land Use Specialist, Planning Board in conjunction with appropriate town departments, potential inclusion of SRPEDD.	2004 and Ongoing.

Objective 2: Promote cultural and historical preservation and renovation projects.

<u>ACTION</u>	<u>RESPONSIBLE PARTY</u>	<u>IMPLEMENTATION YEAR</u>
2a Revisit the Historic Preservation Plan for the town to determine new and update old priority projects.	Historical Commission, Historical Society, and other related town departments as necessary (federal, state, local)	2004 and Ongoing.
2b Participate in the Division of Conservation Resources Heritage Landscape Inventory Program.	Selectmen, Historical Commission, Historical Society, appropriate town departments, partnerships with Historic Mass, MHC, National Register, Taunton Heritage River and Wild & Scenic River Programs.	2004-2005
2c Consider utilizing the Community Preservation Act to fund potential historic restoration, acquisition and related, priority projects.	Selectmen, Historical Society, Historical Commission, Land Use Specialist, GIS Specialist	2004 and Ongoing.
2d Highlight the scenic, cultural and historical assets of the town's riverside drive as a true regional resource.	Selectmen, Conservation Commission, Recreation Department, Historical Commission, Historical Society, Taunton Heritage River Program, Wild & Scenic River Committee, DCR Heritage Landscape Program.	2004 and Ongoing.

Goal 3: Improve and expand outdoor recreational opportunities for all residents of Somerset.

Objective 1: Increase the availability and improve the condition of recreational facilities throughout town, including waterfront and multi-purpose fields.

<u>ACTION</u>	<u>RESPONSIBLE PARTY</u>	<u>IMPLEMENTATION YEAR</u>
Ia: Undertake a comprehensive needs assessment and issues identification study of town facilities based on the Open Space Plan (address the ADA/504 transition plan)	Recreation, Conservation Commission, Land Acquisition and other town departments as necessary	2004-2009
Ib. Develop a five-year facilities improvement plan with budget and list of potential funding sources	Recreation, other town departments as necessary.	2004
Ic. Prioritize sites for expansion potential acquisition to meet the passive and active recreation needs of Somerset's population (work with local and regional conservation and open space organizations).	or Recreation, Conservation Commission, Land Acquisition, Selectmen, other town departments as necessary	2004 and Ongoing.

Objective 2: Secure land and space necessary to meet the passive and active needs.

<u>ACTION</u>	<u>RESPONSIBLE PARTY</u>	<u>IMPLEMENTATION YEAR</u>
2a. Aggressively pursue lands adjacent to new park areas created by the new Brightman Street Bridge.	Recreation, Conservation Commission, Land Acquisition, Selectmen, MHD, FHD, State Government, Congress	2004 and Ongoing.

2b. Increase the holdings around the North End Marsh and the reservoir to protect the integrity of these areas (habitat, water supply, and passive recreation value)	Land Use Specialist, Land Acquisition, Conservation Commission, Selectmen, EOE, Water Department	2004 and Ongoing.
--	--	-------------------

Objective 3: Work to develop a regional multi-use trail system.

<u>ACTION</u>	<u>RESPONSIBLE PARTY</u>	<u>IMPLEMENTATION YEAR</u>
3a Using the existing on-road system, the new pedestrian and bicycle facilities planned for the Brightman Street Bridge and the ability to tie-into similar projects in Fall River and Swansea, develop a strategy and timetable for a regional trail to link with existing trails (and potentially, the East Bay Trail in RI).	Land Use Specialist, Recreation, Conservation Commission, Selectmen, outreach to Fall River, Swansea, Warren (RI), SRPEDD.	2004 and Ongoing.
3b Assess the ability of the town to link key open space parcels, town properties, schools, etc. ("knit" together existing open space holdings).	Land Use Specialist, Conservation Commission, Recreation, Land Acquisition, School Department, Selectmen, other town departments as applicable.	2004 and Ongoing.
3c Secure funding sources for multi-purpose trail/facility planning and construction at Broad Cove and along Elm Street, into Swansea (new bike lanes).	Conservation Commission, others as appropriate, DEM Greenways and Trails Demonstration Grants Program, MCZM Coastal Access, Public	2004-2007.

Access Board, SRPEDD, Wild
& Scenic River Study
Committee, etc.

Goal 4: Promote coordinated, responsible land use management and planning.

Objective 1: Review the existing plans and tools available to town departments, dealing with land use, acquisition, conservation, open space and recreation to ensure compatibility and coordination of intent and effort.

<u>ACTION</u>	<u>RESPONSIBLE PARTY</u>	<u>IMPLEMENTATION YEAR</u>
1 a Update the Community Action Statement and develop a Housing Plan.	Selectmen, Land Use Specialist, all town departments.	2004-2006
1 b Utilize available tools (Buildout, Open Space Plan, Community Action Statement, Historic Preservation Plan, Taunton River Stewardship Plan, Narragansett Bay CCMP, etc.) to update the Master Plan.	Selectmen, Planning Board, Land Use Specialist, GIS Specialist, all town departments as necessary, SRPEDD, outside consultant.	2004-2006.
1 c Review and revise, as necessary, policies and procedures for inter-board communications.	Selectmen, all town departments.	2004-2005
Id. Establish a permanent Open Space Committee to oversee the implementation and periodic update of the Open Space Plan and to work intermunicipally to plan, develop and implement	Selectmen, Land Use Specialist, GIS Specialist, Conservation Commission, Recreation, others as necessary, SRPEDD, Wild & Scenic River Study Committee	2004 and Ongoing.

regional projects.

representatives, RI
representatives, (Save the
Bay, Narragansett Bay
Commission, etc.).

1 e. Develop a digitized parcel
data base for the town so that all
departments are working off of the
same data when addressing
acquisition, preservation, planning
and remediation issues.

Selectmen, Assessor, GIS
Specialist, all departments as
necessary.

2004-2006

®SCENIC RIVERFRONT DRIVE

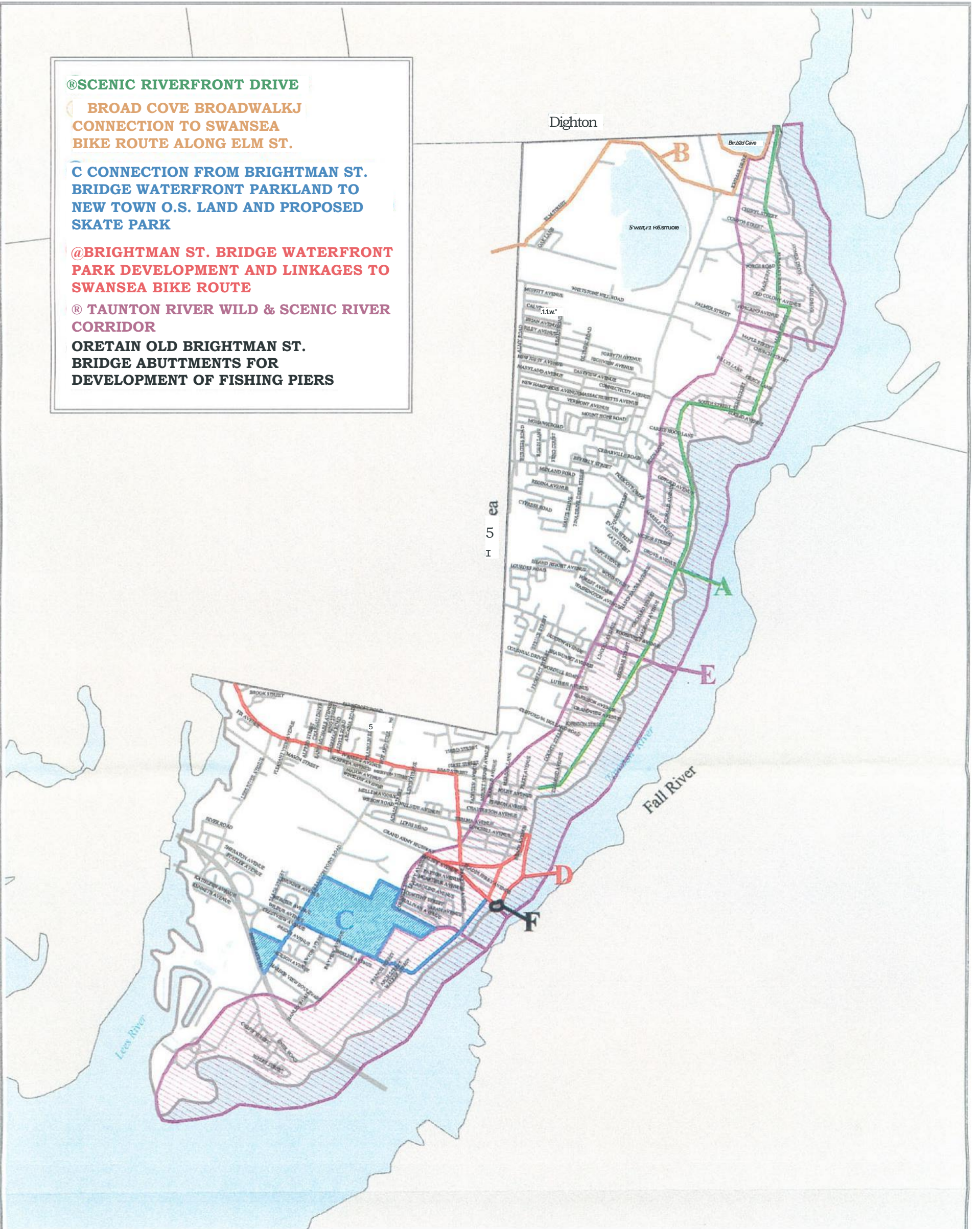
BROAD COVE BROADWALK
CONNECTION TO SWANSEA
BIKE ROUTE ALONG ELM ST.

C CONNECTION FROM BRIGHTMAN ST.
BRIDGE WATERFRONT PARKLAND TO
NEW TOWN O.S. LAND AND PROPOSED
SKATE PARK

@BRIGHTMAN ST. BRIDGE WATERFRONT
PARK DEVELOPMENT AND LINKAGES TO
SWANSEA BIKE ROUTE

® TAUNTON RIVER WILD & SCENIC RIVER
CORRIDOR

ORETAIN OLD BRIGHTMAN ST.
BRIDGE ABUTTMENTS FOR
DEVELOPMENT OF FISHING PIERS



Map produced by SRPEDD for the Town of Somerset. The map is for informational purposes only and should not be used for any other purpose. The map is not a legal document and should not be used for any legal purposes.

Scale: 1 inch = 1 mile. The map is not a legal document and should not be used for any legal purposes.

Legend	
Simms	IV c
Waterholes	CS)
A	D
3	(Z) E
U	F



Town of Somerset

Action Plan Map

X. COMMENTS

1. The first part of the document is a list of references. The references are listed in alphabetical order of the author's name. The references are as follows:

2. The second part of the document is a list of comments. The comments are listed in alphabetical order of the author's name. The comments are as follows:

3. The third part of the document is a list of conclusions. The conclusions are listed in alphabetical order of the author's name. The conclusions are as follows:

4. The fourth part of the document is a list of acknowledgments. The acknowledgments are listed in alphabetical order of the author's name. The acknowledgments are as follows:

5. The fifth part of the document is a list of appendices. The appendices are listed in alphabetical order of the author's name. The appendices are as follows:

6. The sixth part of the document is a list of figures. The figures are listed in alphabetical order of the author's name. The figures are as follows:

7. The seventh part of the document is a list of tables. The tables are listed in alphabetical order of the author's name. The tables are as follows:

8. The eighth part of the document is a list of equations. The equations are listed in alphabetical order of the author's name. The equations are as follows:

9. The ninth part of the document is a list of symbols. The symbols are listed in alphabetical order of the author's name. The symbols are as follows:

10. The tenth part of the document is a list of abbreviations. The abbreviations are listed in alphabetical order of the author's name. The abbreviations are as follows:

XI REFERENCES/RESOURCES

- Aguiar, Bill. Somerset Recreation Department. Personal correspondence, July 1999 — February 2001.**
- Bradbury, James. Somerset Historical Society. Personal correspondence, 2001, 2003.**
- Durfee, Nancy. Somerset Stream Team, Wild & Scenic River Stream Team Coordinator. Personal correspondence, 2001 — 2004.**
- Farr, Vanessa. Somerset Land Use Specialist. Personal correspondence, July 2003 — June 2004.**
- Historic Somerset: A Plan for the Preservation of Community Character, 1986.**
- Massachusetts Department of Environmental Protection, SERO. Personal correspondence, 2000, 2003.**
- Massachusetts Department of Housing and Community Development. Somerset Community Profile data and updates; 1995, 1997.**
- Massachusetts Division of Employment and Training, 2003 statistics.**
- Massachusetts Division of Fisheries, Wildlife & Environmental Law Enforcement, Bournedale office. Personal correspondence, 2001, 2003.**
- National Park Service Standards & National Recreation and Park Association Standards. National Park Service, United States Department of the Interior, 1997.**
- Natural Heritage and Endangered Species Program. Personal correspondence and written correspondence, 2000, 2002, 2004 (website).**
- Open Space Planner's Workbook. Massachusetts Executive Office of Environmental Affairs. Boston, MA. 2001.**
- Somerset Master Plan. 1986.**
- Somerset Open Space Plan. 1983.**
- The Register of Historic Places. Massachusetts Historical Commission. Boston, MA. 2003**
- Smith, Pauline. Somerset Assessor's Office. Personal correspondence. 2001, 2003.**
- Soil Survey of Bristol County, Southern Part. United States Department of**

Turrene, Jim. USDA Natural Resource Conservation Service (NRCS), West Wareham Field Office. Personal correspondence, 2002-2003.

U.S. Census. 1970, 1980, 1990, 2000.

Wordell, Christine. Conservation Commission. Personal correspondence, July 1999 — June 2004.

Online — References/Resources

www.nesoil.com (soil survey website)

www.manomet.org (Manomet Center for Conservation Services)

www.state.ma.us/dfwele/dfw/nhesp/nhtown.htm (NHESP website links to BioMap and Living Waters)

<http://data.massgis.state.ma.us> (Mass GIS website)

ADA SECTION 504

Evaluation and Transition Report

Town of Somerset
Statement of Grievance
Section 504 of Rehabilitation Act of 1973 and
Americans with Disabilities Act (ADA)

Name: _____

t. Address: _____

Phone numbers:

Home _____ **Work** _____ **TDD** _____

Relationship to Town of Somerset:

_____ **Resident** _____ **Employee** _____ **Visitor**
_____ **Other** _____ **(Describe)**

L Statement of Complaint: _____

If more space is needed please use back of form or attach additional material.

What Action Are You Requesting? _____

If more space is needed please use back of form or attach additional material.

Signature of Complainant (OPTIONAL) Date

Received By

Date

Action Taken _____

Date

This form is for "Town of Somerset purposes only. This does not in any way limit your option to file a grievance with any other agency, including the U.S. Department of Justice or the U.S. Department of the Treasury.

Grievance Procedure

The Town of Somerset adopts this grievance procedure to provide prompt and equitable resolution of complaints alleging any action prohibited by Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794) and the Americans With Disabilities Act (ADA).

Complaints should be addressed to : William Meehan, Selectman, Town Office Building, 140 Wood Street, Somerset, Massachusetts, 02726, Telephone 508-646-2800, Fax-508-646-2802, who has been designated to coordinate Section 504 compliance efforts - or - Sally Evans, Chair of the Somerset Committee for the Rights of Persons With Disabilities, (designated ADA. Coordinator), Sprperset Public Library, 1464 County Street, Somerset, Massachusetts, Telephone - 508-646-2829, Fax 508-646-2831, E-Mail - somerset@ultranet.com.

1. A complaint should be filed in writing or verbally briefly describing the alleged violation of the regulations. If notification of action taken is requested, the name, address and/or phone number must be included.
2. The complaint should be filed within thirty (30) days after the complainant becomes aware of the alleged violation.
3. An investigation, as may be appropriate, shall follow a filing of a complaint. The investigation will be conducted by the Town Administrator or designee of the

Board of Selectmen. These rules contemplate informal but thorough investigations, affording all interested persons and their representatives, if any, an opportunity to submit evidence relevant to a complaint.

4. A written determination as to the validity of the complaint and description of resolution, if any, shall be issued by William Meehan, Coordinator and a copy forwarded to the complainant no later than forty-five (45) days after filing.

5. The ADA coordinator shall maintain the files and records of the Town of Somerset relating to the complaints filed.

6. The complainant can request a reconsideration of the case in instances where he or she is dissatisfied with the resolution. The request for reconsideration should be made within ten (10) days to William Meehan.

7 The right of a person to a prompt and equitable resolution of the complaint filed hereunder shall not be impaired by the person's pursuit of other remedies such as the filing of complaints to the U.S. Department of Justice. Utilization of this grievance procedure is not a prerequisite to the pursuit of other remedies.

8. These rules shall be construed to protect the substantive rights of interested persons, to meet appropriate due process standards and to assure that the Town of Somerset complies with Section 504 and ADA regulations.

EVALUATION AND TRANSITION PLAN
SOMERSET RECREATION DEPARTMENT
APPLICABLE FACILITIES

Overview

A majority of facilities need substantial improvements in parking facilities and, especially, equipment. The average age of play equipment appears to have been installed in the 1970's. Sites rarely provide ADA compliant pedestrian connections from parking lots and adjacent residential, institutional, and commercial areas to useable areas of the recreation/open space. For example, Leahy Avenue Playground could be connected to the new Home Depot complex, and a more prominent connection could be made between the Bradbury Museum facility and Village Waterfront Park.

Recreation Facilities

Somerset's Recreation Department provides programs for its residents and maintains a system of several playgrounds, recreation facilities, and three town beaches. Activities such as hiking, nature observing, bicycling, tennis, cross country skiing, and picnicking are provided at several recreational facilities throughout the Town. These facilities include:

Athletic Facilities

O'Neil Field

Location: Brayton Point Road (South of Wilbur Avenue)

Map/Lot: A14-29

Ownership: Town of Somerset

Jurisdiction: Board of Selectmen

Zoning: **Industrial**

Management: Highway Department

Area: 6 acres

Amenities:

1 Tennis Court with lights

1 Basketball Court with lights

1 Softball Field with lights

Playground with swings, slide, and merry-go-round

Restroom Facilities

Storage Area

The property is located on Brayton Point Road, in the southern part of Somerset. The site, overall, is in a poor state of condition and does not comply with ADA standards. The surface of the tennis court renders it unusable. In addition, the surface of the parking lot needs milling/resurfacing, striping, and demarcation of handicapped spaces. Washroom facilities are in good condition. Secured funding for restroom improvements: \$18,000.

South Field

Location: Read Street/Hot and Cold Lane

Map/Lot: B7-139

Ownership: Town of Somerset

Jurisdiction: Recreation Department

Zoning: Residential

Management: Highway Department; Regular Maintenance

Area: 7.01 acres

Amenities:

1 Tennis Court

1 Basketball Court

1 Little League Baseball Diamond

2 Softball Diamonds

1 Minor League Baseball Field

1 Baseball Diamond

Playground with swings, slide, and merry-go-round

2 Restroom Facilities (handicap accessible)

Concession Stand

Storage Area

Electric Scoreboard

Located on Read Street, immediately west of South School, the primary use of the property is for baseball. The parking facilities include a mix of asphalt and gravel surfacing (no special demarcation). The site does not contain sidewalks or pathways for pedestrian travel.

Village Waterfront Park

Map/Lot: D2 Lots 109, 110, 111

Ownership: Town of Somerset

Zoning: Open Recreation

Management: Highway Department; Regular Maintenance

Area: 3.4 acres

Amenities:

Boat Ramp

Fire Museum

Historical Society Building ("Ironworks")

Restroom

Harbor Master Office

Picnic Area with grills

Playground Area

Vista Water View

Pavilion

Park Benches

Village Waterfront Park is located on Main Street in the historical village of Somerset, on the western bank of the Taunton River. This location affords

beautiful views and vistas up and down the river and of undeveloped areas of the Fall River area. The boat ramp is highly utilized, however, it needs some improvements. Concrete blocks in the ramp (visible at low tide) have settled, creating a significant rut that catches the tires of the trailers. While the upper level of the property is accessible for all persons, those who are mobility-challenged may find it difficult to access the lower park area due to steep slope of the sidewalk and driveway.

Ashton Field

Map/Lot: E5-17

Ownership: Town of Somerset

Jurisdiction: Recreation Department

Zoning: Residential

Management: Highway Department, Volunteers

Area: 5.25 acres

Amenities:

2 Softball Fields

1 Minor League Field

Playground with swings, slide, and merry-go-round

Restroom

Concession Stand

Primarily used for baseball by the Somerset Girls Softball League, this site is located in a residential neighborhood off Whetstone Hill Road.

Hillside Avenue

Map/Lot: B4-103

Ownership: Town of Somerset

Jurisdiction: AMVETS

Zoning: Residential

Management: Highway Department

Area: 1 acre

Amenities:

2 Bocci Courts

1 Basketball Court with lights

Horseshoe Pit

2 Picnic Tables

Historically, this site used to be a school property, and the building was a one-room schoolhouse. The property, while town owned, is under the sole jurisdiction of the AMVETS. AMVETS maintains the building and the Highway Department maintains the grounds.

Leahy Avenue

Location: Leahy Avenue/Route 6 (east of Home Depot)

Map/Lot: A9 Lots 227, 223

Ownership: Town of Somerset

Jurisdiction: Board of Selectmen

Zoning:

Management: Highway Department; Regular Maintenance

Area: .59 acres

Amenities:

1 Basketball Court (Convertible to Skate Rink)

2 Small Swings

Playground

Picnic Area

Located in a small post-World War II development commonly referred to as the "Spinelli" development, neighborhood children primarily use Leahy Park. The site does not offer much in terms of shade, and there is no off street parking here. To increase accessibility to Leahy Park, future connections with the Home Depot complex as well as the newly acquired 120-acre parcel, located south of Leahy Park may be explored. In addition, provision of shade through the planting of trees and/or construction of a pavilion would provide needed protection from the sun.

Mount Hope Bay Vista Park

Location: Massasoit/Ripley Streets

Map/Lot: A1 Lots 205, 231

Ownership: Town of Somerset

Jurisdiction: Conservation Commission

Zoning:

Management: Highway Department; Regular Maintenance

Area: .36 acres

Amenities:

Parking

Picnic Benches

View/Nista of Bridges, River, City and Bay

This land is located on the lower Taunton River, at Massasoit and Ripley streets. As its name implies, the land comprising the site affords a beautiful, sweeping view of both the Braga Bridge and Mount Hope Bridge, as well as the bay, the City of Fall River, and Brayton Point Power Plant. The site is unimproved in terms of ADA accessible pathways from the parking lot to the waters-edge, however, amenities include small gravel parking area, a few picnic benches, and some shade trees; needs accessible pathways; designated parking.

Bradbury Museum

Location: High Street

Map/Lot: D2-123

Ownership: Town of Somerset

Jurisdiction: Somerset Historical Commission

Zoning: Residential

Management: Highway Department; General Maintenance

Area: 3 acres

Amenities:

1 Minor League Baseball Diamond

Playground Area

1 Basketball Court

Open Field for Passive Recreation

Located in the old Village School, the Somerset Historical Commission operates the Bradbury Museum. Asphalt areas associated with the previous usage remain in place, and the surfacing is in poor condition. The eastern portion of the property is especially scenic, as it affords views of historical Main Street, Village Park and the water. Potential exists to connect the Bradbury Museum property with Main Street and Village Park with a prominent, nicely landscaped and ADA accessible walkway.

Pottersville Field

Location: County Street (south of Town Hall)

Map/Lot: C3-68

Ownership: Town of Somerset

Jurisdiction: Board of Selectmen

Zoning:

Management: Highway Department; Regular Maintenance

Area: 1.81 acres

Amenities:

6 Basketball Courts with lights

1 Baseball Field

Playground

Restroom

1 Bocci Court

The site is located within walking distance of several municipal services (Town Hall, School, Library, Council on Aging). The old school on the site houses the Town Nurse, Council on Aging, and the Little Red School House daycare (private, for profit). Current pathways from adjacent neighborhoods are not ADA accessible.

Buffington Park

Location: Linden Drive

Map/Lot: C5-300, 160A; C6-161, 162

Ownership: Town of Somerset

Jurisdiction: Board of Selectmen

Zoning: Residential

Management: Highway Department; Regular Maintenance

Area: 37.78 acres

Amenities:

Playground

Picnic Area with grills

Open Field for Passive Recreation

Wooded walking trails

Centrally located, Buffington Park is highly utilized by residents, and it is the site of the town's annual Easter Egg Hunt. Formal access to the site is via Linden Drive, and some trail users access the site via Swazey. Both Lorraine and Washington Streets terminate at/near Buffington Park, however, no formal access to the park has been provided at these locations; there is a need for alternative, accessible entrances to this area.

Pierce Beach Complex

Location: South Street

Map/Lot: D1 (Various)

Ownership: Town of Somerset

Jurisdiction: Recreation Department

Zoning: Open Recreation

Management: Highway Department; Regular Maintenance

Area: 18 acres

Amenities:**Beach**

1,000 square foot Beach Area with Lifeguards

Concession Stand

Restroom and Outdoor Shower

Pathways/Walkways

Bluffs

Nature trails on 50' Bluff

View Nista of River

Recreation

1 Tennis Court

1 Basketball Court with lights

1 Beach Volleyball Court

1 Minor League Baseball Field

1 Little League Baseball Field
2 Playground Areas
Large Tube Slide
Picnic Area with grills

Located on the Taunton River, Pierce Beach and Park facility is by far one of the most prized and picturesque. The town holds a high standard of maintenance for the site, which features beautiful landscaping, new beach sand, and excellent parking and path facilities.



Town of Somerset Conservation Commission

EVALUATION AND TRANSITION PLAN

SOMERSET CONSERVATION COMMISSION APPLICABLE FACILITIES

Chatehurst

**Approximately 5 acres
Trees
Parking Facilities**

**Bridge over Buffinton Brook
Walking Trails**

Chace Preserve is governed by the Somerset Conservation Commission and maintained by the Department of Public Works and with the aid of volunteers. Residents east of the preserve use it for access from the bridge to the center of town. It has a system of walking trails, most heavily wooded, one along the bank of Buffinton Brook. There is a paved parking area and open grassy area for sitting and carry in-carry out picnicking. It has accessible grade from the parking area to the open picnic area and the bridge for viewing the brook. Trails are rough.

Mallard.Zsint

**Approximately 3 acres
Seaside Vista
Limited Street Parking**

**Bird Sanctuary
Fishing
Benches**

Mallard Point is governed by the Conservation Commission and maintained by the Department of Public Works. Excellent seaside vista area looking up and down Taunton River, good fishing access, bird watching. Recently riprapped by the Town to prevent coastal erosion. Accessible parking on public street. Grassed trail at flat grade accessible to benches, vista and fishing point.

MatgasAttAinat

**Approximately .5 acres
Mt. Hope Bay Vista
Fishing**

Picnic area

Area is governed by Somerset Conservation Commission, maintained by the Department of Public Works. Beautiful waterfront vista looking out onto Mt. Hope Bay to Sakonnet and Bristol RI. Prom paved parking lot. Rocky beach, established picnic site in summer, access to waterfront walking. Walk along rocky beach for fishing. Accessible parking on grade with vista viewing in paved parking lot and access to picnic site.

Broad Cove

Approximately 26 acres

Wildlife habitat

Fishing, kayaking, canoeing

Waterfront

Parking area

Trail to water

Broad Cove is governed by Conservation Commission maintained by Department of Public Works. It is in excellent, pristine condition, exceptional far bird watching and vista viewing from on grade, gravel parking lot. Boats must be carried in along trail no boat ramp.

Transitional Plan

Commission has engineered plans for construction of an elevated boardwalk with accessibility. Will be seeking grants for construction of boardwalk in the future.

APPENDIX A: OPEN SPACE SURVEY

TOWN OF SOMERSET

OPEN SPACE AND RECREATION SURVEY

CONSERVATION

1. How important is it to you to preserve the following? (Please circle the number that best represents your opinion: 3 - important; 2 - neutral; 1 - not important.)

Open spaces to meet passive recreation and conservation needs	3	21	63%	X3'7	'19.
• Farm land	3	2	1	'70 %	147o ergo
• Open spaces to meet active recreational needs	3	2	1	6.5%	US% 13%

2. To reserve open spaces would you consider the following options? (Please check your choice.)

	YES	NO
• Contribute some land to the town	<u>2-4⁴/₆</u>	<u>7t/_</u>
• Sell or contribute a conservation restriction to protect your land	<u>42-194</u>	<u>11 9b</u>
• Multi-use of school facilities	<u>% '7o</u>	<u>Alb</u>
• Sell land to the town at fair market value	<u>4\$2_70</u>	<u>M</u>
• Support zoning as a means of open space protection	<u>fe...</u>	
• Give landowners a tax incentive to put their land under a conservation easement or restriction	<u>jil73</u>	<u>19,</u>

3. **Should** Somerset act to maintain its current recreational facilities or acquire more conservation land?

- 44% Maintain current recreation areas and facilities
- /396 Acquire additional conservation land
- 16/b Place equal emphasis on both

4. How important is it to you that the town acquire and preserve conservation areas as natural places?

- /b^ait. Important
- V.% Neutral
- Int* Not important

5. How important to you are the following issues: (Please indicate by circling the number that best represents this importance: 3 - important; 2 - neutral; 1 - not important).

• Pollution of groundwater	3	2	1	61 ⁴ 76	Ile.	tilb
• Loss of Natural habitats	3	2	1	71496	ZIT*	q le
• Loss of rural qualities of the town	3	2	1	83 'lb	I.39.	ii fo
• Quality of surface water	3	2	1	920	490	K ⁴ 16
• Loss of agricultural land	3	2	1	6 /go	30/.	4 lb

RECREATION

6. What activities do you and your family enjoy? (Where: In-(town); Out-(elsewhere))

Activity	In	Out	Activity	In	Out
Fishing	<u> </u>	<u> </u>	Horseback riding	<u>✓</u>	<u>majority</u>
Boating	<u> </u>	<u> </u>	Picnicking	<u> </u>	

Activity	In	Out	Activity	In	Out
Canoeing	✓	majority	Downhill		/Dual%
Swimming	✓	majority	skiing X-		47,
Running	✓	✓	Country skiing		-7--V-
Softball	✓	✓	Skating		
Tennis Soccer	✓	✓	Baseball		
Football	✓	✓	Basketball Golf		
Petting Zoo	✓	✓	Sledding		t1
Bicycling &		100%	Skateboarding		/6159r.
Roller blading					
Mountain	✓	✓			
biking (Non-					
motorized)					

How important is it to you that Somerset expand or develop the following? (Please circle the number that best represents this importance: 3 - great need; 2 - moderate need; 1 - no need).

Baseball fields	3 /896 2 4.516 13G10	Nature/hiking trails	3 39% 2 399% 1 2278
Softball fields	3 32% 2 3t fa 1 3(.1 3	Boat ramps	3 77g. 2 41% 1 37.71.
Basketball courts	2116 2 .3/ 47. 1 .3/ 49b 3	Bridle paths	3 c•To 2 321. 1 4.6%
Beach access	3976 2 itztrib 1 t7 &71 3	Tennis courts	3 .917. 2 559.1 30. 3
Picnic areas Tot	Stft* 2 457e 1 23 90 3	Swimming	2.4/. 2 52% 1 /47 Te.
lots	tiue 21416 1 2.7470	instruction	
Year-round	34116 2 4310 1 Pi bo	programs	
recreation programs		(lessons) Summer recreation programs 3	
		579. 2 2/ T.1 1106	

8. Do you and your family use Somerset's waterfront areas/waterbodies for the following?

hinder your recreation opportunities in town:

Lack of areas in which to recreate .37%
Limited public recreational facilities 1/3 98

	YES	NO		YES	NO
Bathing	6476 y co		Boating	4.410 56	
Swimming	II% 83 ?a		Skateboarding	3398 411	

Please indicate any of the following problems that

Lack of activities 3508
Lack of access to open space 36?b Other (please list)

cAt_fut sOots-a; .51.rnoteA boket4ya.1 (47 .schwa/ se.e child/ton yrutit2-
ooLkyefielloo;
abreNtiA. til.ttAa.) 221,41.44 V1401.43 tifabt.07

10. What improvements or maintenance suggestions do you have for any parks and recreation facilities now

available?

• (Pl o' at. • ...1%

tt-eot 641.1% ltbktLv's ; Wocituv5 dada Oe toattoe sofikalt -6c L4 dt Sszcfh

C67 44 4A-2-te.S^{t11}5r6-eizout XareettiN j /44-4'6size..42, a t balictietto);

buf can aAtit).

Better playground equipment at Read St. Park; Dancing for seniors; better
maintenance of ballfields; greater access to basketball courts for summer basketball
leagues; beauti " " " town'n'm' idr it's attractive lldo: "k oot p eirp's" man

11. What is your favorite conservation or recreation area in Town?

liktapnt Avt.0°(€246 ,(3ta-64) -reiturW6-4 Rrae-x)_____

DEMOGRAPHIC INFORMATION

12. What are the ages of the members of your household (number of each)?

- Under 5 _____; 5-12 _____; 13-18 _____; 19-50 _____; Over 50 _____

Do you have any other comments or suggestions concerning open space and/or recreation in Somerset? If so, please use the space below or the back of this page. We thank you for filling out the survey; your opinions and ideas are important to the future of Somerset. When we have tabulated the results, we will publish the results.

• firms ahrnilleuis;6 61.141 eteo/n -tens;_____

• 72/t tug_05n1wet u2.4cLihAA:6 072,41 r--(96C4 _____

-CAAAP _eguAtt mod-._____

,A.6111-et !Al ccil.". iteatI7AIV2)_____

I⁷ALamute) riéesk Le/Vb./law- fit, CANtv7I et4⁺-6; _____

•yo/ticynetl 0^l/₄₁ LA ciA -/ 61,0-Y1 .-p44176Aleat ae -at(
-raimAr4 learem _____

APPENDIX B: GLOSSARY OF OPEN SPACE TERMS

Glossary of Open Space Terms

Area of Critical Environmental Concern (ACEC): An area encompassing land and water resources of regional or statewide importance, designated by the Secretary of Executive Office of Environmental Affairs (in accordance with 301 CMR 12:6.40-6.55), to receive additional protection and management.

Agricultural Preservation Restriction Program (MGL Ch.132A., s.11a-d): One form of a Conservation Restriction which pertains to lands in active agricultural use. The most commonly known APR program is through the Massachusetts Department of Food and Agriculture (DFA) who purchases the development rights to farms. Under the state APR Program, farmers retain ownership to their land and the right to farm or raise livestock on it, but permanently prohibit all future non-agricultural development (such as residential subdivision or commercial development) on the land. In Westport, MA for example, the DFA has spent nearly \$3.5 million to purchase APRs on 11 farms totalling 1056 acres.

Barrier Beach: A narrow low-lying strip of land generally consisting of coastal beaches and coastal dunes extending roughly parallel to the trend of the coast. It is separated from the mainland by a narrow body of fresh, brackish, or saline water or by a marsh system.

Conservation Commission Act (MGL Ch.40, s.8C): Establishes the authority of any town or city to create a Conservation Commission and outlines the Commission's powers to "acquire, maintain, improve, protect, limit the future use of or otherwise conserve and properly utilize open spaces in land and water areas within its city or town, and it shall manage and control the same."

Conservation Fund Act (MGL Ch.40, s.5): Allows cities and towns to appropriate money for the maintenance and activities of the Conservation Commission. Monies in the fund may be expended by the Commission for any purpose, including costs associated with acquisition or maintenance of town conservation lands.

Conservation Restriction (MGL Ch.184, ss.31-33): A legal agreement between a landowner and a conservation organization (land trust), Municipal Conservation Commission, or government agency that permanently limits a property's uses in order to protect the land's conservation value. The voluntary decision by a landowner to place a Conservation Restriction on their land prohibits future development of the property but allows for other activities. Called Conservation Easements in many other states.

Benefits

Helps town achieve land protection goals without having to buy expensive properties.

Land remains privately held, stays on the tax rolls (at a reduced rate) and is maintained by the landowner, saving the town costs and liability associated with land ownership.

Benefits to Landowner

Landowner is compensated for the decrease in value of the land placed under a Conservation Restriction through property, income, and estate tax relief

Landowner keeps title to the land, can continue to enjoy and maintain the land, can retain privacy rights and can sell or give the property to family or others. The restriction "runs with the land" and any new owners must abide by its terms.

Habitat: The specific area or environment in which a particular type of plant or animal lives. An organism's habitat must provide all the basic requirements for survival.

Land Trust: a private, non profit land conservation organization which works with landowners to acquire land or conservation restrictions for permanent conservation.

Land Banking: A fee on real estate transfers in a community that is used to fund open space acquisitions and affordable housing programs. Requires approval of state legislature. Nantucket and Martha's Vineyard are the only places in the state with approved, active land bank systems. Numerous attempts in the past decade to establish land banking in Barnstable County and elsewhere have failed. There are currently bills pending in the Massachusetts legislature that would authorize individual town election of land banking.

Natural Heritage & Endangered Species Program (NHESP): A program within the Massachusetts Department of Fisheries, Wildlife, and Environmental Law Enforcement, which officially maps known habitats of rare and endangered plant and animal species.

Nonpoint Source Pollution: Pollution generated over a relatively wide area and dispersed rather than discharged from a discrete pipe. Some examples are road runoff, septic systems, and agricultural runoff.

Open Space and Recreation Plan: A town-specific community planning document which defines a town's goals toward preserving important natural, scenic, agricultural, and historic lands for conservation and maintaining adequate outdoor recreation opportunities. The Plan is approved by the Massachusetts Division of Conservation Services and must be updated every five years: Towns with updated, approved Open Space and Recreation Plans are eligible for state fiinding under the Massachusetts Self-Help Program for the purchase and improvement of land for conservation and recreation.

Private Landowners Liability (MGL Ch.21, s.17C): Massachusetts law that states that an owner of land who permits the public to use such land for recreational purposes without imposing a charge or fee shall not be liable for injuries to persons or property sustained by him while on his land in the absence of willful, wanton, or reckless conduct by the owner.

Property Tax Reduction Statutes - Chapter 61: Massachusetts General Laws Chapters 61, 61A, and 61B provide for reductions in property tax on lands in active Forest, Agriculture, and Recreational use respectively. Provides incentive for landowners not to develop their land, but does **not permanently protect land**. Property can be removed from 61 program classification but the landowner is liable for "roll back" taxes for up to four previous tax years in which the land was classified under these sections. Also, provides that the

municipality in which the land is located must be notified of conversion of the land back to residential or other use. The city/town then has 120 days to meet the offer the owner has for the purchase of the property or, if the property is not being sold, to purchase the land for fair market value.

Scenic Roads Act (MGL Ch.40, s.15c): Massachusetts law allowing cities and towns to designate any non-state road within the town as a scenic road. After a road has been designated, any repair, maintenance, reconstruction, or paving shall not involve cutting or removal of trees or destruction of stone walls without the prior written approval of the local Planning Board after a public hearing has been held.

Self Help & Urban Self Help Programs (MGL Ch.132A, s.2b&11): Grant programs offered by the Division of Conservation Services to Massachusetts Cities and Towns for conservation and recreation projects. The Self Help Program provides funding assistance for the acquisition of conservation land. Urban Self Help funds the acquisition of park lands and the development or renovation of outdoor recreational facilities. The maximum state share available under these programs is based on the communities equalized valuation per capita decile rank and ranges from 52-70%. Maximum grant awards are \$500,000. DCS approved Open Space and Recreation Plans are required for Self Help funding.

Southeastern Regional Planning and Economic Development District (SRPEDD): a regional planning agency, located in Taunton, MA, which provides technical and planning assistance to communities in Bristol and Plymouth counties, coordinates inter-municipal activities, and acts as a clearinghouse for regional information.

Watershed: The land surrounding a body of water that contributes fresh water, either from streams, groundwater, or surface runoff to a lake, river, groundwater supply, or coastal waterbody.

Wetlands: Habitats where the influence of surface water or groundwater has resulted in the development of plant and animal communities adapted to aquatic or intermittently wet conditions. Wetlands include saltmarshes, wooded swamps, freshwater marshes, bogs, shallow subtidal areas and similar areas. Protection of and work within wetlands is regulated by the Massachusetts Wetlands Protection Act which is administered locally by the Conservation Commission.

APPENDIX C: ARTICLE 97 OF THE STATE CONSTITUTION

PUBLIC LAND PROTECTION
Article 97 of the Constitution
Opinion of the Attorney General 1973

The House of Representatives, by H. 6085, has addressed to me several questions regarding Article 97 of the Articles of Amendment to the Constitution of Massachusetts. Establishing the right to a clean environment for the citizens of Massachusetts, Article 97 was submitted to the voters on the November 1972 ballot and was approved. The questions of the House go to the provision in the Article requiring that acts concerning the disposition of, or certain changes in, the use of certain public lands be approved by a two-third roll-call vote of *each* branch of the General Court.

Specifically, your questions are as follows:

1. Do the provisions of the last paragraph of Article XCVII of the Articles of the Amendments to the Constitution requiring a two thirds vote by each branch of the general court, before a change can be made in the use or disposition of land and easements acquired for a purpose described in said Article, apply to all land and easements held for such a purpose, regardless of the date of acquisition, or in the alternative, do they apply only to land and easements acquired for such purposes after the effective date of said Article of Amendments?

2. Does the disposition or change of use of land held for park purposes require a two thirds vote, to be taken by the yeas and nays of each branch of the general court, as provided in Article XCVII of the Articles of the Amendments to the Constitution, or would a majority vote of each branch be sufficient for approval?

3. Do the words "natural resources" as used in the first paragraph of Article XCVII of the Articles of the Amendments to the Constitution include ocean, shellfish and inland fisheries; wild birds, including song and insectivorous birds; wild mammals and game; sea and fresh water fish of every description; forests and all uncultivated flora, together with public shade and ornamental trees and shrubs; land, soil and soil resources, lakes, ponds, streams, coastal, underground and surface waters; minerals and natural deposits, as formerly set out in the definition of the words "natural resources" in paragraph two of section one of chapter twenty-one of the General Laws?

4. Do the provisions of the fourth paragraph of Article XCVI I of the Articles of the Amendments to the Constitution apply to any or all of the following means of disposition or change in use of land held for a public purpose: conveyance of land; long-term lease for inconsistent use; short-term lease, two years or less, for an inconsistent use; the granting or giving of an easement for an inconsistent use; or any agency action with regard to land under its control if an inconsistent use?

The proposed amendment to the Constitution as agreed to by the majority of the members of the Senate and the House of Representatives, in joint session, on August 5, 1969 , and again on May 12, 1971, and became part of the Constitution by approval by the voters at the state election next following, on November 7, 1972. The full text of Article 97 is as follows:

Art. XCVII. Article XLIX of the Amendments to the Constitution is hereby annulled and the following is adopted in place thereof: The people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural scenic, historic, and aesthetic qualities of their environment; and the protection, of the people in their right to the conservation, development and utilization of the agricultural, mineral, forest, water, air and other natural resources is hereby declared to be a public purpose.

The general court shall have the power to enact legislation necessary or expedient to protect such rights.

In the furtherance of the foregoing powers, the general court shall have the power to provide for the taking, upon payment of just compensation therefor, or for the acquisition by purchase or otherwise, of lands and easements or such other interests therein as may be deemed necessary to accomplish these purposes.

Lands and easements taken or acquired for such purposes shall not be used for other purposes or otherwise disposed of except

by laws enacted by a two-thirds vote, taken by yeas and nays, of each branch of the general court.

1. The first question of the House of Representatives asks, in effect, whether the two-thirds roll-call vote requirement is retroactive, to be applied to lands and easements acquired prior to the effective date of Article 97, November 7, 1972. For the reasons below, I answer in the affirmative.

The General Court did not propose this Amendment nor was it approved by the voting public without a sense of history nor void of a purpose worthy of a constitutional amendment. Examination of our constitutional history firmly establishes that the two-thirds roll-call vote requirement applies to public lands wherever taken or acquired.

Specifically, Article 97 annuls Article 49, in effect since November 5, 1918. Under that Article the General Court was empowered to provide for the taking or acquisition of lands, easements and interests therein "for the purpose of securing and promoting the proper conservation, development, utilization and control" (of) "agricultural, mineral, forest, water and other natural resources of the commonwealth." Although inclusion of the word "air" in this catalog as it appears in Article 97 may make this new article slightly broader than the supplanted Article 49 as to purposes for which the General Court may provide for the taking or acquisition of land, it is clear that land taken or acquired under the earlier Article over nearly fifty years is now to be subjected to the two-thirds vote requirement for changes in use or other dispositions. Indeed all land whenever taken or acquired is now subject to the new voting requirement. The original draftsmen of our Constitution prudently included in Article 10 of the Declaration of Rights a broad constitutional basis for the taking of private land to be applied to public *uses*, without limitation on what are "public uses." By way of acts of the Legislature as well as through generous gifts of many of our citizens, the Commonwealth and our cities and towns have acquired park land and reservations of which we can be justly proud. To claim that new Article 97 does not give the same care and protection for all these existing public lands as for lands acquired by the foresight of future legislators or the generosity of future citizens would ignore public purposes deemed important in our laws since the beginning of our commonwealth.

Moreover, if this amendment were only prospective in effect, it would be virtually meaningless. In our Commonwealth, with a life commencing in the early 1600s and already cramped for land, it is most unlikely that the General Court and the voters would choose to protect only those acres hereafter added to the many thousands already held for public purposes. The comment of our Supreme Judicial Court concerning the earlier Article 49 is here applicable: "It must be presumed that the convention proposed and the people approved and ratified the Forty-ninth Amendment with reference to the practical affairs of mankind and not as a mere theoretical announcement" Opinion of the Justices, 237 Mass. 598, 608.

2. In its second question the House asks, in effect, whether the two-thirds roll-call vote requirement applies to land held for park purposes, as the term "park" is generally understood. My answer is in the affirmative, for the reasons below.

One major purpose of Article 97 is to secure that the people shall have "The right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and aesthetic qualities of their environment" The fulfillment of these rights is uniquely carried out by parkland acquisition. As the Supreme Judicial Court has declared, •

"The healthful and civilizing influence of parks in or near congested areas of population is of more than local interest and becomes a concern of the State under modern conditions. It relates not only to the public health in its narrow sense, but to broader considerations of exercise, refreshment, and enjoyment." Higginson v. Treasurer and School House Commissioners of Boston, 212 Mass. 583, 590; see also Higginson v. Inhabitants of Nahant, 11 Allen 530, 536.

A second major purpose of Article 97 is "the protection of the people in their right to the conservation, development and utilization of the agricultural, mineral, forest, water, air and other natural resources." Parkland protection can afford not only the conservation of forests, water and air but also a means of utilizing these resources in harmony with their conservation. Parkland can undeniably be said to be acquired for the purposes in Article 97 and is thus subject to me two-thirds roll-call requirement.

This question as to parks raises a further practical matter in regard to implementing Article 97 which, warrants further discussion. The reasons the Legislature employs to explain its actions can be of countless levels of specificity or generality and land might conceivably be acquired for general recreation purposes or for very explicit uses such as the playing of baseball, the flying of kites, for evening strolls or for Sunday afternoon concerts. Undoubtedly, to the average man, such land

would serve as a park but at *even* a more legalistic level it clearly can also be observed that such and was acquired, in the language of Article 97, because it was a "resource" which could best be "utilized" and "developed" by being "conserved" within a park. But it is not surprising that most land taken or acquired for public use is acquired under the specific terms of statutes which may not match verbatim the more general terms found in Article 10 of the Declaration of Rights of the Constitution or in Articles 39, 43, 49, 51 and 97 of the Amendments. Land originally acquired for limited or specified public purposes is thus not to be excluded from the operation of the two-thirds roll-call vote requirement for lack of express invocation of the more general purposes of Article 97. Rather the scope of the Amendment is to *be* very broadly construed, not only because of the greater broadness in "public purpose," changed from "public *uses*" appearing in Article-49, but also because Article 97 establishes that the protection to be afforded by the Amendment is not only of public uses but of certain express rights of the people.

Thus, all land, easements and interests therein are covered by Article 97 if taken or acquired for the protection of the people in their right to the conservation, development and utilization of the "agricultural, mineral, forest, water, air and other natural resources" as these terms are broadly construed. While small greens remaining as the result of constructing public highways may be excluded, it is suggested that parks, monuments, reservations, athletic fields, concert areas and playgrounds clearly qualify. Given the spirit of the Amendment and the duty of the General Court, it would seem prudent to classify lands and easements taken or acquired for specific purposes not found verbatim in Article 97 as nevertheless subject to Article 97 if reasonable doubt exists concerning their actual status.

3. The third question of the House asks, in effect, how the words "natural resources," as appearing in Article 97, are to be defined.

Several statutes offer assistance to the General Court, all without limiting what are "natural resources." General Laws Ch. 21, defines "natural resources," for the purposes of Department of Natural Resources jurisdiction, as including "ocean, shellfish and inland fisheries; wild birds, including song and insectivorous birds, wild mammals and game; sea and fresh water fish or every description; forests and all uncultivated flora, together with public shade and ornamental trees and shrubs; land, soil and soil resources, lakes, ponds, streams, coastal, underground and surface waters; minerals and natural deposits."

In addition, G.L. Ch. 12, § 11D, establishing a Division of Environmental Protection in my Department, uses the words "natural resources" in such a way as to include "air, water, rivers, streams, flood plains, lakes, ponds or other surface or subsurface water resources" and "seashores, dunes, marine resources, wetlands, open spaces, natural areas, parks or historic districts or sites." General Laws Ch. 214, s. 10A, the so-called citizen-suit statute, contains a recitation substantially identical. To these lists Article 97 would add only "agricultural" resources.

It is safe to say, as a consequence, that the term "natural resources" should be taken to signify at least these cataloged items as a minimum. Public lands taken or acquired to conserve, develop or utilize any of these resources are thus subject to Article 97.

It is apparent that the General Court has never sought to apply any limitation to the term "natural resources" but instead has viewed the term as an evolving one which should be expanded according to the needs of the time and the term was originally inserted in our Constitution for just that reason. See Debate of the Constitutional Convention 1917-1918, p. 595. The resources enumerated above should, therefore, be regarded as examples of and not delimiting what are "natural resources."

4. The fourth question of the House requires a determination of the scope of activities which is intended by the words: "shall not be used for other purposes or otherwise disposed of."

The term "disposed" has never developed a precise legal meaning. As the Supreme Court has noted, "The word is nomen generalissimum, and standing by itself, without qualification, has no technical signification." Phelps vs. Harris, 101 U.S. 370, 381 (1880). The Supreme Court has indicated, however, that "disposition" may include a lease. U.S. v. Gratiot, 39 U.S., 526 (1840). Other cases on unrelated subjects suggest that in Massachusetts the word "dispose" can include all forms of transfer no matter how complete or incomplete. Rogers v. Goodwin, 2 Mass. 475s; Woodbridge v. Jones, 183 Mass. 549; Lord v. Smith, 293 Mass. 555. In this absence of precise legal meaning, Webster's Third New International Dictionary is helpful. "Dispose of" it is defined as to transfer into *new* hands or to the control of someone else." A change in physical or legal control would thus prove to be controlling.

I, therefore, conclude that the "dispositions" for which a two-thirds roll-call vote of each branch of the General Court is required to include: transfers of legal or physical control between agencies of government, between political subdivisions, and between levels of government, of lands, easements and interests therein originally taken or acquired for the purposes stated in Article 97, and transfers from public ownership to private. Outright conveyance, takings by eminent domain, long-term and short-term leases of whatever length, the granting or taking of easements and all means of transfer or change of legal or physical control are thereby covered, without limitation and without regard to *whether* the transfer be for the same or different uses or consistent or inconsistent purposes.

This interpretation affords a more objective test, and is more easily applied, than "used for other purposes." Under Article 97 that standard must be applied by the Legislature, however, in circumstances which cannot be characterized as a disposition - that is, when a transfer or change in physical or legal control does not occur. Within any agency or political subdivision any land, easement or interest therein, if originally taken or acquired for the purposes stated in Article 97, may not be "used for other purposes" without the requisite two-thirds roll-call vote of each branch of the General Court.

It may be helpful to note how Article 97 is to be read with the so-called doctrine of "prior public use," application of which also turns on changes in use. That doctrine holds that "public lands devoted to one public use cannot be diverted to another inconsistent public use without plain and explicit legislation authorizing the diversion." Robbins v. Department of Public Works, 355 Mass. 328, 330 and cases there cited.

The doctrine of "prior public use" is derived from many early cases which establish its applicability to transfers between corporations granted limited powers of the Commonwealth, such as eminent domain, and authority over water and railroad easement; e.g., Old Colony Railroad Company v. Framingham Water Company, 153 Mass. 561; Boston Water Power Company v. Boston and Worcester Railroad Corporation, 23 Pick. 360; Boston and Main Railroad v. Lowell and Lawrence Railroad Company, 124 Mass. 368; Eastern Railroad Company v. Boston and Main Railroad, 111 Mass. 125, and Housatonic Railroad Company v. Lee and Hudson Railroad Company, 118 Mass. 391. The doctrine was also applied at an early date to transfers between such corporations and municipalities and counties; e.g., Boston and Albany Railroad Company v. City Council of Cambridge, 166 Mass. 224 (eminent domain taking of railroad land); Eldredge v. County Commissioners of Norfolk, 185 Mass. 186 (eminent domain taking of railroad easement); West Boston Bridge V. County Commissioners of Middlesex, 10 Pick. 270 (eminent domain taking of turnpike land), and Inhabitants of Springfield v. Connecticut River Railroad Co. 4 Cush. 63 (eminent domain taking of a public way).

The doctrine of "prior public use" has in more modern times been applied to the following transfers between governmental agencies or political subdivisions; a) a transfer between state agencies, Robbins v. Department of Public Works, 355 Mass. 328 (eminent domain taking of Metropolitan District Commission wetlands), b) transfers between a state agency and a special state authority, Commonwealth v. Massachusetts Turnpike Authority, 346 Mass. 250 (eminent domain taking of MDC land) and see Loschi v. Massachusetts Port Authority, 354 Mass. 53 (eminent domain taking of parkland), c) a transfer between a special state commission and special state authority, Gould v. Greylock Reservation Commission, 350 Mass. 410 (lease of portions of Mount Greylock), 4) transfers between municipalities, City of Boston v. Inhabitants of Brookline, 156 Mass. 172 (eminent domain taking of a water easement) and Inhabitants of Quincy v. City of Boston, 148 Mass. 389 (eminent domain taking of a public way), e) transfers between state agencies and municipalities, Town of Brookline v. Metropolitan District Commission, 357 Mass. 435 (eminent domain taking of parkland) and City of Boston v. Massachusetts Port Authority, 356 Mass. 741 (eminent domain taking of a park), f) a transfer between a special state authority and a municipality, Appleton v. Massachusetts Parking Authority, 340 Mass. 303 (1960) (eminent domain, Boston Common), g) a transfer between a state agency and a county, Abbot v. Commissioners of the County of Dukes County, 357 Mass. 784 (Department of Natural Resources grant of navigation easement), and h) transfers between counties and municipalities, Town of Needham v. County Commissioners of Norfolk, 324 Mass. 293 (eminent domain taking of common and park lands) and Inhabitants of Easthampton v. County Commissioners of Hampshire, 154 Mass. 424 (eminent domain taking of school lot).

The doctrine has also been applied to the following changes of use of public lands within governmental agencies or within political subdivisions: a) infra-agency uses, Sacco v. Department of Public Works, 352 Mass. 670 (filling a portion of a Great Pond), b) intramunicipality uses, Higginson v. Treasurer and School House Commissioners of Boston, 212 Mass. 583 (erecting a building on a public park), and see Kean v. Stetson, 5 Pick. 492 (road built adjoining a river), and c) intracounty uses, Bauer v. Mitchell, 247 Mass. 522 (discharging sewage upon school land).

The doctrine may also possibly reach de facto changes in use; e.g., Pilgrim Real Estate Inc. v. Superintendent of Police of

Boston 330 Mass. 250 (parking of cars on park area) and may be available to protect reservation land held by charitable corporations; e.g., Trustees of Reservations v. Town of Stockbridge, 348 Mass. 511 (eminent domain).

In addition to these extensions of the doctrine, special statutory protections, codifying the doctrine of "prior public use," are afforded local parkland and commons by G. L. c. 45 and public cemeteries by G. L. c. 114, ss. 17, 41. As to changes in use of public lands held by municipalities or counties, generally, see G. L. c. 40, s. 15A and G. L. c. 214, s. 3 (11).

This is the background against which Article 97 was approved. The doctrine of "prior public use" requires legislative action, by majority vote, to divert land from one public use to another inconsistent public use. As the cases discussed above indicate, the doctrine requires an act of the Legislature regardless whether the land in question is held by the Commonwealth, its agencies, special authorities and commissions, political subdivisions or certain corporations granted powers of the sovereign. And the doctrine applies regardless whether the public use for which the land in question is held in a conservation purpose.

As to all such changes in use previously covered by the doctrine of "prior public use" the new Article 97 will only change the requisite vote of the Legislature from majority to two-thirds. Article 97 is designed to supplement, not supplant, the doctrine of "prior public use."

Article 97 will be of special significance, though, where the doctrine of "prior public use" has not yet been applied. For instance, legislation and a two-thirds roll-call vote of the Legislature will now for the first time be required even when a transfer of land or easement between governmental agencies, *between* political subdivisions, or between levels of government is made with no change in the use of the land, and even where a transfer is from public control to private.

Whether legislation pending before the General Court is subject to Article 97, or the doctrine of "prior public use," or both, it is recommended that the legislation meet the high standard of specificity set by the Supreme Judicial Court in a case involving the doctrine of "prior public use":

"We think it is essential to the expression of plain and explicit authority to divert (public lands) to a new and inconsistent public use that the Legislature identify the land and that there appear in the legislation not only a statement of the new use but a statement or recital showing in some way legislative awareness of the existing public use. In short, the legislation should express not merely the public will for the new *use* but its willingness to surrender or forego the existing use." (Footnote omitted.) Robbins v. Department of Public Works, 355 Mass. 328, 331.

Each piece of legislation which may be subject to Article 97 should, in addition, be drawn so as to identify the parties to any planned disposition of the land.

Conclusions

Article 97 of the Amendments, to the Massachusetts Constitution establishes the right of the people to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic and esthetic qualities of their environment. The protection of the people in their right to the conservation, development and utilization of the agricultural, mineral, forest, water, air and other natural resources is declared to be a public purpose. Lands, easements, and interests therein taken or acquired for such public purposes are not to be disposed of or used for other purposes except by two-thirds roll-call vote of both the Massachusetts Senate and House of Representatives.

Answering the questions of the House of Representatives I advise that the two-thirds roll-call vote requirement of Article 97 applies to all lands, easements and interests therein whenever taken or acquired for Article 97 conservation, development or utilization purposes, *even* prior to the *effective* date of Article 97, November 7, 1972. The Amendment applies to land, easements and interests therein held by the Commonwealth, or any of its agencies of political subdivisions, such as cities, towns and counties.

I advise that "natural resources" given protection under Article 97 would include at the very least, without limitation: air, water, wetlands, rivers, streams, lakes, ponds, coastal, underground and surface waters, flood plains, seashores, dunes, marine resources, ocean, shellfish and inland fisheries, wild birds including song and insectivorous birds, wild mammals and game, sea and fresh waterfish of every description, forests and all uncultivated flora, together with public shade and ornamental trees and shrubs, land, soil and soil resources, minerals and natural deposits, agricultural resources, open spaces, natural areas, and

parks and historic districts or sites.

I advise that Article 97 requires a two-thirds roll-call vote of the Massachusetts Senate and House of Representatives for all transfers between agencies of government and between political subdivisions of lands, easements or interests therein originally taken or acquired for Article 97 purposes, and transfers of such land, easements or interests therein from one level of government to another, or from public ownership to private. This is so without regard to whether the transfer *be* for the same or different uses or consistent or inconsistent purposes. I so advise because such transfers are "dispositions" under the terms of the new Amendment, and because "disposition" includes any change of legal or physical control, including but not limited to outright conveyance, eminent domain takings, long and short-term leases of whatever length and the granting or taking of easements.

I also advise that intra-agency changes in uses of land from Article 97 purposes, although they are not "dispositions," are similarly subject to the two-thirds roll-call vote requirement.

Read against the background of the existing doctrine of "prior public use," Article 97 will thus for the first time require legislation and a special vote of the Legislature even where a transfer of land between governmental agencies, between political subdivisions or between levels of government results in no change in the use of land, and *even* where a transfer is made from public control to private. I suggest that whether legislation pending before the General Court is subject to Article 97, or the doctrine of "prior public use," or both, the very highest standard of specificity should be required of the draftsmen to assure that legislation clearly identifies the locus, the present public uses of the land, the new uses contemplated, if any, and the parties to any contemplated "disposition" of the land.

In short, Article 97 seeks to prevent government from ill-considered misuse or other disposition of public lands and interests held for conservation, development or utilization of natural resources. If land is misused a portion of the public's natural resources may *be* forever lost, and no less so than by outright transfer. Article 97 thus provides a new range of protection for public lands far beyond existing law and much to the benefit of our natural resources and to the credit of our citizens.

APPENDIX D: FUNDING OPPORTUNITIES FROM STATE AGENCIES



THE COMMONWEALTH OF MASSACHUSETTS
OFFICE FOR COMMONWEALTH DEVELOPMENT

100 CAMBRIDGE STREET, SUITE 1010 • BOSTON, MA 02114-2524

(617) 573-1375

MITT ROMNEY
GOVERNOR

KERRY HEALEY
LIEUTENANT GOVERNOR

July 1, 2004

Dear Applicant:

We are pleased to announce a new policy, Commonwealth Capital, applying to the Executive Office of Environmental Affairs Self-Help and Urban Self-Help Programs, Clean Water and Drinking Water Revolving Funds, brownfields funding, Agriculture Preservation Restriction Program, and other land acquisition programs beginning in fiscal year 2005. Commonwealth Capital will help communities implement land-use regulations consistent with state- and region-wide sustainable development goals. This policy is another step being taken by the Office for Commonwealth Development (OCD) and the Executive Office of Environmental Affairs (EOEA) to promote compact growth and environmental protection.

All communities seeking a grant or loan from these programs will be asked to fill out a Commonwealth Capital application (attached). The application is designed to measure, as appropriate, your municipality's efforts toward advancing sustainable development goals, and will contribute 20% to your application's overall score.

The Governor created Commonwealth Capital to advance compact development, housing opportunities, reuse of brownfields and abandoned buildings, conservative use of land and water resources, and protection of forestry, fishing and agriculture. A maximum score of 140 points is possible, but no community is expected to meet all of the criteria; some communities will be strong in some areas and some will be strong in others. The application is crafted to acknowledge and support the differences in our communities that collectively enrich our Commonwealth.

We made every effort to ensure the Commonwealth Capital application is clear and simple as possible. Our goal is not to generate paper but to gain results. Guidance is available (along with the application itself), at <http://www.mass.gov/oed/comcap.html>.

We are also pleased to announce that beginning this July, technical assistance will be available to help you implement sustainable development consistent land use regulations. Information will be posted at <http://www.mass.gov/oed/comcap.html> as it becomes available.

For questions on Commonwealth Capital, please visit <http://www.mass.gov/oed/comcap.html> or email commcap@massmail.state.ma.us or call (617) 626-4949.

Cordially,

Handwritten signature of Douglas I. Foy.

Douglas I. Foy, Secretary
Office for Commonwealth Development

Handwritten signature of Ellen Roy Herzfelder.

Ellen Roy Herzfelder, Secretary
Executive Office of Environmental Affairs



The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Mitt Romney
GOVERNOR

Kerry Healey
LIEUTENANT GOVERNOR

Ellen Roy Herzfelder
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181

July 1, 2004
Re: FY2005 DCS Annual Grant Round

Dear Prospective Applicant:

I am pleased to announce that my office, through the Division of Conservation Services (DCS), **in anticipation of, and contingent upon, the availability of funds** will conduct the annual Fiscal Year 2005 grant round for the Self-Help, Urban Self-Help and federal Land and Water Conservation programs. I invite you to apply for funds by the filing deadline of October 1, 2004. By this time we expect to know how much state funding will be available. Due to the time it takes for you to prepare applications, I wanted to give you as much time as possible and hope that you will apply. While the amount of available state funding is yet to be determined, we do expect approximately \$2M to be appropriated by Congress for the stateside LWCF program and no less than the \$2M from state bond funds received last year. The federal monies may be utilized either for conservation or active recreation projects.

Self-Help Program

The Self-Help Program provides funds to conservation commissions for the purchase of conservation land. The priority for this year's Self-Help grant round will be for the purchase of open space for protection of sensitive stream, river, lake and pond watersheds and biological conservation (including species and habitats). Projects that augment existing conservation lands, or connect to existing conservation lands, and thereby help to preserve the integrity and health of the local or regional ecosystems, will receive greater consideration for funding.

Urban Self-Help Program

The Urban Self-Help Program assists cities and urban towns with the acquisition, construction and/or renovation of parks. The priorities for this year's Urban Self-Help grants will be the innovative re-use of brownfield sites and projects that provide recreational opportunities to urban populations. Projects that serve to stabilize neighborhoods or are part of urban center revitalization efforts will be given special consideration. Small towns may qualify for these grants where projects are designed to provide statewide or regional recreational facilities or up to a maximum grant of \$50,000 for smaller recreational projects.

Land and Water Conservation Fund

These federal grant monies can be used for either state or local agency conservation or park projects as long as outdoor recreation is the primary use. The focus for conservation projects is identical to the Self-Help Program. Park projects should reflect the same project focus as the Urban Self-Help program. The federal funds are being announced in anticipation of a congressional appropriation for fiscal year 2005. Approximately \$2 million is expected from the federal LWCF appropriation. Applicants should apply to the Self-Help Program for conservation land acquisition projects, and to the Urban Self-Help Program for parkland acquisition, improvement, or development projects. The National Park Service, pending the federal appropriations process, will announce the total money available to the stateside LWCF program next fall. The Executive Office of Environmental Affairs reserves the right to determine the allocation of state and federal sources of grant funds as project and budgetary conditions warrant. These federal funds may not be matched on the same project with other federal funding sources unless authorized by Congress.

Self-Help, Urban Self-Help and the LWCF Programs each have specific eligibility requirements and are awarded on a competitive basis. Grants for state assistance range from 52-70% reimbursement based upon a community's equalized valuation per capita (EVPC) decile rank, and 50% for federal assistance. The maximum grant award for any project has been set at \$500,000, but may be reduced or increased at my discretion.

All proposals must advance Sustainable Development objectives as well as watershed and ecosystem protection. Such projects should promote sustainable communities by protecting significant environmental or recreation resources, guiding development away from these resources and to appropriate development areas, and should maximize accessibility via alternative transportation modes (e.g., public transit, bicycle, walking). Proposals that involve inter-municipal and municipal-state cooperation, and multiple partners including non-profits are encouraged. EOEA, its agencies, and non-profits have developed *The Statewide Land Conservation Plan*, a map of specific lands in Massachusetts of interest to many conservation stakeholders. This map will be available online within the next few months. In the meantime, applicants may contact Scott Costello of our MassGIS office at (617) 626-1076 to obtain a copy. I also invite you to visit the Community Preservation page of EOEA's web site at www.mass.gov/envir and click on Community Preservation for information that can help you implement land conservation projects in the broader context of historic preservation, housing, and transportation considerations. Applicants should be advised that the program selection and rating systems have been revised to take into consideration Smart Growth objectives.

In order to encourage municipalities to implement Smart Growth consistent land use practices, the Romney Administration has launched a new incentive policy known as Commonwealth Capital. Beginning in July 2004, ten state programs, including those of the Division of Conservation Services, will use revised project selection systems that include a Commonwealth Capital Score. Municipalities must apply directly to the Office for Commonwealth Development to receive their score. The application and other information are available online at <http://www.mass.gov/ocd/comcap.html>. For questions on Commonwealth Capital email commcapamassmail.state.ma.us or call (617) 626-4949.

Please contact DCS at (617) 626-1010, if you wish to learn more about these grant programs and to request an application package. More information and application forms may also be found on the DCS web page at www.mass.gov/envir/dcs. Thank you for your partnership in land conservation and I encourage each and every community to take advantage of this opportunity.

Regards,

A handwritten signature in black ink, reading "Ellen Roy Herzfelder". The signature is written in a cursive, flowing style.

Ellen Roy Herzfelder

COMMONWEALTH CAPITAL APPLICATION

Municipality:

Email:

Date:

Name:

Title:

Phone:

Please attach to this application a letter signed by the municipality's chief elected official designating a point of contact and outlining how the community has met, or made a binding commitment to, the following criteria. For zoning measures, please cite the zoning bylaw or ordinance and submit a zoning map. For non-zoning criteria or recently passed zoning, provide a copy of pertinent plans, bylaws, appropriations, maps, or other documentation. Electronic submissions are preferred. See Application guidance for additional details and a sample letter.

	Existing	Commit
1. PROMOTE COMPACT DEVELOPMENT (42)		
a. Mixed-use zoning district with capacity for additional growth	<input type="checkbox"/> (7)	<input type="checkbox"/> (3)
b. Zoning for accessory units	<input type="checkbox"/> (7)	<input type="checkbox"/> (3)
c. Zoning allowing, as of right, multi-family dwellings (not age restricted)	<input type="checkbox"/> (4)	<input type="checkbox"/> (2)
If capacity exists within such districts for the equivalent of >20% of existing units in the community	<input type="checkbox"/> (3)	<input type="checkbox"/> (1)
d. Zoning for clustered development	<input type="checkbox"/> (4)	<input type="checkbox"/> (2)
If zoning is mandated, as of right, or has been utilized in the past 12 months	<input type="checkbox"/> (3)	<input type="checkbox"/> (1)
e. Zoning for transfer of development rights	<input type="checkbox"/> (7)	<input type="checkbox"/> (3)
f. Zoning directing new development to existing water and sewer network	<input type="checkbox"/> (7)	<input type="checkbox"/> (3)
2. EXPAND HOUSING OPPORTUNITIES (33)		
a. Executive Order 418 Housing Certification, including, where applicable, regional certification	<input type="checkbox"/> (7)	
b. DHCD-approved Affordable Housing Plan	<input type="checkbox"/> (7)	<input type="checkbox"/> (3)
c. Attainment of the affordable housing goals	<input type="checkbox"/> (7)	
d. Zoning requiring the inclusion of affordable units	<input type="checkbox"/> (6)	<input type="checkbox"/> (3)
e. Local funding or use of appropriate municipally-owned land	<input type="checkbox"/> (6)	<input type="checkbox"/> (2)
3. REUTILIZE BROWNFIELDS AND ABANDONED BUILDINGS (12)		
a. Plan for redevelopment: (a) inventory, (b) remediation/reuse strategy, (c) site planning, (d) other	<input type="checkbox"/> (6)	<input type="checkbox"/> (3)
b. Incentives for Brownfields assessments and reuse: (a) funding, (b) tax incentives, (c) permit streamlining, (d) other	<input type="checkbox"/> (6)	<input type="checkbox"/> (3)
4. PLAN FOR LIVABLE COMMUNITIES (10)		
a. Current Master Plan or Executive Order 418 Community Development Plan	<input type="checkbox"/> (2)	<input type="checkbox"/> (1)
If zoning is consistent with the plan	<input type="checkbox"/> (2)	<input type="checkbox"/> (2)
If the plan and zoning are consistent with relevant Regional Policy Plan (when available)	<input type="checkbox"/> (2)	<input type="checkbox"/> (1)
b. Current DCS-approved Open Space and Recreation Plan	<input type="checkbox"/> (4)	<input type="checkbox"/> (2)
5. PROMOTE LIVABLE COMMUNITIES (12)		
a. Adoption of Community Preservation Act or Land Bank, or recent passage of municipal bond authorization or significant funding for open space protection	<input type="checkbox"/> (4)	<input type="checkbox"/> (2)
b. Protection of 15-25% of land area by a permanent Chapter 184-type restriction or fee-simple Article 97 type acquisition	<input type="checkbox"/> (2)	
If 25% or more of land area	<input type="checkbox"/> (3)	
If a restriction or fee acquisition occurred in the past 12 months	<input type="checkbox"/> (3)	
If a restriction or acquisition was undertaken jointly with a land trust in past 12 months	<input type="checkbox"/> (2)	
6. ADVANCE SOUND WATER POLICY (12)		
a. Water Conservation Plan consistent with the Water Conservation Standards	<input type="checkbox"/> (4)	<input type="checkbox"/> (2)
b. Implementation of (a) stormwater BMPs, (b) LID techniques, (c) other water resource measures	<input type="checkbox"/> (4)	<input type="checkbox"/> (2)
c. Integrated Water Resources Management Plan	<input type="checkbox"/> (4)	<input type="checkbox"/> (2)
7. PRESERVE WORKING NATURAL LANDSCAPES (12)		
a. Right-to-farm bylaw	<input type="checkbox"/> (4)	<input type="checkbox"/> (2)
b. Zoning for agricultural and forestry uses (>10 acres per dwelling unit)	<input type="checkbox"/> (4)	<input type="checkbox"/> (2)
c. Existing agricultural commission or use of Ch. 61-61A-61B right of first refusal in last 2 years	<input type="checkbox"/> (4)	
8. PROMOTE SUSTAINABLE DEVELOPMENT VIA OTHER ACTIONS (7)		
a. Existing or commitment to local measures or actions not listed	<input type="checkbox"/> (7)	<input type="checkbox"/> (5)

TOTAL BOTH EXISTING & COMMIT POINTS (MAX. 140)

Funding Opportunities from State Agencies for Environmental Projects*

Executive Office of Environmental Affairs (EOEA)

Watershed Initiative: Watershed Stewardship Program

Contact: John Clarkeson (617) o26-1159

Summary: EOEA seeks proposals from qualified organizations, as an independent contractor, that accomplish one or more of the following objectives as stated in the Open Space Bond. These are 1) restoration of sites; 2) research 3) environmental improvements; 4) recreational improvements. Each proposed activity must meet one or more of these objectives. The Watershed Stewardship Program, administered by the Massachusetts Watershed Initiative (MWI), is intended to support these objectives in the context of the Initiative. The MWI focuses on creating strong partnerships among state and federal agencies, municipalities, local boards, businesses, watershed and civic associations, regional planning agencies, citizens and others to restore and protect natural resources utilizing a watershed approach. EOEA may give preference to proposals which, in addition to providing the Commonwealth with the best value for the proposed project, also demonstrates the bidder's ability to develop or enhance its position as an organized, sustaining community partner for the Watershed Initiative.

Eligibility: 501 c(3) organizations, land trusts, conservation districts, counties, cities and towns, and other regional or local planning organizations.

Match: Projects must have a 1:1, dollar-for-dollar non-state match of the total state grant amount. In-kind services are eligible as a cost match..

\$ Range Individual contracts of up to \$50,000 will be awarded on a competitive basis. In fiscal year 2000 (July 1, 1999 to June 30, 2000) a total of \$200,000 may be awarded. The contract shall last for a period of up to 2 years. The contract may be extended at the discretion of EOEA for up to two six month periods. Funding for Year 2 is contingent upon satisfactory completion of Year 1 tasks.

Schedule: RFR currently available. Responses due in the late fall.

* This funding list is a summary document, not a request for responses nor an amendment to any request for responses currently effective. All requests for responses are available on the internet at www.comm-pass.com.

Watershed Initiative: Volunteer Monitoring Grants

- Contact: John Clarkeson (617) 626-1159 or john.clarkeson@state.ma.us
Christian Krahforst (617) 626-1216 or christian.krahforst@state.ma.us
- Summary: Grants are available to support volunteer groups which monitor inland and coastal systems; to coordinate these efforts with state priority projects under the MWI; and to gather information to support the protection and restoration of important aquatic habitats and natural resources. These funds may be used for marine, estuarine, and freshwater monitoring to better understand the environmental health of our state's 27 watersheds. There are two types of grant awards:
- 1) Volunteer Monitoring Grant - To aid in the start-up of volunteer monitoring or to support established volunteer monitoring groups currently active in environmental monitoring in Massachusetts. Grants are awarded based on detailed work plans including schedules for Quality Assurance Project Plan (QAPP) submission (where applicable). This grant may not be used solely for salaries or administrative costs. Outreach expenditures cannot exceed more than 15% of the total award.
 - 2) Project Supply Grant - To purchase project supplies such as but not limited to field and sampling supplies, laboratory testing, and lab supplies.
- Eligibility: Both types of volunteer monitoring grants are available to an IRS 501 (c) (3) certified nonprofit monitoring group as well as those monitoring groups organized by municipalities or public academic institutions relying on volunteers. Municipal or non-profit labs are also eligible for equipment grants if they submit a joint response with a cooperating volunteer monitoring group.
- \$ Range: Type 1 grant recipients may receive up to \$5000.
Type 2 grant recipients may receive up to \$2000.
- Schedule: The RFR goes out periodically. Please call for more information.

Watershed Initiative/Planning for Growth: Communities Connected by Water Program

- Contact: John Clarkeson: (617) 626-1175
- Summary: The purpose of this program is to solicit projects that protect watershed resources and plan for sustainable growth. This program recognizes the inherent connection between the resource protection objectives of the Planning for Growth Program and the Watershed Initiative.
- Eligibility: Watershed Initiative Segment: watershed organizations, 501 (c)(3) organizations, regional planning agencies, conservation districts, counties, and cities and towns. Planning for Growth Segment: regional planning

agencies acting on behalf of cities and towns, a group of municipalities acting through a lead community.

- Match: Watershed Initiative Segment: 100%; at least 50% cash. Planning for Growth Segment: 25%; cash or in-kind.
- \$ Range: Watershed Initiative Segment: contracts of up to \$150,000. Planning for Growth Segment: contracts of up to \$100,000.
- Examples: Two projects were funded from the 1998 grant round, "Planning for Growth and Watershed Protection in the Ipswich River Watershed" and "Lool'Ing Beyond Devens: Planning for the Future in the Nashua River Watershed Area".
- Schedule: It is anticipated that the RFR for the 1999 offering will be issued in January 2000.

Watershed Initiative/Environmental Education: Outdoor Classroom Program

- Contact: Melissa Griffiths (617) 626-1114
- Summary: Each proposed activity should meet one or more of the following goals while promoting watershed and environmental education in the classroom. The goals, as defined by the Open Space Bond Bill are 1) restoration of sites; 2) research; 3) environmental improvements; 4) recreational improvements.
- Match: Not required, but presence of match does strengthen application.
- \$ Range: Up to \$1,500.
- Examples: New program. None awarded to date.
- Schedule: RFR is currently available. Applications will be accepted through March 1, 2000. Responses are currently reviewed on a monthly basis.

Planning for Growth Grants

- Contact: Kurt Gaertner: (617) 626-1154
- Summary: Comprehensive growth planning for cities and towns and development of regional policy plans.
- Eligibility: Municipalities and regional planning agencies.
- Match: 25%, can be cash or in-kind.
- \$ Range: Up to \$100,000.
- Examples: \$80,000 to the towns of Buckland and Shelburne for the completion of an inter-municipal comprehensive plan. \$50,000 to the Berkshire Regional Planning Commission and the Towns of Lee and Lenox for development of a sub-regional growth policy plan.
- Schedule: Call for more information.

Wetlands Restoration and Banking Program

GROWetlands Grant Program

- Contact:** Christy Foote-Smith: (617) 292-5991
- Summary:** The program funds the implementation of "proactive" (not required by a permit or enforcement action) wetlands restoration projects. The program wishes to promote and support wetland restoration projects that have been identified and prioritized through the GROWetland Initiative, inventories it has conducted of degraded salt marshes, and watershed wetland restoration plans it has developed.
- Eligibility:** Applicants must be public entities, including counties, town authorities, regional government bodies, and any instrumentalities of government. The wetland restoration work to be performed must not be for the purpose of providing wetland mitigation required by a permit or enforcement action.
- Match:** A grant match is not required, but may result in a more competitive project since the proportion of cash and in-kind contributions toward the total project cost is a criterion for evaluation grant proposals.
- \$ Range:** Although there is no maximum application amount, the total program funds are \$100,000 annually. Proposals fall into two categories, but are judged equally : 1) under \$50,000 and 2) over \$50,000.
- Examples:** Fundable project costs include: 1) physical activities directly related to wetland restoration such as dredging, filling, ditching, mowing, installation of structures, excavation, planting, grading, and monitoring and 2) the purchase of materials such as culverts, tidegates, and other structures necessary to carry out a successful restoration.
- Schedule:** All application materials are reviewed by mid-winter annually. Call for more information.

Corporate Wetlands Resoration Program

- Contact:** Christy Foote-Smith: (617) 292-5991
- Summary.** This program is funded through a public/private partnership to restore wetlands. The program provides funds for wetland restoration projects to GROWetlands projects accepted the Wetlands Restoration and Banking Program (different from the GROWetlands Grant program). GROWetlands provides technical and other support to groups, agencies, individuals who are engaging in proactive wetland restoration. The program funds the implementation of "proactive" (not required by a permit or enforcement action) wetlands restoration projects.
- Eligibility:** Unlimited as to applicants. Must be project that meets WRBP's definition of "wetland restoration".

Match: A grant match is not required, but may result in a more competitive project since the proportion of cash and in-kind contributions toward the total project cost is a criterion for evaluation grant proposals.

\$ Range: Unlimited.

Examples: Project activities include: 1) physical activities directly related to wetland restoration such as dredging, filling, ditching, mowing, installation of structures, excavation, planting, grading, and monitoring; 2) the purchase of materials such as culverts, tidegates, and other structures necessary to carry out a successful restoration; and 3) other activities directly related to wetland restoration such as project design and permitting.

Schedule: Applications are accepted year round.

Division of Conservation Services (DCS)

Self-Help Program

Contact: Jennifer Soper: (617) 626-1015

Summary: Funds for acquiring land for conservation and passive recreation purposes.

Eligibility: Municipal Conservation Commissions (A town must have an state approved Open Space and Recreation Plan to be eligible.)

Match: 52-70% grant of total project cost: level of funding dependent upon the equalized valuation per capita decile ranking of the community. Please note that this is a reimbursement program, not a matching grants program.

\$ Range: Maximum Grant award amount is announced at the onset of each grant round by the Secretary of EOEA.

Examples: Award to Falmouth to purchase coastal pond property adjacent to larger conservation area.

Schedule: The application process begins in the spring with an application deadline of June 1. A new rolling grant round is in development and will be announced by the Secretary of EOEA.

Urban Self-Help Program

Contact: Joan Robes: (617) 626-1014

Summary: Funds for acquiring land for public outdoor recreation and/or the renovation or development of public outdoor park and recreation facilities.

Eligibility: Municipalities:.. Town must have a state approved Open Space and Recreation Plan to be eligible.

- Match:** 52-70% grant of total project cost: level of funding dependent upon the equalized valuation per capita decile ranking of the community. Please note that this is a reimbursement program, not a matching grants program.
- \$ Range:** Maximum Grant award amount is announced at the onset of each grant round by the Secretary of EOEA.
- Examples:** Funds to the City of Cambridge to convert Danehy Park from a 50-acre landfill to playing fields and open space.. A new rolling grant round is in development and will be announced by the Secretary of EOEA.
- Schedule:** The application process begins in the spring with an application deadline of June 1.

Massachusetts Environmental Trust

Environmental Grants

- Contact:** Robbin Peach: (617) 727-0249
- Summary:** The Trust funds projects that: (1) encourage cooperative efforts to raise environmental awareness, and (2) support innovative approaches that can protect and preserve our natural resources, with a special focus on water and related land resources.
- Eligibility:** Non-profit, community associations, civic groups, schools and institutions for higher education, municipalities, and state agencies.
- Match:** See individual program guidelines.
- \$ Range:** See individual program guidelines.
- Examples:** Recipients have included the Coalition for &ITlards Bay, Springfield Science Museum, Pioneer Valley Planning Commission, Association for the Preservation of Cape Cod, and many others.
- Schedule:** The Trust's list of funding availability for FY00 is now available. All program guidelines are available on the Trust's web site.
[http://www.agmconnectorg/maenvtrl](http://www.agmconnectorg/maenvtrl.html) .html.

Office of Coastal Zone Management (CZM)

Coastal Pollutant Remediation (CPR) Program

- Contact:** Jason Burtner (617) 626-1214
- Summary:** Stormwater pollution and vessel pump-out grants.
- Eligibility:** The 221 Municipalities located within the Massachusetts coastal watersheds.
- Match:** 25% local match, cash or in-kind services
- \$ Range:** No restrictions; past grants have ranged between \$3,000 and \$140,000.

Examples: Design and construction of a Best Management Practice structure to filter roadway runoff flowing through a storm drain; boat pump-outs.

Schedule: RFR released in late spring with deadline in summer.

Gulf of Maine Council on the Marine Environment Non-Profit Organizations Coastal and Marine Environment Grants

Contact: Susan Snow-Cotter (617) 626-1202.

Summary: Grants to fund efforts to restore shellfish habitat, restore groundfish resources, identify effects of toxins in marine food chain, reduce marine debris, protect and restore regionally significant coastal habitat.

Eligibility: Nonprofit organizations (e.g. community assoc., civic groups, municipalities, education institutions) in Gulf of Maine Watershed which in Massachusetts extends from Salisbury to Nantucket. (Does not include 131177Ards Bay towns.)

Match: 50% match requirement (Half of the match must be in cash.)

\$ Range: \$1,000 - \$10,000

Examples: Outreach materials to support marine debris education. Development of bilingual Citizen's Guide to Protecting Natural Resources of Boston Harbor.

Schedule: Depends on funding availability. Call for more information.

**Department of Environmental Management
(DEM) Lake and Pond Grant Program**

Contact: Steve Men: (617) 626-1353

Summary: Lake and Pond protection, preservation, enhancement, and public access.

Eligibility: Municipalities; Co-applications are encouraged from Lake and Pond Associations or Districts, and Watershed Associations.

Match: 50% cash match.

\$ Range: \$1,000-\$10,000

Examples: Controlling non-point pollution; eradicating non-native aquatic plant species, developing lake and watershed management plans.

Schedule: In past years, applications were mailed in October and the deadline was December 31. Call for more information.

Recreational Trails Program

Contact: Peter Brandenburg: (617) 626-1453

Summary: Construction and improvement of publicly accessible recreational trails.

Eligibility: Municipalities, nonprofit groups, and regional and state agencies.

Match: 20% minimum, in-kind permitted.
\$ Range: \$2000-\$20,000, exceptions considered.
Examples: Trail building materials; support of volunteer trail maintenance activities.
Schedule: To be determined.

Greenways and Trails Demonstration Grants

Contact: Jennifer Howard: (413) 586-8706 X18; email jennifer.howard@state.maa
Summary: Innovative projects that advance the creation and promotion of greenway and trail networks throughout Massachusetts.
Eligibility: Municipalities, RPAs, and nonprofit organizations.
Match: None required, although encouraged including in-kind contributions.
\$ Range: \$1,000 - \$5,000; up to \$10,000 available for multi-town projects.
Examples: Improving access to rivers and trails, producing greenway and trail brochures, maps, signs, and curricula, and involving community members in greenway and trail planning and implementation.
Schedule: Applications are due in fall/winter each year - call for more information.

Coastal Access Grants Program

Contact: Geordie Vining: (617) 626-1398
Summary: Local and regional projects that improve and enhance the general public's recreational access to the coast.
Eligibility: Municipalities, RPAs, and nonprofit organizations.
Match: None required, although encouraged.
\$ Range: Currently up to \$5,000 per grant.
Examples: Develop a local public access plan, or a management plan for coastal property; develop a new coastal trail; enhance existing coastal access points; develop coastal access educational initiative.
Schedule: The application deadline is at the end of the calendar year, with awards announced 1-2 months later; projects and final reports must be completed by autumn. Call for exact dates and more information.

Urban Forest Planning and Education Grants

Contact: Phillip Rodbell: (617) 626-1466
Summary: Funds to build support for the protection and management of community trees and forest ecosystems.
Eligibility: Municipalities and nonprofit groups.

Match: 100%, in-kind allowed.
\$ Range: Up to \$10,000
Examples: Tree inventories that involve residents in data collection; hands-on training to students to observe, plant and care for trees; workshops and public awareness campaigns; urban environmental analysis (GIS).
Schedule: Applications are due in mid-April.

Heritage Tree Care

Contact: Edith Marka: (617) 626-1466
Summary: Funds for pruning and maintenance of large or historic public trees.
Match:
\$ Range:
Eligibility: Municipalities and non-profit groups.
Schedule: Call for more information.

Mass ReLeaf Program

Contact: Edith Makra: (617) 626-1466
Summary: Funds the purchase of trees for community planting projects by developing partnerships between business, government, and nonprofit groups.
Eligibility: Municipalities, nonprofit groups, and community volunteer groups.
Match: 50%, usually in-kind services to plant and maintain trees.
\$ Range: up to \$5000
Examples: Tree planting to reduce energy use, curb the urban heat island effect, and offset urban pollution; educational and promotional events to expand volunteer networks and corporate partners.
Schedule: Grants in early spring and fall when available. Call for details.

Forest Stewardship Program

Contact: Edith Marka: (617) 626-1466
Summary: Grants to private forest landowners to protect forest ecosystems. Landowners, with assistance of DEM foresters, develop a forest stewardship plan for their property, which makes them eligible for Federal cost sharing funds to help carry out the plan.
Eligibility: Any forest landowner in Massachusetts, who meets the following criteria: ownership must be private, non-industrial, and non-profit; and size of forest land must be less than 1,000 acres in total in the State.
Match:

\$ Range:

Examples: Forest stewardship plans and implementation can include any project which meets one of the 9 main goals, such as wildlife habitat management, erosion reduction, protection of endangered species, trail creation/maintenance, and timber quality improvement.

Schedule: Applications were due in March of past years. Call for more information.

Massachusetts H.storic Landscape Preservation Grant Program

Contact: Katy Lacy: (617) 626-1379 or Icaty.lacy@state.maus

Summary: State-funded competitive grant program to support the preservation and restoration of historic landscapes listed or in certain instances eligible for listing on the National Register of Historic Places.

Eligibility: Applicants must be a municipality.

Match: The Program requires a municipal cash match of no less than 30 percent and no more than 48 percent of the total project.

\$ Range: Up to \$50,000 per year per project.

Examples: Inventory, planning and design activities include the survey of historic landscapes preservation of historic landscape reports, park user studies etc; construction activities include stabilization, protection, rehabilitation and restoration projects that are consistent with current planning documents; preservation maintenance activities include those cyclic maintenance activities that are essential to the long term protection and preservation of historic fabric and features of site; public education and stewardship activities include workshops, school programs, brochures, signage and interpretive elements.

Schedule: Call for more information.

Department of Environmental Protection (DEP)

Section 319 Nonpoint Source Pollution Grants

Contact: Beth McCann: (617) 292-5901

Summary: To control nonpoint sources of water pollution, particularly from agricultural lands, paved surfaces, and other areas where rainwater collects pollutants as it runs over the land.

Eligibility: Any interested public or private organization.

Match: 40% non-federal match of total project cost.

\$ Range: \$20,000 to \$200,000

- Examples: Bioengineering technique used to repair eroded streambank; development of outreach materials to educate about nonpoint pollution, innovative stormwater management techniques.
- Schedule: An RFR is issued annually, around March 1, with proposals due to DEP around May 1. There is considerable lag time between applying for and receiving s319 funds. The RFR for Federal Fiscal Year 2000 will be available in March 1999 for projects that will be funded in 2000.

Massachusetts Clean Water State Revolving Fund Program

- Contact: Steven McCurdy: (617) 292-5779
- Summary: In an effort to provide incentive to communities to undertake projects with meaningful water quality and public health benefits, this program provides financial assistance to help municipalities and wastewater districts to comply with federal and state water quality requirements. The Program provides low-interest loans to finance water quality improvement projects, with particular emphasis on watershed management priorities.
- Eligibility: Massachusetts municipalities and waste water districts.
- Match:
- \$ Range: Minimum \$100,000. Maximum applicants limited to 15-20% of annual program capacity. Annual capacity is approximately \$150M to \$200M.
- Examples: Planning and construction of eligible projects, including new wastewater treatment facilities and upgrades of existing facilities; infiltration/inflow correction; wastewater collection systems; control of combined sewer overflows; and non-point source pollution abatement projects, such as landfill capping, community programs for upgrading septic systems (Title 5), and storm water remediation.
- Schedule: Solicitation annually during the summer. Call for more information.

Massachusetts Drinking Water State Revolving Fund Program

- Contact: Steven McCurdy: (617) 292-5779
- Summary: In an effort to provide incentive to communities to undertake projects with meaningful public health benefits, this program provides financial assistance to help municipalities and public water suppliers to comply with federal and state Safe Drinking Water Act requirements. The Program provides low-interest loans to finance construction or improvement of water treatment facilities, as well as enhancement to distribution systems.

Eligibility: Massachusetts municipalities and community water systems with at least 15 residential connections.

Match:

\$ Range: For calendar years 1998-2003, up to \$400 million may be available through the loan program.

Examples: Projects include: New and upgraded drinking water treatment facilities; projects to replace contaminated sources, new water treatment, or storage facilities; consolidation or restructuring of water systems; project and system activities that provide treatment, or effective alternatives to treatment, for compliance with regulated health standards, such as the Surface Water Treatment Rule, installation or replacement of transmission or distribution systems.

Schedule: Applications are accepted annually in the late summer / early fall. Call for more information.

Section 604b Water Quality Management Planning Grants

Contact: Gary Gonyea: (617) 556-1152

Summary: Water quality assessment and management planning.

Eligibility: Regional public comprehensive planning organizations such as: regional planning agencies, councils of government, conservation districts, counties, and cities and towns.

Match: Match not required but proposals are enhanced by demonstration of local support.

\$ Range: \$30,000 to \$60,000

Examples: Provide technical assistance to communities for water supply protection and assist local officials in comprehensive water resource planning.

Schedule: Request for Responses are typically issued by DEP each October for competitive projects with proposals due approximately six weeks later. Proposals are evaluated and funding is announced within two months of the proposal submission deadline. Generally, projects are expected to begin approximately eight months after the date of their selection by the Department.

Watershed Project Financing and Construction

Contact: Northeast Regional Contact:
Alan Slater (617) 292-5749 or Thomas Mahin (781) 932-7660
Southeast Regional Contact:
Robert Cady (617) 292-5713 or Richard Keith (508) 946-2784
Central Regional Contact:

Gustav Swanquist (617) 556-1083 or Paul Anderson (508) 792-7692 Western Regional Contact:

Stanley Linda (617) 292-5736 or Deirdre Cabral (413) 784-1100 x2148

- Summary: State Revolving Loan Program.
- Eligibility: Massachusetts municipalities and wastewater districts.
- Match: Loans are subsidized, currently at 50% grant equivalency. (Approximately a no-interest loan.)
- \$ Range: In recent years the program has operated at an annual capacity of \$150 to \$200 million per year, representing the financing of 40-50 project annually.
- Examples: 1. Project/ Design/ Construction of municipal water pollution abatement activities, including wastewater treatment facilities, correction of combined sewer overflows, wastewater collection and transmission facilities, nonpoint source projects (including Title 5), and infiltration/inflow removal.
2. Design and construction of projects to protect or improve public drinking water systems, including filtration, disinfection, and distribution.
- Schedule: Calendar Year Basis; applications due October 15.

Community Septic Management Program

- Contact: Northeast Regional Vivek Joshi (978) 661-7742
- Office: Joanne Kasper-Dunn (508) 792-7653
- Central Regional Office: x3763 Pamela Truesdale (508) 946-2881
- Southeast Regional Office: Jane Pierce (413) 784-1100 x2153
- Summary: Loans for septic system planning and improvements.
- Eligibility: Municipalities
- Match: None
- \$Range: This program has already undergone two rounds of funding. Every community was given a chance to participate during the years 1996-1998. Currently available option: Possible grant (up to \$15,000) to develop a regional or watershed based septic system management plan. Upon completion of the plan the municipality would receive a minimum \$200,000 loan for upgrades. If the community is already participating in the program, and can demonstrate a need for additional funds, then the Regional Coordinator must be contacted through an "Expression of Interest".
- Schedule: For new applicants: A two page "Expression of Interest" is required. Call the Regional coordinator for the current schedule.

Municipal Recycling Grant Program

- Contact:** Brooke Nash: (617) 292-5984 / Peggy Harlow (617) 292-5861
- Summary:** Recycling equipment, educational materials, and technical assistance grants
- Eligibility:** Municipalities and regional groups - must provide recycling data sheet and have municipal Buy Recycled policy.
- Match:** Recycling trucks (\$20,000 or trade in of old truck requested)
Replacement curbside set-out containers (50% match required)
Recycled paint (50% match required)
Re-refined motor oil (50% match required)
- \$ Range:** No restrictions: FY 99 grants ranged from \$7 - \$112,654
- Examples:** Recycling grant items include public education information, set out containers, roll-off containers, recycling trucks, transfer trailers, hazardous household products equipment, recycled products, and technical assistance. New FY99 grant opportunities include storage sheds for collecting mercury-containing products, grants to pay for the recycling of electronics and mercury-containing products, technical assistance to increase participation in recycling programs, and re-refined motor oil.
- Schedule:** In FY99, the application process began in July and the deadline was in September. Grant awards were announced in late October.

Municipal Recycling Incentive Program (MRIP)

- Contact:** Brooke Nash: (617) 292-5984 / Joseph Lambert (617) 574-6875
- Summary:** Performance based grant that awards a per ton payment for primary recyclables collected through municipal programs.
- Eligibility:** Municipalities and regional groups - must meet minimum recycling criteria and elective criteria every 6 months (criteria are cumulative and increase every 6 months).
- Match:** None
- \$ Range:** FY 98 payments ranged from \$76-\$124,649 (Based upon \$4/ton for drop-off programs and \$8/ton for curbside programs.)
- Examples:** FY 99 minimum criteria include: establish a municipal Buy Recycled Policy and tracking system; establish equal or "parallel" access to both solid waste and recycling collection services; expand recycling access to unserved residents.

FY 98 elective criteria include: Multiple choices in the areas of recycling access, recycling participation, and recycled product procurement.
- Schedule:** For past fiscal years, the first phase eligibility deadline was December and the second phase eligibility deadline was May. Call for more information.

Department of Fisheries, Wildlife, and Environmental Law Enforcement
(DFWELE) Urban Rivers Small Grants

Contact: Maria Van Dusen: (617) 626-1540
Summary: For projects that seek to restore urban rivers.
Eligibility: Municipalities and non-profit groups located in urbanized areas.
Match: **NJ** match requirement
\$ Range: \$3,000 - \$8,000
Examples: First year grants.
Schedule: Call for dates.

Clean Vessel Act Grants

Contact: Buell Hollister (617) 626-1524
Summary- Funds boat pump-out facilities and dump stations for the proper disposal of sewage from recreational boats.
Eligibility: Municipalities, and private marinas with the support of municipalities.
Match:
\$ Range:
Examples: A fixed station attached to a dock where boats can be serviced or a boat equipped with a pump-out which services boats while attached to a mooring.
Schedule: Please call with all inquiries.

Department of Food and Agriculture (DFA)

Agriculture Preservation Restriction (APR) Program

Contact: Carol Szocik: (508) 792-7712
Summary: Through the APR Program, the state offers to pay farmers the difference between the "fair market value" and the "agricultural value" of their farmland in exchange for a permanent deed restriction which precludes any use of the property that will have a negative impact on its agricultural viability.
Eligibility: Farmers owning farms 5 acres or larger.
Match:
\$ Range:
Examples: Since 1980, deed restrictions have been placed on 468 farms totaling approximately 42,000 acres in 130 towns.

Schedule: The program is a rolling application process. If a farmer is interested, the APR Program should be contacted.

Farm Viability Program

Contact: Kent Lagee: (413) 529-0873

Summary: This program's purpose is to improve the economic bottom lines and environmental integrity of participating farms through the development and implementation of Farm Viability Plans. Financial agreements are made with participating farms upon the completion of such as plan which may include either the purchase of an agricultural covenant by the state for a term of 5 or 10 years, or payment for the implementation of the developed Farm Viability Plan.

Eligibility: Farms of 5 acres or larger.

Match:

\$ Range:

Schedule: Applications are accepted in the spring. Call for more information.

Agro Environmental Technology Grant Program

Contact: Craig Richov: (508) 792-7711

Summary: Applied research, demonstration projects, and feasibility analysis which involve new or alternative production, processing, distribution or market access technologies, practices or organizational arrangements.

Eligibility: Public or private agencies or organizations, business and industry, educational institutions and local governments.

Match: Minimum 1 : 1

\$ Range: Up to \$50,000

Examples: Use of bio-controls for plant pests as an alternative to pesticide use, organizing a marketing cooperative, developing manuals and how to guides for the production of new agricultural or aquacultural crops.

Schedule: Annual RFR released in September, proposals due to by December 1st each year.

Massachusetts Highway Department (MassHwy)

TEA21 - Transportation Enhancement Funds

Contact: Linda Walsh: (617) 973-8052

Summary: Funds for environmental remediation of transportation impacts; transportation improvements including pedestrian and bicycle pathways.

Eligibility: Municipalities apply through regional planning agencies.

Match:

\$ Range:

Examples: Barnstable Walkway to the Sea (land acquisition for harbor access); stormwater remediation in Mashpee.

Schedule: Call for more information.

Department of Housing and Community Development

(DHCD) Municipal Incentive Grant Program

Contact: Don Martin, Program Coordinator: (617) 727-7001, x404

Summary- The Municipal Incentive Grant Program (MIGs) is designed to assist local government officials in the planning, management and operation of cities and towns, and in the training of local officials. The program provides grants to pay for consultant assistance and, in some cases, hardware and software. MIGs funds enable communities, individually or working together, to address particular issues, define solutions and implement improvements in service delivery.

Eligibility: Must be a municipality, county government, or Regional Planning Agency. Maximum grants are \$35,000 for local and \$60,000 for regional projects.

Match:

\$ Range:

Examples: Growth management strategies, affordable housing strategies, design of regional arrangements for service delivery, creation or enhancement of fiscal management practices, development of Geographic Information Systems (GIS).

Schedule: Call for more information.

Community Development Action Grant (CDAG) Program

Contact: Carol Harper, Program Manager: (617) 727-7001 x483

Summary: Primarily Infrastructure support for projects promoting economic development. Project must demonstrate public benefit. CDAG funding limited to 50% of the total project cost; applicant must demonstrate financing commitments of public and private sources. CDAG funds "minimum

amount necessary to make the project feasible." All matching funds must be in place before CDAG funds can be expended.

- Match: \$.50 local; \$1.00 CDAG; \$2.50 private.
- \$ Range: \$100,000 to \$1,000,000.
- Examples: Extension of water and/or sewer service to an industrial park. Road construction/improvement in industrial/commercial area.
- Eligibility: Municipalities only. These funds are to be utilized on public infrastructure projects and are intended to address substandard or blighted conditions. Land to be improved must be publicly owned. Pre-application process, followed by full application.
- Schedule: Rolling admission program.

Community Development Block Grant Program

- Contact: Toni. Hall, Community Development Specialist: (617) 727-7001, x428
Robert Shumeyko, Program Manager, (617) 727-7001, x435
- Summary• Support of community and economic development projects that benefit low and moderate income persons. Funding source: U.S. Department of Housing and Urban Development. DHCD administers competitive grant program for state's non-entitlement communities (e.g., under 50,000 population)
- Eligibility: Municipalities under 50,000 population, either individually or in regional arrangements. Contact DHCD for application.
- Match:
- \$ Range:
- Examples: Housing rehabilitation (includes septic system repairs), water and sewer Improvements, public facilities construction and improvements, e.g., parks and playgrounds, planning, economic development, neighborhood revitalization. List of eligible projects is extensive. Call for details.
- Schedule: Application for Community Development Fund I and II were due on or before August 1 in past years. (Community Development Fund usually has one competitive round yearly.)

Grant Program for the Demolition of Abandoned Buildings

- Contact: Marilyn Contreas, Program Coordinator: (617) 727-7001, x408
- Summary: Grants to demolish abandoned buildings which are posing severe health and safety risks.
- Eligibility: Municipalities. Must demonstrate health and safety risk factors caused by abandoned structures. Maximum grant award of \$250,000.
- Match:

\$ Range:

Example: Removal of abandoned residential and commercial properties primarily in densely settled areas.

Schedule: Rolling admission. Call for details.

This list is also available from the MCZM web page
at: <http://www.magnet.state.ma.us/cm/>

Updated: January 25, 2000

APPENDIX E: LAND PRESERVATION PRIORITIZATION AND RANKING MODELS

INTRODUCTION

Beals and Thomas, Inc. with the assistance of the Lincoln Institute of Land Policy and O'Connor Real Estate Associates developed the following model that will assist communities in prioritizing conservation land. This model was created as a part of a larger project for the MetroWest Growth Management (MWGM) Committee and is provided to Massachusetts communities for their use with permission from MWGM.

PUBLIC INTEREST VALUES OF LAND

Municipalities constantly face the desire to maintain community character. As part of this challenge, cities and towns strive to acquire additional open lands for conservation or recreation uses. Accomplishing this goal is difficult for many reasons, including the cost involved, identification of the appropriate parcel(s) to purchase, and timing (especially if acting under a right of first refusal).

The process described herein is intended to assist the community in rating existing or available parcels in an effort to prioritize the "want list" so that when the opportunity arises, the community is more prepared to respond. The rating criteria include those "public interest values" that are important specifically to a community but not necessarily to a developer. These criteria include values such as wildlife habitat, ability to support recreational needs and scenic or historic value.

The following methodology offers a process by which a community can assess what values it places in conservation land in general. This assessment is followed by an evaluation of a specific parcel in terms of its ability to match those community values. The two ratings are then combined to form a weighted rating that can be used to compare how one parcel satisfies the community needs as compared to another parcel.

METHODOLOGY

A checklist of environmental functions was developed and preliminary criteria established to permit rating the value (none, low, medium or high) of a particular parcel of land with respect to each function. These functions are also used by the community to document which of those functions are most important overall to the community.

The model has been developed to allow a quick estimate of relative value of a particular parcel of land based on its "public interest" values which can be assessed by municipal officials, without the need for consultant expertise. This

methodology can be used to qualitatively assess conservation lands, allowing a community to rate the value of its portfolio of open space or to prioritize lands for future acquisition. The following is a step-by-step description of how the model is intended to be used.

Step 1: Community Values Rating

This step is intended to be a community-wide rating of the importance of the various "public interest values" to the municipality. This rating should be completed without any specific parcel of land in mind, and can be completed at any time. Ultimately the rating will be used in determining how specific parcels of land actually meet community-defined needs.

Rate each of the listed values on a scale of 0-100 points so that the total of the scores add up to 100 points. The rating is a relative weighting of each value (as a percentage of the whole). Some functions or values of land • may be of no importance to a community, while others may have significant importance. Ideally, this rating will be performed by a cross-section of persons that represent the community.

Step 1: Community Values Rating

<input type="checkbox"/> Flood Control	_____
<input type="checkbox"/> Water Supply	_____
<input type="checkbox"/> Protection of Water Quality (from pollutants, sediment)	_____
<input type="checkbox"/> Maintenance of Biological Diversity/Wildlife Habitat	_____
<input type="checkbox"/> Buffer from Undesirable Uses	_____
<input type="checkbox"/> Recreational Opportunity / Character-Building / Spiritual	_____
<input type="checkbox"/> Production of Natural Resources	_____
<input type="checkbox"/> Scenic Views	_____
<input type="checkbox"/> Historic Resources	_____
<input type="checkbox"/> Education	_____
Total	<u>100</u>

Step 2: Evaluate the Public Interests

Evaluate the public interest values associated with the subject site by rating each of the values according to the rating criteria in the following worksheet. The evaluation criteria are assigned values of 0 through 3, 0 being not applicable, or of insignificant value, while 3 represents very high value. Complete the worksheet attached and enter the public interest values associated with the subject site on the Calculation Matrix that follows.

Flood Control

3 High Storage Capacity

Medium Storage Capacity

1 Low Storage Capacity

0 Flood Storage Function Not Lost

(how many properties are protected, how much money is saved by protecting?)

Flood Control Rating _____

Water Supply

Existing Zone I or Capable of Producing a Yield for Public Supply

Existing Zone II

1 Existing Zone III

0 No function as a water supply, Recharge Potential Not Lost

(demand for water, replacement cost, other sites?)

Water Supply Rating _____

Protection of Water Quality/Soil Erosion

3 Parcel Protects Class A Water from Upstream Uses

Parcel Protects Class B Water from Upstream Uses

1 Parcel Protects Class C Water from Upstream Uses

0 Parcel is Not Adjacent to Any Waterway

Water Quality Rating _____

Maintenance of Biological Diversity/Wildlife Habitat

Site is listed in the Massachusetts Natural Heritage Atlas as having Statewide Significance or Provides a Corridor Linking other Open Lands.

2 Site has Local Significance as a Habitat Area - Unique Features

1 Site is of Common Distinction - No Rare or Unique Features

CO Site Does Not Provide a Significant Habitat Function

(ecological "niches ", rare or unique ecological features (bogs, rocky ledge, old growth forest)

Diversity/Wildlife Rating _____

Buffer from Undesirable Uses

Site Buffers Publicly Accessed¹ or Large Scale Private² Sensitive Receptors from Adjacent Land Uses Causing a Nuisance (light, unsightly views, noise, or odors).

2 Site Buffers Small Scale Private Sensitive Receptors³ from Adjacent Land Uses Causing a Nuisance (light, unsightly views, noise, or odors).

1 Site Acts as a Buffer to Uses that are not Sensitive Receptors

0 Site does not serve a Buffering Role

Buffer Rating _____

Recreational Opportunity / Character-Building / Spiritual

a Site is a Destination Point Drawing People for Recreational Activity **or** Site is an Existing Handicapped Accessible Site

2 Site Meets a Priority for Future Need Mentioned in the Open Space and Recreation Plan or in Other Planning Documents

1 Site is not Mentioned in any Current Planning Documents, but is important

CO Not applicable

Public sensitive receptors include users such as schools, hospitals, etc.

² Large scale private sensitive receptors include residential neighborhoods of greater than 20 units

³ Small scale private sensitive receptors include residences or residential neighborhoods of less than 20 units

	H	M	L
Nature Appreciation			
Hiking			
Hunting/Fishing			
Picnicking			
Biking			
Boating			
Horseback Riding			
Motorized Recreational Vehicles			
Solitude, Personal Reflection			
Stress Reliever			
Active Ball Fields			

Production of Natural Resources

- 3 Site Currently Used for Timber and /or Firewood, Agricultural Production / Community Gardens
- 2 Site Provides a Great Opportunity to be Used for Timber and /or Firewood, Agricultural Production / Community Gardens
- 1 Site Provides Little or Limited Opportunity for Natural Resource Production or Community Gardens
- 43 Site Provides No Opportunity for Natural Resource Production or Community Gardens

' Natural Resources Rating _____

Scenic Views

- Site Provides Distinctive Landscape Value or Character Viewable from a Public Way **or** Provides a Point from which to See Significant Wide-angle Unobstructed Views. Currently Identified with Regional Value
- 2 Site Recognized as a Distinctive Visual Element in Town **or** Provides a Point from which to See Significant Wide-angle, but Obstructed Views.
- 1 Site Provides Interesting Landscape Features that are not Readily Accessible (e.g. must hike in to view or see view).
- O Site does not Provide any Scenic Qualities.

Scenic Views Rating _____

Historic Resources

- 3 Features are Listed on State or Federal Register of Historic Places or Documented Ancient Uses of Site are Present

Features are Listed on Local Inventory of Significant Historic, Cultural or Archeological Value

- 1 Features are Not Listed on any Inventory but Contain Significant Historic, Cultural or Archeological value

- 4 Not Applicable

Historic Rating _____

Education

- a** Site Currently Serves or is Planned to Serve as a Destination for Organized Environmental Educational Programs (e.g. interpretive trails, outdoor classroom, observation platforms)

Site has Potential as Educational Resource (proximity to school, existing trail system in place, demonstrates a range of educational lessons (succession, diversity of habitat) **and** is Scarce (lack of existence of other educational sites).

1. Site has Potential to Supplement Existing Environmental Education Areas **or** Other Comparable Sites are Available in Town.

- 0 Not Much Potential **or** Needs are Met by Other Sites in Town.

Education Rating_ ____

Step 3: Calculate the Weighted Rating

Enter the results of steps 1 and 2, below. Multiply each community value rating by the site rating for each public interest value and total. Use the weighted rating to compare various parcels and to facilitate prioritization of those parcels for protection or acquisition.

Public Interest Value	Community Value	Site (parcel) Value	Weighted Rating
Flood Control			
Water Supply			
Protection of Water Quality			
Maintenance of Biological Diversity/Wildlife Habitat			
Buffer from Undesirable Uses			
Recreational Opportunity / Character-Building / Spiritual			
Production of Natural Resources			
Scenic Views			
Historic Resources			
Education			
Total Weighted Rating	---	---	

Farmland Preservation Prioritization and Ranking Model

Due to the importance of farmland protection, the following evaluation system can be used as a model to help weigh and prioritize acquisition options for farmland. The model was originally developed by the Pioneer Valley Planning Commission and modified by the Regional Open Space Planning Committee. This can be used in conjunction with the ranking model drafted for other types of land.

A. Predominant land use (maximum 20 points)	<u>Points</u>
1. Active food producer	18
2. Hay and pasture	6
3. Mixed woodlands, abandoned farm, hobby farm	4
4. Tree farm	7
5. Nursery or greenhouse	18
6. Continuation of use after sale	2
B. Size of farm (maximum 25 points)	<u>Points</u>
1. 150 acres plus	25
2. 100-149 acres	21
3. 50-99	17
4. 25-49	12.5
5. 10-24	8
6. 0-9	4
C. Farmland soils (maximum 25 points)	<u>Points</u>
1. Percent of parcel in Prime Farmland Soils	
75-100 %	25
50-74 %	18
25-49 %	12
10-24 %	5
0-9 %	2
2. Percent of parcel in Soils of Statewide Importance	
75-100 %	13
50-74 %	9
25-49 %	5
10-24 %	3
0-9 %	1

D. Collateral environmental objectives (maximum 20)		<u>Points</u>
1.	Adjacent to farmland or conservation land	2
2.	Includes significant wetlands or habitat	2
3.	Within FEMA 100-year floodplain	2
4.	Includes historic home, building or landscape	2
5.	Within an aquifer or Zone of Contribution	2
6.	Parcel has scenic importance	2
7.	Water frontage or protects water quality	2
8.	Buffer for undesirable uses	2
9.	Recreational opportunities	2
10.	Provides for Environmental Educational Opportunities	2

E. Continuation of Agriculture (maximum 10 points)		<u>Points</u>
1.	Degree of threat to the continuation of agriculture on project land due to contingencies such as, but not limited to, the owner's death, retirement, financial difficulties, development pressure, or to the insecurity entailed in the use of rented lands.	10

Total Weight/Priority for Preservation		<u>Points</u>
1.	High Priority	81-100
2.	Medium to High	61-80
3.	Medium	41-60
4.	Low to Medium	21-40
5.	Low	0-20

APPENDIX F: CHAPTER 61 LAWS

Chapters 61, 61A, and 61B

Chapters 61, 61A, and 61B are differential tax assessment provisions of the State Tax Code which enable certain forest, farm, and recreational lands open to the public, to be taxed at their use value and not their full fair market value, and gives towns a right of first refusal to buy the lands should the owner want to sell them or convert them to a different use. It is this right of first refusal which makes the Chapter 61 provisions so important as a land preservation tool for towns. It enables towns to intercept parcels of open land registered under these tax programs and keep them permanently in their agricultural or forestry use.

Chapter 61 refers to forested lands of 10 or more contiguous acres managed under a cutting practices plan. Chapter 61A refers to land in active agriculture of 5 or more contiguous acres earning at least \$500/year in gross sales or value. Chapter 61B refers to recreational lands dedicated to public use but held in private ownership. All three of these Chapters result in decreased property taxes for the landowner *and* a right of first refusal to the town should the landowner intend to sell or convert the land to other uses. This enables a town to take affirmative action to protect individual parcels of forest or agricultural land as they come onto the market or are threatened with development.

OWNERS OF LAND CLASSIFIED UNDER CHAPTERS 61, 61A OR 61B MUST NOTIFY THE TOWN BOARD OF SELECTMEN, BOARD OF ASSESSORS, PLANNING BOARD, AND CONSERVATION BEFORE SELLING OR CONVERTING THE LAND TO ANOTHER USE.

In other words, if a landowner enters in a purchase and sale agreement with a buyer who intends to discontinue the lands classified use (i.e. agriculture, horticulture, forestry, or open recreational lands), the **landowner** MUST notify the town by CERTIFIED MAIL. The same is true if the landowner himself decides to **use the land for anything else**. The town must be notified by certified mail. The landowner must notify the Board of Select-

men, the Board of Assessors, the Planning Board, and the Conservation Commission, **each** by certified mail, of his intent to either sell or convert the use of the land. The only exceptions are: 1) ceasing to use the land for its classified use without changing its use; or 2) the use of the land for a residence for the owner or the parent, grandparent, child, grandchild, or brother or sister of the owner, or the surviving husband or wife of any deceased such relative, or for living quarters for any persons actively employed full time in the use of such land. In this case, the Board of Assessors must be notified and they record such fact with the registry of deeds; or 3) mortgage foreclosure sale. In the case of a mortgage foreclosure sale, the holder of the mortgage must notify the Board of Selectmen, Board of Assessors, Planning Board, and Conservation Commission by certified mail of the time and place of the sale.

NOTICE REQUIREMENTS

Proper notice from the landowner to the town has the following requirements:

- 1) CERTIFIED mail of a letter to EACH of the following: Board of Selectmen; Planning Board; Conservation Commission; and the Board of Assessors. Bringing the letters to the town clerk, or depositing the letter by hand in a mail box, or any form of communication other than certified mail is NOT acceptable.
- 2) The certified letters must be from the landowner.
- 3) The letter must state the name of record of the landowner, and provide a legal description of the land to be sold or converted.

Ironically, the law does NOT require that the letter of notice of intent state whether the owner intends to convert the use or sell, and if a sale, what the terms of that sale would be. Nevertheless, the town needs this information to exercise its option, and is within its rights to demand such information.



ONCE PROPER NOTIFICATION IS RECEIVED, THE TOWN HAS 120 DAYS TO DECIDE WHETHER TO EXERCISE ITS OPTION TO PURCHASE THE LAND.

The option period begins running from the first day after the certified mailing of the last notice listed above. For example, if certified letters are placed in the mail on January 1 to the Board of Selectmen, the Board of Assessors and the Planning Board, but not until January 2 for the Conservation Commission, the option period of 120 days begins running on January 3. It does not matter when you receive it. That is why the letter of notice of intent to sell or convert the land must be certified: so there is an official date stamped by the United States Post Office, which begins the option period one day later.

The town then has **120 days** to decide whether to exercise its option to purchase. This decision must be made at a **public hearing**. A Board of Selectmen's meeting will suffice for this.

The town may decide to **assign its option** to a non-profit conservation group at this time. Such an assignment must be made for the purpose of maintaining a majority of the land in its classified use (agriculture, horticulture, forestry, or open recreational lands). Again, this decision must be made at a public hearing.

A decision to exercise the option (to proceed with buying the land) and/or a decision to assign the option to a non-profit conservation group, must be sent to the landowner by **certified mail within the 120 day period, and signed by the Board of Selectmen. That letter** must also be recorded with the Registry of Deeds.

The landowner should also be notified of a decision not to exercise the option. That notice must be sent by certified mail also. If the landowner hears nothing at the end of the 120 days, he may proceed with his plans to sell or convert.

Each notice of intent to sell or convert, notice of exercise of option, notice of assignment of option, or notice not to exercise the option must contain the following: the name of the record owner of the land; a legal description of the land so that it can be sold; and, in the case of an assignment to a non-profit land trust, their name and address.

IF THE TOWN VOTES TO ASSIGN ITS OPTION RIGHTS TO A NON-PROFIT CONSERVATION ORGANIZATION, THE TOWN NO LONGER HAS ANY LEGAL INVOLVEMENT WITH THE TRANSACTION.

Once the town votes, at a public hearing, to assign its option rights to a non-profit conservation organization for the purpose of retaining a majority of the land in its classified use, the town no longer has any legal responsibilities or authorities concerning the acquisition of the land. All the town's rights are transferred to the conservation organization. It is vital that before such a vote takes place, that arrangements are made with the non-profit conservation organization, ensuring their interest and ability to acquire the land. The con-

servation organization should be contacted as soon as the notice of intent to sell or convert is received so it can have sufficient time to organize itself.

NOTICE OF CONVERSION IS DIFFERENT THAN A NOTICE OF INTENDED SALE.

If you receive a notice of intent to convert the use of the land, the town, in order to purchase the land, must obtain an impartial appraisal of the full fair market value of the land. This is the amount that the town has the right to buy the land for. However, **you have the right to buy the land if the owner intends to convert the use to residential, commercial, or industrial.**

NOTICE OF INTENT TO SELL

If you receive a notice of intent to sell the **land**, your right of first refusal is based on the amount of money which was offered to the seller in a bona fide offer to purchase. Although you can try negotiating, your right to purchase is based on matching that bona fide offer to purchase.



Summary

Chapter 61A can be an extremely valuable tool for a town to use to intercept a change in use from agricultural, horticultural, forested, or recreational land.

EXAMPLE: A Chapter 61A, 214 acre potato farm in Hawley and Ashfield, entered into a purchase and sale for 50 acres of the land for \$200,000. The buyer intended to build 24 houses along the frontage. The offer later became \$500,000 for 100 acres of frontage (43 house lots). The farm consisted almost entirely of prime farmland. In addition, the owner had previously applied to the State APR program for the sale of his development rights and the State had offered him under \$1,000/acre for those rights. The application to the APR program was considered active by the State.

Since the land was under Chapter 61A, the owner was required to notify (and did) the Towns' Boards of Selectmen, Planning Boards and Conservation Commissions concerning the proposed sale for development purposes. This notice to the towns triggered the towns' rights of first refusal to meet the developer's offer. The towns both voted to exercise that right and at a special town meeting voted to assign those rights to the American Farmland Trust (AFT).

AFT is a national non-profit land trust with offices in Northampton. AFT had been contacted by the Franklin Land Trust (FLT), a regional non-profit organization, concerning financing the acquisition and/or protection of the land. FLT had been in contact with the towns as soon as they had been notified of the proposed sale. Because of the financial scope of the project, FLT called in a larger land trust to work with them and this cooperation between AFT, FLT and the towns of Hawley and Ashfield lead to the assignment of rights to AFT.

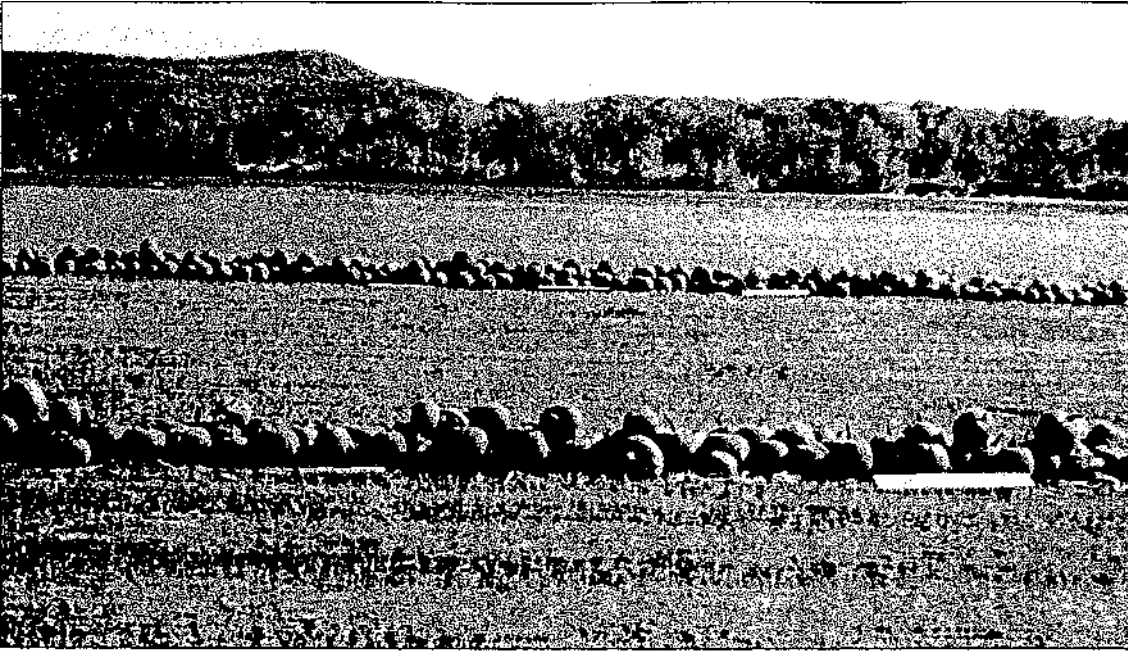
Once AFT was authorized to represent the towns' interests they entered into active negotiations with the owner of the land, the developer, the APR program, and the towns. Among the towns' primary concerns were the large number of homes being proposed and

the impact they would have on town services and town populations, as well as the safety considerations of construction of those homes on a road traditionally not maintained in the winter. The landowner - as clearly evidenced by his interest in the APR program and participation in Chapter 61A, very strongly wanted to see as much of the land remaining in agriculture as possible.

AFT was impressed by the coalescing of several factors: the interest on the part of the owner in remaining in agriculture; the willingness of the Franklin Land Trust to reimburse AFT for their costs; and the outstanding commitment from the APR program to purchase the development rights. Once involved, AFT was able to convince the State to reappraise their APR offer, which resulted in an increased offer of over \$1,000/acre. AFT also facilitated negotiations between the owner, buyer, FLT, and the towns. These negotiations resulted in a 3 fold strategy: (1) The developer bought 50 *different* acres than originally intended (less frontage, less agriculturally significant soils) for a total of 17 buildable lots, at a price of \$141,000. (2) AFT paid \$230,000 to the farm owner for the development rights on the remaining 220 acres (to be reimbursed by the APR program); and (3) FLT agreed to reimburse AFT for a portion of their costs. It is anticipated that the towns of Hawley and Ashfield will reimburse the Franklin Land Trust for all or part of their expense.

The total effect of this transaction was a significant financial return to the landowner in exchange for protecting the agricultural land in perpetuity and enabling it to stay in active agriculture. The developer will get the same amount of acreage for a decreased price to reflect the loss of building lots. The towns will absorb a more modest increase in town services and population. See Appendices for other examples.

Chapters 61, 61A, and 61B present towns with unique opportunities to *plan* for the future of specific parcels of land. We strongly recommend that towns take the time to make a map of all the 61, 61A, and 61B land in town (a



simple matter to copy from assessor's records) and then to sit down and *prioritize* which of those lands the town might be interested in acquiring. Once you know which lands the town is seriously interested in you can take the affirmative: contact the owners and see what their plans for the land are, and let them know that the town would be interested in acquiring an interest in the land when and if

they are ever ready. Often times, once a landowner is aware of the town's interest they would prefer to negotiate with them than with a developer. At the same time, the town should begin investigating sources of funding for acquiring land: contact land trusts, State funding programs (see list on page 27), and establish a town fund for the purchase of conservation lands.

Emergency Procedures

WHAT IF YOU RECEIVE A NOTICE TO SELL OR CONVERT CHAPTER 61, 61A OR 61B LANDS?

- 1) Contact your town attorney.
- 2) Contact the County Planning Office (413-774-3167).
- 3) Contact local land trusts to explore their interest in the property.
- 4) Check to be sure that the **notice was sufficient**: 1) was it mailed by certified mail?; 2) have the Board of Selectmen, Board of Assessors, Conservation Commission, and Planning Board each received their own notification?; 3) did that notice include the name of the record owner of the land, his address, a legal description of the land in

question?; and 4) whether the land is to be sold (if so, for how much) or to be converted.

- 5) If the notice was not sufficient, notify the landowner immediately, as well as your town attorney, and the other Boards. However, proceed immediately on the assumption that the 120 days has begun. Failure on the part of the landowner is a gift of time to you and does not mean that it will not be cured in the next day or two.
- 6) Schedule public hearings to discuss the land. These meetings may be Board of Selectmen meetings, or Conservation Commission, or Planning Board. A Special Town Meeting is NOT necessary UNTIL you decide to exercise the option and need to come up with money to purchase.

ACQUISITION

Acquisition of forest and agricultural land is an important tool to complement land use planning. It is not recommended as the sole response to the threatened development of agricultural and forest lands because: 1) it costs too much; and 2) taking forest and agricultural lands out of the private domain does not necessarily ensure that those lands will remain in productive use. In fact, by putting such lands in the public domain, the town assumes the responsibility for seeing that they are carefully managed and used for their forestry and agricultural value: not always an easy task. Instead, we recommend that acquisition be used in conjunction with zoning and other preservation strategies.

Even with the best planning, lands of significance will become threatened and the only solution will be acquisition in one form or another. It is important that a town be prepared for such eventualities, both financially and procedurally, because usually time is of the essence. It is at times like this that land trusts can play a very important role. They often have the skills, and occasionally the financing, to help a town. A list of the land trusts presently operating in Franklin County which can assist with the protection and acquisition of forest and agricultural resources can be found on page 27.

A note of caution about the acquisition and sale of land as a town. Article 97 of the Massachusetts Constitution requires that **all** sales or transfers of "conservation or agricultural" lands owned by a town or a subdivision of State government must first be approved by a 2/3 vote of the entire State legislature. This would apply, for example, if a town exercised its option under Chapter 61A and bought farmland and wanted to sell off a few acres to defray the cost of the acquisition. Before being able to sell those few acres, the town would have to have authorization by a 2/3 vote of the State Legislature.

APPENDIX G: THE ECONOMIC BENEFITS OF LAND CONSERVATION

TECH MEMO

THE ECONOMIC BENEFITS OF LAND CONSERVATION

By Holly L. Thomas, Senior Planner
Outchess County Planning Department

There is a long-held belief about undeveloped land—that even though it may be *nice* to look at it's not economically productive, and that it only really carries its weight in the local tax base after it is developed. Communities in growing areas are finding out that this belief is wrong. More and more studies are showing that conserving open land and choosing careffilly those areas that should be developed is not contrary to economic health, but essential to it.

The choice we face is not one of environment and aesthetics versus economics, after all. Instead, the fact is that land conservation is a sound investment. Studies comparing the fiscal impacts of development to those of open space protection have found that open space preservation has a more positive impact on a community's economy than most conventional forms of suburban-style development, even when property is preserved through public dollars.

This does not mean that open space protection should be used as an excuse to exclude the diverse housing, schools, roads, businesses, and services needed to keep a community accessible and sound. In fact, providing affordable housing and infrastructure and protecting open space all involve using land appropriately and concentrating development where it can best be served.

What the findings that land conservation is a sound investment **do** mean is that development is not a sure-fire economic boon and protecting the resource base pays off. Development that destroys community resources and natural features is both economically and environmentally wasteful.



Economic Benefits

The following seven points indicate the range of economic benefits of land conservation.

1. ***Land conservation is often less expensive for local governments than suburban-style development.***



The old adage that cows do not send their children to school expresses a documented fact—that farms and other types of open land, far from being a drain on local taxes, actually subsidize local government by generating far more in property taxes than they demand in services. The opposite is true of most suburban forms of residential development. In other words, maintaining a substantial open space system is one important way of controlling the costs of government.

To cite one example, a recent study of Boulder, Colorado's open space program costs found the following:

Average Annual Public Cost of Maintaining Public Open Space Lands (including debt service on land purchases and administrative costs) **\$32⁸/acre**

Average Annual Public Cost of Maintaining Developed and Developable Lands **\$2,524⁴/acre**

Closer to home, a 1990 study of revenues and expenditures for various types of land uses in Red Hook, Fishkill, and Amenia, by Scenic Hudson, Inc. found **that residential land required \$1.11 to \$1.23 in services for every dollar**

It contributed In revenue, while open land required only \$0.17 In services In Amenia, \$0.22 In Red Hook, and \$0.74 In Fishkill for each one dollar contribution.

A 1989 study by Cornell Cooperative Extension of Dutchess County and the American Farmland Trust found that in Beekman and North East, residential lands required \$1.12 to \$1.36 for every dollar they contributed, while agricultural land required only \$0.21 for every dollar it contributed in North East, and \$0.48 for every dollar it contributed in Beekman.

Studies throughout the country are showing similar results. Researchers in Wright County, Minnesota, for example, found that the average annual shortfall between taxes paid and the cost of services required was \$490 for developed house lots larger than one acre, and \$114 for quarter-acre lots. The extent to which undeveloped land subsidizes development, particularly the kind of large-lot suburban development that consumes more space than it really needs, is beginning to hit home.

The Scenic Hudson and Cooperative Extension studies and others have shown that commercial and industrial land uses also demand less in services than they pay in taxes. However, **it is important to remember that commercial and industrial growth encourages residential growth. Working farms do not.**

Although the methods used in the two Dutchess County studies do not address all variables, the magnitude of the differences between the costs of serving agricultural or other undeveloped land and residential developments is striking. **Their findings agree with experience; taxes increase as farms turn into suburbs.**

2. Giving land conservation a high priority encourages more cost-efficient development.

Clustering involves grouping buildings on parts of a piece of property instead of spreading them out in a way that consumes the entire parcel. The concept of clustering can be applied to single-family detached homes as well as multi-family or townhouse styles and non-residential uses. Clusters are frequently referred to as open space subdivisions because they can be designed to keep the most important undeveloped land on a site—such as productive farm fields or wildlife corridors—intact.

The National Association of Home Builders first documented the economic benefits of clustering in 1976. In evaluating this tool for encouraging development and land conservation at minimal public cost, the association found that a sample 472-unit cluster cost 34% less to develop than a conventional grid subdivision.

These costs vary from site to site, but follow the general principle that well-designed clusters—both high-density clusters in community centers and low-density clusters of detached units in rural areas—consume less land, require shorter roads and pipes, and fit in better with traditional

community densities than do the suburban grids and spider-webs that are spreading across our landscape. They also allow for the preservation of natural systems and agricultural resources whose true value cannot be calculated.

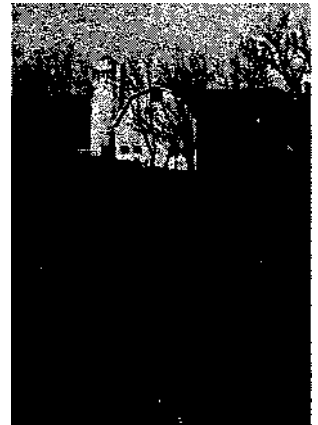
When communities make it clear that protecting open space is a high priority and that unsatisfactory designs will not be accepted, developers are encouraged—or required—to find attractive ways to increase the cost-efficiency of their proposals.

Responsible open space protection involves deciding where and how development should occur as well as where it should not. By retaining the most important natural, scenic, historic, recreational, or agricultural assets, it concentrates development where it fits best, and leads to better decisions about how and where tools such as clustering should be used and where investments in roads, water supplies, and sewers should be made.

3. Communities with well thought-out land protection programs may improve their bond ratings.

Bond ratings are measures of the financial community's faith in the ability of a government to meet its obligations and manage its debts. Favorable ratings save governments money by enabling them to raise money for capital improvements at relatively low costs. The poorer the bond rating, the higher the interest the government has to pay to attract investors, and the greater the chance that potential investors will place their money elsewhere.

Bond ratings are beginning to reflect the fact that unlimited or mismanaged growth can threaten a community's fiscal health, while land conservation and sound planning can help sustain it. The rating assigned to Howard County, Maryland, which lies in the rapidly growing Baltimore to Washington, D.C. corridor, is one example. Howard County has one of the most innovative farmland preservation programs in the country. It stretches public dollars **by** combining installment purchases of development rights with property tax abatements.



In May, 1990, Fitch Investors Service gave the county a AAA bond rating for the issuance of over \$55 million in bonds for capital projects **because of its record and its specific plans for limiting and managing growth.** In its report on the bond issue, Fitch states

The recently completed general plan for future county development is an example of the county's superior planning skill. **A conscious decision has been made,**

after discussions with residents and business, to control future growth within the county to ensure that the quality of life continues to be desirable.

Components of the plan include maintaining a rural character in parts of the county, adopting adequate public facilities ordinances to require that infrastructure is in place before permitting development, and providing a contribution of funds to ensure that state roads are in a condition necessary to provide adequate transportation access.

The report goes on to state that

an important and unique part of the capital improvement plan is the agricultural preservation program under which development rights are purchased by the county to control growth and maintain the area's character.

In other words, the development limits the county has put in place, including a farmland preservation program financed by public dollars, enhance the county's fiscal integrity by demonstrating the county's commitment to maintaining the quality of life and controlling the costs of development.

In its presentation to the Fitch Investors Service, the county argued that because its programs limited the amount of land that could be developed, they limited the amount of infrastructure the county would have to provide. This meant that the county would not have to go into as much debt for infrastructure construction, and could more easily carry any other debt it incurred. In awarding the **AAA** rating, Fitch Investor Service agreed. It acknowledged that rationally limiting growth would be significantly less expensive than allowing growth to continue unconstrained.

The Howard County agricultural development rights purchase program won the Government Finance Officers 1990 national award for innovation in financial management and continues to attract national attention.

4. Open space protection saves public funds by preventing development of hazardous areas.

Floodplains function well as emergency drainage systems—for free—when they are left undisturbed. The public pays a high price when misplaced or poorly designed development interferes with this function. Human encroachment on the



natural flood corridors often increases the risk to downstream homes and businesses by increasing the volume of runoff and altering the flood path. The resulting demands for costly drainage improvements, flood control projects, flood insurance, and disaster relief are all, ironically, preventable by conserving and respecting the floodplains from the outset: **Rockland County's greenways acquisition program was inspired by the county's dismay over the costs of coping with drainage problems caused by encroachment into floodplain systems.**

5. Conserving land allows nature to continue its valuable work.

Two functions that wetlands provide for free—groundwater recharge and water purification—are lost when those wetlands are developed. **Suffolk County's groundwater recharge area acquisition program was triggered by public awareness that uncontrolled growth threatened the quality and quantity of the county's water supply. The county's voters realized that protecting the groundwater system by buying important areas above it made better economic sense than finding another water source.**

As noted above, the ability of a natural floodplain to channel floodwaters efficiently—for free—can cause a public emergency when development gets in the way. The remedies needed to protect life and property after floodplains are improperly developed are limited and costly.

Steep slopes are another example of natural systems that operate best when left alone. Woodlands hold fragile soils in place on steep terrain—for free—when they are left undisturbed. Too often when those slopes are cleared for development, their soils erode and clog streams, lakes, and drainage ways. Soil is an irreplaceable resource and the cost of dredging streams and lakes is prohibitive.

Wooded slopes also help absorb rain water and slow the rate of stormwater runoff. When too much pavement replaces the vegetation, the costs of preventing more serious and frequent floods and of maintaining water quality skyrocket.

6. Open space increases the value of nearby or adjacent property.

Results of a 1978 study of Boulder, Colorado's greenbelt indicated that **property value decreased by \$4.20 for every foot of distance from the public open space.** More recent studies of greenway corridor paths, park lands, and lands under conservation easements throughout the country, in settings ranging from the most urban to rural, have also found that **access to protected open space is a valuable amenity in the real estate market.**

7. Outdoor recreation, tourism, and agriculture are big business.

Tourism and agriculture are vital components of Dutchess County's economy, and both depend on the resources and

amenities that open landscapes provide. According to the 1987 Census of Agriculture, **Dutchess County's farmers sold \$38 million worth of agricultural products in 1987 and employed 1,500 people on farms and another 2,000 to 2,500 in farm-related goods and services.** They spent over \$33 million on goods and services, which multiplied to an infusion of over \$100 million into our local economy.

Tourism is also a multi-million dollar business in Dutchess County. Statistics from the Dutchess County Tourism Promotion Agency show that **tourists spent over \$127 million here in 1988, up nine percent from 1987.** The agency estimates that this represented an economic benefit to the county of \$376.8 million. The tourism business _ employed over 8,850 persons in 1988, one in every ten of the county's workers.

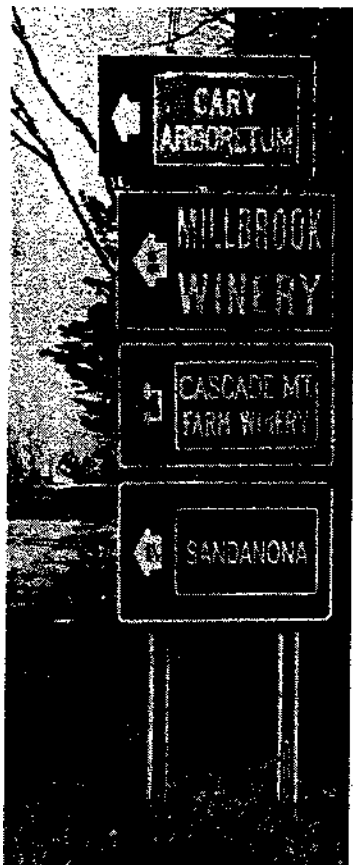
The county's historic buildings and sites are important tourism attractions. Many of these historic features are linked to natural and scenic settings that are relatively unprotected. Conserving these landscapes would help sustain the appeal of the cultural sites, thereby protecting both their historic integrity and their economic contribution.

Outdoor recreation is a major component of the tourism economy, but also serves the county residents who consider access to parks, Hudson River views, historic sites, fishing streams, forest trails, hunting areas, or rural scenes important elements of the quality of life that drew them here.

Conclusion

The value of a productive farm field, a healthy wetland system, or an irreplaceable scenic vista goes far beyond dollars and cents. It is important, however, that we understand the real economic benefits of protecting open space. As these examples show, the benefits can range from filtering water and channelling floods for free, or avoiding the increased costs of serving homes arranged in sprawling grids, to attracting tourist dollars to the region, or influencing the bond ratings that govern the costs of long-term debt.

Too often our communities are presented with a false choice between economic growth and environmental



protection. Success in attaining and sustaining economic health depends on recognizing the economic contribution that undeveloped land already makes.

In choosing which areas should develop, and how, we owe it to ourselves and to our heirs to ensure that important natural systems and our most productive landscapes remain intact. We should also provide for development that will meet community needs for housing, jobs, recreation, and services, and insist that such development respects and complements the values of open lands. By following these principles we can join the growing number of communities throughout the country that have found that a public commitment to combining land stewardship with well-designed development pays off.

References

Note: Many of the concepts included here were presented in 1979 by the New Jersey Conservation Foundation, in Open Space Pays: The Socioenvironmental Economics of Open Space Preservation. The following sources were used to update, augment, and amend the 1979 information to reflect current knowledge and facts relevant to Dutchess County.

American Farmland Trust. Density-Related Public Costs. Washington, DC: 1986.

Arendt, Randall. 'Patterns in the Rural Landscape.' *Orion Nature Quarterly*, pp. 24-27, Autumn 1989.

Bucknall, Christopher P. The Real Cost of Development Poughkeepsie, NY: Scenic Hudson, Inc., 1990.

Caputo, Darryl F. Open Space Pays: The Socioenvironmental Economics of Open Space Preservation D'0 Morristown, NJ: New Jersey Conservation Foundation, 1979.

Cornell Cooperative Extension of Dutchess County and American Farmland Trust. Dog of Community Services Study: Towns of Beekman and Northeast, Dutchess County, New York. Millbrook, NY: 1989.

Correll, Mark R., Jane H. Lillyclahl, and Larry D. Singell. 'The Effects of Greenbelts on Residential Property Values: Some Findings on the Political Economy of Open Space' *Land Economics*, Vol. 54: pp. 204-217, 1978.

Crain, James C., correspondence with Albert Bartlett 'Revised Estimated Costs to Maintain Open Space Versus Developed, Annexed Land.' Boulder, CO: (Department of Real Estate/Open Space, City of Boulder, Nov. 2, 1988.

Fitch Investor Services, Inc. 'Public Finance-Tax Supported New Issue, Howard County, Maryland.' New York, NY: May 22, 1990.

Fox, Tom. Urban Open Space: An Investment That Pays—Real Estate Values. New York, NY: The Neighborhood Open Space Coalition, 1990.

Frank, James E. The Costs of Alternative Development Patterns: A Review of the Literature, Washington, DC: The Urban Land Institute, 1989.

Land Design Research, Inc. Cost-Effective Site Planning. Washington, D.C.: The National Association of Home Builders, 1976.

Peters, James E. 'Saving Farmland: How Well Have We Done?' Planning, Vol. 56, No. 9, pp. 12-17, September 1990.

Regional Plan Association. Green Spaces and Greenways: 1. The Open Space Movement Etc. New York, NY: 1987.

Yaro, Robert D., Randall G. Arendt Harry L. Dodson, and Elizabeth A. Brabee. Dealing with Change in the Connecticut River Valley: A Design Manual for Conservation and Development. Amherst, MA: Center for Rural Massachusetts, University of Massachusetts at Amherst, 1988.

APPENDIX H: LAND PRESERVATION TECHNIQUES

Land Protection Techniques

Summary of Land Trust Options

Donations of Land (Gifts in Fee Simple)• Land trusts and other land conservation organizations are generally required by their bylaws to maintain land in a natural state in perpetuity. The donor is entitled to an income tax deduction for the value of the property up to 30% of the donor's Adjusted Gross Income (AGI) each year for a total of six years, until the value of the donation is fully utilized. Property taxes and potentially high estate taxes related to the property are eliminated. Most of the 2,000 acres protected by The Wildlands Trust have been acquired through an outright donation of land by generous and willing donors. *This is the simplest and most effective means of conserving land.*

Conservation Restriction (Conservation Easement)• This is one of the most promising techniques available for promoting land conservation. Restrictions, also referred to as a "CR" or as a "conservation easement", limit development on a property, ensuring that the land retains its open space value, while allowing the landowner to maintain ownership and use of the land. Farming and Forest Management are generally allowed, and there is a great deal of flexibility in designing each restriction. The owner may sell the land or bequeath it to heirs; the restrictions placed on the deed are binding on all future owners, and are enforced by the holder of the restriction (ie- land trust, con. comm. , etc .) The tax benefits, which generally include a reduction in estate and property taxes, are often quite significant.

Gift of a Remainder Interest; A landowner can give property to a land trust but retain the right to live on it. At the death of the landowner, the ownership of the land transfers to the Trust. Prior to the death of the land donor, a gift of remainder interest agreement will include an agreement concerning the maintenance and management of the land during the landowner's lifetime. The donor of a remainder interest can generally claim a related income tax deduction, and potentially high estate taxes are eliminated.

Bequests• A landowner can will land to an organization such as the Taunton River Stewardship Program. A deduction from the value of one's taxable estate is usually allowed for land bequeathed for public purposes.

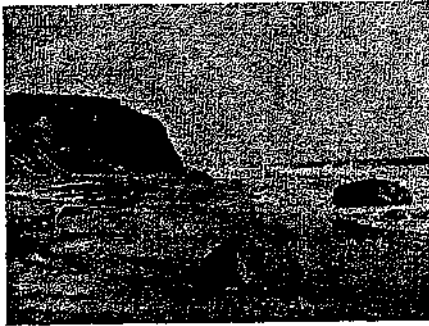
Limited Development Some landowners may wish to protect a property that has conservation value, but are not able to sacrifice what may be their most valuable asset. Limited development can serve as a workable alternative for landowners seeking to preserve their land, yet in need of some direct financial gain from their primary financial asset. On appropriate parcels of land, and in cooperation with a developer, a number of houselots can be built, while the remaining land is permanently protected. The owner will receive a cash return from new development, all of which is strategically located to preserve a property's

most critical scenic and natural resources. This land conservation method is sometimes referred to as "Cluster", "Conservation" or "Open Space" development.

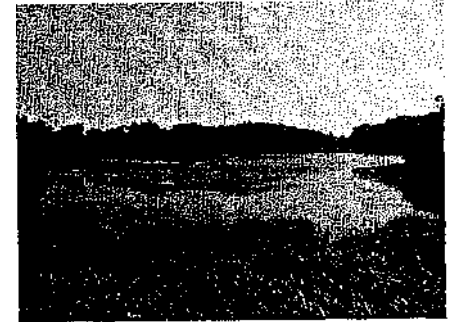
APPENDIX I: COMMUNITY PRESERVATION ACT

The Community Preservation Act

Allows communities to establish a dedicated fund for:



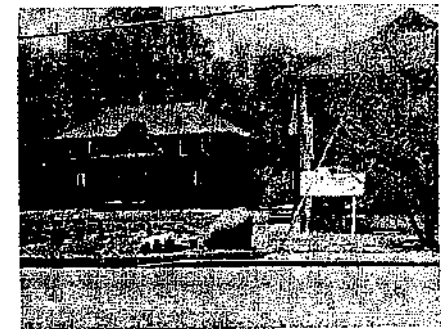
Open Space



Historic Preservation

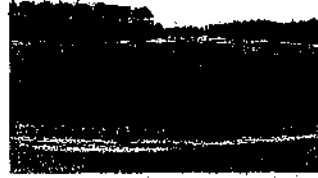


Affordable Housing



Basics of the Act

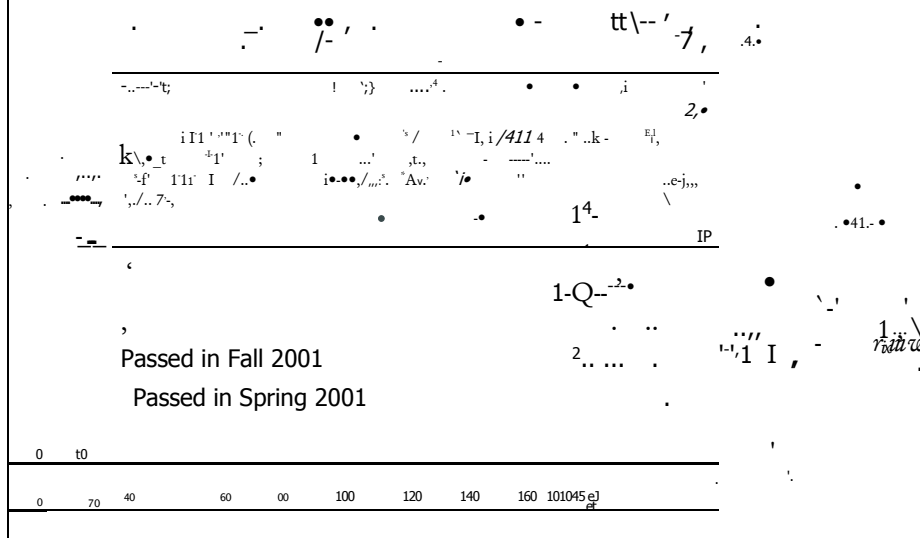
- Local adoption needed
- Establishes up to a 3% surcharge on local property taxes
- Requires 10% of monies to be spent on each of the 3 categories
- Allows flexibility for the remaining 70% in each of the 3 categories
- Establishes a Community Preservation Committee



31 Towns Passed Spring 2001 ----- 5 Cities passed November 2001

Community Preservation Act Passed

as of November 07, 2001



What does that mean for the taxpayer?

Average Assessed Housing Value .	\$165,000
Municipal Tax Rate	\$11.92

Amount Subject to Surcharge	\$1,995
CP Act Surcharge	.02%

Amount paid toward CPA Fund	\$40
-----------------------------	------

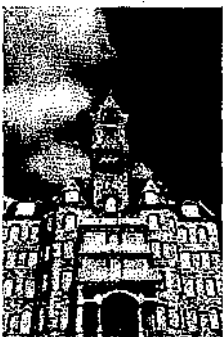
Based on this scenario (with no exemptions), \$40 would be paid into the Community Preservation Trust Fund



mrsEttis'ez.

Amending or Repealing the CPA

- The CPA must remain in place for at least five years.
- After five years the Act can be repealed at any time using the same procedures available for passage of the Act.
- Amendments to the surcharge percentage or the authorized exemptions can be made at any time using the same procedures available for passage of the Act.





Community Preservation Committee

- Membership: (one from each)
 - Conservation Commission
 - Historic Commission
 - Planning Board
 - Board of Park Commissioners
 - Housing Authority
 - If the Board, Commission or Authority does not exist persons "acting in the capacity of or performing like duties" should be designated by the local ordinance or by-law.
- Bylaw or Ordinance specifies:
 - Method of selection
 - (elected, appointed)
 - Length of term
 - Number of members (5-9)

CPA Committee Expenses:

Upon approval of the local legislative body...



...5% of annual Community Preservation Fund revenues can be used to pay for the activities of the Committee.

Expenditure Conditions:

- Community Preservation Funds may be expended anywhere in Massachusetts.



*Water supply for Abington
and Rockland,
located in Pembroke*

- Community Preservation funds may not replace existing operating funds, only augment them.
- Community Preservation funds may not be used for maintenance.
- Communities can bank CPA funds or issue debt against the revenue stream of the CPA.

Housing can be provided
for individuals, families,
and (including seniors of 60+):



Housing

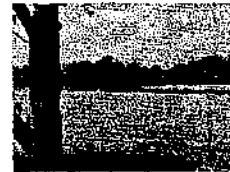
- low income — less than 80% of the area wide median income
- moderate income - less than 100% of the area wide median income

Examples

- Handicapped access improvements to existing affordable or senior senior housing complex
- Down payment assistance and low interest loans for income eligible first time home buyers
- Conversion of existing mill sites and other abandoned buildings to residential use



Open Space



Community Preservation funds may be used to purchase land, easements or restrictions to protect:

1. Existing and future water supply areas,
2. Agricultural, forest or coastal lands,
3. Frontage to inland water bodies,
4. Wildlife habitat,
5. Nature preserves, and
6. Scenic vistas.

Note: Funds cannot be used for land used for horse or dog racing or a stadium, gymnasium or similar structure.

Also, land can be purchased for :

1. Active and passive recreational uses,
2. Community gardens,
3. Trails,
4. Non-commercial youth and adult sports
5. Use of land as a park, playground or athletic field.

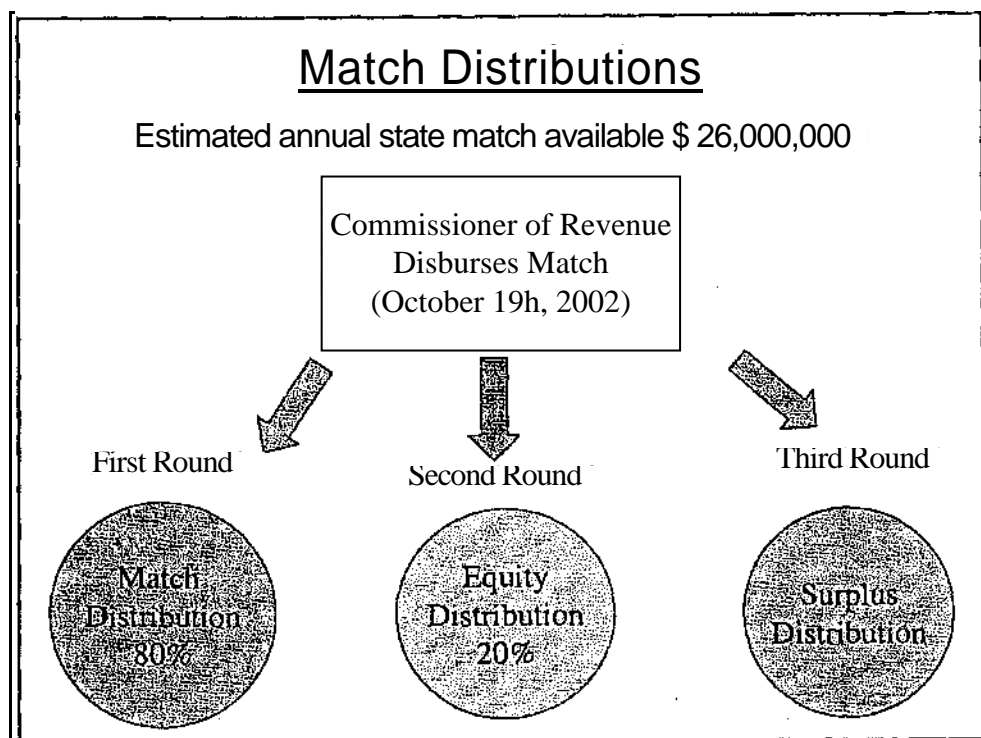


Historic Preservation



Community Preservation funds may be used for acquisition, preservation, rehabilitation or restoration of a building(s) or real property that:

- has been determined by the local historic preservation commission to be significant in the history, archeology, architecture or culture of a city or town; or
- is listed or eligible for listing on the state register of historic places



For Up To Date Information
Visit our Website

www.state.ma.us/envir

www.tpl.orci

COMNIUNI

Disburses Match



**APPENDIX J: CENTER FOR WATERSHED PROTECTION -
CODES AND ORDINANCES WORKSHEET**

Codes and Ordinances Worksheet

1. Street Width

- a. What is the minimum pavement width allowed for streets in low density residential developments that have less than 500 average daily trips (ADT)?

*If the answer is between **18-22 feet**, award **4 points***

- b. At higher densities are parking lanes allowed to also serve as traffic lanes (i.e., queuing streets)?

*If the answer is **YES**, award 3 points*

2. Street Length

- a. Do street standards promote the most efficient street layouts that reduce overall street length?

*If the answer is **YES**, award 1 point*

3. Right-of-Way Width

- a. What is the minimum right-of-way (ROW) width for a residential street?

*If the answer is **less than 45 feet**, award 3 points*

- b. Does the code allow utilities to be placed under the paved section of the

ROW? *If the answer is **YES**, award 1 point*

4. Cul-de-Sacs

- a. What is the minimum radius allowed for cul-de-sacs?

If the answer is less than 35 feet, award 3 points

*If the answer is **36 feet to 45 feet**, award 1 point*

- b. Can a landscaped island be created within the cul-de-sac?

*If the answer is **YES**, award 1 point*

- c. Are alternative turn arounds such as "hammerheads" allowed on short streets in low density residential developments?

*If the answer is **YES**, award 1 point*

5. Vegetated Open Channels

- a. Are curb and gutters required for most residential street

sections? *If the answer is **NO**, award 2 points*

- b. Are there established design criteria for swales that can provide stormwater quality treatment (i.e., dry swales, biofilters, or grass swales)?

*If the answer is **YES**, award 2 points*

6. Parking Ratios

- a. What is the minimum parking ratio for a professional office building (per 1000 ft² of gross floor area)?

If the answer is less than 3.0 spaces, award 1 point

- b. What is the minimum required parking ratio for shopping centers (per 1,000 ft² gross floor area)?

*If the answer is **4.5 spaces or less**, award 1 point*

- c. What is the minimum required parking ratio for single family homes (per home)? *If the*

*answer is **less than or equal to 2.0 spaces**, award 1 point*

- d. Are the parking requirements set as maximum or median (rather than minimum) requirements?

*If the answer is **YES**, award 2 points*

J.

I.

7. Parking Codes

- a. Is the use of shared parking arrangements promoted? *If the answer is*

***YES**, award 1 point*

- b. Are model shared parking agreements provided? *If the answer is*

***YES**, award 1 point*

- c. Are parking ratios reduced if shared parking arrangements are in place? *If the answer*

*is **YES**, award 1 point*

- d. If mass transit is provided nearby, is the parking ratio reduced? *If the answer is*

***YES**, award 1 point*

8. Parking Lots

- a. What is the minimum stall width for a standard parking space? *If the answer is 9*

***feet or less**, award 1 point*

- b. What is the minimum stall length for a standard parking space? *If the answer is*

***18 feet or less**, award 1 point*

- c. Are at least 30% of the spaces at larger commercial parking lots required to have smaller dimensions for compact cars?

*If the answer is **YES**, award 1 point*

- d. Can pervious materials be used for spillover parking areas? *If the*

*answer is **YES**, award 2 points*

9. Structured Parking

- a. Are there any incentives to developers to provide parking within garages rather than surface parking lots?

*If the answer is **YES**, award 1 point*

10. Parking Lot Runoff

- a. Is a minimum percentage of a parking lot required to be landscaped? *If the answer is*

***YES**, award 2 points*

- b. Is the use of bioretention islands and other stormwater practices within landscaped areas or setbacks allowed?

*If the answer is **YES**, award 2 points*

11. Open Space Design

- a. Are open space or cluster development designs allowed in the community?

*If the answer is **YES**, award 3 points*

*If the answer is **NO**, skip to question No. 12*

- b. Is land conservation or impervious cover reduction a major goal or objective of the open space design ordinance?

*If the answer is **YES**, award 1 point*

- c. Are the submittal or review requirements for open space design greater than those for conventional development?

*If the answer is **NO**, award 1 point*

- d. Is open space or cluster design a by-right form of development?

*If the answer is **YES**, award 1 point*

- e. Are flexible site design criteria available for developers that utilize open space or cluster design options (e.g., setbacks, road widths, lot sizes)?

*If the answer is **YES**, award 2 points*

12. Setbacks and Frontages

- a. Are irregular lot shapes (e.g., pie-shaped, flag lots) allowed in the community?

*If the answer is **YES**, award 1 point*

- b. What is the minimum requirement for front setbacks for a **one half (%) acre** residential lot?

*If the answer is **20 feet or less**, award 1 point*

- c. What is the minimum requirement for rear setbacks for a **one half (1/2) acre** residential lot?

*If the answer is **25 feet or less**, award 1 point*

- d. What is the minimum requirement for side setbacks for a **one half (1/2) acre** residential lot?

*If the answer is **8 feet or less**, award 1 point*

- e. What is the minimum frontage distance for a **one half (1/2) acre** residential lot? *If the answer is **less than 80 feet**, award 2 points*

13. Sidewalks

- a. What is the minimum sidewalk width allowed in the community?

*If the answer is **4 feet or less**, award 2 points*

- b. Are sidewalks always required on both sides of residential streets?

*If the answer is **NO**, award 2 points*

- c. Are sidewalks generally sloped so they drain to the front yard rather than the street?

*If the answer is **YES**, award 1 point*

- d. Can alternate pedestrian networks be substituted for sidewalks (e.g., trails through common areas)?

*If the answer is **YES**, award 1 point*

14. Driveways

- a. What is the minimum driveway width specified in the community?

*If the answer is **9 feet or less (one lane) or 18 feet (two lanes)**, award 2 points*

- b. Can pervious materials be used for single family home driveways (e.g., grass, gravel, porous pavers, etc)?

*If the answer is **YES**, award 2 points*

- c. Can a "two track" design be used at single family driveways?

*If the answer is **YES**, award 1 point*

- d. Are shared driveways permitted in residential

developments? *If the answer is **YES**, award 1 point*

15. Open Space Management

- a. Does the community have enforceable requirements to establish associations that can effectively manage open space?

*If the answer is **YES**, award 2 points*

1

- b. Are open space areas required to be consolidated into larger units?

*If the answer is **YES**, award 1 point*

- c. Does a minimum percentage of open space have to be managed in a natural condition?

*If the answer is **YES**, award 1 point*

- d. Are allowable and unallowable uses for open space in residential developments defined?

*If the answer is **YES**, award 1 point*

- e. Can open space be managed by a third party using land trusts or conservation easements?

*if the answer is **YES**, award 1 point*

16. Rooftop Runoff

- a. Can rooftop runoff be discharged to yard

areas? *If the answer is **YES**, award 2 points*

- b. Do current grading or drainage requirements allow for temporary ponding of stormwater on front yards or rooftops?

*If the answer is **YES**, award 2 points*

17. Buffer Systems

- a. Is there a stream buffer ordinance in the community?

*If the answer is **YES**, award 2 points*

- b. If so, what is the minimum buffer width? *If the*

*answer is **75 feet or more**, award 1 point*

- c. Is expansion of the buffer to include freshwater wetlands, steep slopes or the 100-year floodplain required?

*If the answer is **YES**, award 1 point*

18. Buffer Maintenance

- a. Does the stream buffer ordinance specify that at least part of the stream buffer be maintained with native vegetation?

If the answer is YES, award 2 points

- b. Does the stream buffer ordinance outline allowable

uses? *If the answer is YES, award 1 point*

- c. Does the ordinance specify enforcement and education mechanisms?

If the answer is YES, award 1 point

19. Clearing and Grading

- a. Is there any ordinance that requires or encourages the preservation of natural vegetation at residential development sites?

If the answer is YES, award 2 points

- b. Do reserve septic field areas need to be cleared of trees at the time of

development? *If the answer is NO, award 1 point*

20. Tree Conservation

- a. If forests or specimen trees are present at residential development sites, does some of the stand have to be preserved?

If the answer is YES, award 2 points

- b. Are the limits of disturbance shown on construction plans adequate for preventing clearing of natural vegetative cover during construction?

If the answer is YES, award 9 point

21. Land Conservation Incentives

- a. Are there any incentives to developers or landowners to conserve non-regulated land (open space design, density bonuses, stormwater credits or lower property tax rates)?

If the answer is YES, award 2 points

- b. Is flexibility to meet regulatory or conservation restrictions (density compensation, buffer averaging, transferable development rights, off-site mitigation) offered to developers?

If the answer is YES, award 2 points

22. Stormwater Outfalls

- a. Is stormwater required to be treated for quality before it is discharged?

If the answer is YES, award 2 points

- b. Are there effective design criteria for stormwater best management practices (BMPs)?

If the answer is YES, award 1 point

- c. Can stormwater be directly discharged into a jurisdictional wetland without pretreatment?

If the answer is NO, award 1 point

- d. Does a floodplain management ordinance that restricts or prohibits development within the 100 year floodplain exist?

If the answer is YES, award 2 points

TOTAL

Scoring

Community has above-average provisions that **90 -100** promote the protection of streams, lakes and estuaries.

Local development rules are good, but could **80 - 89** use minor adjustments or revisions in some areas.

Opportunities exist to improve development **70 - 79** rules. Consider creating a site planning roundtable.

Development rules are likely inadequate to **60 - 69** protect local aquatic resources. A site planning roundtable would be very useful.

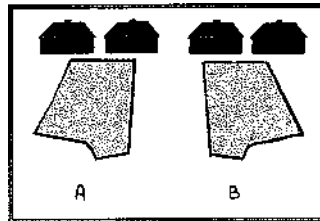
Development rules are definitely not **less than 60** environmentally friendly. Serious reform is needed.

APPENDIX K: TRANSFER OF DEVELOPMENT RIGHTS

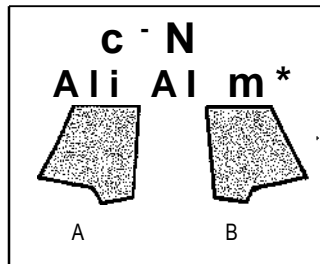
- **Transfer of Development Rights** — Transfer of Development Rights are the conveyance of development rights by deed, easement or other legal instrument authorized by local law on a parcel (sending or donor parcel) to another parcel of land (receiving parcel) and the recordation of that conveyance among the land records of that municipality/county. This zoning amendment allows a community to direct growth away from either environmentally sensitive or historically/socially important sites to areas that have the infrastructure to accommodate additional growth.

Steps in the TDR process include:

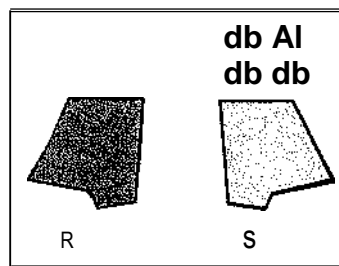
1. Determine the by-right density of the sending (A) and receiving (B) parcels.



2. Under the local zoning by-law (under the special permit process) transfers the by-right density of the sending parcel (A) to the receiving parcel (B). It is recommended that this transfer should be a condition of the special permit and protected by a deed or other legal document (fee simple to the community).



3. The sending parcel (A) becomes protected open space and the receiving parcel (B) is developed at the combined density of both parcels A and B.



Retynhcilen

be made in perpetuity via deed restriction at terms affordable to persons or families qualifying as low and moderate income as defined by the Department of Housing and Community Development. Such additional lot shall not count toward the calculation of the basic number of units nor shall such lot count as an incentive lot below. Such lots shall be subject to the approval of the Planning Board; or take any action relative thereto.

In accordance with the provisions of M.G.L. Chpt. 40A, Sec. 5, the Raynham Planning Board will hold a public hearing on Thursday, April 26, 2001, 7:45 p.m., at the Raynham Town Hall, 53 Orchard Street, Raynham, MA, to consider a proposal to amend the Raynham Zoning By-laws by adding the following new article:

Article 17: Transfer of Development Rights

17.1 Purpose and Intent:

This bylaw enables the transfer of development potential from one parcel to another. The transfer of development rights (TDR) makes it possible to greatly restrict or even prohibit development entirely in one area called the Preservation Area to another area called the Receiving Area where there are little or no impediments to higher density, such as an serviced by with public water and sewer. The density is transferred from a "sending" parcel to a "receiving" parcel. By creating receiving parcels as markets for the sale of unused development rights in the sending parcels, TDR program encourages the maintenance of low-density land uses, open spaces, historical features, critical environmental resources, and other sensitive features of the designated sending parcels. When the owner of a sending parcel sells development rights to the owner of a receiving parcel, the purchaser thereby increases the development rights beyond otherwise permissible limits. In this manner, local governments can protect a variety of sensitive features while providing a mechanism to compensate any perceived diminution in land development potential. The TDR program is consistent with the Raynham Master Plan to further the conservation and preservation of natural and undeveloped areas, wildlife, flora and habitats for endangered species; the preservation of coastal resources including aquaculture; protection of ground water, surface water, as well as the other natural resources; balanced economic growth; the provision of adequate capital facilities, including transportation, water supply, and solid, sanitary and hazardous waste disposal facilities; the coordination of the provision of adequate capital facilities with the achievement of other goals; the development of an adequate supply of affordable housing; and the preservation of historical, cultural, archaeological, architectural and recreational values.

17.2 Definitions

Development Rights. Are rights to develop a single family house lot, expressed as the maximum number of lots permissible on a designated sending parcel or parcels under the applicable zoning and subdivision rules and regulations in effect on the date of the transfer of development rights. Development rights (house lots) are computed on a one for one basis. Determination of the maximum number of development rights (house lots) available for transfer shall be made by the Special Permit Granting Authority (Planning Board).

Transfer of Development Rights (TDR). A development right (house lot) can be transferred from a sending parcel(s) to a receiving area. A receiving area is defined as a residential subdivision. Development rights can be transferred to multiply parcels, if multiply parcels are under consideration for a residential subdivision in order to increase the number of house lots for said development. The density of said development would be increased above existing zoning requirements in order to accommodate the transferred development rights.

Sending Parcel(s). Is a parcel or parcels of land that is determined by the Planning Board to be of special importance to remain in a natural state because of its visual prominence, potential vista impairment, ecological significance, fragility, special importance as farmland, its value for recreation, future town water supply, or because it is important to the town's open space plan and/or town's master plan. The sending parcel or parcels must be residentially zoned from which development rights may be transferred.

Receiving Area. Is a previously approved subdivision provided that the subdivision is serviced with water and sewer. The subdivision can support the increased development and complies with the most recently amended Zoning Bylaws and Planning Board Rules and Regulations. A receiving area can also be a new conventional subdivision that can support the increased development and complies with the most recently amended Zoning Bylaws and Planning Board Rules and Regulations. The receiving area cannot be located within the town's Water Resource Protection Overlay.

17.3 Determination of Development Rights

- (a) To establish the development rights available for transfer, the SPGA may require the applicant for residentially zoned land submit a preliminary plan or a more detailed subdivision plan, as defined by the Planning Board's subdivision rules and regulations, to illustrate the number of lots or dwelling units.

- (b) Development rights may be transferred at a rate of one (1) lot per forty thousand (40,000) square feet whether or not contiguous with or in the same ownership as the site being developed.
- (c) The lot(s) must comply with all existing density limitations imposed by the Raynham Zoning Bylaws as well as those that may be imposed as a condition of a special permit and effective at the time of application for approval of the proposed development.
- (d) The credited land must not be wetlands as defined in MGL 131 Section 40 or be used to satisfy lot area requirements for any other development.
- (e) The land being developed must not be within the Water Resource Protection. Overlay District, as most recently amended.
- (I) The transfer cannot be used, if the transfer is being utilized solely for the purpose of accelerating growth pursuant to Article 16-Subdivision Phasing Bylaw.

17.4 Permanent Development Restrictions

Any lot or lots deemed to meet the standard of qualifying for a transfer must be permanently restrict from future development by way of a conservation restriction in accordance with Massachusetts General Law Chapter 184, Section 31-33 as most recently amended. Such restriction shall be submitted to the Planning Board prior to approval of the project and recorded at the Registry of Deeds/Land Court prior to the conveyance of any building lot. A management plan may be required by the Planning Board, which describes how existing woods, fields, meadows or other natural areas shall be maintained in accordance with good conservation practices. Upon receipt of a special permit for development where such special permit is conditional upon the voluntary, permanent restriction of development rights, the land owner may sell or otherwise transfer those development rights affected by such restrictions to a Receiving area before any building permits can be issued for said transfer.

17.5 Receiving Area

- (a) Is an approved or proposed residential subdivision that is capable of supporting additional development? By way of support, water and sewer must service the subdivision. The lot sizes for the receiving area half of the minimum requirements in Article Five: Intensity of Use Regulations.

- (b) The Special Permit is not effective until the purchased developments from the sending parcel or parcels are under a conservation restriction.

17.6 Title Recordation, Tax Assessment and Restriction of Development Rights

- (a) **All** instruments implementing the transfer of development rights shall be recorded in the manner of a deed in the Registry of Deeds of the jurisdiction for both sending and receiving parcels. The instrument evidencing such TDRs shall specify the map and lot number of the sending parcel(s) and the map and lot of the receiving parcel(s).
- (b) The clerk of the Registry of Deeds shall transmit to the applicable town assessor(s) for both the sending parcel(s) and receiving parcel(s) all pertinent information required by such assessor to value, assess and tax the respective parcels at their fair market value as enhanced or diminished by the TDRs.
- (c) The record owner of the sending parcel(s) shall, within forty-five (45) days of receipt of a special permit authorizing TDRs, record at the Registry of Deeds a Conservation Restriction as defined by G.L. c. 184 §§31-33 running in favor of the town prohibiting, in perpetuity, the construction, placement or expansion of any new or existing structure or other development on said sending parcel(s). Evidence of said recording shall be transmitted to the Planning Board of the town in which the restriction has been placed, indicating the date of recording and deed book and page number at which the recording can be located. The grant of the special permit to transfer development rights shall be conditioned upon such restriction, and no special permit for a transfer of development rights shall be effective until the restriction noted above has been recorded at the Registry of Deeds.

17.7 Severability:

If a court of competent jurisdiction holds any provision of this bylaw invalid, the remainder of the bylaw shall not be affected thereby. The invalidity of any section or sections or parts of any section or sections of this bylaw shall not affect the validity of the remainder of the [town]'s zoning bylaw; or take any action relative thereto.

In accordance with the provisions of M.G.L. Chpt. 40A, Sec. 5, the Raynham Planning Board will hold a public hearing on Thursday, April 26, 2001, 7:50 p.m., at the Raynham Town Hall, 53 Orchard Street, Raynham, MA, to consider the following proposal: To see if the Town will vote to amend the Town of Raynham Zoning By-laws, Article 16 Subdivision Phasing, by adding the following new language in bold print: (5) rely exclusively on on-site wastewater for domestic purposes; **or (6) the rate of build-out of a**

subdivision on a year to year basis can be increased by an owner by purchasing development rights. Development rights can be purchased from property that is contiguous to said development or from property that is not contiguous. The property does not need to be in the same ownership. A development right is defined as a building lot that complies with the Raynham Zoning Bylaws as most recently amended that can be utilized for a single family home. A development right used under this subsection shall be computed on a one for one basis to increase the rate of build-out in a twelve-month period. A development right or rights that is purchased must be permanently restricted with a Conservation Restriction in accordance with Massachusetts General Law Chapter 184, Section 31-33 as most recently amended. A development right that is used as an incentive lot under Article 17: Transfer of Development Rights cannot be used to increase the rate of build-out under this article and a development right that is utilized under this bylaw cannot be counted as an incentive lot under Article 17: Transfer of Development Rights; or take any action relative thereto.

Any person wishing to be heard or interested in these proposed amendments should appear at the time and place designated.

A complete copy of the proposed amendments and the Raynham Zoning Bylaws may be viewed in full at the Town Clerk's office, 53 Orchard Street, Raynham, Massachusetts, during the usual scheduled business hours.

Raynham Planning Board

Henry Ellis,
Chairman Carl
Carlson, Clerk

Published in the Taunton Daily Gazette on: April 9, and April 16,2001

Please bill: Raynham Planning Board
Town Hall
53 Orchard Street
Raynham, MA 02767

RECEIVED
TOWN CLERK'S OFFICE
01 APR - 6 AM 10:06
TOWN OF RAYNHAM
MASSACHUSETTS

**APPENDIX L: TAUNTON RIVER WILD & SCENIC RIVER
STEWARDSHIP PLAN SUMMARIES**

INTRODUCTION

The Taunton Wild & Scenic River Management Plan presents a vision and action strategy for the cooperative management and protection of the approximately 40 miles of the Taunton River in southeastern Massachusetts. It also presents a vision and associated management actions for the major tributary watersheds of the river. The Plan was prepared as part of the Taunton Wild & Scenic River Study, authorized by Congress in 2000.

The study has been conducted by the Taunton Wild & Scenic River Study Committee in cooperation with the Southeastern Regional Planning and Economic Development District (SRPEDD) and the National Park Service. The Study Committee included members from the ten communities within the study area, the Commonwealth of Massachusetts' Riverways Programs, the Wildlands Trust of Southeastern Massachusetts, Natural Resources Trust of Bridgewater, SRPEDD, Save the Bay, the Taunton River Watershed Alliance and the National Park Service. Funding and staff assistance were provided by the Northeast Regional Office of the National Park Service.

The plan is made up of seven sections:

- 1. Background**

This section provides background information on the watershed, the Wild and Scenic River Study, and the content of this Plan.

- 2. River Protection Framework & Philosophy**

This section describes the goals of the study committee, the guiding principles that helped to form the plan and how the Wild & Scenic designation would affect the river, the tributary watersheds and those entities interested in protecting the Taunton River.

- 3. Administrative Framework**

This section describes the organizational structure that is being proposed to oversee implementation of the plan.

- 4. Geographic Area Covered By This Plan**

This section describes the primary focus area, the tributary focus areas and the limits of the Wild & Scenic designation.

- 5. Management and Protection of Outstanding Resources**

This section outlines the major elements of protection for the Wild & Scenic Taunton River. It includes examples of current management and protection, potential threats to the resources and an action strategy for each of the six outstanding resource values.

- 6. Management of Water Quality, Water Quantity and Instream Flow**

This section describes background on water quality and instream flow, potential threats and an action strategy for management.

7. Wild & Scenic River Designation

This section describes in more detail the relationship of the proposed Wild & Scenic River designation to this plan and to the protection of the free-flowing character and identified Outstanding Resource Values of the Taunton River.

8. Tributary Surveys

This section outlines the results of eight tributary shoreline surveys, conducted by Stream Teams made up of volunteers, municipal officials and Wild & Scenic committee members with support from the Wild & Scenic study and the Massachusetts Riverways Program. These shoreline surveys provided baseline data and helped to identify in the tributaries the same outstanding values that were identified on the mainstem Taunton River. Management recommendations were developed from survey data and recommendations from Stream Team action plans.

Appendix A: Existing Resource Protections

This section gives an overview of some of the important river and land protections that are in place in each of the municipalities in the study area, as well as state and federal regulations that pertain to river management.

Appendix B: What's so Special About the Taunton River?

This section contains extended background material supporting the six outstanding values including references.

Appendix C: Stream Team Reports

I. BACKGROUND

Taunton River Overview

The Taunton River is perhaps the most diverse and intact coastal riverine ecosystem in all of southern New England. The Taunton River is the only major coastal river in the region that is without a dam or obstruction over its entire length. The river is formed at the confluence of the Matfield and Town Rivers in Bridgewater and along with its extensive network of tributaries, drains an area of 562 square miles. The river itself is an important tributary to the Mount Hope Bay/Narragansett Bay estuary in Rhode Island, part of the National Estuary Program.

The Taunton River travels through 10 communities and over 40 miles to Mount Hope Bay. It is tidal for 18 miles from the bay, with saltwater intrusion ending at about the Dighton-Taunton line, 12 miles from the mouth. The landscape of the Taunton River watershed is the result of glacial deposition as shown in flat outwash plains, numerous wetlands and kettle ponds. Glacial Lake Taunton was created by the retreating glacier and eventually drained as the Taunton River. Clay deposits from this glacial lake have been used in modern times by the brick and clay industry. Numerous bogs and wetlands have also provided bog iron, important to early development and industry.

The width of undisturbed river corridor along the upper Taunton and its primary tributaries ranges from approximately 2,000 feet to over one mile for approximately twenty-two meandering miles - an extraordinarily wild river in eastern Massachusetts. The river corridor's mix of large woodland areas (largely devoid of non-native species), vast tidal and non-tidal wetlands, and edge habitats, related to nearly 2,000 acres of prime agricultural land provides extraordinarily rich habitat diversity for a wide range of species.

The remarkably intact quality of the river corridor results not only in outstanding wildlife habitat, but great scenic beauty and extraordinary recreational opportunities such as hunting, hiking and canoeing. The fact that the Taunton River drops only 20 feet in elevation over its entire course makes it particularly appealing to paddlers. The Taunton also contributes greatly to what remains of the rural character of the communities through which it flows. Large stretches of pasture, woodland and meadow help to preserve rich historical and archaeological resources along the river. The Taunton River is directly tied to early contact between English settlers and Native Americans and with its major tributaries, shows many examples of early colonial industrial innovation including millworks and transportation.

Some of the outstanding attributes of the Taunton River corridor include:

- the only major river without a dam along its entire mainstem.
- over 154 species of birds and 45 species of fish, including the bald eagle and the endangered Atlantic sturgeon;
- more than 360 identified plant species, including 3 globally rare species;
- globally rare freshwater tidal marsh habitat located in the estuary sections of the study area;
- one of the largest alewife runs in the state including the Nemasket River with headwaters at the Assawompset Ponds, the largest natural lakes in Massachusetts;
- The Taunton River is part of the state designated Wampanoag Commemorative Canoe Passage, the ancient Native American waterway from Massachusetts Bay in the east, to Narragansett Bay in the south.
- Wampanucket, located at the Assawompset Ponds in Middleborough is the location of one of the most significant Paleoindian depositions known in New England. This site contains evidence of dwellings dating from 12,000 — 8,000 years before present day.
- The first four, five and six masted schooners were designed and/or registered in Taunton. The only seven-masted schooner to exist was also captained by a Tauntonian.
- The first iron forge was set up on the Forge River in Raynham in 1652. This forge became the longest operating one of its kind in the country after more than 230 years in operation.
- Iron fittings for the USS Constitution and the USS Monitor were forged in Bridgewater during the Civil War.

Wild and Scenic River Study

The Wild and Scenic River Study and Stewardship Plan represent the culmination of over seventeen years of local planning, stewardship and advocacy efforts on the Taunton River. The current study has its roots in the 1988 Upper Taunton River Conservation and Management Plan. The 1988 plan was undertaken by a coalition of local citizens in an effort to preserve and protect the natural resources in a 14.5 mile stretch of the Upper Taunton River from the Bridgewater-

Middleborough-Raynham line to the Weir Village in Taunton. The group facilitating the 1988 plan and related public planning process evolved into the Taunton River Watershed Alliance (TRWA). One of the principal regional recommendations of the plan was to seek Wild and Scenic River status for the Taunton River.

In the mid-1990's, as a result of ongoing efforts to preserve riverfront lands along the Taunton River and its tributaries, the Taunton River Stewardship Program (TRSP) was formally organized after months of meetings. An alliance of conservation agents and planners from the Bridgewater, Middleborough, Raynham and Halifax, TRSP worked with partners from the Massachusetts Division of Fisheries and Wildlife, the National Park Service (NPS) Rivers and Trails Conservation Assistance Program, Southeastern Regional Planning and Economic Development District (SRPEDD), the Wildlands Trust of Southeastern Massachusetts, the Natural Resources Trust of Bridgewater and the TRWA. TRSP works to serve as a bridge for riverfront landowners and communities seeking workable, appropriate land conservation options for riverfront properties.

Concurrently, in the fall of 1997, a local group spearheaded by the Taunton Conservation Agent and SRPEDD, working with Congressman Joseph Moakley's office, prepared a nomination application for the Taunton River to President Clinton's new American Heritage Rivers Program. This program was created to recognize and designate ten (10) American Heritage Rivers for their importance to American culture and history. While the Taunton failed to gain American Heritage River status, the application did foster a sense unity amongst the riverfront communities (who had all signed a "Declaration of Interdependence" on the Taunton River as a preamble to the American Heritage Rivers application). The application also created a great deal of public awareness and brought to light a wealth of environmental and historical information about the Taunton.

Following the American Heritage River effort, in conjunction with TRSP and the NPS, SRPEDD developed legislation to undertake a study of the Taunton River to determine whether or not the Upper Taunton River, from its confluence in Bridgewater, to the Forge River in Raynham, met the criteria for federal Wild and Scenic River designation. Legislation was submitted and presented to Congress by the Massachusetts delegation of Representatives Moakley, Frank and McGovern, and Senators Kerry and Kennedy. In October of 1999, Congressional hearings were held and testimony given on behalf of the Taunton River Study Bill. In October of 2000, President Clinton signed the bill into law, authorizing funding to undertake the Taunton River Wild and Scenic River Study. In February of 2002, the original legislation was amended to include the Lower Taunton River, from the Taunton —Raynham line to the Mount Hope Bay at Fall River and Somerset, as part of the Wild and Scenic Study area.

How This Plan Was Developed

This plan was developed through a public process facilitated by the Taunton River Wild and Scenic River Study Committee. The Committee consists of volunteers appointed by their respective Boards of Selectmen or Mayors and representatives from the NPS, the Massachusetts Riverways Program, the Wildlands Trust of Southeastern Massachusetts, Save the Bay, SRPEDD, and the Natural Resources Trust of Bridgewater.

The Committee has held open meetings on a monthly basis since August of 2001. Special Topics meetings have been held periodically, employing outside experts/speakers, covering such topics as rare and endangered species habitats and natural resources of the Taunton River Corridor; cultural, historical and archaeological resources; agricultural resources; fisheries resources; recreational opportunities, and the resources of the Lower Taunton estuary. All of these special topic meetings were also open to the public. In February of 2004, the Committee also sponsored a regional river planning meeting (a charrette) at the Bristol County Agricultural High School in Dighton. Citizens from all ten of the riverfront communities participating in the Wild and Scenic River Study attended the charrette. Public comments on the resources of the river, threats to those resources and potential remedies to problems on the river were recorded by members of the Committee during the charrette.

The Committee has used the information obtained at all of its public meetings, special topics meetings and the charrette, in conjunction with study, research and interviews, to form the basis of the content and recommendations of the Taunton River Stewardship Plan.

Major Recommendations of the Wild & Scenic Stewardship Plan

The designation of the Taunton River as a Wild & Scenic River has come at a crucial time for the communities in the study corridor. Southeastern Massachusetts is facing record growth and the Wild & Scenic study corridor communities are facing many challenges and tough decisions. A lack of municipal resources has put many of these small communities on the defensive in the face of development pressures and economic growth. Now is the time to face these challenges by protecting community character and the outstanding resources of the Taunton River and restoring fisheries and wildlife populations.

The Wild & Scenic Stewardship Committee and the study communities are being presented with many opportunities for restoration and protection of the outstanding resources of the river corridor and watershed. The Taunton River has been recognized by the Nature Conservancy as a globally important resource and much attention is being paid to its status as a rare resource. It is one of the few major rivers in New England to have retained its characteristics as a salt wedge estuary with tidal influence reaching 18 miles from Mount Hope Bay. This free-flowing river has retained significant and rare habitats and biodiversity despite its location in a fast developing area of Massachusetts. The river is already home to the state's most significant anadromous herring run, and with the removal of a few small barriers on major tributaries, fisheries resources such as Rainbow Smelt and Shad could be regained in much of the watershed.

A major challenge ahead will be to keep the currently intact river buffer particularly along the upper river to the City of Taunton. This buffer makes the river a scenic and recreational gem and creates a wildlife corridor unknown in much of the state. Work to protect large areas of agricultural land as well as other parcels that are not in permanent protection will need to be completed within the next few decades in order to preserve this natural corridor. Losses of the agricultural economy of the region and areas of prime agricultural land are already becoming a reality. Threats from water withdrawals, industrial development and pollution are currently at the forefront of our management efforts, and in the next few years important decisions will be made for the future of the Taunton River.

One of the major recommendations of this stewardship plan is to create a bi-state compact between Massachusetts and Rhode Island for the protection of the Taunton River as a tributary to Narragansett Bay and the National Estuary Program. This compact will allow greater communication and cooperation among state and federal agencies working to protect the river.

The Taunton River is also significant to the people who live and recreate in the watershed. Preservation and enhancement of recreational opportunities and opportunities to learn about and appreciate the river are also a goal of this plan. The continuation of efforts started by the Taunton Heritage River Program will allow greater access to local knowledge and appreciation for the history of life on the river. Preservation of prehistoric, colonial and Native American cultural sites is also a high priority. The Taunton River and its tributaries were the center of life for early Native Americans as well colonial settlers, and they are central to the customs of the present day Wampanoag tribal members. It is essential to preserve these tribal links to the land, the landscape and the river. We hope that you join us in working to learn about and preserve the river, its tributaries and the sense of place that the river brings to the communities through which it flows.

The major recommendation of the plan include:

- Remove the Plymouth Street Dam to facilitate fish passage into the Town and Matfield Rivers and to remove hazards to recreational paddling.
- Remove some of all of the dams on the Assonet River in order to restore natural stream habitat and to facilitate spawning of anadromous fish.
- Remove the Cotton Mill Dam below Route 106 on the Satucket River and restore a natural stream channel.
- Finalize installation of the fish ladders on the Three Mile River
- Establish and promote a bi-state partnership with Rhode Island linking the Taunton River to the Narragansett Bay watershed.
- Promote awareness and education about the outstanding values of the Taunton River.
- Protect stream flow, water quality and riparian habitat as the foundations for each of the six outstanding values of the Taunton River.
- Promote the continued efforts of the Taunton Heritage River Program.

Existing Municipal Protections — Zoning Bylaws

This matrix covers zoning bylaws that relate to the protection of the Taunton River's Wild & Scenic values within the study communities. The information on this matrix was gathered through a survey of municipal zoning regulations, town master plans, etc. Please provide additional information, comments or corrections.

	Building Permit Limitation/ Subdivision Phasing	Wetland Bylaws	Open Space/Cluster Subdivision	Transfer Development Rights	Community Preservation Act	Demolition Delay	Soil Conservation/ Land Clearing and Grading
Bridgewater	no	no	Allows for cluster development in residential areas with special permit	no	no	no	no
Halifax	No more than 40 permits per year; no more than 6 permits per applicant over 12 months and 10 permits per project over 24 months.	-Expands protected values to include wildlife habitat, recreation, air and noise pollution and aesthetics -Requires a permit for work which can be refused if there will be an adverse effect	no	no	no	no	no
Middleborough	no	no	Allows for smaller lot sizes and revises setbacks and frontage in Open Space District	no	no	Allows up to six months for negotiations and alternatives to loss of historic structures	no
Raynham	Maximum number of building permits for dwelling units is 24 per fiscal year (expired on June 30, 2003) No more than seven permits per year per subdivision	no	Allows for cluster developments with special permit in Farm and Forest District or Residential A district	yes	no	no	no
Taunton	Phased growth requiring building permits to be issued based on a percentage of the total number of units.	Adopted in 2003	Allows for cluster development in residential areas with special permit	no	Adopted in 2003	Covers all buildings over 50 years of age, with historic significance or located within 150 feet from an Historic District	Requires permit for any tree cutting, land clearing or excavation; encourages preservation of trees
Freetown	no	no	no	no	no	no	no
Berkley	No more than 10 building permits may be granted to one owner/ developer in one year.	no	no	no	no	no	Soil Conservation Board which issues permit for earth removal that changes land contours over 2 feet.
Dighton	Subdivisions containing 8 or more units shall not be developed at a rate greater than 8 lots or 10% of total number of lots in any year.	no	Allows for cluster development in residential areas with special permit	no	no	no	Erosion control bylaw requires special permit for slopes 15% or greater, controls land clearing Earth removal bylaw requires special permit for the removal of more than 50 cubic yards of material in one year.
Somerset	no	no	Allows for cluster development in residential areas with special permit	no	no	Allows up to six months for negotiations and alternatives to loss	no
Fall River	no	no	Allows for cluster development in residential areas with special permit	no	no	no	no

TAUNTON RIVER WILD AND SCENIC RIVER DESIGNATION FEASIBILITY STUDY

Common Questions and Answers

1. *What is the purpose of the Wild and Scenic Rivers Act?*

The Wild and Scenic Rivers Act was passed in 1968 to balance a long-standing federal policy of river development with one that would permanently protect the country's most outstanding free-flowing rivers. To accomplish this, the Act prohibits federal licensing, assistance or construction of water resource development projects that would alter the free-flowing character of designated rivers or diminish their outstanding resource values.

2. *What are the benefits of the study?*

The Wild and Scenic feasibility study provides the study communities and state with staff assistance and financial resources in planning for the river's future, designing and implementing specific conservation actions, and in conducting public outreach.

3. *What protection can Wild and Scenic designation provide that local and state regulations can't?*

State and local regulations that reflect a desire to protect important river values are not binding on federal agencies and federal actions. The only way to ensure federal agency consistency is through the Wild and Scenic Rivers Act.

Wild and Scenic River status is a privilege reserved for special rivers whose adjacent communities recognize, and are committed to, the long-term protection of identified river values.

4. *Are there different classifications given to rivers in the Wild and Scenic Rivers. System?*

Yes. "Wild," "Scenic," and "Recreational." The different classifications are based solely on the existing amount of development on the land adjacent to the river at the time of designation. Wild rivers are those with little or no adjacent development or evidence of human activity; scenic rivers may have more development, including some structures and road crossings; and recreational rivers may include parallel roads, communities and other development, and may even flow through urban areas.

5. *What factors are involved in determining whether the river is appropriate for federal designation?*

1) Eligibility

To be eligible, the river segment must be free flowing and possess one or more "outstandingly remarkable" resource values (e.g. fisheries, recreation, wildlife, historic, etc.).

2) Suitability

To be suitable, there must be long-term protection provided for the river's outstanding resources and strong public support for designation. Due to the lack of federal lands along the Taunton, and a presumed desire to keep it this way, there will need to be a strong local commitment toward protection of the river and its special values.

6. *Who will decide Wederal designation is appropriate?*

Ultimately, the National Park Service is responsible for submitting a report to Congress that will detail a river conservation plan and make a recommendation on federal designation. The National Park Service will not recommend federal designation of the river segment unless there is strong public support for designation. This support will be based upon the recommendation of each community along the river segment and the Local Advisory Committee.

7. *Would all new development be banned if the river is designated?*

The intent of the Wild and Scenic Rivers Act is to promote the wise management of growth that is sensitive to the river's values. Designation itself would only effect federally licensed or assisted water resource projects that would impact the river's outstanding values. Other types of development would continue to be regulated by local and state land use laws.

8. *Would designation allow the federal government to zone my land?*

No. The federal government has no power to zone private land. Land use controls on private land are solely a matter of state and local jurisdiction. Any changes to local or state zoning regulations associated with the designation would only occur through existing procedures at the town or state levels.

9. *Would the federal government be able to look over my shoulder at what I do on my private land?*

No. Wild and Scenic designation does not give the federal government any authority to infringe on an individual's privacy or property rights. Rumors often spread during a study that designation will result in the federal government telling people such things as what color to paint their house or whether they can repave their driveway. These rumors are unfounded. Designation would have no effect on a property owner's ability to sell or subdivide property.

10. *Would I have to provide public access across my property?*

No. Landowners are under no obligation to provide access on their property, even if they have decided to grant a conservation easement. The river corridor plan can be used to help reduce the frequency of trespassing by ensuring that public access to the river is maximized on town and state lands, and by promoting improved management of river recreation.

11. *If designated, how would the river be managed?*

The river segment would continue to be managed by local and state authorities in conjunction with the Local Advisory Committee. The National Park Service role would be to assist this effort as requested, and to make sure that federal agency actions are compatible with the conservation of the river as outlined in the Taunton River Management Plan.

12. *Will the federal government contribute money to the management of the Taunton River if designated?*

Yes, subject to the availability of funds and to the priorities established by the Local Advisory Committee.

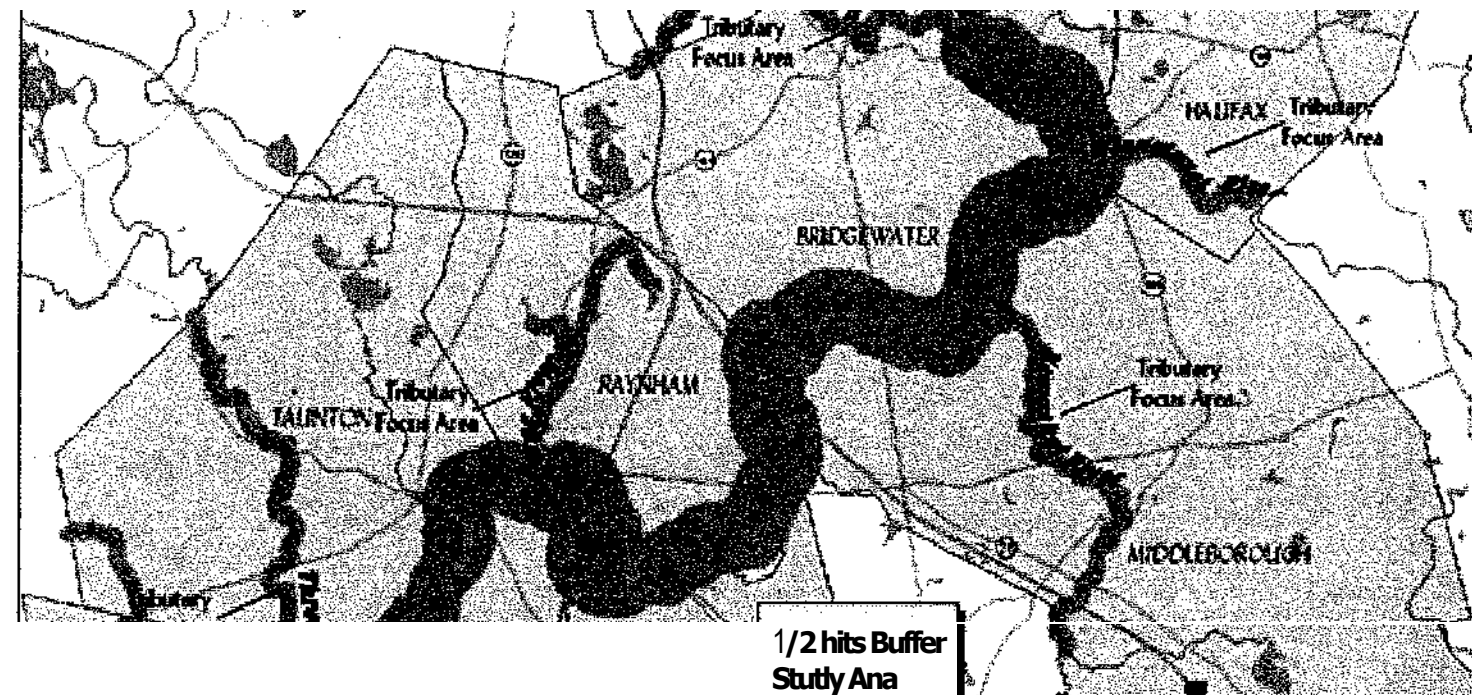
13. *Does designation mean the Taunton River would become overrun by outsiders?*

No, unless towns along a river choose to promote the designated river to attract tourism. There are no requirements in the Wild and Scenic Rivers Act for publicizing or promoting a newly designated river. Wildcat Brook in Jackson, New Hampshire, provides an excellent example. The Town of Jackson has chosen not to publicize the Wildcat since its inclusion in the national system in 1988, and the visitor use is no different than it was before designation.

The Wild & Scenic Taunton River

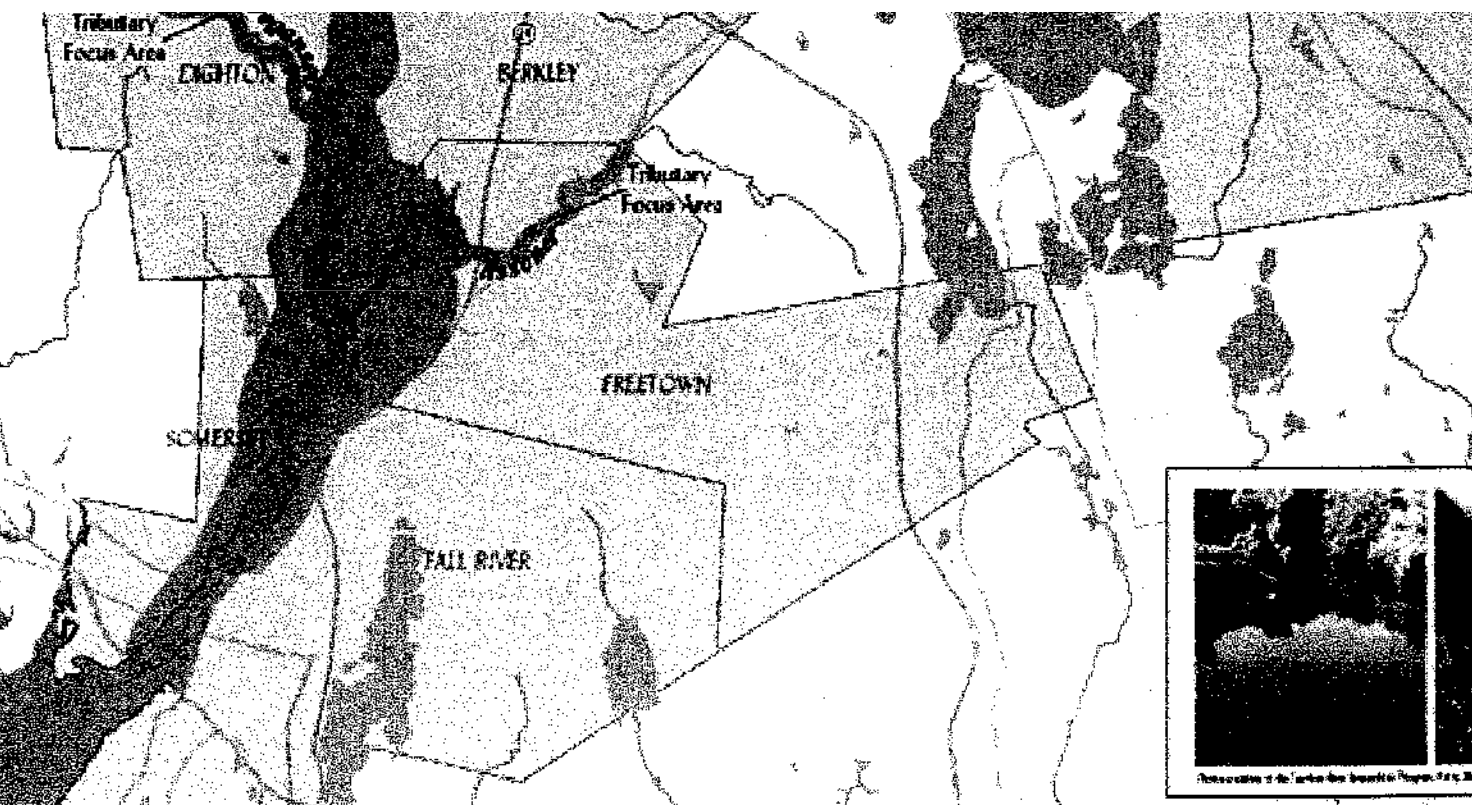
The Taunton River Wild & Scenic Committee Goals

- *To understand and preserve the Taunton River corridor as an intact river ecosystem and regional resource.
- *To develop a strong coalition of municipalities, citizens, non-profits and agencies for planning and implementing public education, land-use, recreation and conservation strategies for the Taunton River.
- *To secure a designation for the Taunton River as a National Wild and Scenic River.



Six Outstanding Values of the Taunton River

1. Fisheries
2. History and Archeology
3. Agriculture
4. Recreation and Scenery
5. Ecology and Biodiversity
6. Mount Hope/Narragansett Bay Estuary



Did You Know?

- *The Taunton River is the only major river in Massachusetts without a dam along its entire mainstream.
- *There are over 154 species of birds and 45 species of fish along the river.
- *There are more than 360 identified plant species along the river.
- *The Taunton River has one of the largest and most important alewife runs in the state.
- *The Assonet River has the largest contiguous salt marsh in the Narragansett Bay estuary.
- *The Taunton River corridor produces many economically important agricultural products.
- *The Taunton River and its tributaries are part of the state designated Wampanoag Commemorative Canoe Passage.
- *Wampanucket, located at the Assawompset Ponds in Middleborough is the location of one of the most significant Paleoindian depositions known in New England.
- *The 1st four, five and six mast schooners were designed in the city of Taunton.
- *The first iron forge was set up on the Forge River in Raynham in 1652.
- *At the turn of the 19th century, the Taunton River was home to many major entertainment resorts.



Photocollage of the Taunton River landscape in Raynham, MA and Freetown, MA.





0:1:1) BOAT LAUNCH

Today recreational boats follow the historical paths of Native Americans, who traveled by canoe from Plymouth Bay to Mount Hope Bay. In these boats are echoes of the river's early heritage and the legacy of clipper ships, schooners, and barges. During the river's industrial heyday, goods and raw materials traveled back and forth on its waters, transforming the region's economy and linking southeastern Massachusetts to the larger world.

The Taunton River remains a vital part of southeastern Massachusetts. Preserving its resources will ensure that future generations can also enjoy the history, natural beauty, wildlife, and recreation of the Taunton Heritage River.

The Taunton Heritage River Program
A Massachusetts Heritage River
A collaboration between local Taunton River watershed partners, the Executive Office of Environmental Affairs, DEM, DFWELE, and the Riverways Programs.

THE TAUNTON RIVER: FACTS & FIGURES

- The Taunton River begins at the confluence of the Matfield and Town rivers in Bridgewater. The Town River is fed by the Hockomock Swamp, the largest wetland in Massachusetts.
- The Taunton River is 44 miles long, drains a watershed of 562 square miles, and drops only 20 feet in elevation.
- The river is tidal for 12 miles north of Mount Hope Bay, to an area just above the Weir Village in Taunton.
- The tide averages 4.4 feet in Fall River and 2.8 feet at Weir Village.
- The river has no dams, which is rare among major coastal rivers in New England.
- The waters of the Taunton River are naturally tea colored and silty due to the decomposition of leaves from overhanging trees and other vegetation.
- More than 154 species of birds and 29 species of native fish live in the Taunton watershed.
 - The river has 7 species of mussels, including 3 on the state's list of endangered and at risk species.
 - In the 19th century, herring were so plentiful in the river — millions "whistled through" the fish weirs — that they were known as "Taunton Turkey."
 - River otters and harbor seals have returned to the river, indicating that both water quality and habitat have improved.
 - The lower Taunton River contains the very rare Atlantic sturgeon, which can grow to 14 feet long.

SWANSEA



MT. HOPE//

SCENIC DRIVE 4)

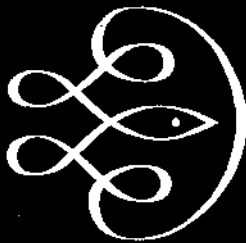
eCANOE/KAYAK POINTS
www.tauntonriver.org

THE TAUNTON HERITAGE RIVER

For its prominent role in the history, culture, recreation, and economy of its thirteen communities, the Taunton River has earned its designation as the first Massachusetts Heritage River. A journey downstream reveals the river's varied character. In the upper reaches are large tracts of undisturbed land and agricultural fields, with abundant native wildlife along the scenic, winding, and slow-paced river. A local coalition is seeking to protect this natural landscape through a federal Wild & Scenic River designation. At Raynham the river's role as workhorse for colonial settlements and backbone to the industrial revolution emerges. Below Berkley the river widens with a dramatic sweep into an estuary. For the rest of the route to the sea, fish and wildlife share the river with



Jane Swift, Governor
Commonwealth of Massachusetts
Bob Durand, Secretary
Executive Office of Environmental Affairs



TAUNTON HERITAGE RIVER

APPENDIX M: SOMERSET STREAM TEAM SURVEY, 2003

I. Introduction

After 30 years of federal, state & local action under the Clean Water Act of 1973, most of the obvious discharges that lead directly into our waterways from industry and municipal wastewater have been brought under control, and the long process of removing contaminated soils from the banks and bottoms of our rivers is well underway. However, more than half of the rivers and streams tested by the State of Massachusetts are still not safe to swim in, and their fish not safe to eat.

After years of public education and research into water quality issues, we now see more clearly that in addition to industrial contamination, what each of us does in our daily lives can also affect the quality of the water that runs underneath and through our communities. Most of our remaining water pollution problems are subtler than those of the pre Clean Waters Act was past. Most of today's water pollution problems arise from our own everyday activities and practices. Today's pollution comes from streets and parking lots, failed septic systems, soil erosion from fields and construction sites and stream banks, seepage from active and abandoned dumps and landfills, and runoff from residential developments including pesticides, lawn fertilizers and animal waste. Collectively this type of water pollution is called "non point source pollution," meaning pollution that does not arise from an easily traceable source, like a pipe.

Compounding the effect of this non point source pollution is another form of pollution commonly called point source pollution, meaning pollution that arises from an identifiable source, such as a pipe or single outfall. Most of this type of pollution is generated by our own municipal wastewater treatment plants. While many of our municipal wastewater treatment plants no longer discharge flows that are aesthetically offensive, their effluent flows can and do have profound impacts on aquatic ecosystems from our headwaters to the sea.

The cumulative impacts of these pollutants present us with a challenge that is in many ways more difficult to address than the gross pollution of the pre Clean Water Act era. These types of pollution give us no single entity or "bad guy" to focus on. We have only ourselves to question. These problems require creative solutions. Today, we must focus on empowering community leaders and concerned citizens so they may play a larger role in identifying problems and shaping solutions. State agencies and regional environmental groups are helping communities find answers that make

sense. To do this, we must have good local information on the quality and quantity of water flowing through our neighborhoods.

Members of the Taunton River Shoreline Survey are trained and advised by environmental and water quality experts. These experts, including Joan Kimball, Adopt-A-Stream Director of the Massachusetts Riverways; and Rachel Calaboro, Adopt-A-Stream Program Coordinator, have provided technical guidance and will assist in the analysis and interpretation of the Shoreline Survey findings. Through this project, Stream Team Volunteers, neighborhood and community leaders, environmental professionals, and Massachusetts State regulatory agencies seek to learn together how, in the decades ahead we may work, build, farm and expand our communities without further damaging our precious natural resources.

We would like to thank all community members involved that volunteered countless hours of time and passion to the Taunton River. For without your help this project could never have come to fruition.

II. Narrative Descriptions of the River Sections

Section Surveyed #1: Broad Cove to South Street
Surveyors: Nancy Durfee, Mary Martha Murphy, and Ronald
Lassonde Date: July 2003

Narrative Description:

Team found Broad Cove bottom to be composed of mostly organic debris the water was tea colored with no odor. There is a bridge separating the cove from the river this was recently rebuilt with no change to the tidal flow. There was a fishy smell noted at the boat ramp at Village Waterfront Park from boats dumping fish. Saw rockweed, sea lettuce spartina patens and alterniflora. No trees over hang the banks along this segment of the river. The river here has residential use, with recreational area, parking lots, roads, old railroad bed. Saw one construction site, area mostly lawns and roads. The river is used for canoeing, fishing, swimming, walking and motorboats. Saw crabs, Asian shore crabs, fiddler crabs, ribbed mussels and horseshoe crabs. Saw bluefish, strippers, minnows and mummichogs. Bird life seen were herons, egrets, ducks, gulls, osprey and swans. There is wildlife habitat including salt marsh vegetation, scattered rocks and stonewalls, there have been sightings of coyote, deer and red fox in the area.

Team found dumping along old railroad bed at Broad Cove. At the foot of North Street a lot of debris was noted seemed to have been intentionally dumped there. Saw at least seven tires and assorted debris. Team removed a few items by boat. Fairly large stand of Phragmites (Reed Grass) in same area probably due to street drain at bottom of North Street. Moving south to Friends Cove saw more Phragmites (Reed Grass) thought to be runoff from draining toward the river, there were three to four patches of phragmites between this area and Mallard Point. Discharge pipes in this area appeared to be in good repair. Approaching Mallard Point you view the new armoring of the point done by the Somerset Highway Department it is a fine job that will protect the landmass for years to come against erosion. On the side of Mallard Point a few stands of Phragmites were seen near some historic pilings. There was a drainage pipe of unknown origin at the north shore on this side. Observe a small stand of Cat nine tails near a stormwater outfall appearing to be quite new. The outfall was clogged by sedimentation by what appeared to be street sand creating a perfect mosquito habitat. Team noted exposed fly ash on the bank in this area, where children are known to play.

Moving south along the Village/Main Street waterfront observed stormwater outfalls new and old, found old steel pipe coming out of the east end of a granite barge pier about 2½ feet below the high tide mark. Nothing of major negative significance regarding debris, waterfront misuse or any new construction. Strong encroachment of Phragmites was observed in the northerly areas of Main Street.

The team concerns for this segment are pipes need to be rechecked, Phragmites beginning to take hold, swans and no juvenile ducks seen, exposed fly ash at Mallard Point. Clear cutting to the river and dumping of yard waste and debris. At the north end of Village

Waterfront Park there is undermining of the northeast corner appearing to be a potential safety hazard that should be repaired or restricted as a walkway.

Section Surveyed #2: Labor-in-Vain Brook
Surveyors: Linda Marcoux, Carol Cote and Edward Cote
Date: June 28, 2003

Narrative Description:

Team found Labor-in-Vain Brook to have a bed mostly of silt, and partially decomposed organic matter, with a brown bottom and mostly musky smelling clear water but some areas had an oily sheen to it.

Found that the brook flows through field and house lots to the Taunton River in this area forming a circuitous route, team was able to cross **feeder stream** periodically. The brook runs under Dublin and South Streets to the Taunton River, one of the feeders smelled very foul, another looked like it had petroleum products in it, most likely gasoline. One side of brook was entire marshland, which then became heavy bamboo like reeds. On the north side we could only cross $\frac{1}{4}$ of the way to the open area due to dense growth, to the south is a town sewer pumping station, east there is a church parking lot, north very heavy foliage trees, undergrowth etc., and more open marshland, to the west mostly heavy foliage, trees, undergrowth etc., making it impossible to traverse entire stream.

Team saw evidence of wildlife habitat, hoes, unhatched eggs, and fiddler crabs, frogs and no fish were seen. Saw the dead carcass of a heron. A total of 6 pipes were seen, 5 were in good shape all were metal 2 had no flow, 2 had clear flow and one had red/brown flow with fetid odor this was the feeder stream running from "The Marsh" on Dublin Street parking lot.

Section Surveyed #3: Pierce Beach to Pratt Avenue
Surveyors: Tom and Margaret Vezina
Date: July 6, 2003

Narrative Description:

Team found the river bottom at this point to be sandy and yellow in color the water was amber color with no smell or sheen the bank was mostly shrubs and brambles, river here is used for swimming and boating. Minnows and mallard ducks and geese were seen. Saw 4 pipes along riverbank, from Flores Avenue, a clay pipe with broken ends, Warren Street a 3 ft. cement pipe another small clay pipe in same area, and with PVC pipe and storm drain at Harrington Lane.

Found assorted debris along the shoreline, a pickle barrel, logs, brush, Xmas tree, lawn chairs, grass clippings, cut trees, old screens, metal fence, evidence of lots of dumping of yard waste over the banks along Riverside Avenue.

Assets found were a family of ducks and duck nest along the shore, a sandy beach area toward Marble and Center Street, a den of beach chairs with a path cut tot the shore evidence of residents enjoying the riverfront.

Section Surveyed #4: Pratt Avenue to Breeds
Cove Surveyors: Richard Ashcroft and Christina
Wordell Date: June 30, 2003

Narrative Description:

The river bottom here is gray in color composed of gravel and silt with no odor and the water is tea colored. At the cove on Riverside Avenue where Buffington Brook enters the river are two large 36" culverts there is a lot of sediment build up in this cove. There is rockweed in the river. The tidal range is 3 to 6 feet it is mostly saltmarsh with pebble and sandy beaches and many marsh areas, trees and shrubs overhang a large portion of the bank. Team saw clear cutting in only one area the foot of Durfee Court. There is an undercut bank at the foot of Annette Avenue. Team saw mallards, swans, cormorants, terns, sandpiper, gulls, osprey are known it the area along with heron and egrets. There is a large industrial site, Montaup Power Electric Plant, where we saw erosion on one portion of their bank and some debris along the bank there was one pipe with clear water flowing in dry weather. There is sediment build up at Breeds' Cove and Pratt Avenue. Saw large amount of shells of oyster and clams in evidence.

Team saw 4 pipe in river all concrete in good shape with clear flowing water one pipe was dry, two carried streams into the river and had clear flow the other was at Montaup. Pratt Avenue outfall was dry but silted in.

Overall condition of the shoreline was good with a lot of saltmarsh, wildlife habitat, plentiful with birds indicating a fish population, river is known for recreational aspects, fishing, river is closed to shellfishing and at one time was a herring which would be great to have restored. Large proliferation of swans in this area is a concern.

Section Surveyed#5: Breed's Cove Brook to AMF Bowling Alley Riverside
Avenue Surveyors: Nick and Delores Inannuzzi
Date: July 12, 2003

Narrative Description:

Team found the river in this area to be gray in color with a silt bottom with some cobbles and boulders present. The water was clear with no odor; there was foam on the beach and debris on the shoreline. There were large stands of Phragmites with some high marsh, trees and shrubs along the bank. Area has parking lots, roads, homes, bridges and a large construction site for new Brightman Street Bridge. There is a potential site for a beach to the south of the former Slade's Ferry Bridge. Team saw crabs and snails, clam holes, blue mussels, med flats, seaweed, ducks and pigeons.

A lot of debris was seen approximately 30 tires, dumped asphalt in large pieces some up to 12 feet in lengths. Bricks and mortar, remnants of old pier a 25 foot steel beam and loly columns, into the river, metal fence pieces of carpet and granite debris extends overall from Bowling Alley to breeds Cove Brook. At the brook a lot of shellfish, clams, mussels, oyster, the banks covered with honeysuckle, poison ivy, and multiflora rose. North of the former Slade's Ferry Bridge a lot of timber thrown about bank there were no pipes seen. Saw an old pier with one concrete wall extending 25 feet into the river, was mild odor in this area. There is one lawn extending into the beach for about 50 feet.

Area subject to a lot of dumping, and neglect only small area south of Slade's Ferry Bridge could be developed into beach.

Section Surveyed #6: AMF Bowling Alley to Somerset Sewage Treatment Plant
Surveyors: Donna English and Mary Pemberton
Date: June 26, 2003

Narrative Description:

Team found the river in this area to have no odor to be clear with the bottom being brown with cobbles. Saw marsh grasses, trees and shrubs and grass along the banks. Area is mostly industrial with roads and parking lots. Throughout the walk saw numerous, plastic bottle, tires, and rims and glass debris. Saw no fish, but shells of mussels, oyster and clams, horseshoe crabs. Wildlife seen included swans, with 7 young, and cormorants. Banks had a lot of poison ivy on them and team could not see any pipes in most areas or outfalls but saw water flowing that was clear and had no odor. Saw one pipe that had clear water but some algae around pipe located across from bowling alley. Team felt clean up of area essential, dumping including couches, plastic barrels, and rugs.

Section Surveyed #7: Sewage Treatment plant to Massasoit Street
Surveyors: Kathy Lima and Marsha Aguiar
Date: June 27, 2003

Narrative Description:

Team found the river in this segment to be tea colored no odor but seaweed floating; the shore is rocky with 90% of it being pebbles. Foam along beach caused by the surf. Two large stands of Phragmites one halfway between Massasoit Avenue and Braga Bridge, the other is about a quarter of a mile line north of the Braga Bridge. There were mussel beds south of the Braga Bridge. Saw dead sea life, horseshoe crabs, and a dead cormorant. There is a stream entering the river north of the Braga Bridge in the middle of a Phargmites patch, it appeared clean with fish swimming in it. Could not trace origin of stream too thick with Phargmites.

Phragmites were a major concern; there was a rainbow sheen seeping from the sand north of the Braga Bridge. Found that the Braga Bridge has pipes that drain the whole length of the bridge to the shore below, meaning rain, snow and salt, this has caused a large gully

directing flow to the river. There was a large amount of debris tires and other general debris abounding throughout this segment.

Team felt the area has the potential for usage as open space with possible trail system if cleaned up.

Section Surveyed #8: Massasoit Street to Brayton Point Power
Plant Surveyors: Ann Whalen, Nick Iannuzzi, Mary Quinn
Date: July 1, 2004

Narrative Description:

Team found the river in this area to be clear with no odor, the bottom was comprised of mostly cobbles and was brown, there was foam along the beach broke up with a stick river had a mild odor to none. There was salt marsh with *Spartina alterniflora* and *patens* present, there was also *Phragmites*. The area contains industrial development; PG&E coal fired power plant, parking lots, homes, roads and beach. The area is used for fishing, walking, boating. Saw crabs, periwinkles, blue mussel, ribbed mussel, clams, conchs, barnacles, oyster and small crabs contains mud flats and rocky shoreline. Gulls were noted in the area. There were areas with *Rosa rugosa* and multiflora rose. Some of the seawalls had pipes coming out, clear water flowing out. 150 feet past the last house on Ripley Street we found a large brown stain on the beach, occupant of last house implied it was from ships at coal plant this should be investigated. There was a lot of debris on the shore, bottles, aluminum cans, pieces of lumber broken glass, etc. Resident said coal barges wash down their ships directly into the river and he feels the brown foam comes from Fall River sewer treatment plant.

In general found the area surprisingly clean with minor debris, lots of shells, closer to the PG&E power plant noticed a sulfur smell in the air. There is a creek in this area that runs from a marsh across Ripley Street to the River it had clean water in it. In this area found the remains of old foundations results of the 1938 hurricane.

Area has a beautiful vista of Mt. Hope Bay and Fall River with a view of Mt. Hope in Bristol RI, which was the summer home of Chief Massasoit of the Wampanoag Indians.

Section Surveyed #9: Buffington Brook
Surveyors: Tim Turner and Jim Harrington
Date: July 5, 2003

Narrative Description:

Team found the streambed to be composed of gravel, cobbles, silt, organic debris and partially decomposed organic matter. The bottom was brown; the water was clear with no odor. There was excess sediment around drainage tunnels and minimal sediment around bridges over the brook. There was aquatic vegetation in some area, no algae around pipes, there is about 50% of shading of the banks from trees and shrubs. There are lawns

in many areas, some as close as 10 to 20 feet, other as far as 100 feet away. There is no fill or clear cutting evidence, mostly residential but some commercial development with parking lots and roads along the stream. There are conservation-protected lands in some areas. Area provides some walking areas in Chace Preserve with a bridge over the stream. Saw good amount of turtles and snails throughout. Some fallen trees in brook. Standing dead trees providing habitat, stonewalls, springs and seeps along the way.

Team found the area to have very little encroachment on the bank; most home have left a buffer of natural vegetation. There was very little litter and in many locations no disturbances at all. The entire area along the brook appears to be thriving with people seeming to understand it should remain undisturbed.

III. Summary of Findings -Priority Chart-

Problems Found See maps, survey records and summary for details	Natural Resources & Assets Found	Priority Work to do
Section #1: 1. Pipes to be rechecked 2. Yard waste on banks 3. Clean up North St. 4. Waterfront Park needs repairing 5. Exposed fly ash on Mallard Point 6. Phragmites beginning to take hold in many areas 7. Land owners clear cutting to river 8. Swans, no juvenile ducks	1. Great access at waterfront park for boaters 2. Good habitat for shorebirds 3. Most landowners using river in friendly way	1. Fly ash should be a top priority, *children play here frequently 2. Pipes should be checked 3. Clean-up 4. Educate landowners about buffer, yard waste, and clear cutting 5. Educate fishermen about dumping fish and fishing line at boat ramp and Broad Cove 6. Phragmites needs to be addressed 7. Swan population
Section #2: 1. Deteriorated pipe at marsh parking lot 2. Dense foliage in streambed	1. Highly vegetated 2. Great habitat for wildlife 3. Unhatched eggs 4. Wetland & marshes	1. Recheck pipe at Marsh parking lot 2. Smell in streambed should be checked
Section #3: 1. Broken clay pipe 2. PVC pipe 3. Clay pipe (Warren St) 4. Debris on bank along Riverside Ave. 5. Erosion on Riverside 6. Trash along rivers edge	1. Geese, minniows and a family of ducks 2. Nesting ducks	1. Recheck pipes 2. Clean up 3. Erosion on Riverside Ave should be repaired

<p>Section #4:</p> <ol style="list-style-type: none"> 1. Pipe at Montaup running in dry weather 2. Sediment build up at cove 3. Proliferation of Swans 4. Debris on Montaup Banks 	<ol style="list-style-type: none"> 1. Overall shoreline condition good 2. Marsh wildlife habitat 3. Birds plentiful, known for fishing and shellfishing (beds closed) 4. Good recreation 5. Long term potential for Herring run 	<ol style="list-style-type: none"> 1. Education about buffer zones to bank 2. Sediment controls 3. Clean up 4. Stormwater mang. for healthy shell fish 5. Limit swans 6. ID stormwater outfall 7. Herring restoration
<p>Section 5:</p> <ol style="list-style-type: none"> 1. Erosion at Slades Ferry Bridge 2. Tires and Construction debris 	<ol style="list-style-type: none"> 1. Small area good for possible beach area 	<ol style="list-style-type: none"> 1. Area near Slades Ferry Bridge should be checked 2. Possible removal of broken down pier
<p>Section #6:</p> <ol style="list-style-type: none"> 1. Shoreline debris 2. Pipe on Riverside 3. Several parking areas and entrances to rivers edge 3. Clean up 	<ol style="list-style-type: none"> 1. Many oyster, mussel and clam shells along the shoreline 1. Horseshoe Crabs 	<ol style="list-style-type: none"> 1. Clean up 2. Pipes should be checked
<p>Section #7:</p> <ol style="list-style-type: none"> 1. Phragmites on shoreline 2. Braga bridge/Road runoff drains into the river 3. Oily seepage N of Braga Bridge 4. Clean up needed 	<ol style="list-style-type: none"> 1. Shoreline along this section has great potential for public use: Waterfront Park, or wildlife area with trails 	<ol style="list-style-type: none"> 1. Investigate oil seepage 2. Clean up 3. Control Phragmites

<p>Section #8:</p> <ol style="list-style-type: none"> 1. Rusty brown stain on beach 2. Rusty pipe 3. Anchor chain box 	<ol style="list-style-type: none"> 1. Good access at Massasoit Street 2. Clean 3. Pleasant walk, cooling breeze from Bay 4. Vista 	<ol style="list-style-type: none"> 1. Check out rusty stain on beach, believe to be caused from ships unloading 2. Coal Barge washing down their decks 3. Old barge on beach
<p>Section #9:</p> <ol style="list-style-type: none"> 1. Some undercutting of banks 	<ol style="list-style-type: none"> 1. Very little encroachment on brook 2. Very little litter 3. Many location no disturbance at all 	<ol style="list-style-type: none"> 1. This entire resource area seems to be thriving 2. Better left alone

SOMERSET TAUNTON RIVER STREAM TEAM
RECOMMENDATIONS FOR ACTION
October, 2003
Based on Shoreline Survey of June, 2003

Short Term Action: Suggestions for work that can be accomplished in a few months. Some of these proposals may be part of Long Term Action.

Long Term Action: Suggestions for long term activities. These activities can be seen as the glue that holds the Stream Team together. They are the major issues that the Stream Team chooses to work on to protect and restore the stream and its resources.

A. Education

1. Educate residents about the importance of buffers along the river's edge by sending material from Save the Bay and Massachusetts agencies.
2. Educate boaters at local marinas about proper boating practices, recycling and debris cleanup using fact sheets and other handouts.
3. Ask Mass. Highway to add "do not litter" signs to Route. 138.

Long Term

4. Design an educational flyer for Somerset boaters using examples of good and bad practices.
5. Work with marinas for better trash disposal facilities
6. Start a town-wide initiative for better habitat in back yards and gardens with increased runoff control including rain gardens and buffer plantings.

B. Invasive Species

1. Work on a "test patch" of Phragmites to determine what control method works best.
2. Monitor spread and extent of Phragmites along the shore.
3. Discuss ways of controlling mute swans, including addling of eggs. Find out the rules and regulations about swan control for Mass Wildlife.

C. Stormwater/Runoff

1. Recheck pipe in Section 4 at Montaup
2. Check pipe in Section 6 in front of Bowling Alley.
3. Recheck oily seepage in Section 7 and check drainage from small brook that drains into the river.
4. Recheck areas along Labor in Vain Brook for odor, runoff and discharge from pipes.
5. Check about exposed fly-ash in Section 1. Who is responsible?
6. Send literature to residents about applications of excessive fertilizers and chemicals to lawns.

Long Term

7. Distribute educational material about protecting the river and to offer alternative products or suggestions for homeowners.
8. Discuss with the DPW and highway department how to help with stormwater management and the Phase II program.
9. Control sediment coming off streets into stormdrains along tributaries. Increase road sweeping or install sediment traps. As new development is proposed, make sure that they are including runoff and sediment control.
10. Reduce runoff volumes by encouraging use of rain gardens and other methods to contain water in yards to infiltrate naturally.
11. Work on reopening shellfish beds by reducing runoff and other discharges to the river.

D. Trash Cleanups

1. Clean up trash near Braga Bridge and Brayton Point (Sections 6/7).
2. Clean up of debris near Montop in Section 4

**APPENDIX N: NARRAGANSETT BAY PLANS - WATERSHED
AND BI - STATE**

A Collective Vision and Core Principles for a Decision-making Framework for Narragansett Bay, Coastal Rhode Island and Their Watersheds

Rhode Island Sea Grant, University of Rhode Island Coastal Resources Center

Narragansett Bay, coastal Rhode Island and their watersheds in Rhode Island and Massachusetts are facing economic, social and environmental issues, including suburban sprawl, accelerated land development, a shortage of technical talent in the workforce, increased competition for bay resources, compromised quality of natural resources, and contradictory public policy.

In order to manage these issues, all stakeholders — politicians, developers, municipal officials, volunteers, environmentalists, educators, business leaders and individuals — must "buy in" and stake their commitment to achieving a common vision and agree upon governance principles and specific objectives that will guide decisions for Narragansett Bay and coastal Rhode Island watershed communities towards that collective vision.

Project Objectives

1. Develop a measurable collective vision for Narragansett Bay, coastal Rhode Island and their watersheds that reflects multiple stakeholder goals.
2. Establish a set of core principles and objectives of a decision-making framework for Narragansett Bay, coastal Rhode Island and their watersheds that build upon the vision.
3. Develop a strategy to obtain endorsement of the core principles by the major decision-making institutions in Rhode Island and Massachusetts.

Methodology

Step 1: Draft Strawman "Vision 2020 and Core Principles": We will draw upon the results of prior efforts that will serve as the basis of the initial draft "strawman" for *Vision 2020: A Collective Vision and Core Principles for Narragansett Bay, Coastal Rhode Island and their Watersheds (Vision 2020 and Core Principles)*. Topics may include economic development, regional transportation, housing, watershed and water quality protection and restoration, sound land use and community-engagement.

Step 2: Conduct a consultative process with keys stakeholders in both Rhode Island and Massachusetts to enhance the structure and content of "Vision 2020 and Core Principles": We will organize focus groups to collect and incorporate views and opinions of individuals/experts working closely on specific social, economic and environmental issues and representing the business, environmental, direct user and scientific communities. The overall purpose of the focus groups will be to discuss the components of the draft *Vision 2020 and Core Principles*, including proposing changes, reordering the draft, and adjusting its content. This will also encourage individuals and organizations from diverse sectors of the community to begin identifying and discussing their common issues and aspirations.

Step 3: Build broad-based input and support for "Vision 2020 and Core Principles" We will apply survey tools to analyze the percentage of respondents from various stakeholder groups and adjust our efforts to ensure that there is widely distributed input from key stakeholder groups and both states.

Step 4: Formulate final Vision 2020 and Core Principles (July 2003): The final version of *Vision 2020 and Core Principles* will be placed on the PNB web site with hot links to the CRC and Rhode Island Sea Grant web sites, among others, and submitted in hard copy and in digital format to the PNB.

Step 5: Develop a strategic plan to obtain endorsement of the Vision 2020 and Core Principles by major decision-makers in Rhode Island and Massachusetts (September 2003): We will organize a one-day retreat for Massachusetts and Rhode Island political and non-political decision-makers for the purpose of drafting a strategic plan to obtain official endorsement of *Vision 2020 and Core Principles*.

RISG/CRC Project Team: Stephen Olsen, Virginia, Lee, Jennifer McCann, Meg Kerr, Sue Kennedy, Monica Allard-Cox, and Bill Matuszeski (consultant).

For more information, please contact:

Jennifer McCann
Project Manager
Rhode Island Sea Grant, University of Rhode Island Coastal Resources Center
220 South Ferry Road
Narragansett, RI 02882
401-874-6127
[mccann\(a\).so.uri.edu](mailto:mccann(a).so.uri.edu)
www.seagrants.gso.uri.edu/scc

Prepared for:

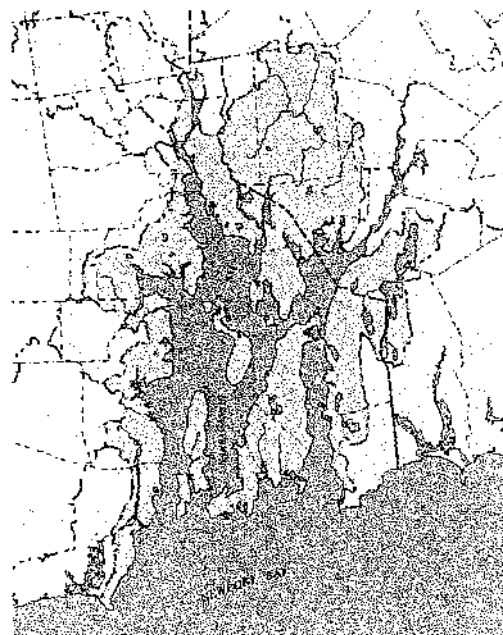


Massachusetts Executive Office of Environmental Affairs
251 Causeway Street, Suite 900
Boston, MA 02114



(WORKING DRAFT)
Mount Hope & Narragansett Bay
5-Year Watershed Action Plan

2/22/04



Prepared by:

4iNgjar

411174651251S, GEOSYNTEC CONSULTANTS

629 Massachusetts Avenue
Boxborough, MA 01719

(978) 263-9588 www.waasyntec.com

As described below in Section 1.2, GeoSyntec served as technical consultant and facilitator for a watershed planning process that was structured around local participation and input from a Watershed Advisory Committee (WAC) and other public participants. The three primary goals of this watershed planning project were:

> Promote Watershed-wide Planning, Cooperation and Consistency: By emphasizing local involvement and inter-municipal collaboration in development of the Five-Year Action Plan, a strong focus this project was to foster consistency and a regional perspective in the planning goals of the watershed communities.

Synthesize and Prioritize Existing Information From a Variety of Sources: The Five Year Action Plan reflects the review, synthesis, and prioritization of a variety of previous assessments and studies of the Mount Hope & Narragansett Bay Watershed.

Develop a Five Year Action Plan That is Relevant, Focused and Achievable: The recommendations of this Action Plan are intended to be (1) relevant to the communities of the Mount Hope & Narragansett Bay Watershed, (2) focused on the issues of greatest concern and/or greatest potential benefit to the Watershed, and (3) achievable within a five-year timeframe given existing and realistically anticipated resources.

❖ **Issue:** Improve interstate coordination across the greater Narragansett Bay Watershed.

- **Accomplishment:** An Interstate Narragansett Bay Watershed Action Grant Program (BayWAG) was established in 2002. In the first round \$122,600 was awarded that leveraged an additional \$77,000 in local matching funds. The grant program received project proposals requesting over \$420,000 from across the Bay watershed. The four successful projects in Massachusetts involved formation of an interstate alliance of conservation organizations in the bi-state Blackstone River; GIS mapping for communities in the Taunton River watershed; dissemination of sediment pollution data from across the Bay and coastal rivers; and the potential of using the blue mussel as an indicator of low oxygen conditions. The FY 2003 MWI Roundtable and other sources approved funding for a second round.
- **Accomplishment:** The first interstate newspaper for the Greater Narragansett Bay Watershed was launched. Known as the Narragansett Bay Journal three issues have been printed and distributed to over 200,000 as a regional newspaper insert and by free subscription. At least one article of Massachusetts interest was included consistent with the theme of that issue. Article topics include: the abundant alewife run on the Namansket River, Brayton Point Power Plant and the Urban River Vision charrette to restore the historic waterfall in downtown Fall River.
- **Accomplishment:** RI Senator Lincoln Chafee provided over \$130,000 for an interstate effort to update the Comprehensive Narragansett Bay Plan. Contractors are synthesizing the environmental, economic and planning initiatives; and developing a collective vision for the greater Narragansett Bay and its watershed. The latter task will include a significant public participation piece that will culminate in September 2003 with a decision-making framework to be presented to the Governors of both MA and RI. Bill Matuszeski, former director of the Chesapeake Bay Program, toured the greater Narragansett Bay (including MA watersheds of Blackstone, Taunton, Ten Mile & Mt. Hope) in October to learn more about the area, the people and the issues of import. He has used this information to develop the first draft of an effective interstate framework for decision-making and action on environmental and economic issues. The MA Narragansett Bay WTL will remain an active participant in the review process as a member of the Partnership for Narragansett Bay Administrative Committee.
