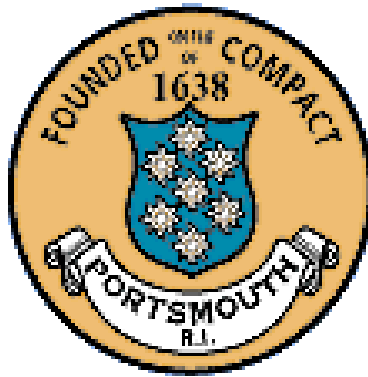


Town of Portsmouth Rhode Island



COMPREHENSIVE COMMUNITY PLAN

September 1992

A cooperative effort of the Town Council,
Portsmouth Citizen Advisory Committee,
Planning Board, Comprehensive Plan
Committee and Town Planner.

Revised July 2002

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Maps are categorized in the same order as the elements of the Comprehensive Plan, according to where they would be most appropriate. However, most maps are useful references for more than one element.

AQUIDNECK ISLAND PORTION OF PORTSMOUTH

<u>Map #</u>	<u>Map Date</u>	<u>Name</u>	<u>LAND USE</u>
1.	06/02	Future Land Use Plan	
2.	05/02	Zoning Map 2002	
3.	05/01	Existing Land Use 1995	
4.	01/91	Parcel Map 1990	

			<u>HOUSING</u>
5.	01/02	Residential Land Use 1995	

ECONOMIC DEVELOPMENT

See Land Use Maps and Commuting Pattern Maps in Text

			<u>WATER QUALITY</u>
6.	05/01	Community and Non-Community Wellhead Protection Areas & Wells	
7.	05/01	Known and Potential Sources Of Groundwater Contamination	
8.	04/01 RIGIS	Watershed Sub-Basins	
9.	04/01 RIGIS	Groundwater Resources	
10.	06/01	Watershed Protection Overlay District	
11.	04/91	Close-up of Watershed Protection Overlay District	

			<u>RESOURCE PROTECTION</u>
12.	04/01 RIGIS	Wetlands – Freshwater & Coastal	
13.	05/01	Forestland	
14.	05/01	Rare and Endangered Species	
15.	04/01 RIGIS	Biodiversity Resources	
16.	01/02	Resource Protection Overlay District	

			<u>SEPTIC</u>
17.	02/91	ISDS Constraints (formerly Development Constraints)	
18.	04/01 RIGIS	Soil Hydrology	

			<u>SOIL & AIR QUALITY</u>
19.	11/90	Environmentally Sensitive Lands	
20.	02/91	Slopes	

			<u>WATERFRONT & COASTAL</u>
21.	07/91	Coastal Waters Zoning	

<u>Map #</u>	<u>Map Date</u>	<u>Name</u>
22.	04/01 RIGIS	CRMC Water Type Classification
<u>HISTORICAL</u>		
23.	04/01 RIGIS	Historical and Archeological Resources
<u>FACILITIES AND SERVICES</u>		
24.	04/01 RIGIS	Facilities Siting
<u>WATER SUPPLY</u>		
25.	04/01 RIGIS	Public Water System
<u>OPEN SPACE</u>		
26.	01/02	Open Space and Active Agriculture
27.	05/01	Scenic Areas
28.	01/02	Greenways Plan
29.	04/01 RIGIS	Land Protected for Conservation and Open Space
<u>RECREATION</u>		
30.	05/01	Recreation Areas
<u>CIRCULATION</u>		
31.	05/01	Highway Classification Map
<u>AGRICULTURE</u>		
32.	05/02	Open Space and Active Agriculture
33.	05/01	Farmland

PRUDENCE ISLAND MAPS

<u>LAND USE</u>		
34.	06/02	Future Land Use Plan
35.	05/02	Zoning Map 2002
36.	05/01	Existing Land Use 1995
37.	02/91	Parcel Map 1990

<u>HOUSING</u>		
38.	01/02	Residential Land Use 1995

ECONOMIC DEVELOPMENT

There is no economic development existing or planned for Prudence Island.

<u>WATER QUALITY</u>		
39.	05/01	Community and Non-Community Wellhead Protection Areas & Wells

<u>Map #</u>	<u>Map Date</u>	<u>Name</u>
40.	05/01	Known and Potential Sources of Groundwater Contamination
41.	02/91	Proposed Wellhead Protection District

RESOURCE PROTECTION

42.	05/01	Forestland
43.	05/01	Rare and Endangered Species
44.	01/02	Resource Protection Overlay District

SEPTIC

45.	12/90	ISDS Development Constraints
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OPEN SPACE

46.	05/02	Open Space and Active Agriculture
47.	05/01	Scenic Areas
48.	05/02	Greenways Plan

RECREATION

49.	06/01	Recreation Areas
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SOIL & AIR QUALITY

50.	02/91	Slopes
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WATERFRONT & COASTAL

51.	03/91	Coastal Waters Zoning
52.	03/91	Flood Hazard Areas

WATER SUPPLY

See Maps # 39, 40 & 41.

AGRICULTURE

53.	05/01	Farmland
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HOG ISLAND

Hog Island is shown on both Aquidneck Island and Prudence Island Mapping.

54.	01/02	Parcel Map 1997
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INTRODUCTION -- THE ORGANIZATION OF THE PLAN

There are eight elements of the Comprehensive Plan required by the State. While the Plan for Portsmouth does not necessarily fit neatly into these eight categories, for purposes of consistency with other communities' plans, these elements are used and the order in which the elements are presented are as recommended by the State. The Goals and Policies Statement, rather than being a separate element, is contained at the beginning of each element and sub-element under "Goals" and "Objectives."

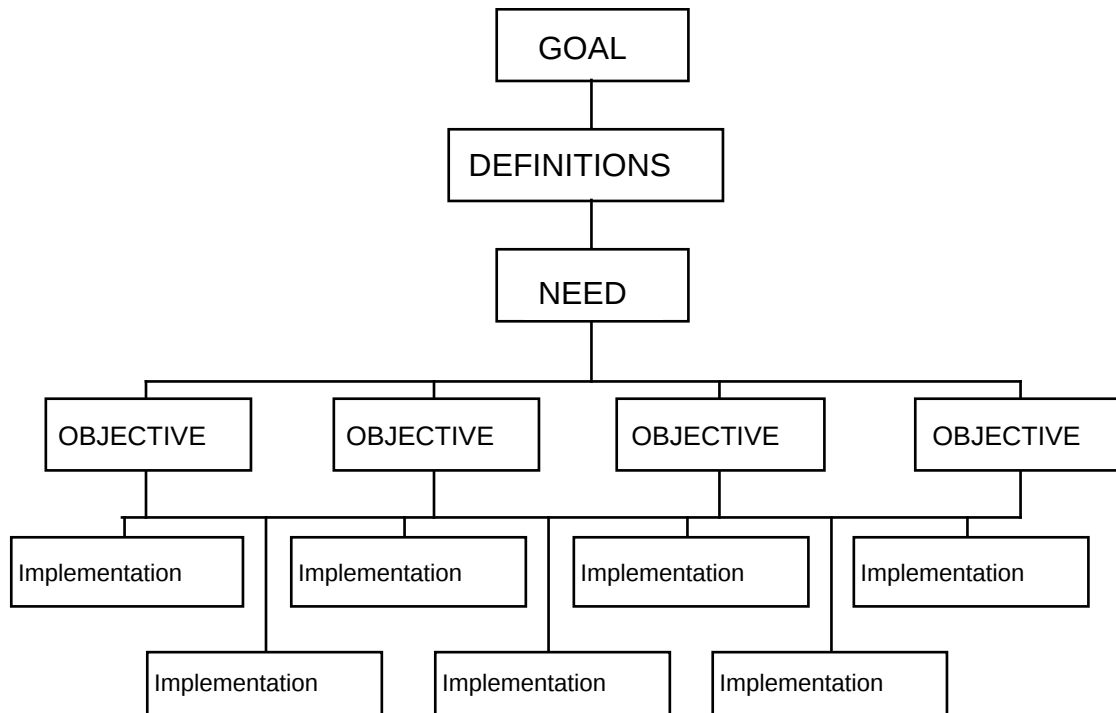
Due to their individual importance, and because breaking them up among the other elements would be ineffective, Agriculture, Prudence Island, and Hog Island each have additional elements of their own.

Within some elements there are sub-elements, each of which is organized and approached as if a separate element:

ELEMENT #1	LAND USE
ELEMENT #2	HOUSING
ELEMENT #3	ECONOMIC DEVELOPMENT
ELEMENT #4	NATURAL and CULTURAL RESOURCES:
ELEMENT #4A	WATER QUALITY
ELEMENT #4C	RESOURCE PROTECTION
ELEMENT #4D	SEPTIC
ELEMENT #4E	SOIL and AIR QUALITY
ELEMENT #4F	WATERFRONT and COASTAL
ELEMENT #4G	HISTORICAL
ELEMENT #5	FACILITIES and SERVICES
ELEMENT #5A	FACILITIES and SERVICES
ELEMENT #5B	WATER SUPPLY
ELEMENT #6	OPEN SPACE and RECREATION:
ELEMENT #6A	OPEN SPACE
ELEMENT #6B	RECREATION
ELEMENT #7	CIRCULATION
ELEMENT #8	AGRICULTURE
ELEMENT #9	PRUDENCE ISLAND
ELEMENT #10	HOG ISLAND
ELEMENT #11	IMPLEMENTATION
MAPS	

To maintain a logical flow from the broad to the specific, each element and sub-element is set up in the same outline fashion, going from overall goal statement through to implementation items.

Every recommendation has a reason. While it is not always necessary to read each element from beginning to end, a full understanding of why any particular item is included can be found in the goals, needs and objectives.



There is not a one-to-one relationship between objectives and implementation steps. Implementation items do not necessarily flow directly from a single objective, and they often apply to more than one objective. Some, particularly in the Land Use Element, even apply to more than one element. For the sake of brevity, we have tried to avoid having the same implementation item in more than one place. That is not always possible in that the reader could be left hanging after reading objectives and finding no implementing tool.

LOCATION OF DATA AND MAPS

Data is located within the text of each element. Where such information is needed elsewhere in the text, it is referred to rather than repeated.

There are over 50 maps in this Comprehensive Plan. Due to their multiple uses, all maps are in a separate section at the end of the Plan. Some maps are directly referenced in the text, but many are not. The reader is encouraged to use the maps as reference when reading the various elements.

IMPLEMENTATION

Those wishing to scan this document for individual items of interest may wish to start with the Implementation Element, which is a listing of major work items. Readers can then go back into the text for more detail

UNDERSTANDING THE COMPREHENSIVE PLAN

I. WHAT IS A COMPREHENSIVE PLAN?

- A. The Comprehensive Plan will serve as a guide for development over the next 20 years. It is primarily a policy document to be used in the planning and decision-making process by local officials. It contains recommendations for new regulations, items for further study, and an implementation schedule.
- B. The plan provides a long-range view of how various areas should be developed. It requires the development of a land use map, which is to be the basis for a new zoning map, (required to be adopted within 18 months of the adoption of this Plan).
- C. Decision-making tends to be reactive in response to a particular problem or specific proposal. (In some situations this cannot be avoided.) This leads to long term policies being enacted in a de-facto incremental manner. But incrementalism is extremely limited in its capacity to address long-range policy issues. Land use regulations, in particular, have typically been reactionary.
- D. Unlike incrementalism, the Comprehensive Plan attempts to be predictive, anticipatory and rational. As a result of inventory and study, the strengths, weaknesses and limits of the Town can be determined and priorities set for action. The future can be assessed and goals set for what the community wants rather than what may be imposed upon it. It enables decision makers to plan their activities by comparing them with community standards and the future foreseen by the Comprehensive Plan.

II. THE PURPOSE OF A COMPREHENSIVE PLAN

- A. THE PLAN SHOULD:
 - 1. Reflect the feelings and attitudes of the Town's citizens.
 - 2. Be based upon an accurate inventory of the Town's resources.
 - 3. Incorporate proven professional concepts to allow the Town to better manage growth.
 - 4. Recommend environmental protection ordinances and standards for development.
 - 5. Be a reference document, not only for facts, but also for ideas, concepts and goals.

6. Be a living document, providing a vision of the Town 5 to 20 years from now, and specifying the means by which this may be achieved.
7. Be designed to manage expected growth, ensuring that community goals are outlined, that the quality of the environment is not degraded, and that current and future residents have sufficient, high quality community services and facilities.
8. Integrate issues and problems facing the Town. While there are many areas where one goal reinforces another, such as open space and protection of the environment, there are others, such as economic development and affordable housing, which are often in conflict with these goals. Realization of these interrelationships greatly eases our ability to deal with them.
9. Be flexible enough to respond to changes in population and growth pressures, the economy and its positive or negative directions. Where there are trends on the Island, within the State or region, the Plan must identify and provide for them. Even in subject areas that we are not ready to address now, we must be sure not to destroy our ability to deal with the problem later. Because there is only so much land, particularly on an Island, we must be careful not to completely eliminate any major options due to the pressures of today.

III. WHAT THIS PLAN DOES NOT DO

- A. A comprehensive plan does not get into great detail on wording various ordinances. It can, however, recommend the types of additional land use and development controls needed. To explain concepts, it may give some examples.
- B. The Plan does not answer all the questions. The length of time needed to assemble this Plan means that many things are left to future study.

IV. HOW TO READ THIS PLAN

This is a large document. The length of the Plan is due both to the number of subjects covered and the diversity of the readership. Many readers will go directly to the implementation sections, to see a particular subject matter. Those readers must realize that this Plan was formulated from the top down--from broad goals to more specific objectives to the implementation. The Implementation is the “what, where, when and how” of the Plan. But what precedes the implementation is the critical “why.”

A. GOALS AND OBJECTIVES

1. It is critical in any endeavor that you know what you want and where you want to go before figuring out how to get there. Goals and Objectives are unifying guiding principles. They are the solid foundation upon which the plan and its implementation are built.
2. Most comprehensive plans start with history and existing conditions, and follow with a natural progression of events. Portsmouth's Comprehensive Plan is based on the

Town's goals and objectives for the future. Development of these goals and objectives was perhaps the most important aspect of the planning process. Goals can be described as an expression of future desires. These goals are based on the concerns of the PCAC subcommittees and the results of the surveys that were generated, distributed, and analyzed by the PCAC. Once the goals were established, the next step developed more specific objectives for each of the goals.

3. The strategy behind a goals-and-objectives methodology, and its inherent strength, is to gain consensus on what community values are, and build upon those values to create long term policies and specific implementation steps. Decision making is easier when values are clear.
4. There are many instances where physical, legal and economic realities make these somewhat high-minded goals and objectives seem difficult to achieve. Nonetheless, with our goals and objectives firmly in place we can know where we are going and why. Disagreement on implementation is easier to deal with when there is a consensus on goals.
5. Visions and goals in nine major areas were developed by the PCAC subcommittees in the winter and spring of 1990. During the late spring and fall, more specific objectives were developed. In the fall and through the spring of 1991, specific implementation steps were developed. The results have been widely publicized in documents, newspaper articles and public hearings.
6. This superior method works where community values, rather than a set of written facts and maps, guide us into the future. It can be successfully used only with broad citizen participation. It is possible in Portsmouth because its citizens, with the blessings of the Town Council and Planning Board, have taken such an active role. This document's weight in future land use decision-making will be substantial to the extent that the Town maintains its commitment to the goals and objectives, and that the citizenry maintains an active interest.

B. IMPLEMENTATION

1. The Implementation Plan recommends actions that may be undertaken over the next several years to achieve the goals and objectives. The vision Portsmouth has defined for itself will depend on the execution of these recommendations.
2. The implementation section of the plan includes studies and adoption of growth management tools and identification of related capital improvement projects.
3. A NOTE ON OBJECTIVES AND IMPLEMENTATION PLACEMENT:
 - a) While goals and objectives sometimes overlap between subjects, it is important to include most of them in their respective categories, regardless of some duplication.
 - b) Implementation items are detailed under the dominant category. Most implementation items that involve adoption of land use regulations for more than one category are placed under the Land Use section.

4. The exact timing of and monetary allocations for all planned implementation items will be at the discretion of the then-sitting Town Council. All scheduled expenditures are understood to be subject to budgetary constraints.

C. CITIZEN PARTICIPATION

1. The planning process that has accompanied the development of the final plan is as important as the actual plan. Through this process, Portsmouth's vision for the future has been defined. While not everyone agrees with all of the recommendations, maximum consensus has been developed. This consensus will be critical as the Implementation phase unfolds.
2. Developing this consensus has involved a high level of continuous public participation. The Portsmouth Citizen Advisory Committee (PCAC) was established with local board members, businessmen, and interested citizens from a broad geographic, age, and income level spectrum as members. The Committee divided into 10 subcommittees that met at least monthly. Nine of the subcommittees dealt with specific Comprehensive Plan categories. A tenth dealt with public communications and the surveys.
3. A series of 4 highly publicized and well attended public meetings and two all-day workshops, sponsored by the PCAC, were held over a 12-month period.
4. The PCAC conducted two Town-wide surveys, one in November 1989 and one in December 1990, each of which surveyed about 15% of all the households in Town. The surveys were used as a check on the goals, objectives and strategies developed by the PCAC subcommittees, and as a measure of community support for various alternatives. The survey results are very much part this plan.
5. The PCAC, the Town Planner, and the Planning Board met every other week from January through July 1991 to go over each element one by one. The Town Council met in officially posted open workshops from January through September 1992 to go over the Plan in detail as well. A public hearing on the final draft was held on October 21, 1992. This document is a result of that collaborative effort.
6. From March 2000 to July 2002, the Comprehensive Plan Committee, composed of citizens of Portsmouth, worked with the Town Planner and the State on revisions necessary to gain State approval.

V. ASSUMPTIONS

A number of critical assumptions applicable to the 20-year time frame of this Plan are made up front -- due to inherent locational and natural characteristics, some from overwhelming resident preferences revealed by the PCAC surveys, and some from common sense financial limits.

1. Due to the overwhelming cost and the lack of State and Federal funding, a public sewer system covering the majority of the Town will NOT become a reality.

2. Due to the lack of public sewers and a finite fresh water supply, Portsmouth cannot realistically seek major water consuming industry.
3. Due to the lack of public sewers, Portsmouth cannot realistically accommodate much of a traditional apartment rental market.
4. Due to the proximity of other shopping centers and resident preferences, Portsmouth will not be the home to any major retail malls or the like.
5. Due to limitations on its non-commercial growth, Portsmouth will remain predominantly a farming and bedroom community.
6. Due to limits on its commercial growth, the tax base will be mainly residential. To keep property taxes at a reasonable level, growth will have to be carefully balanced between residential, non-residential and open space.
7. Portsmouth's major assets -- its natural beauty, relatively crime-free atmosphere, excellent school system and fine municipal services -- are both its blessing and its curse. People want to live here. Unplanned, this residential growth could threaten the Town's assets over the long run. But a "lock the door behind me" attitude, which focuses on stopping growth, is neither constitutional nor desirable. Therefore, we must work within the confines of a "managed growth" concept, a concept which acknowledges the dynamic nature of Towns and takes a pro-active stance in guiding development, rather than reacting to it. It will be assumed that Portsmouth wants to adopt this strategy and work toward its reality.

VI. CROSSING JURISDICTIONAL BOUNDS

- A. The quality of life, our environmental future, the character of our community, our Town government's financial future, the quality of education that can be afforded, job opportunities in Town, are all interrelated. These issues cross jurisdictional bounds.
- B. The scope of this Comprehensive Plan includes not only the legal/political entity called the "Town of Portsmouth," but the Portsmouth Water and Fire District, the School Committee, the State of Rhode Island, etc. Where the Town has the legal ability and capacity to address a problem that is not being adequately addressed it should do so. Organizations separate from the "Town" but whose decisions and operations have a major impact upon us must also be informed of the Town's desires so that we can plan the future in active cooperation.

VII. MAPS

Maps are referenced throughout the plan. For ease of use, they are located in a separate section in the back.

VIII. ATTACHMENT

An analysis of the recent history of Portsmouth is presented through U.S. Census data, and compared with the two other communities on Aquidneck Island.

LAND USE

I. GOAL

The purpose of this Land Use Element is to provide a guide for future land use and to propose implementation of land use control regulations. This element presents a description of Portsmouth's future use of land, based on the interrelationship of development trends, natural constraints, the transportation network, and basic public services and facilities. The Land Use Element is described herein and depicted visually on the map entitled Future Land Use Plan. The recommended pattern of future land use is based on the problems, issues, and policies identified in the other sections of this Comprehensive Plan. The Land Use Plan does not specifically reference property lines or ownership patterns (although it has recognized them), but does acknowledge much of the established pattern of development that has taken place. The potential for future development in Portsmouth is tied to the Zoning Ordinance, which is a reflection of the Future Land Use Plan.

- A. Develop an orderly and rational land use plan designating the general distribution, location and interrelationship of land uses, for residential, commercial, industrial, open space, agriculture, recreational, community facilities, and other categories of public and private land use.
 - 1. The plan must be consistent with the character of existing land uses and with the established community goals of fiscal and municipal services management, economic development, population growth management, natural resource protection, cultural preservation, and general public health, safety and welfare.
 - 2. "Build what needs to be built, save what needs to be saved, in a way that the community can afford."¹
- B. Manage development to ensure that it has a positive impact on the Town, that it occurs in an orderly fashion, fiscally enhances the Town, is aesthetically and environmentally compatible, that infrastructure capacity and municipal services are adequate, and that Portsmouth's quality of life and coastal and rural resources are protected.
- C. Preserve the rural character of Portsmouth as both an aesthetic and fiscal goal. Any land use incentives and regulations which result in a managed rate of growth both preserves the Town's open space and allows for balanced growth at a level and rate which does not overburden municipal facilities and services.

NOTES: The Land Use Element contains much of the implementation of goals and objectives presented elsewhere, particularly the regulatory aspects. There is a very close relationship with the Agriculture, Open Space, and Natural Resources elements. Readers of this section are particularly referred to maps #1 – 3. Many of the other maps are also apropos to this element, but are listed under other elements. Please see the map list.

¹ John M. DeGrove: Balanced Growth-A Planning Guide for Local Government; Washington, ICMA, 1991

II. DEFINITIONS

A. GROWTH MANAGEMENT

1. Growth management is a commitment to accept a reasonable level of growth and to plan for it wisely. Growth management is not an effort to stop growth. It is a calculated effort by local government to achieve a balance between natural systems - land, air, water, residential, commercial and industrial development. Growth Management is an essential part of Comprehensive Planning.¹

B. EXURBAN

This is a term used to describe an area which develops much like a suburb but is not an extension of a metropolitan area. Portsmouth fits that description.

C. ENVIRONMENTALLY SENSITIVE AREAS

1. "This broad category includes both freshwater and saltwater wetlands, areas with high water tables or fragile seawater-freshwater balance, beach and dune systems, and other shoreland areas prone to erosion or slumping if disturbed. Also included are areas - both land and aquatic -, which support relatively large populations of important animal species. These areas play a vital role in the function of natural systems and are especially vulnerable to changes induced by development and extensive use, and they are valuable for tangible reasons."²
2. The following are Environmentally Sensitive Sites and Features:
 - a) Water resources, including perennial or intermittent watercourses, ponds, lakes, reservoirs, and natural retention basins.
 - b) Wetlands, as defined in the R.I. Freshwater Wetlands Act and mapped (see map #12) on the most recent RIGIS mapping system. (Note: RIGIS maps are not DEM's wetlands maps. According to DEM, however, they represent the latest and probably the best available information at this time. See further definition below.)
 - c) Floodplains, as shown on the latest FEMA maps.
 - d) Coastal areas, including the 200 foot CRMC buffer from coastal features, as well as any further inland estuarine areas.
 - e) Highly erodible soils according to the US Soil Conservation Service criteria.
 - f) Steep slope areas.
 - g) Watersheds, both surface and groundwater, which feed into public drinking water supplies.
 - h) Rare Species Habitats and Exemplary Natural Communities

² HENDLER, BRUCE; CARING FOR THE LAND: CHICAGO: AMERICAN SOCIETY OF PLANNING OFFICIALS; 1977.

D. ROLLING GROWTH CAP

A “Growth Cap” is a maximum number of dwelling units to be permitted during a set of period of time. “Rolling” means that this set period of time is a consecutive number of days or months which moves along with the current date, as opposed to being fixed dates like a calendar year. The result is a controlled rate of residential growth.

E. BASE ZONING DISTRICT

This is the existing zoning based on an official zoning plan and parcel-by-parcel listing in the Zoning Ordinance, which dictates things like general type of use (residential, commercial, etc.), densities (minimum lot size), and setbacks (of buildings from streets and other property lines). Portsmouth’s Base Zoning Districts are as follows:

RESIDENTIAL DISTRICTS are intended to allow orderly development of residential dwellings designed to complement the natural features of the land, to promote suitable placement of buildings and related facilities in relation to the site and surrounding areas, with adequate living space and open space, to avoid overcrowding of land, to encourage good design, to avoid overburdening municipal facilities, and to insure compatibility with the immediate neighborhood and with the natural environment.

R-10 DISTRICT is a residential zone with minimum lot size of 10,000 sq. ft.

R-20 DISTRICT is a residential zone with minimum lot size of 20,000 sq. ft.

R-30 DISTRICT is a residential zone with minimum lot size of 30,000 sq. ft.

R-40 DISTRICT is a residential zone with minimum lot size of 40,000 sq. ft.

R-60 DISTRICT is a residential zone with minimum lot size of 60,000 sq. ft. and special restrictions to preserve and protect important natural resources.

COMMERCIAL DISTRICT C-1 is established to provide areas for commercial establishments and serve community and town-wide shopping and service needs.

INDUSTRIAL DISTRICTS are established to encourage intensive industrial and business activities, with proper safeguards for protecting nearby residential areas and environmentally sensitive areas.

HEAVY INDUSTRIAL I-H is established to provide for levels of noise, vibration, smoke, odor and other evidence of industrial activity commensurate with State and Federal standards and other performance standards that may be set by the Town.

LIGHT INDUSTRIAL I-L is established to provide for a lesser level of noise, vibration, smoke, odor and other evidence of industrial activity commensurate with performance standards that may be set by the Town.

WATERFRONT DISTRICT WD is established primarily for businesses catering to marine and marine-related activities.

OPEN SPACE AND PUBLIC LANDS OS is established for all lands that shall be dedicated to open space, recreation, conservation, or public uses.

F. OVERLAY DISTRICT

“A district established in a zoning ordinance that is superimposed on one (1) or more districts or parts of districts and that imposes specified requirements in addition to but not less than those otherwise applicable for the underlying zone.”³

G. CLUSTER ZONING

Cluster zoning is the permissive or mandatory zoning regulation whereby, in exchange for a substantial portion of a large tract or parcel of vacant land being dedicated in perpetuity to open space, the remaining portion of the land is allowed to be platted into house lots which are smaller than would normally be allowed by the base zoning in that district. The “cluster zoning” concept benefits the community through the dedication of land for open space. It benefits the property owner by allowing for a savings in infrastructure construction costs (i.e. roads and utilities) by reducing such construction to a more compact area. Regulations should insure that the layout of the house lots and open space is done in a manner that most of the house lots abut at least part of the open space. The bare minimum size of such a house lot should be based upon the area requirements for an adequate septic system for the soil type plus appropriate building setbacks. Under cluster zoning there is a guarantee that the land that is dedicated to Open Space is not later used for housing.

H. FISCAL IMPACT ANALYSIS

Fiscal Impact Analysis is an analysis of the cost of a new development to the Town (schools, public services etc.) vs. the revenue generated.

I. FUTURE LAND USE PLAN

This is the most important map in the Plan. (See maps #1 and 34.) It is the guide to where various types of land uses are planned to take place. State law requires that the zoning map (maps # 2 and 35) reflect the Future Land Use Plan within 18 months of the adoption or amendment to this map, so changes should be made only when the intent is to follow immediately with changes to the zoning map. Minor changes to one of just a few lots do not require immediate changes to the other. If major changes are contemplated, however, the Future Land Use Plan in the Comprehensive Plan must take place first.

J. RIGIS MAPPING

The RI Geographic Information System is a proprietary computerized mapping system that displays major environmental and land use data. Comprehensive Plan maps are required to be RIGIS based. RIGIS maps are not claimed to be 100% accurate, but they are generally regarded as the best available. Therefore they should be used to indicate the probability of such things as wetlands, but do not take the place of site inspection.

³ RHODE ISLAND ZONING ENABLING ACT of 1992 [R.I.G.L.45-24-31(50)]

K. POPULATION CHARACTERISTICS

An analysis of the population is contained in Attachment 2.

L. BUILD-OUT

“Build-out” is a hypothetical ultimate profile of the Town if every developable parcel was to be built upon to its maximum capacity allowed under current land use regulations. “Build-out” is a set of numbers such as maximum: population, housing units, square footage of commercial and industrial buildings, traffic counts, water usage, etc. A summary of the Build-Out Analysis is shown on the page entitled “Potential Buildable Lot Calculations”. The purpose of the Build-out Analysis is to assist in shaping the future by predicting the future if the current path is continued. Appropriate changes in comprehensive community planning and land use regulations can change the build-out of tomorrow.

M. A NOTE ON THE ATTACHMENTS AND APPENDICES

Attachments: There are two attachments to this Plan: 1) Maps, and 2) Population Analysis.

Appendices: Under the Implementation sections throughout this Plan are a number of recommended ordinance types. These ordinances are described briefly from the point of view of what they are meant to do and how they are structured. The separately published appendices contain elaborations on these, including some sample language. Neither the text in this section nor the appendices are meant to be complete. The language is illustrative only presented for educational purposes so that it is clearly understood what these future ordinances should do.

III. LAND USE INVENTORY AND ANALYSIS

The following table entitled “Land Use Summary” contains important information about existing land use and build out possibilities on the Aquidneck Island portion of Portsmouth. (Similar tables are presented for Prudence Island and Hog Island in their elements.) Before addressing the analysis that went into the development of the revised Land Use Plan it is appropriate to examine the current land use/land cover. What has already happened cannot be changed easily; however, by studying the past trends, the town may now determine the future course for the lands that are not “used up”.

A. CURRENT LAND USE PATTERNS

Portsmouth has some contrasts in its development patterns. The Town has developed primarily from north to south over the past 100 years. Housing is dominated by single-family homes; there are few apartment buildings and these tend to be scattered. The northernmost parts of town are densely developed on small lots, becoming progressively less dense, both in zoning and actual development, as you move south. Much of the southeast and south-central portion is agricultural and undeveloped. Within town are two principal through highways, East Main Road and West Main Road. The northern half of East Main Road contains strip commercial development primarily servicing local needs, as well as older residential

development interspersed with the commercial. The west side contains most of the industrial uses. Portsmouth has developed, however, as primarily a bedroom community.

Patterns of development emerge from the history of the Town. Prior to the construction of the Sakonnet River Bridge in the late 1950's, Portsmouth was primarily a farming community. Because nearby Fall River, Bristol, Newport and Middletown satisfied the retail and service needs of the small population, no town center ever emerged. In 1960, about 75% of the land was farmed; today this figure is well under 20%. With the bridge came major employers and the affects of rapid suburbanization from nearby urban centers. Farmers, comparing the financial rewards of selling to developers against the difficulty of financial success farming in New England, one-by-one have chosen the former. Thus, typical sprawl development of former farmland dots the town from north to south, and primarily east of West Main Road.

The town's soils and natural ground cover contribute to chronic problems of high water table, soil erosion, and poor drainage. As these soil conditions are prevalent throughout, and since there is no sanitary sewer system, the Town does not lend itself well to differentiating areas that should be developed from those that should not. It also limits the ability of the Town to designate areas as more densely developed than what can be accommodated with septic systems.

B. LAND USE CATEGORIES

The following discussion provides guidance for future planning decisions based on categories of land use. Portsmouth can accommodate changes if those changes are accomplished in an orderly, constructive and positive manner. The general categories of land use listed below have been used in developing the Land Use Plan. For planning purposes, residential land, is categorized into four categories of residential uses: 1) high density, 2) medium density, 3) medium-low density, and 4) low density. (It should be noted that high-medium-low is relative to Portsmouth only. Such designations vary greatly between more urban and more rural municipalities.)

Residential Land Uses

High Density Residential - This includes areas in the northern section of Town devoted to single-family housing on lots generally one fourth of an acre or less. While such high-density areas are presently zoned R-10 (minimum lot size 10,000 sq.ft.), most lots are under 5,000 sq. ft. It should be noted that high-density in Portsmouth does not mean multi-family housing. These areas are generally built-out with single-family houses, have few buildable vacant lots, and are planned to continue as such.

Medium Density Residential - This includes areas predominantly developed for single family housing on individual lots of one-half to three quarters of an acre. Residential densities average between 1 to 2 dwelling units per acre. Medium density areas are zoned R-20 (minimum lot size 20,000 sq.ft.). Most existing housing is in the R-20 zone. Medium density

residential areas are more restrictive than high-density areas and usually exclude or strictly limit non-residential uses. Most of the subdivision activity in Town during the past 30 years has taken place in medium density areas.

Low-Medium Density Residential - This includes areas predominantly developed for single family housing on individual lots of three quarters of an acre to one acre. Residential densities average between 1 dwelling units per acre. Low-Medium density areas are zoned R-30 (minimum lot size 30,000 sq.ft.). Low-Medium density residential areas are more restrictive than higher density areas and exclude or strictly limit non-residential uses. With the R-20 zone becoming built out, there is considerable development pressure in R-30 areas. Since many of the low-medium density areas are located within reservoir watersheds, the potential problem of soil erosion and pollution of waterways must be addressed. Areas located directly adjacent to waterways or reservoirs are generally planned for low-medium density development. The Watershed Protection District is primarily a low-medium residential area and must conform to special protection restrictions regarding any construction within the zone (see the Water Quality Element). Uses considered appropriate for low-medium density are agricultural production, single family residential dwellings, large estates, essential public/ quasi-public uses and facilities, and open space/recreation.

Low Density Residential - These areas recognize districts within the town where very little urban development has taken place, but where future community expansion is likely to occur. These areas contain much of the remaining farmland in town. Much of this land is located near wetlands, and as such is limited in their ability to support higher density development. Low Density development is zoned R-40 (40,000 sq.ft. minimum lot) and R-60 (60,000 sq.ft. minimum lot). The coverage in low-density areas should be less than one dwelling per acre. Uses considered appropriate for low density are agricultural production, single family residential dwellings, large estates, essential public/ quasi-public uses and facilities, and open space/recreation.

Commercial Land Uses

Portsmouth does not have a lot of retail and commercial development, primarily since nearby Fall River, Middletown and Newport have historically had major concentrations. Most retail tends to be oriented toward specialized products and services serving the local community. However, the advent of the Internet seems to have given rise to businesses that need not be in a central location and prefer the less urban environment that Portsmouth provides. Included in the category of commercial land uses are retail sales, offices, consulting services and personal/ professional services. The original zoning in Portsmouth unfortunately zoned for strip commercial development just one lot deep along certain portions of East Main Road. Rapid residential development behind these commercial lots severely limits the ability to create any sort of retail “town center” without significant property acquisition.

Industrial Land Uses

Portsmouth has significant land areas that are zoned for industrial purposes. The Future Land Use Plan and the current zoning map show large industrial parcels in four significant areas of industrial land use:

- The Raytheon Campus on West Main Road;

- The Arnold Point area, which includes marine interests plus a substantial amount of vacant land;
- The Portsmouth Business Park, which ranges from high tech to distribution; and
- A portion of the former U.S. Naval Base property at Melville presently being used for residential boat building and services. The private property in this area is built to capacity, but there is the potential for major expansion should unutilized Navy property become available.

Institutional Uses

There are no major institutional uses in Portsmouth.

Educational Uses

Beside the Portsmouth public schools, the Portsmouth Abbey, St. Philomena's and the Pennfield School are major private schools. Roger Williams University also has a dormitory and conference center here.

Agricultural Uses

Recognizing that Portsmouth is historically a farming community with major parcels still devoted to agricultural uses, a separate "agricultural" element is included in this plan. Farmed parcels are scattered throughout the Town, less in the north and more in the south.

Conservation, Recreation and Open Space Uses

Significant Conservation, Recreation and Open Space parcels, both public and private, exist in many parts of town. Most of Prudence Island fits this category.

Transportation Uses

Other than the road system, the railroad corridor represents a major land holding and a major opportunity to improve Island-wide transportation.

Discussions of the importance of and plans for these land uses are contained in specialized elements throughout this Plan.

C. Buildout Potential

A careful analysis of the Land Use tables reveals considerable potential for additional development. The following assumptions were used to derive these numbers:

1. No Subdivision Needed:
 - a) Platted Lot area is between the minimum lot size and twice the minimum lots size per zoning. In other words, these lots are ready to go as house lots, but not big enough to be subdivided further.
 - b) Variance Lots are 80 - 99% of the lot area required; it is assumed a variance would be granted for a single-family house for currently existing lots.
 - c) For Island Park, Common Fence Point and Portsmouth Park, where the average residential lot is well below the minimum Zoning lot, variances are generally

granted if the lot is near the average size of neighboring lots. These neighborhoods have 342 buildable lots (i.e. over 3000 SF can fit a 24' x 26' foundation with required setbacks), that historically they have been granted variances for lot area (consistent with neighborhood character).

2. Potential From Subdividing:

- a) Vacant residential parcels greater than twice the minimum lot size are divided by the minimum lot size and rounded down to the nearest integer. Where over three lots are possible, 15% of the total parcel area is assumed lost for roads.
- b) Large residential lots with a house that could be further subdivided are calculated as above.
- c) Farms that have not sold development rights are calculated the same manner.

None of the analyses considers wetlands, odd-shape lots or accessibility problems, so the actual buildout numbers are certainly lower.

Note that direct comparison between numbers produced today and those of the 1990 land use and buildout analysis is problematic: In particular, the 1988 and 1998 revaluations (the basis for this data) use different categories of land use, the latest containing far more categories and even an estimate of developability of vacant land into 100%, 50% and 0% developable. Also, it subtracted 15% for roads for lots over 10 acres. This analysis subtracts 15% for over 3 potential lots.

D. Potential Buildout population

1. Multiplying the above potential number of new dwelling units (4843) and the average number of persons per household per the 1990 Census (2.67) equals 12,931 potential additional population. Added to the 2000 Census population of 17,149, the total potential buildout population equals 30,080.
 - a) It is important to note that this is a gross estimate. The number of potential house lots assumes each is buildable using the formulas and assumptions. It does not account for wetlands, irregularly shaped lots, or access problems. So the number of new lots is probably high. On the other hand, it assumes that only single-family houses are built, not apartments, condominiums, or other more densely developed housing types. Finally, it assumes the average number of persons per household will remain constant, which it certainly will not. Nonetheless, this is the best available estimate.
 - b) The timing of buildout is very difficult to predict as well. It depends upon such things as economic cycles, regional employment levels, the perceived popularity of the town, price levels, etc. Over the past 21 years (1980 - 2000) there have been an average of 77 new units built per year (according to building permit records). At this rate, the 4,843 lots would be absorbed in 63 years.

2. Buildout Population

The above estimate of potential new houses (4,843) multiplied by the 2.53 average number of person per household per the 2000 census equals a potential of 12,245 more residents. The 2000 census places Portsmouth's population at 17,149. So the potential buildout population is 29,394 persons, or 71% greater than in 2000.

LAND USE SUMMARY

PORTSMOUTH - AQUIDNECK ISLAND PORTION

FROM TAX ASSESSOR DATABASE 5/2001

RESIDENTIAL UNITS

<u>CODE</u>	<u>TYPE</u>	<u>LOTS</u>	<u>UNITS *</u>	<u>ACRES</u>
1010	Single Fam	4786	4,786	2,736
1012	SRF-OCEANF	3	3	2
1013	SRF-WATERF	424	424	229
1021	RES CONDO	265	265	0
1031	MOBILE HOME	19	-	48
1040	TWO FAMILY	159	318	169
1050	THREE FAM	23	69	14
1090	MULTI HSES	99	158	668
1091	MULTI HOUS	1	1	0
1114	4 FAMILY	11	44	9
1115	5 FAMILY	4	20	5
1126	APT 6 MORE	13	229	58
444	COMBO PROP	58	115	160
		5,865	6,432	4,098

* Number of units IN type of building.

VACANT LAND SUMMARY

<u>CODE</u>	<u>TYPE</u>	<u>ACRES</u>
1300	Res. Dev'l Land	1,564
1310	Res. 50% Dev'l	48
1320	Res. 0% Dev'l	75
3170	Farm	342
3930	Comm. Land	203
9999	Dev.Rights Sold	-
		2,233 Acres

DEVELOPABLE VACANT LAND

Developable from above*	2,133
Oversize Residential Lots	2,064
	4,198 acres

NON-RESIDENTIAL USE SUMMARY

<u>CODE</u>	<u>TYPE</u>	<u>UNITS *</u>	<u>ACRES</u>
3222	Small Business	19	8
3333	Large Business	132	869
3421	Comm. Condos	15	-
3900	Devel'ble Comm. Land	48	245
3910	Pt. Deve'ble Comm. Land	10	43
3920	Undevel'ble Comm. Land	16	60
4000	Industrial	15	352
4021	Ind. Condos	23	-
4210	Util, RR	15	502
4230	Elec. Util.	13	26
4240	Elec. Substa.	3	5
8100	Municipal	1	0
9000	Federal	5	440
9010	Amtrak	13	77
9030	Municipal	83	523
9033	School	5	33
9060	Religious	24	164
9100	Cemetery	15	60
9101	Ex-Charter	20	26
9302	Other Tax Ex	3	1
9999	Devel Rights Sold *	0	-
		478	3,434
	Developed	7,532	
	Vacant	2,233	
	Total	9,765	15.26 sq.n

Main Island portion is 16.87 sq. mi.

Missing 1032 acres is roads and ponds.

* Deletes "Res. 0% Dev'l" and 1/2 Res. 50% Dev'l

* Code 9999 invented by Town Planner for this calculation.
 Aquidneck Island Land Trust lots could have been about 158 house lots.
 State Devel. Rights Purchased could have been 281 house lots.

POTENTIAL BUILDABLE LOTS CALCULATIONS - MAIN ISLAND

The following calculations are based on residentially zoned property that is either vacant or large enough to be further subdivided.

Buildability factors of vacant residential lots were determined by the Revaluation 1998.

In it, vacant residential parcels were labeled buildable, 50% buildable, or unbuildable. Only buildable and partly buildable are used here.

Buildability factors such as wetlands, access and odd shapes for farms and oversize residential lots were not taken in consideration, so estimates in "Potential for Subdividing" are maximums.

NO SUBDIVISION NEEDED

	PLATTED	VARIANCE *	
<u>BY ZONE</u>			
R10	8	28	
R20	111	30	
R30	22	3	
R40	61	9	
OS	0	0	
C			
LI			
HI			
TOTALS	202	70	272
			TOTAL

POTENTIAL FROM SUBDIVIDING

	VACANT RES. PARCELS	FARMS	OVERSIZE RES. LOTS	
R10	60	0	94	154
R20	662	146	903	1711
R30	937	41	654	1632
R40	274	146	359	779
OS	28	0	0	28
C				
LI				
HI				
	1,961	333	2,010	4,304
				TOTAL

272 Vacant Buildable Size Lots

4,304 Additional Lots From Future Subdivisions Of Vacant And Oversize Residential And Farm Lots.

264 "Dotted Line Lots" over 3,000 SF

4,840 POTENTIAL ADDED HOUSE LOTS

PLATTED = lot SF is between min. lot size and twice min lot size

VARIANCE assume 80% of min. lot size: likely to be granted variance for one additional lot only.

POTENTIAL = lots designated vacant residential that are twice minimum lot size & could be subdivided.

For these, where 3 additional lots are possible, need for a road is assumed.

I.e. if assume over 3 lots 15% loss for roads.

"Dotted Line Lots" are lots of record that are taxed as single lots, yet can be divided into separate lots by right.

Those under minimum lot size, but buildable by right under current zoning are generally over 3,00 Sq. Ft..

This assumes a min. reasonable house footprint of 24' x 26' that meets setbacks: front 10 ft.; rear & side 20 ft.

Assumes no non-residentially zoned parcels will be developed as residential, and no residential non-conforming uses will be expanded.

III. THE NEED FOR LAND USE PLANNING AND GROWTH MANAGEMENT

A. EXURBANIZATION AND SPRAWL

1. The exurbanization of Portsmouth, as shown in the accompanying chart (figure 2) entitled “Housing Permits Per Year” and the parcel map (map #4), started in the early 1960’s for 4 major reasons:
 - a) The introduction of subdivision regulations caused some large land owners to subdivide to beat the new regulations.
 - b) Route 24 and Sakonnet Bridge were built, so that Portsmouth could function as a bedroom community for employment centers to the north
 - c) Raytheon moved in and NUSC (now NUWC) was formed, creating an Island based demand for housing.
2. Portsmouth is no different than the rest of the country in this regard. Nationally, we consumed a third as much land in the past quarter century as we did in the previous three-and-a-half centuries.
3. This is not something inflicted upon us by developers against the wishes of society. On the contrary, this land-consuming pattern of development is often required by typical municipal land use regulations all over the country.
 - a) It should be stressed that Portsmouth has avoided true large-lot zoning, like 2-5 acre minimums. By mandating large lots, more of the countryside is consumed by back yards. True open space, relatively large tracts of undisturbed land, disappear.
4. “As exurban areas begin to build out, however, a growing number of citizens have recognized the impacts that this form of growth - longer commutes, traffic jams, rising taxes and housing prices, destruction of natural resources and open space - are having on their daily lives. What is equally at risk, and is motivating many citizens to take action, is the recognition that their sense of place is being destroyed.”³

B. THE NEED FOR A PRO-ACTIVE PHILOSOPHY ABOUT LAND USE

1. Large parcel owners need to be able to realize reasonable value and get similar financial benefits from innovative land use techniques as they would from a conventional subdivision.
2. The Town needs to manage growth, uphold basic development standards, and protect the environment.
3. The community’s relationship with developers should not be an adversarial one, but one of cooperation encouraging better development projects. When flexibility and creativity are incorporated into the development process, it is possible to have projects that are both environmentally sensitive and fiscally responsible.

³ This section is adapted from Balanced Growth: A Planning Guide for Local Governments, Washington: ICMA, 1991.

4. This element, which is not designed to produce a quick change, can only take place carefully over time. A system will be utilized in which the developer and the Town work hand in hand to produce something of quality that protects the environment, and allows the landowner to realize the financial benefit of his land.

IV. OBJECTIVES

This Plan does not propose any major changes in land use patterns, but instead seeks to guide the development of the Town in a manner that is consistent with the principles that are set forth in this Plan.

A. THE BALANCED GROWTH APPROACH

1. A Balanced Growth is a policy in favor of balanced and controlled growth of population and development. Growth should only take place to the extent that there is:
 - a) An available capacity in the existing municipal facilities and services infrastructure to absorb such growth; and
 - b) The fiscal ability and community desire to pay for the expanded infrastructure necessitated by such growth.
2. Such a policy must also identify environmentally suitable locations for the desired level of growth and the various land uses associated with it.
3. The final objective is to determine the community's desired annual rate of growth of all potential land uses, and the appropriate locations for such land uses.

B. GENERAL OBJECTIVES OF BALANCED GROWTH

In Portsmouth the key growth management techniques relate to:

1. Containment of urban sprawl, so that development doesn't simply consume the countryside.
2. Protection of rural, agricultural, and environmentally sensitive lands from untimely or inappropriate conversion to urban uses.
3. Maintenance of the existing rural character of Portsmouth.
4. Helping to create/maintain a balance of job opportunities and population.
5. Helping to create /maintain a balance of nonresidential to residential tax base so that the Town can successfully deliver services over the long term.
6. Management of the fiscal impact of growth so that the Town is not suddenly met with large unexpected demands for increased services.

C. SPECIFIC OBJECTIVES OF BALANCED GROWTH

1. Define the long-range fiscal needs, municipal services, and residential growth management goals for Portsmouth that will achieve a stable rate of change in the per capita property tax rate, adjusted for inflation.
 - a) Develop a Fiscal Management Plan that reviews the impact of absorbed growth on the various components of the municipal budget on a regular basis, so that long range improvements to municipal infrastructure are scheduled on a pro-active basis rather than a reactive basis.
 - (1) Coordinated by the Town Planner and the Town Administrator, and with input from all department heads, the School Department, and the Portsmouth Water and Fire District, to develop such a written fiscal impact assessment report with recommendations concerning desired changes in the growth rate caps, budget cuts or increases, establishment of sinking funds for long range infrastructure improvements (taking into consideration budgetary restraints).
2. Land zone allocations which will, in the long run, provide enough nonresidential uses to balance the fiscal demands of residential uses, as well as enough open space to maintain the character of the community.
3. Rolling Growth Cap (with a phased development system) so that the fiscal and other impacts of growth are predictable and can be planned for, and so that there are not sudden jumps in tax rates due to demand for added services.
 - a) A controlled rate of growth means a predictable rate of growth over the long run. Being able to predict gives the Town government the ability to develop resources(financial and otherwise), to build things like roads and schools, and to plan for increased staff and equipment and other items that take time to plan and implement.
4. Adopt a “Flexible Zoning/PUD” (Planned Unit Development) format for commercial and industrial districts which tailors the required site design standards to the specific type of use and nature of the parcel, as opposed to a rigid inflexible set of standards. Such a format will allow for environmental sensitivity, compatibility with surrounding land uses, and enable cost efficient development techniques.
5. Preserve and seek to expand the level of agricultural land use as a means of promoting economic development, protecting open space, preserving local sources of food, and preserving the historically rural lifestyle in Portsmouth.
 - a) The key here is to keep farmers farming by creating proper incentives, eliminating disincentives.
6. Protect and preserve the limited natural resources that are necessary to maintain the quality of life in our community utilizing established historical, scientific and environmental standards and models.
 - a) The model chosen is “Resource Protection Overlay Districts”, explained further in V.C. below, and in the Natural Resources section. Within Resource Protection Districts special performance standards and restrictions apply in addition to those

for the regular zone in which the land is located. Resource Protection Overlay Districts will be adopted for:

- (1) Watershed Protection.
 - (2) Wetlands Protection.
 - (3) High Water Table Protection.
 - (4) Coastal Resource Protection.
7. Reevaluate the existing municipal land use regulatory scheme to allow for more planning initiative, less regulatory reaction, and higher quality development by utilizing modern land management techniques.
 - a) The new Zoning Enabling Act, passed in June 1991, adds a great deal of flexibility to municipal zoning regulations, and gives us the opportunity to reshape our land use regulations as we would like them, rather than as we seemed forced to have them by the old 1921 Zoning Act.
 8. An update of the Future Land Use Plan, in accordance with the above goals and objectives, will be used as a planning tool as well as forming a basis for revisions to our land use regulations.
 - a) Locations of land (Future Land Use Plan) to be devoted to each category of use.
 - b) Consider decreasing density by increasing minimum lot sizes, in accordance with soils capabilities and the cluster development concept.

V. IMPLEMENTATION

This Plan does not propose any major changes in land use patterns, but instead seeks to guide the development of the Town in a manner that is consistent with the principles that are set forth in this Plan.

A. LAND ALLOCATION

1. The future character of the community is largely shaped by its zoning map, which is a reflection of the Future Land Use Plan. The Future Land Use Plan (Maps #1 and 34 in the Maps section) incorporates these elements. The current zoning map is a reflection of current land use plans. Other studies, such as those mentioned herein, may also result in changes to the Future Land Use Plan. All but minor changes in the zoning map must be preceded by changes to the Future Land Use Plan in this plan.
2. Most (but not all) industrial land is located away from residential uses and close to major transportation access routes. Of the 492 acres zoned industrial, 329 acres are vacant (not counting Navy lands or Portsmouth Abbey property). Particularly well located are industrial zones along and west of West Main Road. Most commercial land (particularly retail and service) is located along East Main Road close to the residential areas served. The strip nature of these commercial zones is unfortunate,

but both the commercial and adjacent residential parcels are largely built out, so little can be done to correct the problem through changes in the Future Land Use Plan.

3. By State law, the Town zoning map must be consistent with the Comprehensive Plan's Future Land Use Plan within 18 months of adoption of the Comprehensive Plan. Due to the large number of potential changes in land use regulations proposed, it is impractical to expect them all to be adopted in that time period, so changes must be scheduled herein.

B. ZONING CHANGES

The following changes in the Zoning Map and Zoning Ordinance will be made within 18 months of the adoption of this Plan:

1. Inconsistency between Future Land Use Plan and Zoning:
 - a) Zone Military Property as follows:
 - (1) Properties currently used for housing as medium density residential.
 - (2) Properties west of or immediately adjacent to the railroad right-of-way and north of Lawton Brook as Waterfront District.
 - (3) Properties east of the railroad and north of Stringham Road as Light Industry.
 - (4) Properties south of Lawton Brook as "Open Space and Public Lands".

Future Land Use Plan Map is to reflect said changes, as shown on the Future Land Use Plan herein.

- b) Historically, residential uses have been allowed in commercial and industrial zones. This creates a condition of incompatible adjacent uses and impairs the desirability of these areas altogether. While this practice has not been followed over the past few years, it should be more clearly prohibited in the zoning ordinance.
 - c) Properties on Prudence Island which are owned by the State of Rhode Island or any of the various conservation land trusts shall be zoned "Open Space and Public Lands", as shown in the Future Land Use Plan herein.
 2. Industrial Area:

Carefully zone for desirable industrial and commercial uses. .

 - a) The permitted uses list in the zoning ordinance should be those we wish to attract. The prohibited uses and processes should be those we do not wish to attract due to their potential negative impact on the characteristics of the Town or hazards to the environment.
 - b) Heavy Industry is neither desirable nor appropriate for Portsmouth. The "Heavy Industry" zoning designation should be changed to better reflect this fact.

Use Plan

3. Zone Military Property as follows:
 - a) Properties currently used for housing as medium density residential.

- b) Properties adjacent to the railroad right-of-way and north of Lawton Brook as Waterfront District.
 - c) Properties south of Lawton Brook as Open Space.
4. Resource Protection Overlay Districts detailed in paragraph C below will be implemented over the next few years.

B. REGULATORY MEASURES

The Land Use Element encompasses and consolidates many of the regulatory measures suggested in other elements of the Comprehensive Plan.

C. RESOURCE PROTECTION OVERLAY DISTRICTS

This section explains the purpose of and how resource protection overlay districts in general work. It's meant to apply to all the overlay districts in general. An overview of each of the types of overlay districts to be adopted follows. More detailed explanations of each, including some examples of how such regulations could be written, are contained in the Appendix.

1. TIMING OF IMPLEMENTATION

- a) Wetland and Watershed Protection Overlay Districts will be adopted within 18 months of the acceptance of this Plan. This is the major land use regulation change to be adopted during this period. High water table and coastal overlay districts are scheduled for the 2-5 year time period.

2. CONCEPT

- a) Overlay districts impose an additional set of restrictions and development standards on land within these districts with the specific purpose of protecting sensitive land and water bodies from the potential polluting effects of development. Resource Protection District regulations identify mapped areas to be protected and stipulate techniques to be employed. *Development is not prohibited in these areas, but is subject to more stringent standards.*
- b) Resource Protection Overlay Districts to be adopted are:
 - (1) Watershed Protection
 - (2) Wetlands
 - (3) High Water Table
 - (4) Coastal Resources

3. PRECEDENCE

- a) Overlay districts are one of the most commonly used types of local environmental regulations. Rhode Island municipalities, which had specific regulations and development standards to protect special environmental resources, in existence in

1990, are identified in Table 1 and those with special regulations and standards are listed in Table 2.

TABLE 3

Protected Areas	Number of Municipalities
Wetlands	26
Watercourses	32
Scenic Areas	3
Agricultural Land	7
Groundwater Aquifers	12
Water Supply Watersheds	7
Floodplains	39

TABLE 4

Special Regulations and Standards	Number of Municipalities
Reduced Density	6
Setbacks and Buffers	34
Restriction of Uses	22
Special Site Plan Approval	29
Special Construction Techniques	14
Overlay Districts	18
Other	20

4. MAPPED AREAS

- a) The Town's RIGIS mapping (see maps #10 and 16) will be used to set the overlay district boundaries. It will be the first source of judgment as to whether or not an area is within the district. These maps are accurate enough for planning purposes.
- b) When an application comes in, the appropriate staff person consults the maps to see if the parcel seems to be on an overlay zone. If so, he/she goes to the site for a more detailed determination. A written notification is then sent to the applicant as to whether or not the parcel is subject to overlay district regulations. Individual applicants can, if they wish, hire specialists, such as wetlands biologists, to delineate the exact environmental boundaries on their parcels.

5. DEVELOP THRESHOLD SIZES

- a) Develop minimum threshold sizes of types of sensitive areas to be protected and distances from them within which all building, development or other alteration of the land would be subject to Resource Protection provisions.

6. DEVELOPMENT PLAN REVIEW

- a) Develop detailed Development Plan Review regulations and development standards for proposed projects over certain threshold sizes within each overlay district.

7. ENVIRONMENTAL IMPACT REVIEW

- a) Require an Environmental Impact Review (a written analysis by a qualified professional) of proposed projects over certain larger threshold sizes. Such review would evaluate measures proposed to help reduce environmental impacts.

8. GENERAL DEVELOPMENT STANDARDS

- a) Limit the amount of wetland or coastal area that can be counted toward minimum lot size. (See "Developable Land Area" below.)
 - (1) This would reduce the amount of wetland that can be part of a developed site, as well as reduce the environmental impact.
 - (2) Provide for existing lots that are predominantly wetland.
- b) Strictly limit the amount of area that can be filled according to DEM and/or CRMC requirements (as well as Army Corps of Engineers requirements if applicable).
- c) Limit and/or prohibit building or impervious surfaces within 150 ft. buffer from defined environmentally sensitive areas (see definition in paragraph II. C.).
- d) Require mandatory vegetative buffers around all critical environmental areas.
- e) Tree preservation/removal regulations.
 - (1) Under building permit, zoning and subdivision regulations, an applicant must demonstrate why each area must be cleared. Tree removal shall be minimized in all development.

D. WATERSHED PROTECTION OVERLAY DISTRICT

1. DISTRICT ZONES

- a) The watershed area is defined on a map prepared for the Newport Water Dept. (May 1989) on a USGS map is the official map delineating the surface watershed area plus a sufficient distance for groundwater that might flow toward the reservoirs even though the surface topography goes away from it.
- b) "A" ZONE

The area close in to the reservoirs, which is critical to the protection of surface and subsurface water supplies, requires a high degree of protection from incompatible land uses.

 - (1) Within a measured distance from the edge of the bank of a surface water body, plus certain water saturated soils types adjacent to these areas. Use Soil Conservation Service maps.
 - (2) Applicants can, if they wish, hire recognized specialists, such soil scientists, to delineate the exact boundary of contrasting soils types on their parcels.

c) “UD” ZONE

The watershed area which is contributory to surface water runoff to the primary water bodies contained in Zone 1 areas either through surface water runoff or groundwater movement.

d) USES PERMITTED IN “A” ZONE

Severely restricted uses, such as open space and recreation, which pose little hazard to the water supply if done properly.

(1) The use of herbicide, pesticides and fertilizers should be restricted.

e) USES PERMITTED IN “UD” ZONE

(1) Any use in the underlying zoning district by right or by special use permit, except for expressly prohibited uses with severe potential for pollution.

(2) The use of herbicide, pesticides and fertilizers should be controlled.

2. WATERSHED LAND USE CLASSIFICATION SYSTEM

a) Land Uses categorized by effects on water quality. Prevention is the key to water quality protection.

b) Five categories of land uses are proposed ranging from least to the most severe threat to water quality are permitted within the less restrictive “UD” zone. Each category may be permitted subject to required “mitigative measures” which should be taken to minimize the threat of pollution.

(1) Class A - Maximum Protection - No Risk

(i) Such as Open Space, forest, shrubs, certain farming, etc.

(2) Class B - Slight Risk

Uses which provide a substantial economic return to a land owner without posing a major risk to drinking water supplies. Examples are:

(i) Low density residential

(ii) Field Crops, Pasture, Utility Rights-of-Way, Golf Courses

(iii) Developed Recreation

(iv) Fertilizers and pesticides applied to lawns and crops.

(3) Class C - Moderate Risk

These uses will require regulatory oversight and strict adherence to applicable mitigative measures to prevent contamination problems. Examples are:

(i) Agricultural Production such as livestock, nurseries, corn, fruits and vegetables, orchards.

(ii) Low Intensity Commercial and Institutional.

(iii) Other uses that wouldn't produce wastewater discharges or stormwater runoff at a higher level than would be expected from medium density residential development.

(4) Class D - High Risk

Threat of spills, leaks, or unauthorized discharge of domestic wastewater or hazardous materials from these land uses.

- (i) Institutional
- (ii) High Density Residential
- (iii) Commercial Uses
- (iv) Light Industrial

(5) Class E - Severe Threat to Water Quality

These uses should not be permitted in the watershed area.

- (i) Any use that would generate a wastewater discharge other than domestic sewage, or any use that would store, use or process a hazardous material.

E. WETLANDS OVERLAY DISTRICT

The purpose of a Wetlands Overlay District is to protect wetlands from being polluted or having their natural functions impaired by development. This is the most common type of environmental overlay district.

The following is a brief overview of a Wetlands Overlay District. Further detail, which could form the basis for an ordinance, is contained in the Appendix.

1. DISTRICT ZONES

- a) RI Statute 2-1-20 defines “wetlands” based on a set of technical standards. RIGIS wetland maps, however, are based upon U.S. Fish and Wildlife Service’s National Wetlands criteria. So RIDEM “wetlands” and RIGIS “wetlands” are not equivalent. RIGIS maps are generally regarded as the best available, so the Town will use RIGIS maps to define wetland districts. RIGIS maps are an indication of the probability of wetlands, but do not take the place of site inspection.
- b) As water, pollutants and debris float into wetlands both above and below the ground, it is important to have a sufficient buffer to be the biological edge of DEM wetlands, per RIGIS maps, should be adopted as the buffer.
 - (1) Therefore, the Wetlands Overlay District is comprised of all wetlands plus a buffer around them.

2. PROHIBITED USES IN ANY FRESH WATER WETLAND

All uses and construction, including septic systems, which clearly would pollute a wetland, are prohibited.

3. SPECIAL USE PERMIT USES

Uses and construction that would harm the wetland if not done properly. Cooperation with DEM would be an important help in such evaluations. Special use permit review allows the use if it is shown that proper methods will be used. Examples are:

- a) Filling, draining, excavating;
- b) Structures, roads, parking areas, & other facilities.
- c) Underground utilities.
- d) Diverting water flow.

4. SPECIAL DEVELOPMENT STANDARDS

Standards that apply to all development in the overlay zone, in addition to normal standards.

F. HIGH WATER TABLE LIMITATIONS OVERLAY DISTRICT

A High Water Table Overlay District is as much for the protection of the homeowner or prospective homeowner as it is for the environment. In such areas, wet and flooded basements, flooded septic absorption fields, as well as eventual uneven settling of the foundation, are common.

1. DEFINITION

- a) Areas in which the water table is within 3 ft. below the surface of the ground for a significant portion of the year, create moderate to severe limitations for subsurface development. These types of soils tend to be in or adjacent to actual wetlands.
- b) In high water table overlay district "1" (High Water Table Overlay District) the water table is generally within 18" of the surface of the ground.
- c) In high water table overlay district "2" (High Water Table Overlay District) the water table is generally between 18" and 30" of the surface of the ground.

2. PROHIBITED USES

Examples are:

- a) In district "1" septic systems and underground fuel storage tanks
- b) In district "2" underground fuel storage tanks.

3. SPECIAL USE PERMIT USE PERMIT USES

Uses and construction that would harm the wetland if not done properly. Special use permit review allows the use if it is shown that proper methods will be used. Examples are:

- a) In-ground swimming pools.
- b) In-ground basements.

4. DEVELOPMENT STANDARDS

- a) Sets up development and construction standards. These would allow for modern engineering methods, but set standards that any method must meet.
- b) Maximum impervious coverage regulations depending on zone.

G. COASTAL RESOURCES OVERLAY DISTRICT

1. DISTRICT ZONES

- a) Tidal waters and coastal salt ponds;
- b) Shoreline features including dunes, barrier beaches, rocky shores and man made shorelines;
- c) Areas contiguous to shoreline features extending inland for 200 ft, as defined by CRMC.

2. SPECIAL USE PERMIT USES

- a) Examples are:
- b) Filling, draining, excavating.
- c) Boat ramps and residential docks, piers and wharfs;
- d) Structures, roads, parking areas and other facilities;
- e) Underground utilities, including septic;
- f) Marinas.

3. SPECIAL USE PERMIT USES

Proposed project will not, for example:

- a) Interfere with public access to shore;
- b) Degrade aesthetic or recreational value;
- c) Degrade existing water quality;
- d) Increase the volume or velocity of stormwater runoff;
- e) Except for water dependent activities, all grading, filling, excavation and construction, ISDS and underground utilities set back at least 100 ft. from the inland edge of the shoreline feature.

H. GROWTH CAP SYSTEM

- 1. This section briefly introduces the basic mechanics of a concept which ensures a controlled rate of residential growth through a rolling growth cap system.
 - a) A growth cap system is hereby embraced in concept.
 - b) The growth cap number will be based upon matching the capabilities of the Town infrastructure (water, road maintenance, schools, fire, police, taxes, etc.) to the needs of the existing community and on the expanded needs resulting from the

additional total units allowed. This number would have to be updated periodically.

- c) This system works best when combined with a Phased Growth System, which is the subject of Section I below, but it can be done independently.
2. A “rolling growth cap” allows up to a certain number of dwelling units to be scheduled for construction over a consecutive 24 month period.⁴ This 24 month period actually looks back 12 months and forward 12 months from any given date of application. (See appendix for further explanation.)
3. A growth cap would be imposed on residential development via the number of building permits issued in a given period. At any given point in time, the growth cap number of units, minus those already in process, can be permitted for the next 12 month period.
4. A Growth Cap system is hereby embraced in concept. The following studies are necessary prior to the implementation of this system:
 - a) Full water capacity study for the next 20 years and to hypothetical “build-out” under current land use regulations, or regulations adopted as a result of this Plan.
 - b) Capital Improvement Program (see Facilities and Services Element) which tells us what services the Town can reasonably do and afford. This includes the maximum service capacity of the infrastructure.
 - c) A fiscal impact evaluation of Town government for different types and rates of growth, so that taxes and levels of service can remain relatively stable. A fiscal impact analysis simply projects the net cash flow to the Town of growth, in much the same way that a business’s sales translate to profits or losses.
5. The use of an Impact Fee Assessment on new development could be factored into the allowable rate of growth at any given time. Impact fees are only for specified capital improvements to specified areas, and must be carefully crafted, as this will require further study.

I. THE PHASED DEVELOPMENT/POINT SYSTEM

This section briefly introduces a concept used successfully elsewhere which encourages quality growth through a point system. It is detailed in the Appendix.

Ideally, this system should be used in conjunction with a Growth Cap System, but it can be done independently as well.

1. The Concept has Two Major Components⁵:
 - a) A percentage of each development (phasing) that may be granted building permits each year, depending on subdivision size.

⁴ The model proposed is that of Amherst, Massachusetts, as presented in the “Growth Management Workbook”, 1988: Pioneer Valley Planning Commission. It is summarized in the appendix.

⁵ Ibid.

- b) A point system that identifies community goals for residential developments can be used to raise or lower the phasing allowed.
- 2. Benefits of a Phasing System
 - a) A small development (say 1-10 units) can be completed in 1 or 2 years.
 - b) A larger development is completed over a longer period of time for less impact upon the community and neighborhood.
 - c) Compact neighborhoods are encouraged by allowing them to develop more quickly, as opposed to larger sprawling grid-style subdivisions.
 - 3. Benefits of a Point System
 - a) If we adopt growth caps, we need a way to choose which proposals are approved and determine the pace each is allowed to develop. At any given time there may be more proposals than there are units to allocate.
 - b) A point system is a way to adjust the above Development Phasing System, allowing projects that are well designed and meet the Town's desires to proceed more quickly .
 - c) A point system helps guarantee quality by giving the applicant an incentive to get the maximum number of points both to beat out the competition and to get the fastest development schedule.

J. TARGETED ZONING

- 1. Currently Portsmouth has "step-down" zoning. This means that zones enjoy various levels of protection, where the "highest" zone (single family) may include only agriculture, recreation and residential, and the "lowest" zone (heavy industrial) may include everything not excluded from the Town altogether.
- 2. The problem with "step-down" zoning is that short term market considerations can destroy long range planning. If business development is important to the Town for jobs and tax base, it cannot be allowed to be lost to residential development.
 - a) At the current time, most residential is allowed by "special use permit" in industrial and commercial districts.
 - b) Residential is not compatible with industrial and only marginally compatible with commercial. Industry does not want to locate in residential areas due to incompatibility. So not only do you lose the land taken by residential, you lose the nearby land too. The best way to minimize incompatibility problems is to minimize the possibility in the first place.
- 3. "Targeted Zoning" prohibits all types of uses not targeted for the zone.
 - a) Geographic placement of commercial and industrial zones is very important to their success, and we do want them to succeed.
 - b) Targeted zoning means that land is reserved only for targeted and acceptable compatible uses.

- c) Agriculture is permitted and encouraged in all zones. Targeted zoning is not recommended for agriculture.
- d) Targeted Zoning does not prohibit designation of areas for mixed uses or Planned Unit Developments.

K. THE “DEVELOPABLE LAND AREA” CONCEPT

1. Developable Land Area is a single number that measures actual developable land and uses it for all zoning related calculations. (Developable Land Area was adopted into the Zoning Ordinance in 1994.)
2. Defined as: the total gross land area minus the total area in wetlands, flood hazard areas, coastal areas, water, street or street right-of-way, utility easements, and areas required for stormwater detention/retention.
3. The benefits of wetland/coastal/flood areas are:
 - a) Protecting future occupants from their negative effects.
 - b) Allowing wet areas to be counted as part of minimum lot size encourages the pollution of wetlands, and increases density just where we don't want it.
 - c) Allowing wet areas to be counted toward a wide variety of required areas under zoning often makes those calculations unreliable, in terms of what zoning is meant to accomplish.
 - (1) Density calculations, maximum coverage, usable open space, etc.
4. This has long term planning benefits as well:
 - a) We can look at an overall area, calculate its developable area, and then calculate what build-out would look like, without having to guess how much environmentally sensitive land will be counted toward lots, regardless of how lot lines fall.

L. CLUSTER ZONING

1. Permit cluster for single-family development. (A form of single-family cluster called Residential Open Space development in the Zoning Ordinance) was adopted into the Zoning Ordinance in 1997.)
2. Cluster development standards will be mandatory in the low density residential districts for parcels over a minimum size (say 25 acres) to ensure that the maximum amount of open space is preserved. Specific locations and requirements to be worked out at a later date.
3. Cluster development standards will be based upon the ability of the soil to support residential use under the base zoning standard. Minimum lot sizes shall be enough to accommodate a standard size house with setbacks as designated by a zoning ordinance plus a septic system large enough considering the underlying soils. The

maximum number of dwelling units in the cluster development would be the same as the number permitted if a conventional subdivision grid.

4. Land left open would have development rights extinguished permanently by deed. The remainder of the land can be used for recreation/open space or for agricultural purposes.
5. Open spaces created as part of cluster developments should be made within the framework of the Open Space Element objectives. Particular attention should be paid to linking open spaces to create a significant continuous open space network that maintains the character of the Town.

M. MERGER OF SUBSTANDARD LOTS

1. There are hundreds of substandard size lots both on the “main island” and on Prudence and Hog Islands that were platted decades ago. These represent potential problems - the construction of houses on tiny lots which, due to the size of the lot, would have to violate every dimensional zoning regulation (density, lot coverage, setbacks, etc.) in order to build.
2. The new State Zoning Enabling Act allows municipalities to implement regulations to control the merger of contiguous substandard size lots to create conforming or less non-conforming lots. The standards relate to zoning districts and the Town will study the feasibility of adopting such an ordinance.

N. INTERIM REGULATIONS

1. Purpose: Any discussion of changes in land use regulations or zones could cause some fear of the unknown. This fear will be present regardless of best intentions. The result could be a rush to submit subdivision plans to beat the changes in the law. Inevitably, the speed with which these plans will be done will result in poor quality and work to the detriment of our purposes.
2. Due to current market conditions and the large number of lots for sale, it is highly unlikely that any of these new plans would be followed through in the near future. Thus we may unwittingly create a "bomb-waiting-to-explode" - hundreds of platted lots waiting to be developed whenever the real estate market turns up.
3. Interim Regulation - Temporary Subdivision Moratorium

A temporary moratorium on new subdivisions may be justified by the proposed changes in our land use regulations and the impacts they will have on the Town. A moratorium is legal if the proposed action:

- a) Is done for a specific reason.
- b) Has a reasonable expiration date that is tied directly to that reason.
- c) Has a proposed course of action, which is then followed.

O. ADMINISTRATIVE REQUIREMENTS AND RECORD-KEEPING

1. Interdepartmental Communications on Land Use Matters

- a) The administration of many of the implementation items requires a rigorous system of communication between all municipal officials, municipal boards and State agencies.
- b) The current system is not up to the task. Communication is primarily verbal and handwritten. There is little standardization as to how critical information is passed along. This can result in “one hand often not knowing what the other hand is doing”.
- c) A single interdepartmental tracking form is to be developed in which all development and development-related procedural items are checked, dated, and initialed as a project moves its way along.

2. Computerized Land Use Record-Keeping System

- a) The old system of individual slips of paper being given from one department to the next, with key information being copied from one form onto the next, inevitably results in errors of omission or misreading. The system is inadequate.
- b) Upon computerization of the Town Hall, the Town should institute a computerized record-keeping and land use monitoring system:
 - (1) Key information is entered only once and by the person or department responsible for the item. Re-copying errors and miscommunication is reduced.
 - (2) The next official in chronological order of the production or sale of, say, a house, can look at the individual file for that particular property and find out if the proper permits and approvals have been obtained prior to the chronologically next thing to be done.
 - (3) A password system would control access to information.
 - (4) Through simple computerized compilations, the Town can, at any time, get an accurate picture of how much of what kind of property-related activity is going on. The current system hardly allows that at all, without a massive amount of work.
 - (5) The ease of use of computers and software that exists in the marketplace today is up to the task.
 - (6) The time to do this is now, before the next development boom.

HOUSING

I. GOAL

Encourage a diversity of housing opportunities for present and future residents of all income levels. Work toward consideration of the special needs of the elderly, handicapped and first-time buyers. Ensure that every Portsmouth resident can obtain safe, decent, sanitary, and affordable housing area. Provide housing opportunities for the elderly, disabled, and low-moderate income families that meet the needs of all those who qualify.

NOTES: Readers of this section are particularly referred to maps #1 – 5 and 34 – 38.

II. DEFINITIONS

- A. Portsmouth is a Town dominated by single-family homes. Development during the 1980's was dominated by high-end homes. This section deals with those not in that category.
- B. "Next Generation Housing" is moderately priced housing that our children will be able to afford. Portsmouth is, for the most part, a relatively expensive Town to live in, so our children may have to move elsewhere.
- C. There are several definitions of "Affordable Housing". It is measured both by income level and by housing cost. The State definition, used herein, is "subsidized housing". A major point is that it need not be subsidized or low-income housing. "Affordable" is housing that can be afforded by moderate-income households or lower-income households. Various programs define "affordable" differently. Please refer to the section entitled "Subsidized Housing Programs" for the various income limits applied.
 - 1. As it is our children who are or will be primarily in this category, particularly for their first homes, "affordable" should be equated with "next generation" housing.
- D. In terms of housing need, "Elderly" and "Low-Moderate Income" housing is assumed to be subsidized in some form, be it direct rental subsidy to the tenant or the owner. However, market rate "over 55" communities exist and are being planned in Portsmouth.
- E. "Scattered Site Housing" is best described as the opposite of "housing projects." Rather than dozens of targeted-type units in a single lot or development, "Scattered Site Housing" has a few units here and there at one to four or six per site. The objective is to blend into the neighborhood with negligible effect.
- F. The current edition of this section contains a number of disparities between years. The latest detailed income data, as of this date, is available only for 1990. More recent RIHMFC and HUD income and rent limits are based upon estimates of Statewide averages. These disparities can be corrected once relevant data is published by the US Census.

III. HOUSING INVENTORY

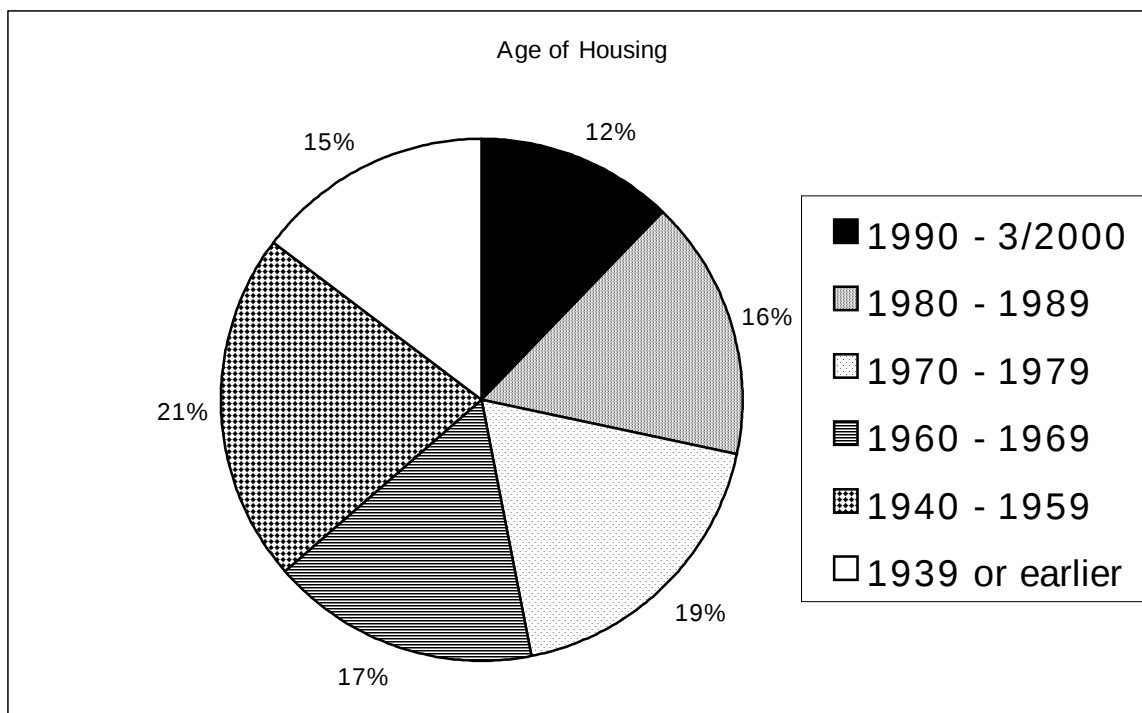
A. PORTSMOUTH DEMOGRAPHIC and HOUSING CHARACTERISTICS

1. Demographic information tells us a lot about the Town and its housing needs. Some 1990 U.S. Census information is presented in the Appendix, some from the 1989 Portsmouth Citizen Advisory Committee (PCAC) survey.
2. If we accept a figure of around \$30,000 as an “affordable income level” (HUD defined “low-moderate income” as \$31,338 for a family of 4 in 1990), we can see that many households (24.90%) in Portsmouth fall in the affordable income range. This compares with 40% Statewide (by definition).
3. Of new arrivals (1990, in Town under 5 years), 26.67% were within the affordable income range. This tells us there is an active need and demand for affordable housing in Portsmouth.
4. Portsmouth today has a mix of ownership housing and mid to higher level rental housing. What Portsmouth can support is difficult due to the lack of sewers and the poor soil conditions. However, new technologies in wastewater treatment, which are being pursued by RIDEM, may change this situation dramatically.

a) Age and Occupancy of Housing

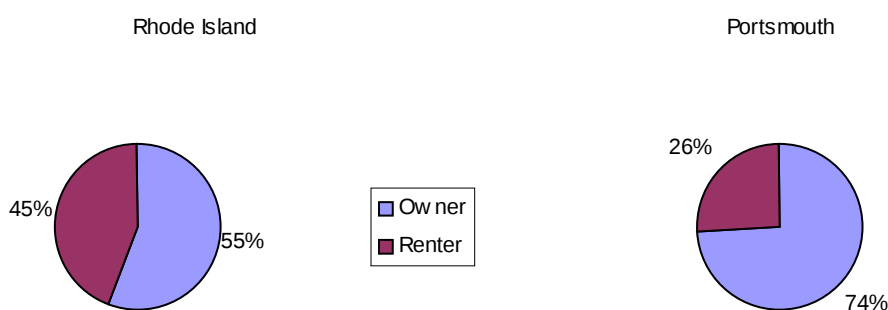
Housing in Portsmouth is comparatively new (63% of all housing built since 1960) in all but the northern sections of town, and is generally in excellent condition.

Figure 1 – Age of Housing Stock 2000



Portsmouth's housing is predominantly owner-occupied (see figure 2), with a much higher percentage than the State as a whole, which, in turn, is higher than Middletown's 50% or Newport's 42%. In 1990, with 26% of Aquidneck Island's population, Portsmouth had only 15% of the entire rental housing on Aquidneck Island but 36% of the owner-occupied housing.

Figure 2: Owner vs. Rental Occupancy - 2000



Portsmouth's average annual increase of owner occupied housing was over 4 % during the 1970s and over 3 % during the 1980's. Thus, between 1970 and 1990, there was an 89 % increase (2147 houses) in owner occupied housing. By 1990, Portsmouth had nearly as much owner-occupied housing as Newport. Portsmouth had a much smaller increase in rental housing (37 % and 473 units) during the same period.

b) Turnover of Residents

Consistent with the level of owner occupancy is the fact that Portsmouth has a relatively low level of turnover, as shown in figure 3. Most people stay in their houses a long time. This leads to community stability.

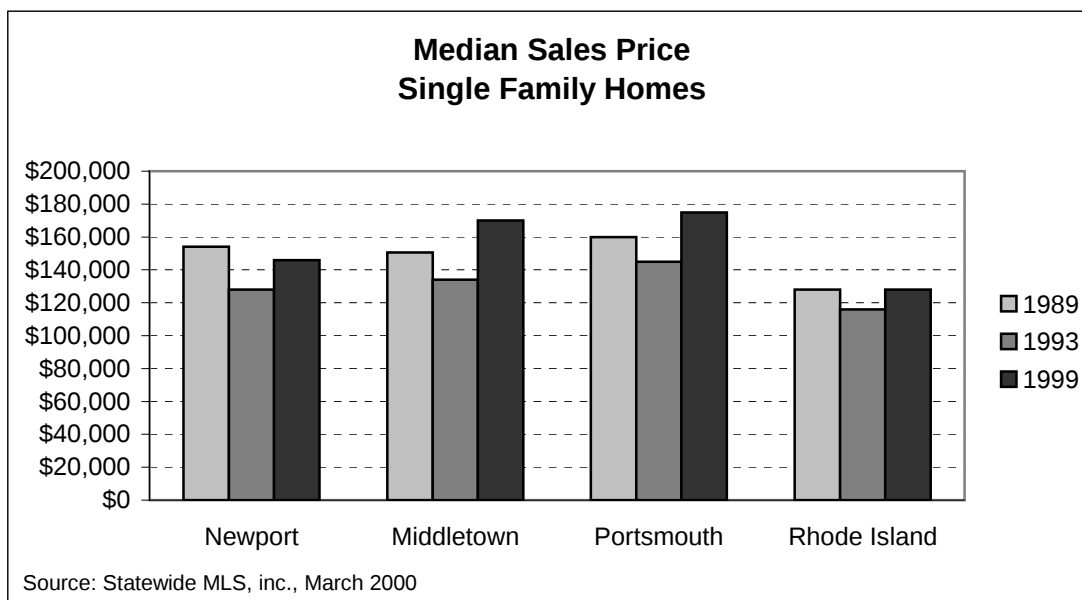
Figure 3: Housing Turnover 1990



c) Cost of Housing

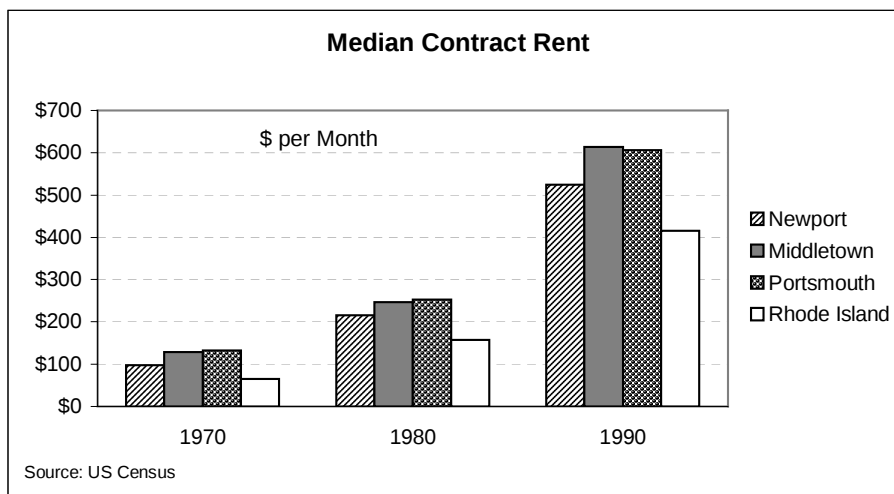
Like most things on Aquidneck Island, housing is relatively expensive. Single-family houses in Portsmouth exceeded the State median price in 1999 by 27%, as can be seen in figure 4. House prices dropped in 1993 due to the recession, but rebounded more than others.

Figure 4 – Median Home Prices 1989 - 1999



Rental Housing, as indicated in figure 5, is also relatively expensive on Aquidneck Island. Since little new rental housing has been built in Portsmouth, the lack of supply keeps rents high.

Figure 5 – Median Rent 1990



d) NAVY HOUSING

The Navy provides some housing for non-civilian personnel assigned to Naval Station Newport in a variety of locations and styles. Civilian employees live in the community and have a relatively low turnover.

Since 1992, renovation of Navy housing has reduced the total number of family housing units. Connell Manor was transferred to Newport for a community college campus and housing in North Kingstown is no longer used for personnel at the Newport Naval complex. The Navy's family housing facilities at the Newport Naval complex has decreased nearly 30 % from 1927 units in 1992 to 1365 units in 2000. The 1365 family housing units available in 2000 were below housing needs of approximately 1500 families assigned to the Naval station. Taken together, this may mean that Navy housing in Portsmouth is less likely to be reduced and more likely to be occupied.

Table 1 - Navy Housing Units

	<u>1992</u>	<u>2000</u>
Newport	348	199
Middletown	<u>1258</u>	<u>951</u>
Total	1606	1150 a loss of 456 units
Portsmouth		
Capehart Melville	239	236
Rainbow Heights	20	21
Mobile Home Park	<u>52</u>	<u>52</u> (pads)
Total	311	309

If Navy personnel do not have housing available or choose not to live on base, they are given a housing allowance to assist with off-base costs. Generally the housing allowance is too low for Portsmouth, so most privately rented units are elsewhere.

e) HOUSING CONDITIONS

Because most of Portsmouth's housing is relatively new, most modern standards are met. In 1990, 2.5% of the housing units were considered substandard, compared to the State average of 4.2%. However, in 1995 57.4% of housing was estimated to have lead based paint, a health hazard to children. The State average was 66.6% and the lowest percentage in the State was Charlestown at 44.1%. ¹

5. THE NEED FOR HOUSING PLANNING

a) HOUSING AFFORDABILITY

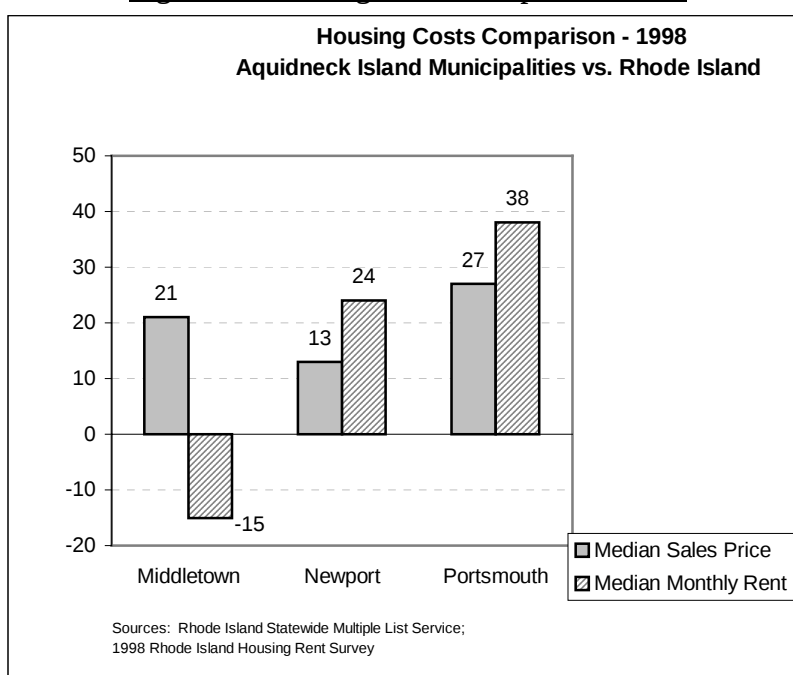
Housing is a regional item, so an individual town cannot be considered in isolation. For Portsmouth, the region is basically Aquidneck Island. As shown in the Economic Element, a high percentage of Aquidneck Island residents also work on the Island.

¹ Source: State Housing Plan, March 2000.

Rental verses Purchase Cost Comparison – Figure 6 shows the gap between housing prices on the Island and statewide averages is generally higher for renters than for homebuyers. An exception to this pattern was in 1998 rental rates in Middletown, which were below statewide median rental rates.

- (1) Housing Affordability - Housing is considered affordable if the rental or mortgage cost is at or below 30 % of monthly income. Housing affordability information such as family incomes and typical cost of housing is gathered in the 10-year census. HUD determinations are calibrated from the Census. Thus, it is difficult to determine trends in housing affordability between census years.

Figure 6 - Housing Costs Comparison 1998



- (2) The 1999 “affordability gap” (the difference between what the median income family can afford for a mortgage versus the median selling price) was:

TABLE 2 - Affordability Gap

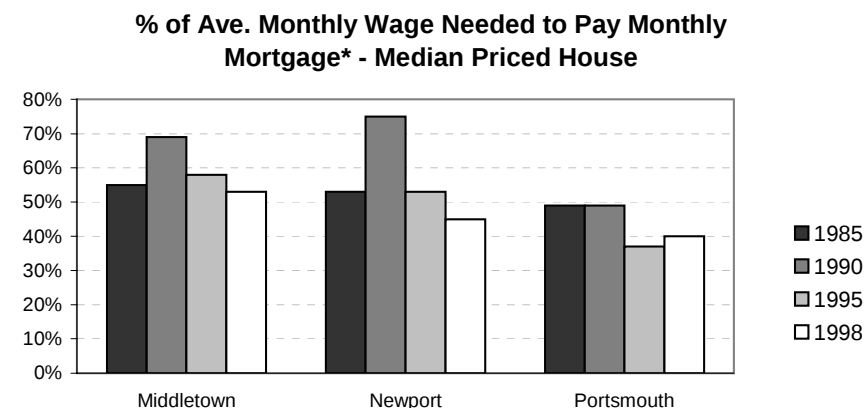
Median 1999 Sale Price	\$196,900
Income required with 20% down**	\$75,242
Portsmouth median family income 2000	\$68,577
AVERAGE AFFORDABILITY GAP	\$6,665

** Maximum 30% of income to 30 year mortgage at 8.0%, 1999 property tax at \$21.51 per \$1,000 value, and insurance at \$1,000 per year.

- Trend Indicator for Housing Affordability – one indicator for the relative affordability of housing in a community is the percentage of average wage necessary to pay the average monthly rent or monthly mortgage for a house at the median sale price. (One-half of all houses sold in the community were bought for less than the median price and one-half were bought for more than the median price.)
- Based on this indicator, housing has become relatively more affordable in recent years for those who live and work on Aquidneck Island. In 1990, the Gap was \$15,600. This is primarily due to rising incomes of Town residents, which are up 47% since 1990, while the median house price increased only 23% since 1990.

The % of their average wage that people working on Aquidneck Island would need to pay for their monthly mortgage on a median priced house dropped from 1990 to 1995 in all three municipalities. As in figure 7, by this measure, between 1995 and 1998 the cost of housing relative to incomes continued to drop in Middletown and Newport but increased in Portsmouth.

Figure 7 - % of Average Wage Needed to Pay Mortgage



* Mortgages based on a 30 year mortgage with 10% down payment and 8.5 %

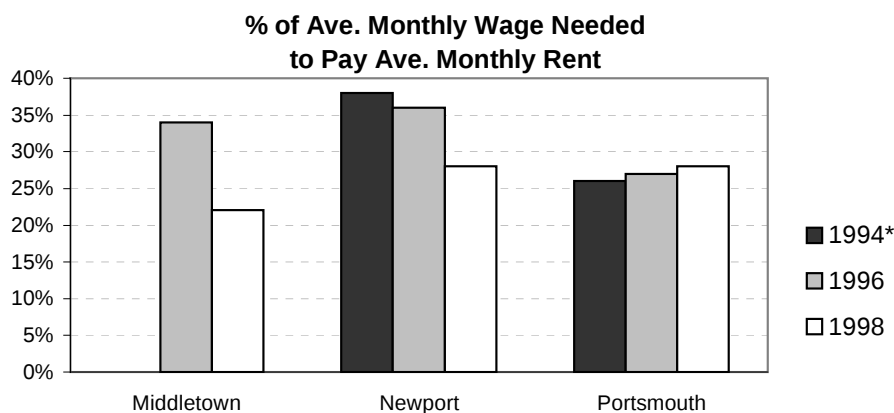
Sources: Rhode Island Statewide Multiple List Service
Rhode Island Department of Labor and Training Labor Market Information

Using 30 % of income as a benchmark, the mortgage for a median priced house is not affordable for families with a single wage earner who earns an average wage. For these families, owning a median priced house requires a high percentage of their income.

As a percentage of average wages for people working on Aquidneck Island, rental housing became more affordable between 1994 and 1998 in Middletown and Newport. By this measure, rental housing became less affordable in Portsmouth. Using 30 % of income for housing as a benchmark, rental housing on Aquidneck Island was affordable in 1998 to those earning an average wage. In Portsmouth, the median rent in 1990 was 27.3% of household income. However, there are many people and families with below average wages and incomes for which rental housing

is not affordable. This is evident in Newport, where in 1990, the average rent was \$121 per month lower, but the percent of household income spent on rent was about the same.

Figure 8 - % of Average Wage Needed to Pay Rent



*1994 Data not available for Middletown

Source: Rhode Island Department of Labor and Training, Labor Market Information
Rhode Island Department of Housing Rent Survey

6. MARKET RATE OWNERSHIP HOUSING

- a) Portsmouth has a mix of single-family housing types and costs within the physical limits of its poor soils and lack of sewers. The major concern of most residents is that Portsmouth may not be affordable to our children as many of those working here.
 - (1) The median sales price of a single-family home in 1988 was \$159,250, some 27% higher than the State average, 6th highest in the State.
 - (2) Our 1990 family median income was \$46,660, 8th highest in the State (\$39,172).
- b) A study of February 1991 MLS house price listings showed 25.8% were “affordable” under RIHMFC’s first-time buyer mortgage program. This figure is similar to both the percent of households in Town with incomes under \$30,000 and the same for new arrivals in the 1989 PCAC survey. This shows there is an active market from both the supply and demand side for affordable single-family housing. (In the 1990’s almost exclusively single-family housing, plus some elderly housing, was built. Therefore, it is unlikely that this percentage has declined.)

7. LOW-MODERATE INCOME MARKET RATE HOUSING: MOBILE HOMES

- a) Notable is the fact that the 592 mobile homes, almost by definition “low-moderate income housing” (whether subsidized or not), comprise 8.5% of all housing units in Portsmouth, and 9.9% of all single-family housing. This compares with just 1.1% and 1.9%, respectively, State wide. In fact, Portsmouth has the second highest absolute number of mobile homes (behind Charlestown) in the State. So

while Portsmouth does not have a significant number of *subsidized* low-moderate income multi-family units, it does provide a significant number of low-moderate income single-family units.

8. ELDERLY, LOW-MODERATE INCOME and HANDICAPPED HOUSING

- a) According to the 1990 Census, 1.9% (or about 123) of Portsmouth households have an income level below the Federal poverty line. (Similar numbers for Home Energy Assistance, Supplemental Security, and Food Stamps corroborate this number). While low compared with much of the State, the need is still present.

B. PROJECTED HOUSING NEEDS

1. Based on the 1990 Census and assuming 100% occupancy of non-seasonal units, the following tables forecast housing needs to the year 2010:

Table 3 – Projected Housing Needs

	1990	2000	2010
Population ²	16,857	17,149	18,710
Single Family	5,715	5,814	6,344
Mobile Homes	537	546	596
Multi-Family	467	475	518
Seasonal ³	516	516	516
TOTAL UNITS	7,235	7,351	7,974

Included in multi-family housing are 270 units of military housing at Melville and Rainbow Heights. (In the mid 1990's, privatization of this military housing was considered; but since that time the Navy has reversed course and is spending \$10 – 15 million to upgrade this housing and keep as Navy housing.) Most of the remainder is at Bayview Tower and two apartment complexes off Jepson Lane.

C. PROJECTED SPECIAL HOUSING NEEDS

Table 4– Projected Special Housing Needs

	1990	2000	2010
Nursing Home Beds ⁴	0	0	0
Retirement Apartments	110	114	122
Assisted Living	0	92	99
Group Home Beds	17	18	19

² 2000 Population from US Census; Population projections for 2010 per Statewide Planning, October 1999.

³ Seasonal housing is not a “need”. Being located primarily on Prudence and Hog Islands, it is assumed any increase in the number of those units will be negligible, and that they are not available to fill permanent housing needs.

⁴ There are no nursing homes in Portsmouth. There are 334 on Aquidneck Island, but we have no methodology of determining need in Portsmouth.

IV. SUBSIDIZED HOUSING PROGRAMS

A. Programs and Eligibility

1. Eligibility for Subsidized Ownership Housing – Income Standards

- a) For RIHMFC's (Rhode Island Housing and Mortgage Corporation) First-Time Buyer Mortgage Program (as of May 2001):

Your household income cannot exceed:

- (1) \$53,200 for a household of one or two
- (2) \$61,180 for a household of three or more

Price of the Home (Aquidneck Island)\$198,500 for all housing types.

2. Eligibility for Subsidized Rental Housing – Income Standards

- a) Eligibility for Subsidized Housing – Income Standards

- (1) U.S. Department of Housing and Urban Development (HUD) ties its rental assistance programs to median income for the market area, our area being defined as Newport County. Relevant income limits are as follows:

TABLE 5

ELIGIBLE HOUSEHOLD INCOME IN PORTSMOUTH - 2001		
INCOME CATEGORY	DEFINED LEVEL	NO. OF HOUSEHOLDS
VERY LOW INCOME	(50% of median) up to \$29,050	1,375
LOWER INCOME	(80% of median) up to \$46,480	2,491
MODERATE INCOME	(115% of median) up to \$66,815	3,882

- (2) Public Housing - to be eligible for public housing, individuals and families must be low-income, defined as incomes below 80% of median income.

- (3) Section 8 Vouchers - to be eligible for Section 8 housing vouchers, individuals and families must have an income below 30 % of median income.

- b) In Newport County, the income limits for Public Housing & Section 8 Rental Vouchers in 2001 were:

<u>Household Size</u>	<u>Max. Income</u>
Single person	\$20,350
Household of 2 people	\$23,250
Household of 3 people	\$26,150
Household of 4 people	\$29,050
Household of 5 people	\$31,350
Household of 6 people	\$33,700

- (1) Public Housing - to be eligible for public housing, individuals and families must be low-income, defined as incomes below 80% of median income.
- (2) Section 8 Housing Vouchers - In addition to subsidized units, federally subsidized Section 8 vouchers are available to qualified residents. With the voucher program, families and individuals pay 30% of their monthly income towards rent, and the subsidy picks up the remaining cost for rent.

B. Subsidized Housing Programs and Facilities on Aquidneck Island

1. Housing is a regional issue. Therefore, we must consider housing programs available anywhere on Aquidneck Island as available to Portsmouth residents.

Table 6 – Federally Subsidized Rental Housing

Town	Assisted Living Beds	Total # of Housing Units	Low/Moderate Income Housing Units	Public Housing Units and vouchers	Rhode Island Mortgage and Finance Company Units
Middletown	103	5,846	698 Family: 419 Elderly: 279	No housing authority	Family: 12 Elderly: 50 Vouchers: 95*
Newport		13,094	2,097 Family: 1,529 Elderly: 568	Family: 828 Elderly: 268 Vouchers: 100	Family: 12 Elderly: 56
Portsmouth ⁵	98	7,235	135 Family: 25 Elderly: 110	Family: 0 Elderly: 40 Vouchers: 100	Family: 0 Elderly: 70

Source: Rhode Island Consolidated Plan 2000-2005

- * Of the statewide Section 8 vouchers offered by RIHMFC, 95 families currently live in Middletown

Portsmouth and Newport have a Housing Authority that manages subsidized housing units for families and elderly persons. Rhode Island Mortgage and Finance Company (RIHMFC), the statewide housing agency, operates additional subsidized units. Although Middletown does not have a Housing Authority, RIHMFC operates subsidized units in the town.

- Section 8 Housing Vouchers – In addition to subsidized units, federally subsidized Section 8 vouchers are available to qualified residents. With the voucher program, families and individuals pay 30% of their monthly income towards rent, and the subsidy picks up the remaining cost for rent.
- In order for the Section 8 program to be effective, landlords must be willing to rent apartments to voucher holders, and there must be apartments available for reasonable rents. (See lead paint comments on page 6) Each housing authority establishes a rent range for appropriate apartments. There are currently waiting lists for Section 8 vouchers in all three municipalities.

⁵ This does not include 270 units of Navy-owned housing, which is all considered low-moderate income housing due to the level of pay of Navy personnel.

- Section 8 holders must find an apartment within 60 days (with an opportunity for a 60 day extension) or the voucher must be returned to the housing authority. Frequently individuals are unable to find a suitable apartment within the time limit, and lose their voucher and are put back on the waiting list.
- There are currently waiting lists for Section 8 vouchers in all three municipalities. Unfortunately, the Section 8 rent subsidies are not high enough to enable participants compete in the private market. In Portsmouth vouchers go unused.⁶ Therefore, the only way Portsmouth can significantly increase its amount of subsidized housing is either for the rental subsidy to increase or for more subsidized rental housing to be built.
- At 1.87% of all housing, Portsmouth has one of the lowest rates of subsidized housing in the State. Middletown's housing is 10% subsidized and Newport 16%, compared with the overall 7.9% for the State.

C. Other Low-Moderate and Special Needs Housing Programs and Facilities

1. Church Community Housing Corp. Rental Properties – there is one rental unit in Portsmouth plus 34 family rental units in Newport (including 1 subsidized) and 3 in Middletown.
2. Church Community Housing Corp. Ownership Properties – there are 21 homeownership properties in Portsmouth.
3. **Special Needs Housing** – There are a variety of facilities and/organizations that provide housing for community residents with special needs such as senior housing, emergency shelters, and transitional housing.
4. Emergency Shelters/Homeless Shelters/Transitional Housing
 - Lucy's Hearth, 30 beds (Middletown)
 - Newport County Women's Resource Center, 10 beds (Newport)
 - McKinney Cooperative Shelter, 25 shelter beds, 2 transitional family units, 10 transitional individual units (Newport)
 - Child and Family Services of Newport County, 8 transitional family units
 - Fifty Washington Square, transitional 108 single room occupancy units & 18 bed emergency shelter (Newport)
5. Nursing Homes
 - Aquidneck Place Assisted Living, 92 units (Portsmouth)
 - Carriage House Nursing Home (Middletown)
 - Forest Farms Assisted Living, 50 units (Middletown)
 - Heatherwood Nursing and Sub acute Center (new) (Newport)

⁶ Conversion with James Dille, Executive Director, Portsmouth Housing Authority, May 10, 2001.

- St. Charles Home for the Aged, 49 units (Newport)
- Village House Convalescent Home, 9 hospice and comfort care, 31 Alzheimer, (new) (Newport)
- St. Clare Home, 47 beds (Newport)
- Grand Islander Center (new), 148 beds (Newport)
- Henderson Home (Newport)
- Nina Lynette Home (Newport)

6. Retirement Communities and Senior Housing

- Quaker Manor: 40 senior units, 2 of which are for the elderly/disabled (Portsmouth Housing Authority).
- Anthony House, 70 senior units subsidized, Church Community Housing Corp. (Portsmouth)
- Sakonnet View: 24 units for the elderly.
- John Clarke Retirement Center: 50 units independent living, 60 beds nursing (Middletown)
- Blenheim-Newport Residential Retirement Community: 59 independent units, 41 assisted units (Newport)
- West House: 50 senior units subsidized, Church Community Housing Corp. (Middletown)
- Mumford: 34 senior units subsidized, Church Community Housing Corp. (Newport)
- Star of the Sea: 37 senior units (Newport)

- An informal survey of managers at senior housing facilities indicates that more than 90 percent of residents and staff are from the Island.

7. Group Homes

There are 25 beds in community residences for Mental Health, retardation and children in Portsmouth.

- 2 operated by Church Community Housing Corp. (Newport)
- 1 operated by Church Community Housing Corp. (Middletown)

8. Physical Disability Housing

- Villa Nia, 15 units subsidized, Church Community Housing Corp. (Middletown)

D. Additional Housing Resources and Programs

Church Community Housing Corporation – A community development corporation that addresses community housing issues in Newport County. Under contracts, Church Community Housing administers housing funding from the CDBG (Community Development Block Grants) Federal Programs. They operate four programs:

1. Down Payment Assistance Program – initiated in 1992, the organization provides loans to low and moderate-income homebuyers. The loans are 0% interest and repaid when the house is resold. Funds are maintained in a revolving fund. In the early 1990's there were 30-40 loans per year. In 2000 there were about 60 loans made in this program, when the income qualification for this loan for an average family income (four people) of was \$41,500. With good credit and low debt, families with this income could qualify for a mortgage to buy a house costing \$125,000.
2. Home Rehabilitation – Initiated in 1975, community development block grant money has been spent for over 890 loans by 1999 to residents for housing rehabilitation projects such as replacing a roof, insulation, and window replacement. Up to \$3500 of the loan is deferred until the house is sold. Loans up to \$10, 000 have a 3 % interest over 15 years. The deferred loans primarily benefit individuals over 60 years of age. This is a revolving loan fund and, thus, the program has become a larger dollar amount each year. In 2000 there was between \$3 – 4 million in the revolving loan program. Loans average about \$8000. Many loans were for multifamily housing. Between 1990 and 2000 the organization provided 153 loans to help homeowners maintain their homes.
3. Landtrust Home – Initiated in 1992 to acquire and resell houses while Church Community Housing Corp. retains ownership of the land where the house is located. The purpose of this program is to reduce the purchase cost of housing and to keep housing affordable over the years. Since the land values are separated from the house values, house values and costs remain lower. This program was created with the philosophy that the average wage earner in a community should be able to buy a house. Between 1992 and 2000, 22 houses were acquired for the Landtrust program. Church Community has purchase houses for the program ranging from \$12,000 to \$145,000. Home ownership under this program enables participants to benefit from their investments in home improvements and real estate appreciation.
4. Home Buyer Education – A RI Housing approved program that teaches homeowners how to budget and establish a savings account. The 10-session program helps graduates to qualify for mortgages. There are always two education programs underway at any time throughout the year. Between 1994 and 2000 there were 180 graduates of the program. Most graduates take a year or more after the class to qualify for a mortgage.
5. Home Buyer Mortgage Program –Pre-qualifies participants for a mortgage so that they can be eligible to participate in the home buying program.

Table 7 – Church Community Housing Corp. – Homeownership Support Program

Church Community Housing Corp. - Home Ownership Support Programs 1990- 2000			
Community	Down Payment Assistance	Landtrust HOME	Rehab. Loans
Middletown	23	14	55
Newport	29	22	153
Portsmouth	8	9	57
TOTAL	60	45	265

E. HOUSING FOR JOBS

Many people who work here cannot afford to live here. For any Town to be successful, it must provide for the broad income range of workers.

F. COMMUNITY SUPPORT

Public support for meaningful Town actions, as found in the 1990 PCAC survey, was lukewarm.⁷

IV. OBJECTIVES

A. OBJECTIVE 1

A mix of housing should be maintained at current levels to preserve the character of Portsmouth.

We express our desire to have affordable housing and our intention to work with Federal, State and charitable organizations to promote affordable housing and to encourage initiative from all of those organizations.

1. Preserve the diversity of densities provided under the zoning ordinance. Maintain the relatively high density zoning in the northernmost sections of Town, consistent with environmental constraints.
2. A plan will be established to maintain a regular review of all housing needs, including housing opportunities for low-and-moderate income families, the elderly, the handicapped and other Portsmouth special-needs groups.

B. OBJECTIVE 2

Address housing constraints and costs in Portsmouth that limit housing availability and affordability.

1. Ensure that Town land use policies, regulations and fees do not inhibit the development or renovation of affordable housing.

C. OBJECTIVE 3

Address Needs of First-Time Buyers, Elderly and Handicapped.

1. Provide information on available programs and housing in a central location.
 - a) Cooperate actively with State, Federal and local non-profit organizations.

⁷SEE APPENDIX-PCAC SURVEY RESULTS 1990 PCAC SURVEY QUESTION 25, 1990 PCAC SURVEY QUESTION 25.1 , 1990 PCAC SURVEY QUESTION 25.2, 1990 PCAC SURVEY QUESTION 25.3 , 1990 PCAC SURVEY QUESTION 25.4 , 1990 PCAC SURVEY QUESTION 25.5 , 1990 PCAC SURVEY QUESTION 25.6 , 1990 PCAC SURVEY QUESTION 25.7

2. Encourage the availability and maintenance of housing to benefit elderly persons.

D. OBJECTIVE 4

Consider types of development regulations to lower costs without lowering quality of life by keeping in perspective concerns for open space, greenbelts, etc.

The cost of raw land and the cost of site improvements create a cumulative cost that is born by the units in the development. Costs can be lowered by increasing site density by methods such as cluster and Planned Unit Development (PUD) and higher lot coverages. Density would be governed by constraints such as utility availability, soil suitability, watershed and traffic.

E. OBJECTIVE 5

Identify and pursue opportunities to develop scattered site and cluster “next generation” housing.

Identify parcels which can accommodate this new “next generation” housing. The cost of land is too high to build such new housing at market rates, so this will have to be a subsidized effort.

F. OBJECTIVE 6

Improve conduit of ideas and review to Town Officials and Related Boards.

1. Communicate to appropriate Town officials proposals that can be adjusted to changing economics and residents' preferences.
2. Review the housing plan periodically to ensure that it continues to adequately address changing social and economic conditions.

V. IMPLEMENTATION

An underlying deterrent to all development is the lack of public utilities. Unless Portsmouth comes to grips with this utility issue, these needs will continue to be unanswered with potential consequences of the inability of our children to afford to live here and the lack of a balanced labor force.

The potential conflict between housing for first-time buyers vs. desires for open space creates a severe dilemma. As we push for more open space and limits to growth, property values and housing costs increase. This is an area in which two prime objectives of this Plan inevitably conflict.

A. PUBLIC EDUCATION

1. Negative reaction to affordable housing initiatives often can be attributed to a negative perception. It is too often thought of as the old fashioned “housing projects”

for poverty stricken families. These perceptions must be changed before effective housing programs can be implemented.

- a) Concentrated developments (“projects”) are unlikely in Portsmouth simply because of the lack of sewers and poor soils for septic systems.
2. The public must be educated as to the likely beneficiaries of many of the programs-- often their own children.
3. The public must be educated as to the types of housing that are realistic for Portsmouth, such as scattered site housing that fits right in with the neighborhood.

B. ADOPT SPECIFIC TARGETS INCLUDING NUMERICAL COMMUNITY GOALS

1. Adopt a definition of “Affordable Housing” to apply to Portsmouth. There are several types.
 - a) RIHMFC has a limit on house price and maximum “affordable income.”
 - b) The U.S. Dept. of Housing and Urban Development (HUD) defines “low-moderate income” housing as a house that can be afforded by a household with 80% of the median income for the metropolitan area. This definition conceptually includes 40% of all households in the metropolitan area.
 - c) HUD has income limits for rental assistance and maximum rents that they will subsidize. Unfortunately, the Section 8 rent subsidies are not high enough to enable participants to compete in the private market. Therefore, in Portsmouth vouchers go unused.⁸
 - d) Poverty standards, like AFDC and Public Assistance levels are not directly linked to housing and should not be included.
2. Determine what percent of housing should be “affordable.” For instance, Rhode Island has adopted a goal of 10% of all housing for all Towns but has limited their definition to subsidized developments (subsidy to the developer).
 - a) There are 135 such units in Portsmouth. This target would bring the total to 700, using the State goal of 10% of all housing units.
 - b) The Rhode Island Housing Appeals Board has the authority to overrule town zoning ordinances and boards for new subsidized developments in municipalities that have less than 10% of housing in the “low-moderate income” category, as defined by the State.
 - c) The Town will work with developers, RIHMFC and the Housing Appeals Board on a case-by-case basis to provide for affordable subsidized housing.

C. ADOPT REALISTIC TARGET TYPES OF HOUSING FOR PORTSMOUTH

As discussed above, low Section 8 rent subsidies mean that a greater percentage of subsidized rental units are unlikely unless more subsidized units are built.

⁸ Conversion with James Dille, Executive Director, Portsmouth Housing Authority, May 10, 2001.

1. The nature of Portsmouth and the lack of a public sewage system means large-scale development may not be practical. Concentrate on:
 - a) Single-family housing
 - b) Duplexes
 - c) Small apartment buildings (new and existing)
 - d) Cluster development to provide affordable housing.
2. Target areas for first-time buyers. Focus on availability of existing housing and its costs.
3. Focus on areas with moderately priced single-family homes and larger improved multi-family structures and those adaptable as multi-family homes.
4. Being a predominantly single family town, promote the use of RIHMFC's home buying assistance programs.
5. Concentrate on "Scattered Site" housing programs.
 - a) Large concentrated complexes will not work in Portsmouth.
 - (1) An exception might be under a mixed-use development or PUD, where the federal subsidy could help the developer with the residential part.
 - b) Scattered site programs build smaller houses or duplexes in several neighborhoods where they would blend in.
 - (1) Under HUD guidelines, dwelling units need be only 700 square feet, so some of our grandfathered substandard size lots may be appropriate.
 - (2) Duplexes are already allowed under zoning regulations, so accommodation may not mean any major regulatory changes.
 - c) Work with the local Housing Authority, the State, and non-profit organizations in an active, and supportive role.
6. Cooperate with RIHMFC and others in the construction of new subsidized units.

D. REGULATORY METHODS

1. General
 - a) Land cost is affected by lot size requirements. Determine if implementation of housing objectives can be made within present Zoning Districts.
 - b) Investigate acceptable exceptions to current land use regulations which would make development more feasible.
 - c) Build in some acceptable amount of flexibility in regulations for target housing types. This can be done, for example, through a "special permits" process.
2. Affordable "Next Generation" Housing

- a) Consider if a “scattered site duplex” program can be accommodated within zoning. Duplex housing is allowed by right in most residential zones.
 - b) Consider allowing mobile home parks in residential zones, applying reasonable minimum lot size, density, setbacks and other considerations. However, Portsmouth already has the second highest number of mobile homes in the State, concentrated in two mobile home parks.
 - c) Consider reducing density requirements in R-10 and R-20 zones with a restriction that housing is to be affordable. In R-30 and R-40 zones consider giving a density bonus for cluster development.
3. Cluster Development Regulations
- a) The cluster concept makes housing development more affordable by lowering the costs of roads and utility installation. In 1997, the Town adopted quite flexible single-family cluster regulations under zoning.
 - b) Current Zoning Regulations allow cluster for apartments and condominiums as special use permits. (A single family cluster provision was adopted into the Zoning Ordinance in 1997.)
4. Elderly Housing
- a) Existing housing can be more affordable for the elderly and special needs households by increasing the existing tax exemptions for these groups.
 - b) Modify the Zoning Ordinance to make it easier to explicitly permit accessory family dwelling units to enable more elderly to live with their families:
 - (1) Incorporate safeguards so they do not become apartments.
 - c) Some elderly and other special needs groups have constraints which call for central road arterial access locations. Sites of 20 acres or more along East and West Main Roads should allow elderly and special needs groups housing with a more lenient maximum lot coverage (say 30% versus current 20%).
 - (1) Cite specific areas for new development that meet criteria to house the elderly and handicapped.
5. Minimum Housing Program
- a) The Town maintains a complaint based minimum housing (code enforcement) program, run by existing staff in the Building Inspector’s office.

E. FINANCIAL ASSISTANCE PROGRAMS

1. The Town has had a low interest home rehabilitation revolving loan program for many years. Originally funded by Community Development Block grant funds, this program is now self-funded by loan repayments. Eligibility is limited to HUD-defined “low-moderate income” homeowners. It is administered for the Town by the Church Community Foundation.

2. Consider reducing time-consuming and excessive permitting procedures and costs. An obstacle might be the application fee for Zoning Board of Review consideration of \$100 per unit. Streamline costs for special needs development, keeping the necessary safeguards.
3. Work with not-for-profit groups, the Portsmouth Housing Authority, and developers to encourage utilization of existing Federal, State and/or private funding programs.
4. Consider donating or leasing of Town-owned land.
 - a) The sheer price of land in Portsmouth is a major barrier to an effective program.
 - b) The Town owns many parcels, some of which may be inappropriate for municipal use.
 - c) Identify which might be appropriate for use under any of the housing programs.
5. Consider the donation of Navy Land and Housing.
 - a) The Town and the Navy should cooperate in identifying any excess land or housing not programmed for future use.
6. Consider floating bond issues which could be floated for acquisition and construction cost supplementation for developers of elderly and special needs groups' facilities. The cost supplementation to be repaid over a long fixed-rate amortization term. (The concept here is simply that governmental organizations can obtain lower interest rate than can the private sector.)
7. Town Support for Renters, Special Needs and Homeless
 - a) The Town's Housing Authority runs the Section 8 Rental Assistance Program. There are sometimes several unused rental assistance vouchers.
 - b) The Town provides annual financial support to Island-wide organizations that assist special needs and homeless, including:
 - Newport County Mental Health (Middletown)
 - Visiting Nurses Association (Portsmouth)
 - New Visions for Newport County (Newport)
 - Stop-Over Shelter (Middletown, formerly in Portsmouth)
 - Senior Citizens Bus Transportation (Newport)
 - Self-Help (East Providence & Newport)
 - Child and Family Services (Newport & Middletown)
 - Lucy's Hearth (Middletown)

Encourage the cooperation of non-profit, tax-exempt organizations in the Town to provide services that enhance the quality of life for all the residents, including special needs groups.

ECONOMIC DEVELOPMENT

I. GOAL

Attain a balanced structure of population, environment, job opportunities, services and facilities, and recreational and cultural resources. An overriding guideline for the community should be to maintain that amount of economic growth necessary to sustain the desired employment and local tax base by the encouragement of forms of industry and commerce whose impact on the environment and on the social, aesthetic, and cultural environment will be within acceptable limits.

NOTES: Readers of this section are particularly referred to maps #1 -3 and commuting pattern maps in this text.

II. DEFINITIONS

- A. "Economic development is concerned with the best use of the community's limited economic resources in a long-term process aimed at preserving the good and improving the less good in community life."¹
- B. Local economic development can be simplistically defined as a conscious, coordinated set of activities undertaken by a municipality to:
 - 1. Help maintain and expand employment opportunities for its residents.
 - 2. Increase its revenue (tax base) so that it may provide desired services to its residents.
- C. A municipality can be considered like a business, a business that has public service as its primary goal instead of profits, but a business nonetheless.
 - 1. If we view economic development as long-term business development and translate our thinking into that as a business wishing to survive and expand from within, while keeping our stockholders (voters) happy, we're on the right track.
 - 2. A municipality is a business that offers its human and physical resources in trade for tax revenue and jobs.
- D. An economic development program deals with existing resources and attracts new customers for those resources. .

III. INVENTORY AND ANALYSIS OF ECONOMIC BASE AND CONDITIONS

Nowhere is the interdependence of the Island communities more evident than in economic conditions. Any discussion of economic conditions in Portsmouth must include some discussion

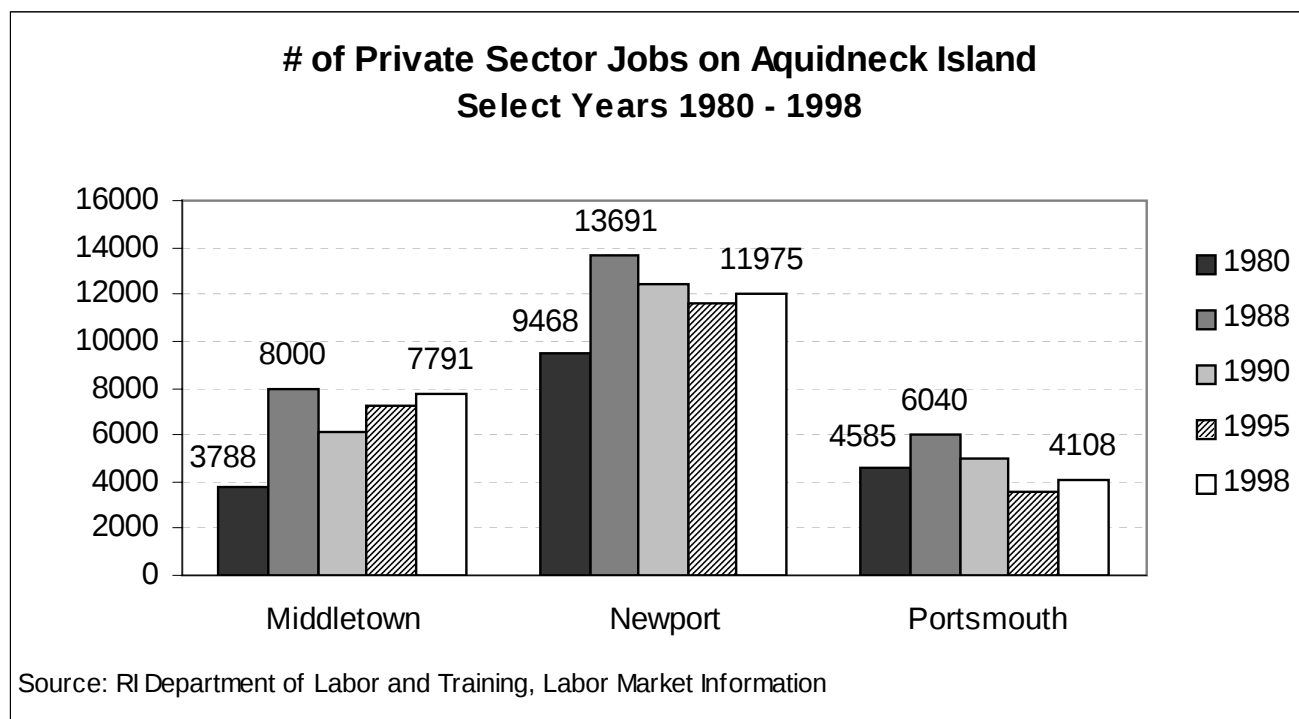
¹ "LOCAL ECONOMIC DEVELOPMENT PLANNING: FROM GOALS TO PROJECTS"; AVROM BEN DAVID-VAL, 1980, AMERICAN PLANNING ASSOCIATION, WASHINGTON, DC.

of Aquidneck Island as a whole, which includes pertinent data on Middletown and Newport. (Most recent available data is used, but it is not always from the same year.)

Total Employment

In 1998, there were 37,174 people working on Aquidneck Island including Navy personnel. This is a 9.6 % decline from 1990 when the Census reported over 41,120 people working on the Island. This number peaked in 1988 and declined during the recession of the early 1990's.

Figure 1



Jobs in Portsmouth – As seen in Figure 1, there were 4,108 private sector jobs in Portsmouth in 1998. Portsmouth lost over 40% of the private-sector jobs between 1988 and 1995. This decrease was due almost entirely to cutbacks at Raytheon (from over 3400 to less than 900 in 1995, back up to about 1500 in 2000.). Although the number of private sector jobs has increased since 1995, the 1998 employment levels were still 32 % below the peak employment in 1988.

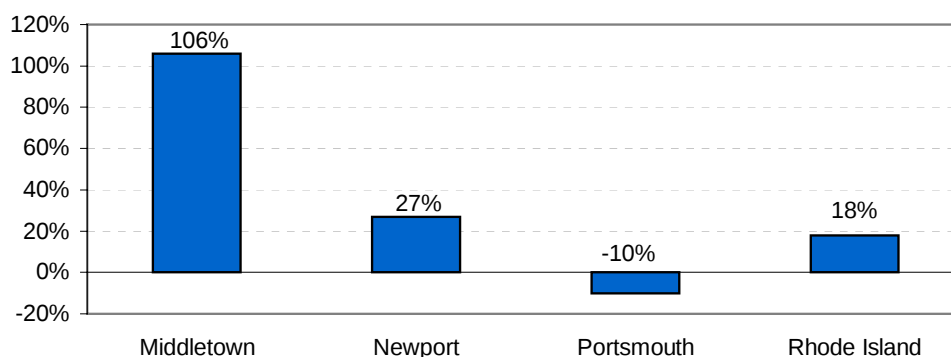
A significant proportion of the Portsmouth workforce works in Middletown and Newport. As illustrated in Figure 1, between 1988 and 1990, Middletown lost over 22% of its private sector jobs. By 1998, its economy recovered so that employment was only 1.9% below the 1988 peak. Between 1988 and 1990, Newport lost over 15 % of its private sector jobs. But Newport's recovery from the early 1990's recession has lagged. By 1998, Newport still had 12.5 % fewer jobs than its peak in 1988. By 1999 the overall employment growth on Aquidneck Island during the end of the 1990's had not yet returned to the number of employees of the 1988 pre-recession levels.

Figure 2 compares private sector job growth in Aquidneck Island towns to job growth statewide from 1980 to 1998. Middletown and Newport outpaced the State. The total number of private

sector jobs in Portsmouth declined during this period. This reflects Portsmouth's prior reliance on a small number of large employers who either left Town (Weyerhaeuser, Kaiser, Transcom, Pearson Yachts) or significantly downsized (Raytheon) between 1980 and 1998.

Figure 2

**% Change in # of Private Sector Jobs 1980 - 1998
Aquidneck Island Municipalities & Statewide**



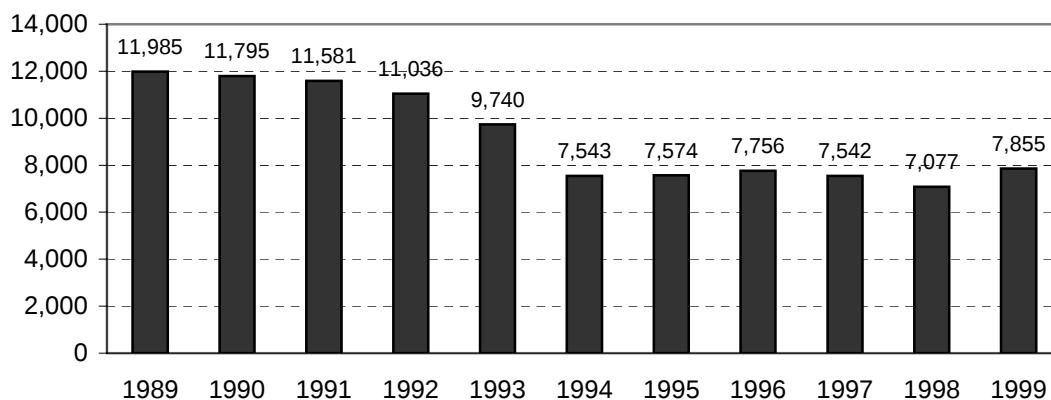
Source: RI Department of Labor and Training, Labor Market Information

Employment at the Newport Naval Complex

The Navy is the largest employer on Aquidneck Island with 7,855 employees in 1999, including Naval Station Newport (including the Naval Education and Training Center), the Naval Underwater Warfare Center (NUWC), and the Naval War College. None of its jobs are based in Portsmouth. Approximately 60 % are civilian staff. In 1973, a national reorganization of Navy operations led to a reduction of over 14,000 employees at the Newport Naval Complex. In the early 1990s there was another reduction of over 4,000 employees at the Naval Complex. As shown, staff levels have been fairly stable since 1994 with a slight increase from 1998 to 1999.

Figure 3

**Total Personnel for The Newport Naval Complex
1989-1999**



Source: Public Information Office, Naval Station Newport, 2000

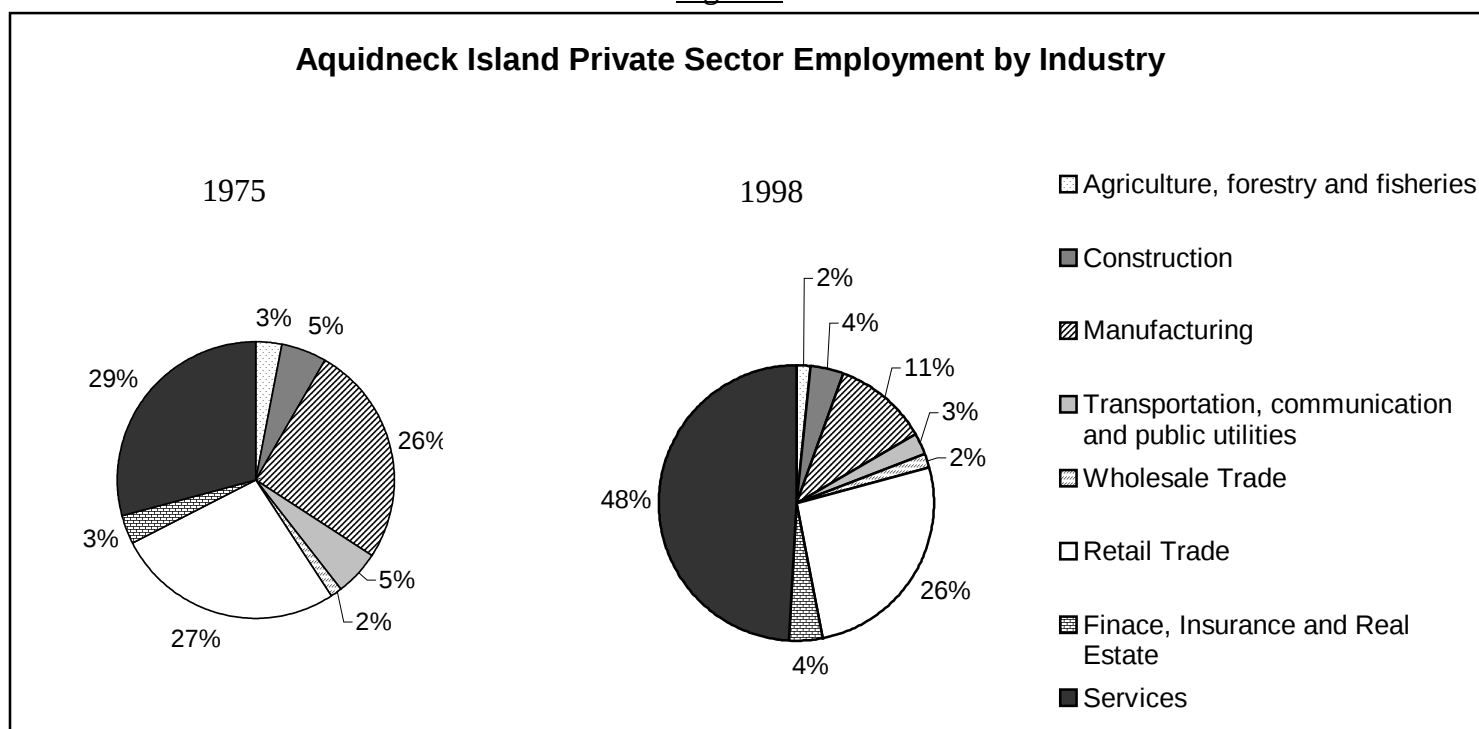
Many Portsmouth residents are employed at Naval Station Newport and NUWC or at firms that do business with the Base, so employment levels at the Newport Naval Complex are a key issue.

Employment by Sectors

In 1998 the largest employer on Aquidneck Island was the Navy with 19 % of all jobs. Only the service industry, with 31 % of all jobs, employs more people on the Island than the Navy. Two other components of Aquidneck Island economy - retail trade (17 % of all jobs), and state and local government (17 %) - comprise nearly as much local employment as the Navy.

Private Sector - Since 1975, several major shifts have occurred in the portion of the Aquidneck Island workforce employed in each industry. Employment in the service sector has increased from 29 % to 48 %, while manufacturing has decreased from 26 % to 11 %. These shifts are illustrated in Figure 4. All sectors experienced some decline in the 1990 recession.

Figure 4

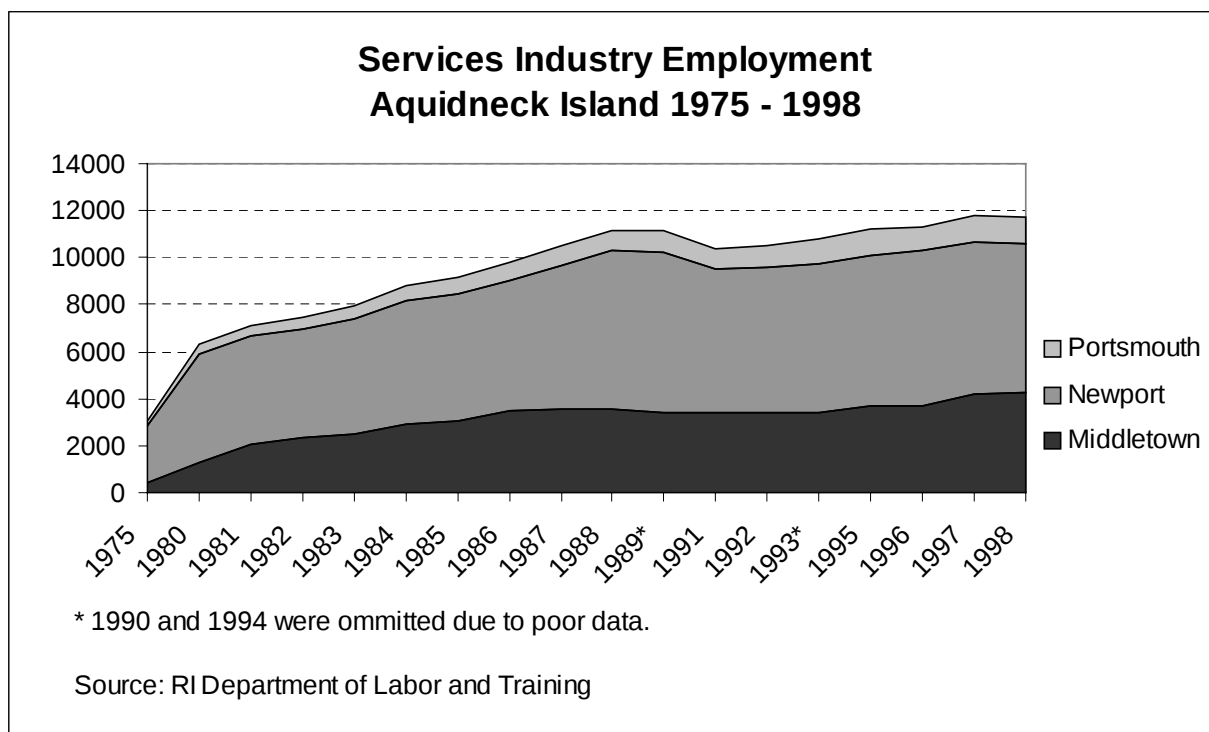


Employment Shifts by Industry – Services, retail trade and manufacturing dominate private sector employment on Aquidneck Island: Other industries have less than 1000 jobs Island-wide. Graphs that compare employment in all industries mask changes in smaller employment sectors because of the relatively lower number of employees.

The **service sector**, including tourism, health services, business services and educational services, has experienced steady employment growth, outpacing the rates of other industries. This trend reflects the growth and increasing importance of services nationally. The percentage of people working in the service industry increased from 29 % of the Island's employees in 1975, to 41 % when total Aquidneck Island employment peaked in 1988-89, and 48 % in 1998.

The service sector increased over 9 fold in Middletown, increased one and a half fold in Newport, and increased almost four fold in Portsmouth, though Portsmouth has a very small portion of the Island's service trade.

Figure 5



Retail trade accounted for 26 % of the private sector employment on Aquidneck Island in 1998. The number of people employed in retail trade has generally grown at the same rate as the Island's population and economy. Thus, retail trade has remained a consistent portion of employment in the local economy ranging, as seen in Figure 6, between 25 % (1989) and 27 % (1975). Portsmouth has a very small portion of the Island's retail trade.

Figure 6

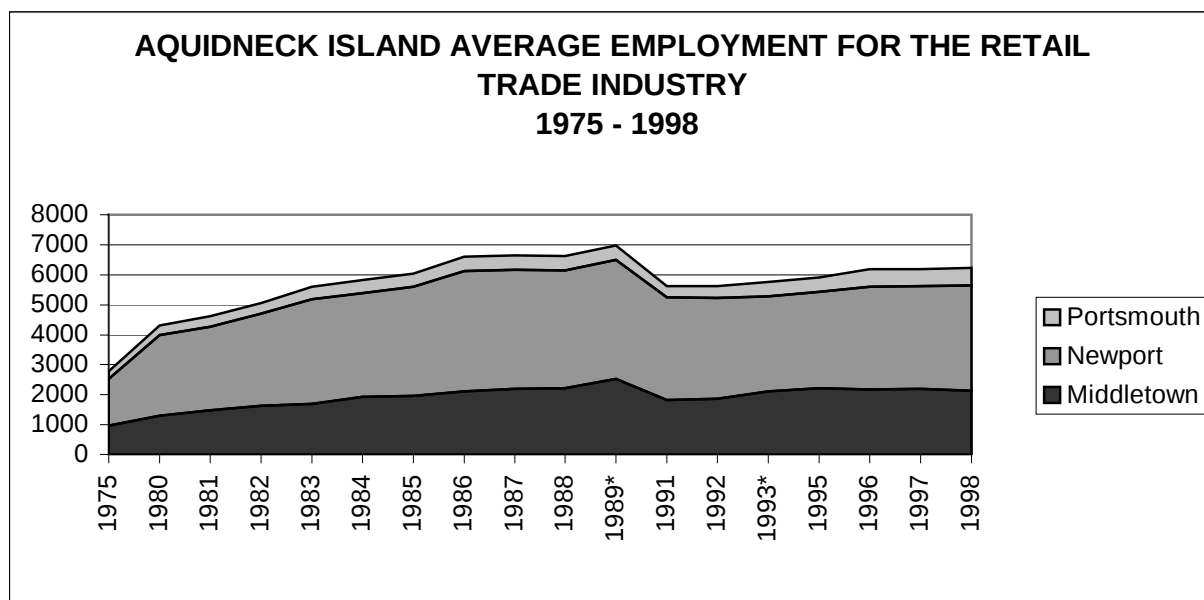
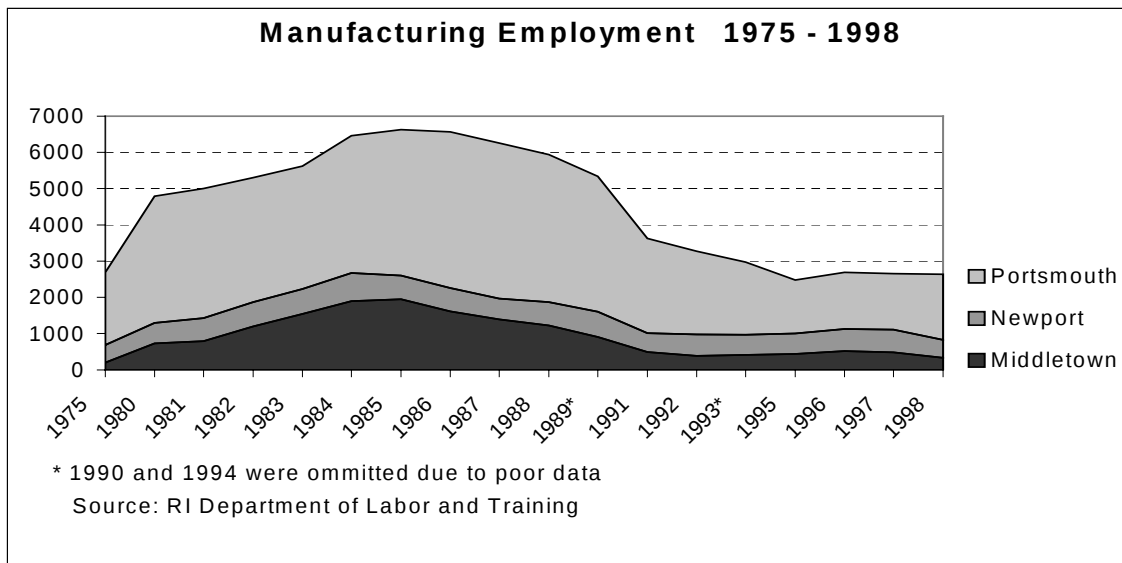
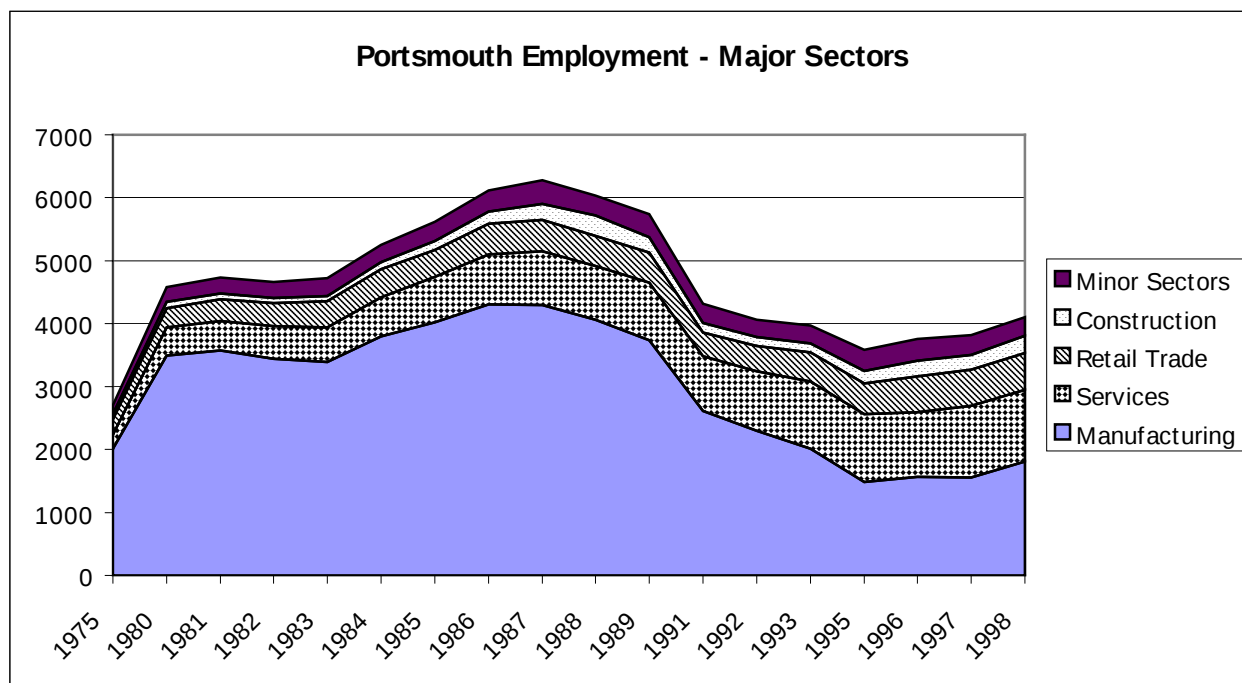


Figure 7



The total number of **manufacturing** (Figure 7) jobs on Aquidneck Island is much the same in the 1990s (2,639 in 1998) as it was in the 1970s (2,692 in 1975). Manufacturing employment grew nearly 250% to over 6,500 people during the 1980's but declined to 1975 levels by the mid 1990's. As the rest of the Island's economy grew, the proportion of employment in manufacturing declined from 26 % of the workforce in 1975 to only 11 % in 1998. Changes are most pronounced in Portsmouth, having the most manufacturing-related employment.²

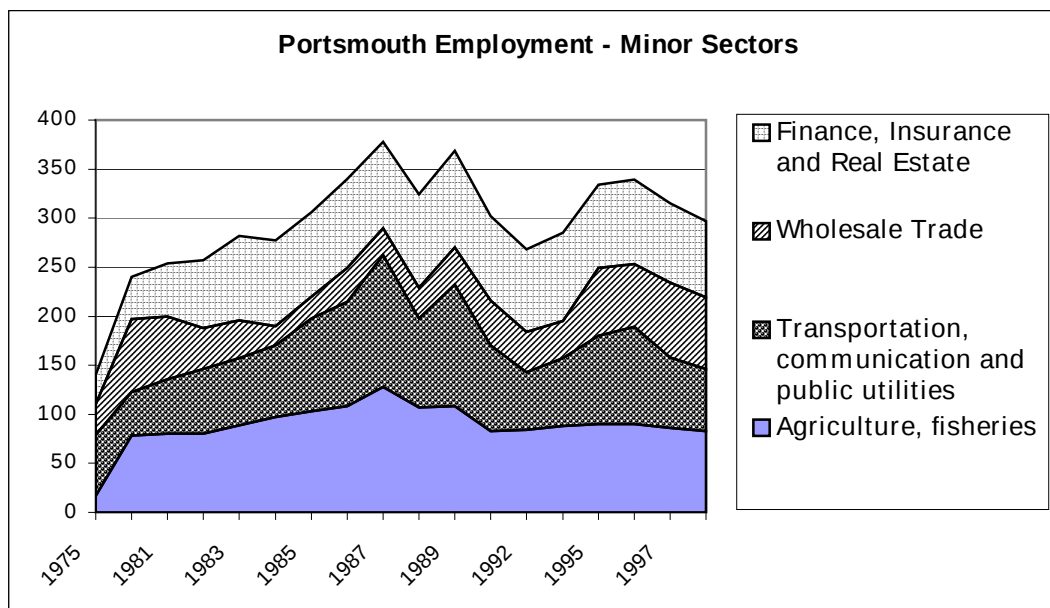
Figure 8



² Raytheon, primarily a research and development operation, is classified as manufacturing, since the end product is a manufactured item. Its employment was over 3,400 in 1988, but declined to under 900 only four years later.

As shown in Figure 9, other than manufacturing, Portsmouth has a relatively small proportion of employment on the Island. Reliance on a single sector can cause economic disruption, so diversification is needed.

Figure 9

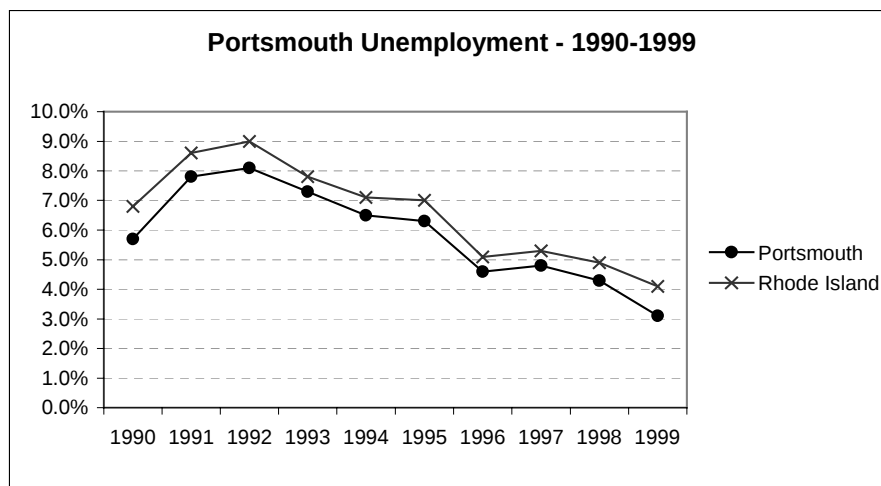


Unemployment

In the 1990-91 recession, unemployment in all three Island municipalities was significantly below the state average. Unemployment peaked in 1992. Unemployment in Portsmouth remained below State averages from 1990-99, and has maintained the lowest unemployment rate on the Island.

Unemployment data (figure 10) should not be confused with the above industry statistics. Unemployment pertains to the residents of the Town, while industry statistics (charts above) pertain to employment provided by companies located in Portsmouth.

Figure 10



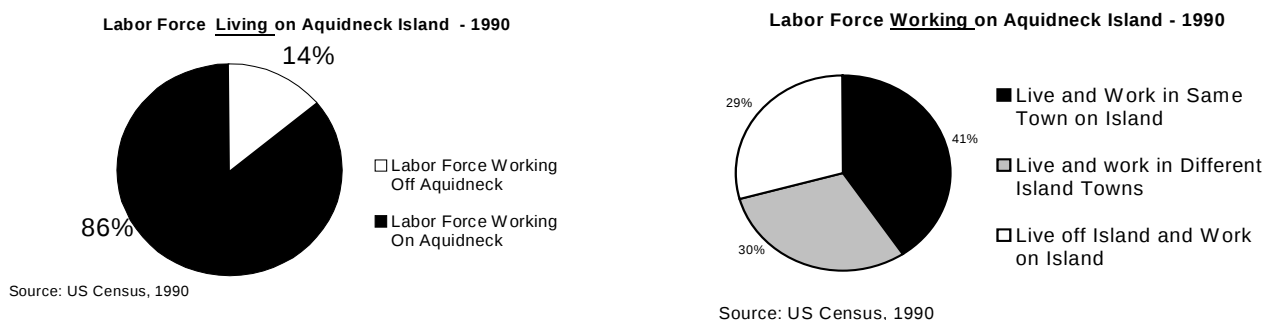
Resident Work Force & Commuting Patterns

In 1990, there were over 7,300 more jobs on Aquidneck Island than resident labor force. Thus, there was a net in-commuting of workers from off the Island to meet the staff needs of the Island's employers. This is largely due to the major employers, the Navy and Raytheon.

The 1990 Census found the following labor force characteristics:

- Labor force **living** on Aquidneck Island: 33,771 people;
- Labor force **working** on Aquidneck Island: 41,120 people;
- # of people (non-Island residents) that **commuted to the Island to work**: 12,000 + people;
- # of Island residents that **commuted to jobs off the Island**: < 5000 people;

Figure 11



Aquidneck Island communities are very interdependent. Many people who live in one municipality commute to work in another municipality on the Island. 72% of the Portsmouth labor force commutes to Newport or Middletown. But only 9% of Middletown's commuters (5% of its labor force) and 12% of Newport's commuters (4% of its labor force) go to Portsmouth. This data provides clear evidence of the lack of employment opportunities in Portsmouth.

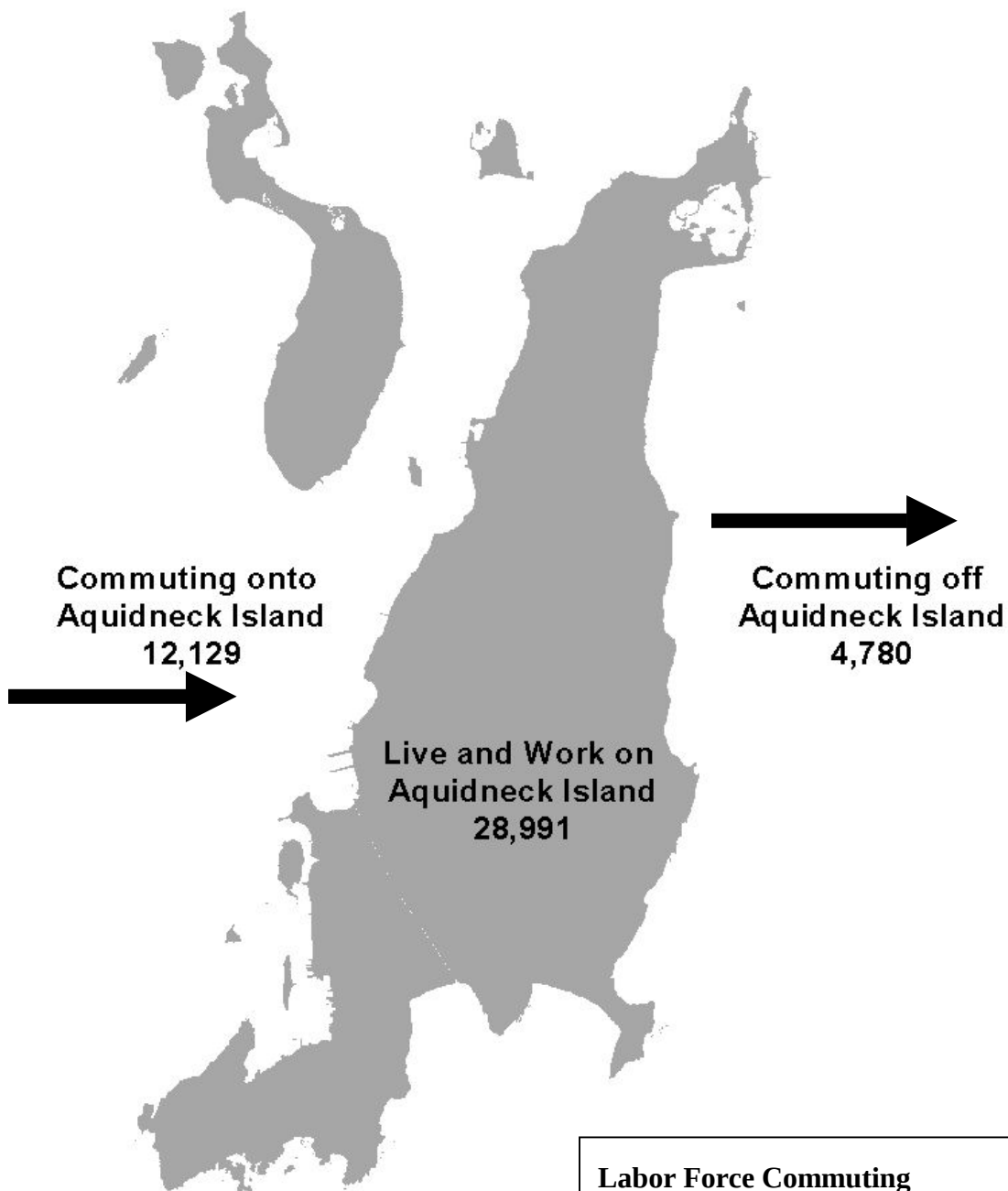
Table 1

Origins and Destinations for Commuting between Towns on Aquidneck Island		
Municipality	Destination of Out-Commuters	Origin of In-Commuters
Middletown	Newport (72 %), Portsmouth (9 %)	Newport (30 %), Portsmouth (24 %) Massachusetts (15 %)
Newport	Middletown (50 %), Portsmouth (12 %)	Middletown (37 %), Portsmouth (21 %) Massachusetts (11 %)
Portsmouth	Newport (40 %), Middletown (32 %) Massachusetts (11 %)	Massachusetts (24%) Bristol (14 %), Newport (13 %)

The following maps illustrate commuter patterns to and from Portsmouth in 1990. Detailed in-commute and out-commute information for each municipality are based on the 1990 Census.

AQUIDNECK ISLAND

LABOR FORCE



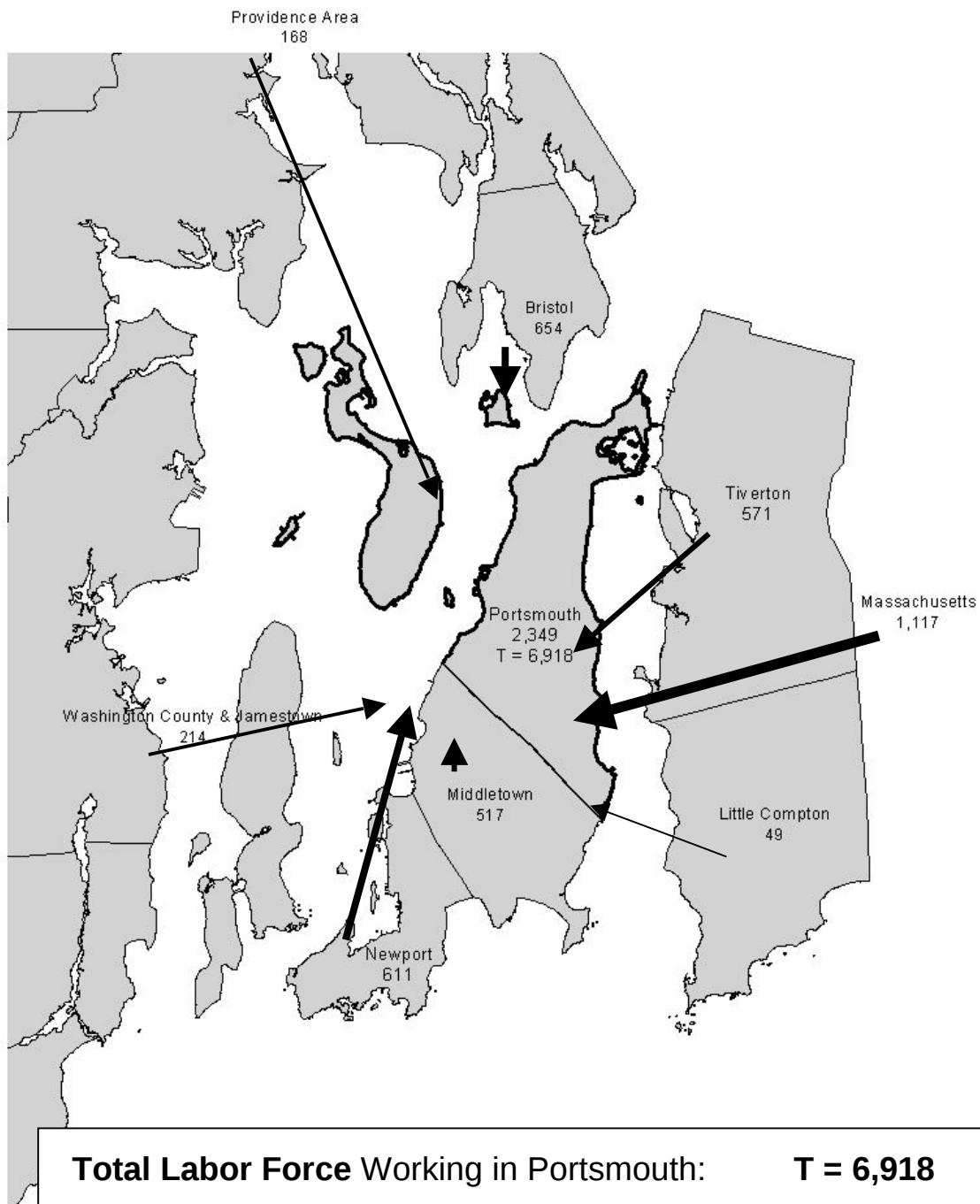
Labor Force Commuting	
Onto Aquidneck Island.....	12,129
Labor Force Live and Work	
On Aquidneck Island.....	28,991
Total Labor Force Working	
On Aquidneck Island.....	41,120

Labor Force Commuting	
Off Aquidneck Island.....	4,780
Labor Force Live and Work	
On Aquidneck Island.....	28,991
Total Labor Force Living	
On Aquidneck Island.....	33,771

Source: US Census, 1990

PORTSMOUTH'S LABOR FORCE

In-Commuting Workers



Total Labor Force Working in Portsmouth: T = 6,918

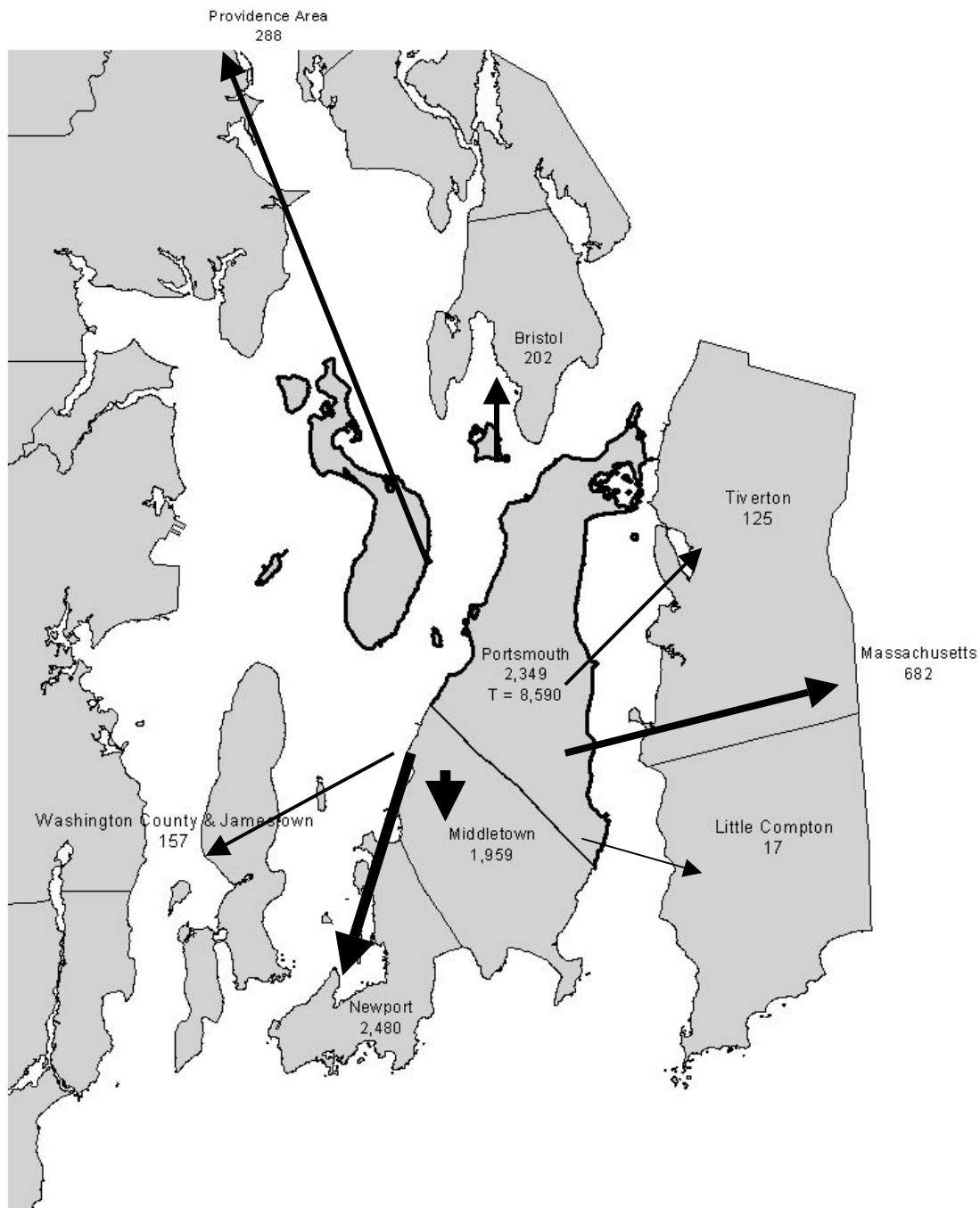
Labor Force Living & Working in Portsmouth: 2,349

Labor Force Commuting to Work in Portsmouth: 4569

Source: US Census, 1990

PORTSMOUTH'S RESIDENT LABOR FORCE

Employment Locations & Out-Commuting Patterns



Total Labor Force Living in Portsmouth: T = 8,590

Labor Force Living & Working in Portsmouth: 2,349

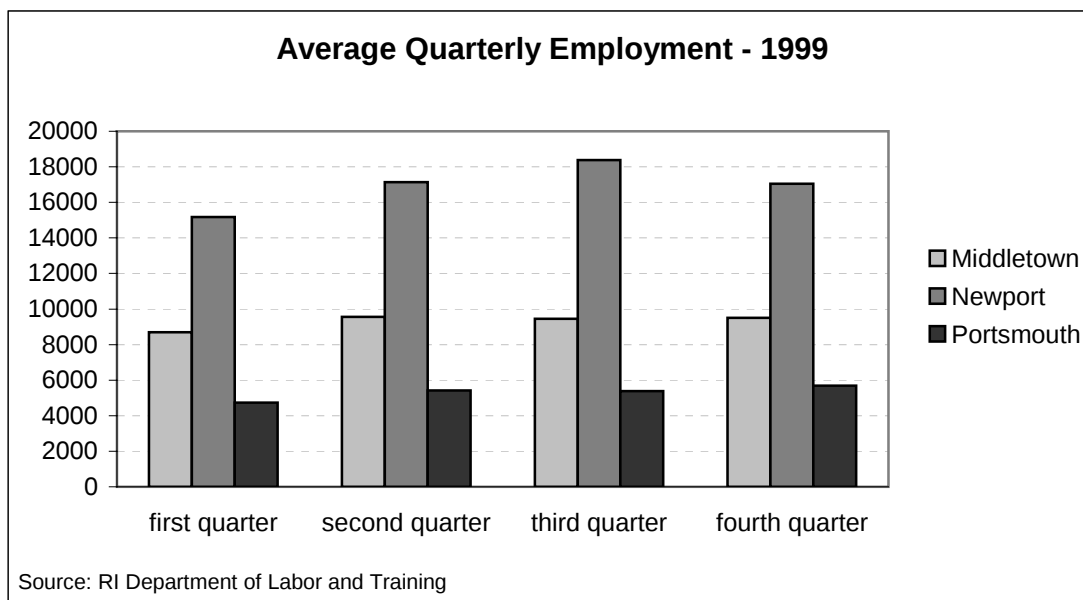
Resident Labor Force Commuting Out of Portsmouth: 6,241

Source: US Census, 1990

Seasonal Effects on Economy

The importance of tourism and summer recreation on Aquidneck Island's economy is reflected in strong seasonal employment trends. In 1999, between the first quarter (January – March) and the third quarter (July-September), employment increased over 8 % (>760 employees) in Middletown, 21 % (>3200 employees) in Newport, and 13 % (>630 employees) in Portsmouth.

Figure 15

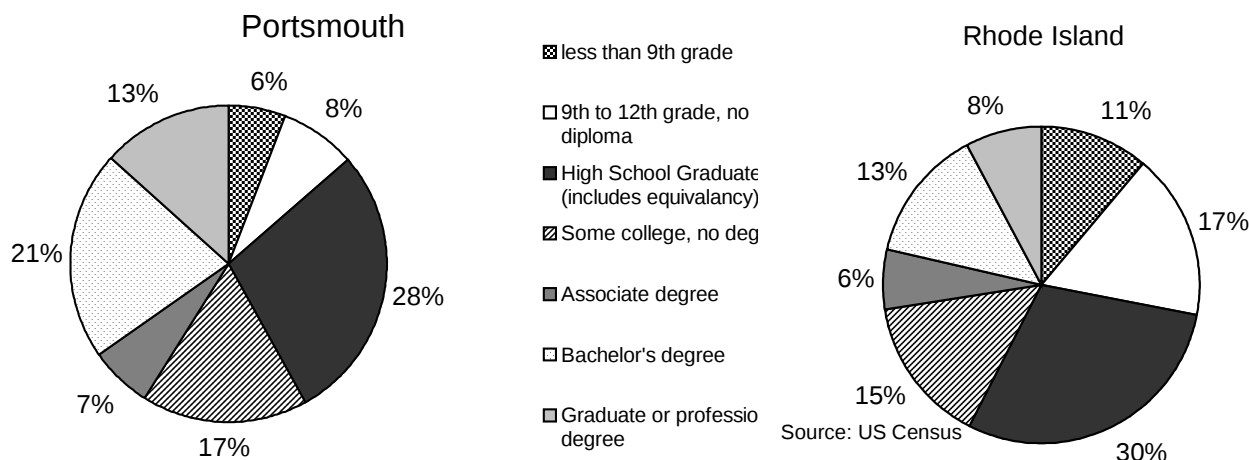


Educational Status of the Aquidneck Island Labor Force

Figure 13 shows that Aquidneck Island residents are very well educated in comparison to the statewide population. In 1990, approximately 85 % of all adults living on the Island had completed high school compared to 72 % statewide. College degrees (bachelor and advanced degrees) were held by 27 % of Middletown, 32 % of Newport, and 34 % of Portsmouth residents compared to 21 % statewide.

Figure 16 – Educational Status

Education Attainment – Aquidneck Island Municipalities - 1990



Revenue Streams

- Money flows into and out of the Aquidneck Island economy through several major pathways. Large inflows of money include:
- Navy payroll
- Navy contracts
- Tourism
- Convention and workshop participants
- Retirees
- Social security payments
- Foundation grants and funding
- State and Federal projects and grants
- Purchase of boats and boat repairs
- Exported goods and services
- Island residents who work off-Island

There are also several major outflows of money leaving the Island economy including:

- Non-Island residents who commute to their jobs on the Island.
- National and regional retail chains with stores on the Island.
- Non-Island businesses with major contracts and extensive business on the Island.
- State and federal taxes.

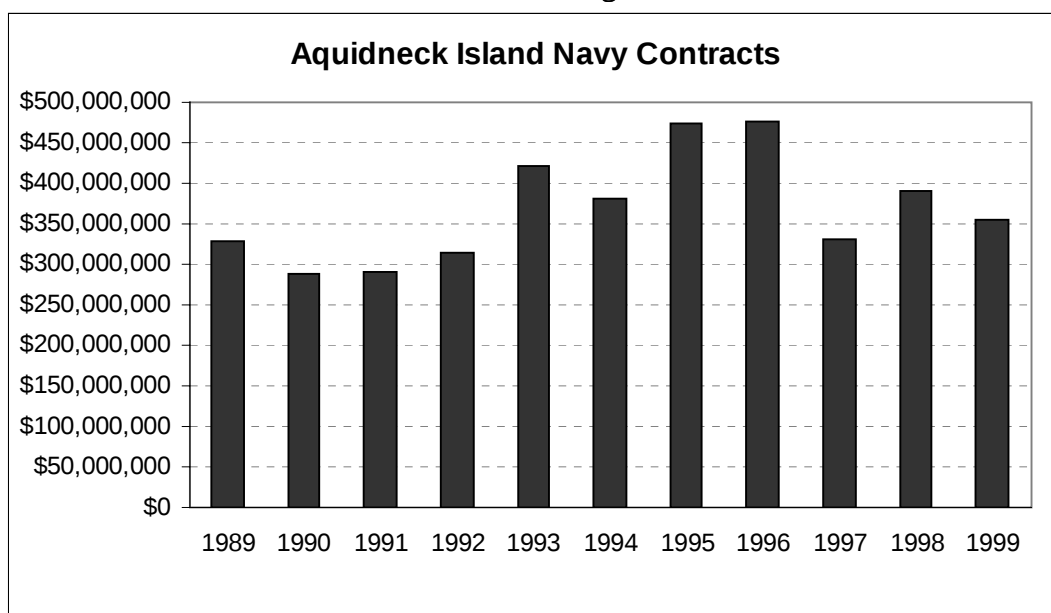
Navy Payroll

1998 Payroll for Naval Station Newport was:

- Nearly \$228 million for civilian personnel,
- \$71.6 million for permanent active duty military personnel, and
- \$91.2 million for students.

Total payroll: \$390.7 million.

Navy Contracts – Over the past 10 years Navy contracts funded from Aquidneck Island have ranged from just under \$300 million to over \$450 million. Variations in contract levels has a major impact on the local and regional economy.

Figure 17

Tourism economy Many Aquidneck Island businesses depend on tourists and visitors for their revenue.

While seasonal tourism certainly has an effect on traffic in Portsmouth, the lack of tourist-related businesses (lodging, restaurants, shops) means that tourism has a relatively small direct economic impact here. While there are insufficient data to determine how many Portsmouth residents are employed in the tourism industry, the fact that 28% of Portsmouth's labor force commutes to Newport³ is evidence of tourism's importance to Portsmouth residents.

Retail Sales – Sales tax reports indicate the amount of retail sales, which might be related to gifts, souvenirs, restaurant and bar meals and beverages.⁴ Rhode Island's 7 % sales tax collected represents sales of nearly \$114 million in Middletown, \$300 million in Newport, but only \$57 million in Portsmouth in 1998.

Social Security, Retirement Incomes, and Government Payments – 1990 Census reported that 12 % of Middletown and Portsmouth and 13 % of Newport residents were over 65 years old. In 1990, 22 % of Middletown residents, 25 % of Newport residents, and 23 % of Portsmouth residents received Social Security payments. Many Navy and other military personnel retire on Aquidneck Island because of the proximity to support services for military personnel. In 2000, there were 6600 Navy retirees within a 50-mile radius of Newport.

Large Employers - the following companies are the largest employers in Portsmouth included in the Rhode Island Economic Development Corporation's "Selected Company Listing." This database contains 46 Island employers with over 100 employees, but only 5 in Portsmouth

³ Source: 1990 U.S. Census

⁴ Retail sales are reported from the municipality where the sale occurred if the business is a local business without multiple stores in other municipalities or when a chain sells alcohol. Retail sales from chain stores that do not sell alcohol report from the municipality where their main Rhode Island office is located. Thus, retail sales are likely to be under-reported in municipalities with national or regional chain stores.

1000 + Employees

- Raytheon Electronics Systems

200 – 999 Employees

- Little Harbor Marine / Ted Hood Company

100 – 199 Employees

- Raytheon Service Company
- Visiting Nurse Services of Newport and Bristol Counties
- Hodges Badge Co /Image Award Ribbons
- Portsmouth Abbey School

IV. THE NEED FOR ECONOMIC DEVELOPMENT PLANNING AND PROGRAM**A. LONG-TERM NEED FOR ECONOMIC DEVELOPMENT**

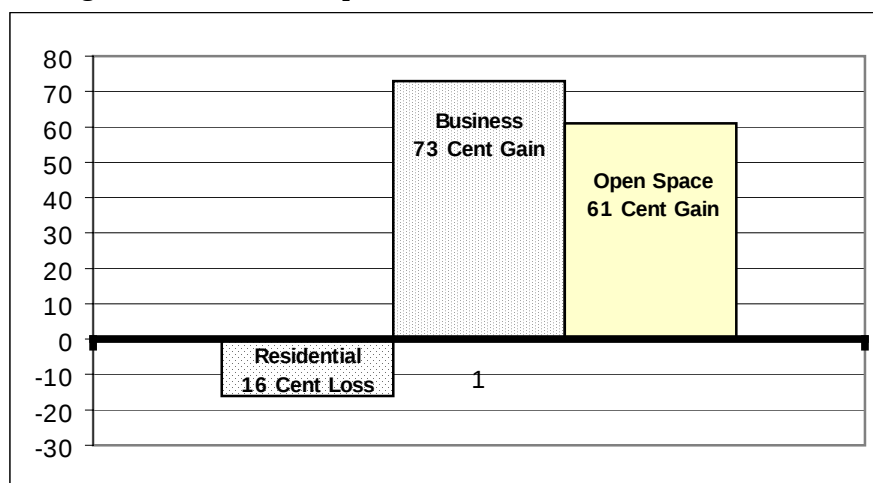
There are multiple reasons for a municipal economic development program now and during the next twenty years.

1. Simple inflation increases costs and thereby increases the need for increased revenues. Depending on the current perception of local tax rates, and the real ability of property owners to pay their taxes, municipalities may or may not be able to maintain current levels of services solely via tax rate increases.
2. Uneven economic events, such as higher inflation, loss of a few major businesses or many small businesses (sources of jobs and taxes), recessions, etc. reduce sources of revenue and the ability of those remaining to pay their taxes (especially if they lost their jobs).
3. Major programmed (capital budget) or unprogrammed (emergency, bond issues for one-time expenses, recession, loss of expected State and Federal aid) expenses.
4. Economic development efforts are geared at maintaining and attracting “high profit revenue”. Business and industry does not demand as much in services as they pay in taxes. Any business type has multiplier effects, such as related business generation, and spin-off effects, like the ability of Town residents to pay their taxes and patronize consumer-related business.
5. Changes in the structure of the regional, national and world economy are causing severe long-term economic disruption. We feel it today as the defense industry, which plays such a vital role in the Island’s economy, cuts back, recession hits, and we find that we are in competition with the rest of the industrialized world.
6. The alternative to an economic development effort is a conscious decision to become a high-tax bedroom community.

B. CURRENT NEED FOR ECONOMIC DEVELOPMENT

Beside the obvious need for residents to have gainful employment and a reasonable standard of living, non-residential development (including maintenance of farms and open space) is needed to offset the costs of residential development, so that the Town may provide quality services at a reasonable “price” (tax rate). As detailed in a Cost of Community Services⁵ study done for Portsmouth in 1997, the average housing unit costs the Town \$1.16 for every \$1.00 of total revenue. Open space and non-residential development contribute more to Town revenue than they cost.

Figure 18 - Gain/Loss per Dollar Town Government Revenue

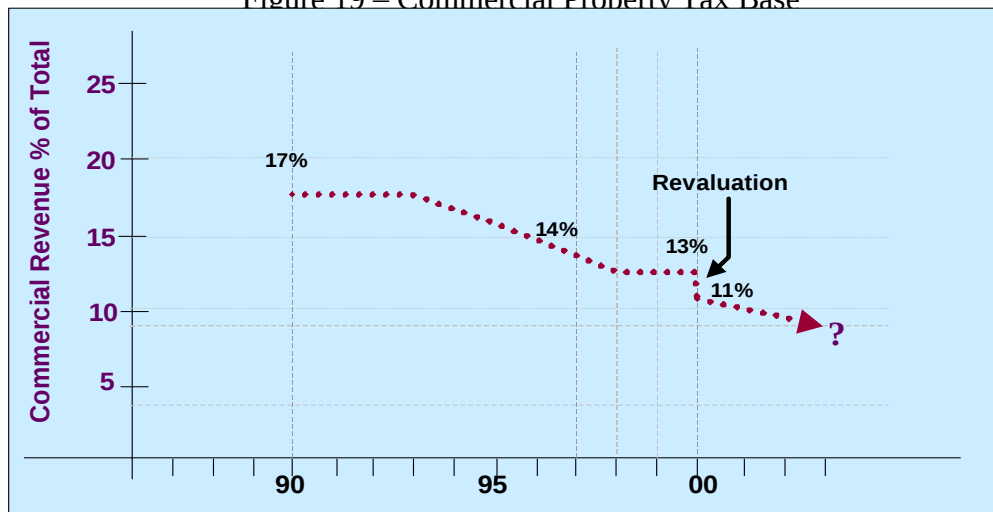


Therefore, the result of residential development outpacing non-residential development is higher property taxes. From 1990 to 2000, Figure 16 shows the dramatic Commercial & Industrial revenues declined from 17% to 11% of total tax base.⁶ This is not due to a loss of jobs; it is due to the rapidly expanding residential tax base and the relatively stagnant commercial tax base.

⁵ “The Cost of Community Services in Portsmouth, Rhode Island”; Johnson, Dr. Robert J.; 1997 Aquidneck Island Partnership.

⁶ Source of tables and graphs in this section: Portsmouth Economic Development Committee report, September 1999, as amended November 2000. Data source: Portsmouth Tax assessor records for year ending December 31, 1998 and 2000.

Figure 19 – Commercial Property Tax Base



A continuing effort to increase the number of jobs -- jobs that fit the Towns' character and the skills of its labor force cannot be ignored. The non-residential tax base has not grown during the last decade or two.

1. The last decade or so has seen the demise of four of the top five employers. Only the former Transcom building has been fully re-occupied (Hodges Badge and Visiting Nurses Association). The former Pearson Yachts facility is half-occupied by Albin Yachts. The Kaiser property is still vacant, and the former Weyerhaeuser property is being slowly converted to fishing and shipping related facility. Raytheon has declined from over 3400 employees in 1988 to about 1500 in 2000. None of these, except the former Transcom, have reached their prior level of employment.
2. Aquidneck Island faces an economic watershed as over-reliance on the defense industry has once again proven to be a mistake. This is a structural change like the Navy pullout in 1973. Transition and diversification are necessary.
 - a) In 1989 and 1990, Newport County lost 5,005 jobs out of an average labor force of 34,653 or 14.4%.⁷
 - b) In 1990, total wages in Newport County decreased by 0.4%, while the State as a whole increased by 6.9%.⁸
 - c) In 1988, 22% of the traffic over the three bridges to the Island was attributable to the three major defense industries (Naval Underwater Warfare Center, (now known as NUWC), and Naval Education and Training Center, (now Naval Station Newport), and Raytheon.⁹

⁷ AQUIDNECK ISLAND BUILD-OUT ANALYSIS, IEP, INC. MARCH 1991.

⁸ IBID.

⁹ IBID.

C. PUBLIC CONCERN OVER JOBS

1. The 1990 Portsmouth Citizen Advisory Committee (PCAC) survey (Question 28.7) asked people if their employment or that of their spouse will be affected by the defense reduction. A frightening 39% of the respondents said it would! ¹⁰

D. THE FEDERAL AND STATE ROLES IN ECONOMIC DEVELOPMENT

1. The Federal Role

- a) The Federal Government has not done a good job of planning for the economic future of the United States. Regardless of views as to why this has happened, there is no evidence that this will change.
- b) Historically, the federal role in local economic matters is through grant programs, the Small Business Administration (SBA) and Economic Development Administration (EDA). These usually require a local dollar match or the direct dollar participation of a business.

2. The State Role

- a) The R.I. Economic Development Corporation (RIEDC) is a source that can be tapped for information, financial assistance to business, and marketing. It is the Town's responsibility to tap RIEDC resources.
- b) Other State agencies can have major, though indirect, impact on economic development.
 - (1) The Department of Transportation (DOT) has programs to improve roads, access points, and rail links that can mean the difference in a community's locational attractiveness.
 - (2) Businesses and plants of any significant size need sewage disposal. Although Portsmouth cannot afford a traditional central sewage treatment system, new and emerging technologies will be investigated in an effort to attract businesses without a significant burden on either the Town or the business.

3. The Local Role

- a) The Town should take the initiative in attracting new business and in helping existing business to expand.
- b) Existing economic development related programs generally rely upon the local government or local business to initiate the program and the process.

E. PUBLIC SUPPORT FOR ECONOMIC DEVELOPMENT EFFORTS

1. The 1990 PCAC survey Question 28 asked if Town officials should guide economic development efforts and asked three questions about support for

¹⁰ SEE APPENDIX-PCAC SURVEY RESULTS 1990 PORTSMOUTH CITIZEN ADVISORY COMMITTEE (PCAC) SURVEY (QUESTION 28.7)

specific types of growth (environmentally safe) to hold down taxes. The results supported environmentally safe development, except for convenience shopping.¹¹

- a) Over 82% strongly agreed or agreed that Town officials should guide economic development efforts to sustain growth in employment and the tax base by encouraging industry and commerce whose impact on the environment and character of the Town are “within acceptable limits.”
- b) 80% strongly agreed or agreed with holding down taxes with more environmentally safe industrial development within existing zoning.
- c) 65% strongly agreed or agreed with holding down taxes with more environmentally safe convenience shopping close to home.

V. OBJECTIVES

“A diversity of economic development strategies is the order of the day. Local Governments can assume a key role in helping to provide the necessary foundation for the successful implementation of many popular strategies. Labor force development, provision of adequate infrastructure, coordination among local academic institutions, technical and financial assistance for small businesses, and Governmental policies and regulations sympathetic to economic development needs are all areas where the decisions and actions of the Local Government play a leading role in determining economic development potential.”¹²

A. EMPLOYMENT

The objective is to achieve economic growth at a rate that maintains the ratio of employment in Portsmouth to the population at the same level as in January 1989.

Targeting a specific numerical objective is often useful. January 1989 is a good benchmark date. It is the most recent year for which we have full economic data from all relevant sources. It was after the big economic boom of the mid-80's but before the recession of the early 90's.

The estimated target ratio is 0.38 jobs per capita.

1. Provide a level of industrial employment to maintain a constant ratio of jobs to population. Desirable industries include: high-tech non-defense, marine, and aquaculture.
 - a) There is a major high-tech presence in Portsmouth and on Aquidneck Island, primarily related to the defense industry. Considerable potential exists for expanding these skills into non-defense markets.
 - b) There is a large and growing boat-building and related business sector in Portsmouth with considerable potential to win a large share of the worldwide custom yacht market.

¹¹ SEE APPENDIX-PCAC SURVEY RESULTS, 1990 PCAC SURVEY QUESTION 28, QUESTION 28.1, QUESTION 28.2, QUESTION 28.3, QUESTION 28.11,

¹² BLACK, HARRY; ACHIEVING ECONOMIC DEVELOPMENT SUCCESS: TOOLS THAT WORK; WASHINGTON: ICMA, 1991

- c) While there is little or no aquaculture presently, being an Island presents the potential for a presence in this growing industry.
2. Maintain a diversified labor base for targeted economic development types.
3. Public Support: 77% wanted employment opportunities to increase on Aquidneck Island over the next five years ¹³

B. TAX BASE

Maintenance of economic growth at a rate adequate to provide non-residential tax base at about the same percentage of the total tax base as of January 1989, a good benchmark.

The target ratio of non-residential to residential tax base is 19%.

1. Encourage enough new high-tech and marine oriented growth to provide most of the additional tax base required to maintain this industry to total tax base ratio. The remainder to be provided by commercial and service development.

As of January 2001, the following development potential exists (all \$ in millions):

Table 2 – Potential Economic Development Sites

<i>Property</i>	<i>Est. Incr. Valuation</i>	<i>Basis of Valuation Estimate</i>	<i>5 yr Probability</i>	<i>10 yr Probability</i>
Complete Clements' Market	\$1	EDC estimate	100%	100%
Carnegie Club	\$4	1X YR 2000 Value	100%	100%
People's Credit Union	\$0.6	People's Credit Union	100%	100%
Freedom Bay	\$7	2X Linden Tree + 4X Aquidneck Place	70%	100%
Kaiser Plant	\$6	Office & Light mfrg	50%	70%
Hood Marina	\$10	EDC est.-condos/marina	25%	50%
Portsmouth Business Park (15 Acres)	\$9.5	20% coverage @ \$75/sq ft.	25%	50%
Arnold Pt includes Mt Hope Terminal (158 acres)	\$33	10% coverage @ \$50/sq ft.	10%	25%
Rte 138 Industrial Lands (46 acres)	\$14.5	10% Coverage @ \$75/sq ft.	10%	25%
Rte 114 Industrial Lands (102 acres)	\$32	10% coverage @ \$75/sq ft.	10%	25%
32 Acre Melville Site (Navy)	\$4	Talaria \$/acre=42% Tal	70%	100%
West Side Plan (Navy Lands Only)	\$125	Town Planner Est.	5%	25%
Growth of Current Base (1% per yr)	\$1.5/yr	EDC estimate	\$7.5	\$15
TOTAL			\$44.2	\$98.6

¹³ See Appendix-PCAC Survey Results, Question 28.9 of the 1990 PCAC Survey

Some of the above may occur by themselves, especially if the Enterprise Zone program continues. Some, particularly the sites currently owned by the Navy and in the cleanup process, will need more help.

C. INFRASTRUCTURE CAPACITY

Maintain a balance between the facility and service requirements of industry and residents, and the availability of Portsmouth resources.

Implicit in encouraging a business to locate here is a promise that the infrastructure can adequately service their needs. This means both not overtaxing what we have and building additional capacity as needed.

D. COMPATIBLE AND DESIRABLE USES AND DEVELOPMENT PATTERNS

Limit economic growth to those forms of industry that are compatible with the environment. The natural environment is one of our major attributes with respect to economic development, not just as an aesthetic consideration. Desirable goals include:

1. Prohibit the establishment of any industry that would cause sewage or air pollution.
2. Prohibit the establishment of any industry that would pollute the coastal waters.
3. Prohibit the establishment of any industry that regularly emits hazardous materials.
4. Consolidate consumer services, retail establishments, and professional offices into designated cluster areas best suited to serve the needs of the population.
5. Encourage commercial development that enhances the historical, architectural, and aesthetic character of Portsmouth.
6. Prevent establishment of large, concentrated retail centers.
7. Maintain the agricultural industry close to its current level. Farms pay far more in taxes than they receive in benefits, and, as importantly, lend the type of charm and atmosphere that entices the business decision maker to locate here because he wants to live here.

VI. IMPLEMENTATION

A. GUIDELINES FOR COMPATIBLE USES

1. Consider actions to assist in establishing an aquaculture industry.
2. Restrict additional neighborhood retail facilities to those necessary to provide service within a reasonable service area of living centers.

- a) Do a retail market analysis to determine the total square footage supportable by a radius area and zone just enough land commercial.
- b) Zone for cluster/non-sprawl commercial use (i.e., limit strip development).
 - (1) Limit existing commercial zones that are not among the targets to just the areas now zoned as commercial.

B. REGULATORY INITIATIVES

1. Encourage diverse industrial developments to be planned and developed as an integral unit to encourage light industry. Consider ordinances that would encourage an "incubation facility" for small "start-up" companies. All ordinances should provide for control of the environmental impact.
 - a) Actively encourage the coordination of the efforts of major landowners in the Kaiser-Pearson-Weyerhaeuser industrial area.
2. Encourage "Home Occupations" or "Cottage Industries" as a means of keeping skills from leaving the area.
3. Incorporate specific hazardous materials limits into zoning statutes.
4. Require landscaping and encourage aesthetic frontal appearance of all new commercial and industrial development. The attractiveness of the Town for business is strongly affected by its appearance.
 - a) Current regulations require little in the way of aesthetic treatments that would make the appearance of these developments more compatible with the character of the Town. As most non-residents only know the Town by its main roads, and most commercial use is on main roads, the perception of the Town is often shaped by the aesthetics on the main roads.
5. Carefully zone for desirable industrial and commercial uses. (See Land Use Element V.A.)
 - a) The permitted uses list in the zoning ordinance should be those we wish to attract.
 - b) Prohibited uses should be those we do not wish to attract.

C. IDENTIFY THE LOCAL GOVERNMENT'S ROLE

1. Local Government must determine what role it can and wants to play. The models presented in the appendix entitled "Identifying the Local Governments Economic Development Role" are examined based upon the following: ¹⁴
 - a) The desired degree of control.
 - b) The amount of public funds the Town can invest.
 - c) Structure chosen appropriate for the goals set.

I. 14 CHAPTER 2 ACHIEVING ECONOMIC DEVELOPMENT SUCCESS: TOOLS THAT WORK, 1991: ICMA

II.

2. Recommended model for Portsmouth.
 - a) The Council may in the future wish to establish a partnership using the public-private model.
3. The recently created Economic Development Committee will help coordinate the views and activities of diverse groups involved in any economic development effort.
 - a) The Committee should particularly help coordinate the Town's efforts with those of the R.I. Dept. of Economic Development.
 - b) The Committee can undertake other studies and tasks, within whatever powers and limits are established for it by the Town Council.

D. COORDINATION WITH PUBLIC AND PRIVATE SECTOR

1. Participation with the State Department of Economic Development and others in attracting the appropriate kind of business.
2. Market the Town
 - a) Stress the Quality of Life Attributes, for example:
 - (1) Excellent schools.
 - (2) Low crime rate.
 - (3) Low drug use.
 - (4) Physical beauty of area.
 - (5) Boating and fishing.
 - (6) Proximity to Newport (because it's well known).
 - b) Stress Business/Labor Advantages, for example:
 - (1) Source of high-tech knowledge base on the Island.
 - (2) Skilled labor on and just off the Island.
 - (3) Low absentee rate.
 - (4) Good regional location for business.
3. Track Federal grants and tax programs.
4. Work with the State
 - a) Encourage and work with the State to provide the necessary infrastructure. Pursue the development of alternative modes of transportation, including various forms of mass transit, especially so that summer tourism traffic to Newport does not further degrade levels of service on main roads.
 - (1) Improvement of main streets.
 - (2) Changes of DEM regulations to allow alternative sewage treatment methods, so that industries that require sewage can consider Portsmouth.

- b) Formal liaison with RIEDC so that Portsmouth is an integral part of their thinking.

5. PRIVATE INDUSTRY

- a) Develop a business incentive. Consider and investigate inclusion of the following:
 - (1) Assistance with State or Federal Industrial Development Bonds (IDB's).
 - (2) Waiving and/or phasing in Inventory Taxes (done 1995).
 - (3) Phased in real estate taxes over several years (Done for new or added business construction as part of the Enterprise Zone in 1995).
 - (4) Coordination for businesses of the Jobs Partnership Training Act and the Targeted Jobs Tax Credit.
- b) Consider and investigate the inclusion of Special Assistance to Small and Start-up Businesses.
 - (1) Coordination of SBA loans and loan guarantees.
 - (2) Provision of low-rent space for business incubators by finding and utilizing existing under-used industrial, research and development and office space, public and private.
- c) Consider and investigate focusing special attention on the Weyerhaeuser, Pearson, Kaiser, Melville, and Portsmouth Business Park areas.
 - (1) Inventory and assess resources of the physical environment.
 - (2) Assess the size and condition of water supply lines, plus the availability of public water.
 - (3) Encourage innovative mixed-use developments on these parcels, within and among them; modify Zoning Ordinances as necessary.

6. Community Support ¹⁵

E. EDUCATION and JOBS

- 1. Strengthen and/or create a regional vocational school with training programs subject to existing and anticipated job skill opportunities. Student categories should include not only high school and post high school, but also re-trainees.
- 2. Support public and private efforts at retraining and business conversion away from the defense industry.
- 3. Work with RIEDC and others to create new job opportunities for our labor base.

¹⁵ See Appendix- PCAC Survey Results, Question 28.8 Of The 1990 Pcac Survey: 82% agreed with fostering relationships with private, State, and regional development organizations.

F. INFRASTRUCTURE

1. Plan utilities and services development to meet the requirements of targeted businesses.
2. Alternate Sewage Treatment Facilities
 - a) Encourage the State to develop standards for alternate sewage treatment methods, biological and other innovative methods, which would allow industrial development without requiring heavy municipal investment.
 - b) Help plan utilities and services development to meet industry needs.
 - c) Designate areas, in cooperation with DEM and the Coastal Resource Management Council (CRMC), where industrial plant sewerage systems can be built.
3. Public Water Supply
 - a) Provision of public water to targeted economic development areas is absolutely essential.
 - b) The Portsmouth Water and Fire District is strongly encouraged to:
 - (1) Work with the Town to estimate the water supply needs of targeted areas for targeted uses.
 - (2) Plan improvements needed to bring sufficient water to the sites, in accordance with its 1988 Capital Improvement Program.
 - (3) Make any changes in their own regulations and policies, needed in coordination with Town's economic development efforts.
4. Reliability of Electrical Power.
 - a) Consult with Eastern Utilities and the Public Utilities Commission on the current power grid, future needs.

G. FINANCIAL INCENTIVES

There are many financial assistance tools that Portsmouth could use to attract business. A business may receive from the Town Council certain economic assistance.

1. In January 1995, the Town was awarded a State Enterprise Zone for about 2/3 of the Town. In 1999, the area was amended to include virtually every commercially and industrially zoned parcel in Town. The Enterprise Zone offers the following financial incentives to growing businesses:
 - a) A RI State Income Tax Credit of 50% of wages paid in the year of hire to new positions that are filled by RI residents, up to \$10,000 per new hire. This increases to 75% up to \$15,000 for residents who reside in an Enterprise Zone.
 - b) Tax Assessment on new, renovated or expanded businesses buildings is phased in over six years. Tax on added value is zero in the first year, 20% in the second, etc.

H. ECONOMIC DEVELOPMENT COMMITTEE

The Town created the Portsmouth Economic Development Committee in 1991. The views and activities of diverse groups were included. It has prepared a vision and approach for economic development in the Town, within the context of the parameters set forth herein. This Comprehensive Plan element includes some of the elements of the outcome of this study. Summaries of further enhancements to the economic development approach will be included in future amendments to this Plan.

WATER QUALITY

I. GOAL

Guide land development with respect and protect our environment. Protective measures should ensure that our drinking water is plentiful and of the highest quality.

NOTES: Readers of this section are particularly referred to maps #6 – 11 plus 39 - 41.

II. DEFINITIONS

A. Drinking Water

The subject of this element is the quality of the water we drink. Though Portsmouth does not own the drinking water supply (it purchases most of it through the Portsmouth Water and Fire District) the quality of the drinking water is very much affected by land use practices surrounding the reservoirs. Addressed herein is the quality of drinking water supplied prior to treatment and distribution.

B. Overlay Zone

A district established in a Zoning Ordinance that is superimposed on one (1) or more districts or parts of districts and that imposes specified requirements in addition to but not less than those otherwise applicable for the underlying zone.

C. Best Management Practices (BMP'S)

Physical design, in structure, development and ongoing management measures which can be taken to protect the environment from potential pollution or other degradations. BMP's are developed for specific types of development (like earth moving, street runoff, septic systems, etc.) and applied as appropriate.

III. THE NEED FOR PROTECTION OF OUR NATURAL RESOURCES

A. Drinking Water Quality

“Water. It’s a salesperson’s dream product. It has the single most universal and effective sales pitch: ‘Without it, you die. In a list of life necessities, it outranks food, clothing and shelter. It requires no elaborate introduction. We all know that while 70 percent of our bodies are water, only one percent of the water on earth is drinkable.”¹ It takes no further explanation to know that protecting the quality of our drinking water is a survival issue.

1. Portsmouth gets its water supply from the Newport and Tiverton (Stone Bridge) systems. The water provided us by the Newport system comes from surface water

¹ N.E. MONTHLY, JULY 1990.

generated in Portsmouth and water piped from Tiverton (Nonquit Pond and Watson Reservoir) directly to St. Mary's Pond in Portsmouth. In the future an increasing percentage of the Town's total water supply will come from the Newport system, meaning an increasing portion of the water we drink will sit in Portsmouth a while before it comes to our homes. (As of 1999, the Portsmouth Water and Fire District received 100% of its water from the Newport system.)

2. While we can only suggest control of water pollution in Tiverton, we can control it here.
3. Pollution of our precious water supply is mainly a direct result of the nature of land uses within the watershed. Therefore, it is important to carefully control the use of land in our watersheds. Without appropriate measures being taken now, there may be a significant degradation of water quality. Luckily, Portsmouth has not had much development in its watershed districts to date -- but there are today few controls in place to prevent land uses that can destroy our water quality.
 - a) The most insidious threat to water quality can be grouped under the term "Non-Point Pollution". Non-point source pollution refers to the many diffuse sources of sediments, toxic contaminants, nutrients, and pathogens that come not from an identifiable "pipe outfall" (such as industrial discharges to streams), but from septic systems, road runoff, eroding soil surfaces, chemicals used on home lawns and in agriculture, underground storage tanks, salt piles, and other areas affected by human use.
 - b) Leaking Underground Fuel Storage Tanks (LUSTS) present a more direct threat to groundwater and water supply contamination. As of 1999, there were 19 LUSTS in Portsmouth. Fortunately, none are located in the watersheds of the three reservoirs in town.
 - c) The Watershed Protection District portion of the Zoning Ordinance, described below and adopted in 1997, prohibits uses which commonly use products which would be harmful to the water supply.
4. Problems with Watershed Protection by the State
 - a) A more pro-active and comprehensive planning process for water resource management should be adopted that recognizes the regional nature and limits of this critical resource. This planning process needs to integrate water quality and quantity management (water and wastewater) and needs to incorporate development, operating, and regulatory parts with the State taking a stronger leadership role. The ongoing (2001) Source Water Assessment Program (SWAP) being done by RIDEM and the RI Dept. of Health is creating such a plan.
 - b) The Department of Environmental Management (DEM) does not have land use standards to address the sensitive nature of a public drinking water supply. DEM has limited Individual Septic Disposal Systems (ISDS) regulations for watershed areas.
 - c) DEM does not have the authority that the Department of Health (DOH) has under the provisions of the State "Contamination of Drinking Water Act." The formation of a DEM Division of Water Supply Management will address this.

- d) The DOH has responsibility for water quality oversight. Due to lack of staff at DOH, there has been very little enforcement of this legislation. The fine for polluting is only \$20 per day, not providing any economic incentive to comply with the law.
5. The 1989 Portsmouth Citizen Advisory Committee (PCAC) Survey ² provides an evaluation of drinking water quality.

IV. OBJECTIVES

A. Protect Our Groundwater and Surface Water Resources

1. Protect, preserve and maintain the quality of ground and surface water by regulating the land use and development of the land adjoining water courses and primary water recharge areas.
2. Existing surface and groundwater supplies are all subject to risks of contamination and catastrophic loss-both temporary and permanent. It is critical that these risks be managed so as to avoid them or minimize their impacts.
3. Prevention is the key to water quality protection.

V. IMPLEMENTATION

A. POLLUTION CONTROL

1. Identify and map sources of pollution-surface and ground water, public and private.
 - a) DEM has such a map that would be used.
2. Inventory existing pollution control facilities, both public and private.
3. Review State/local regulations controlling sources of pollution,
4. Identify kinds of facilities effective in controlling sources of pollution.
5. Consider registering in-ground tanks and monitoring septic systems.

B. NEWPORT WATER QUALITY PROTECTION PLAN

1. In December 1990 the Newport Water System prepared a Water Quality Protection Program. The plan includes:
 - a) Watershed Boundaries.

² See Appendix PCAC Survey Results, The 1989 Portsmouth Citizen Advisory Committee (PCAC) Survey (Question 17.1), The 1989 Portsmouth Citizen Advisory Committee (PCAC) Question 17,

- b) Identification of existing and potential contamination sources.
- c) Determination of available water quality protection measures including:
 - (1) Acquisition of buffer zones
 - (2) Diversion of stormwater spills
 - (3) Desirable land use regulations.
 - (4) Prioritization of actions.
- 2. Portsmouth should use this water quality protection program as a resource in developing its own water quality programs. Consult the Newport System and Portsmouth Water District for technical assistance as appropriate.

C. WATERSHED PROTECTION DISTRICT (WPD)

- 1. Regulations for development should be drafted in the near future. The district should designate two areas with differing permitted uses and other regulations. The reservoir/adjacent recharge area "A" zone, and an upland drainage area or "UD" zone. Each area has its own set of regulations and permitted uses which overlay regular zoning regulations.

2. Recommended Watershed District

A detailed explanation of the two districts and the five use risk classes, with examples, are contained in the appendix entitled "Resource Protection Overlay Districts."

- a) "A" ZONE -- The area close to the surface reservoir which is critical to the protection of surface and subsurface water supplies, and requires a high degree of protection from incompatible land uses.
 - (1) Within 500 ft. from the edge of the bank of a surface water body, or as otherwise shown on the zoning map, and
 - (2) Areas with very wet soils.
- b) "UD" ZONE -- The watershed area which is contributory to surface water runoff to the primary water bodies either through surface water runoff or groundwater movement.
 - (1) The watershed area is defined on a map prepared for the Newport Water Dept.
 - (2) On Prudence Island the watershed protection area has recently been delineated.
 - (3) This has not yet been done for Hog Island.

3. Recommended Land Use Classification System for Watershed Protection

Land Uses within a watershed district should be categorized by potential effects on water quality. All uses allowed, with certain exceptions, in the underlying zone are still allowed, but with conditions, depending on use classification.

For each of these classifications, there is a set of mandatory protective measures (conditions) required as part of any building or development permit. For instance, Class 1 uses would require only slight protective measures since they have little potential for pollution. Class 4 uses would require considerable protective measures since they have major potential for pollution.

The following categories, ranging from least to the most severe threat to water quality, were developed for the large Scituate Reservoir watershed area³ and provides an excellent means of approaching the problem. Both simplification and outright banning of certain uses is called for in Portsmouth.

a) Class 1--Maximum Protection--No Risk.

Examples: Open space, recreation.

b) Class 2--Slight Risk.

This category provides a substantial economic return to a landowner without posing a major risk to drinking supplies.

Examples: Certain crops, low density residential, utility lines, fertilizers and pesticide use.

c) Class 3--Moderate Risk

These uses require regulatory oversight and strict adherence to applicable mitigative measures to prevent contamination problems.

Examples: Much agriculture, medium density residential, low density commercial.

d) Class 4--High Risk

Threat of spills, leaks, or unauthorized discharge of domestic wastewater or hazardous materials from these land uses. Permitted only with extreme caution, if ever.

Examples are institutional, high density residential, medium density commercial and industrial.

e) Class 5--Severe Threat to Water Quality

These uses should not be permitted in the watershed area.

Examples are printers, dry cleaners, auto body, underground fuel storage tanks, toxic chemical storage, etc.

³ "Scituate Reservoir Watershed Management Plan - Draft", R.I. Division of Planning, 1990.

D. PURCHASE OF PROPERTIES OR DEVELOPMENT RIGHTS

1. An excellent long-term strategy for projecting drinking water supplies is the acquisition of properties and/or their development rights that are adjacent to the surface water reservoirs or tributaries thereto.
2. The Newport Water Department has embarked on exactly this strategy, using funds from the State's so-called "penny per hundred" program. Portsmouth should encourage and support these efforts.
3. The Aquidneck Island Land Trust has a mission to purchase development rights of farms and open space. Portsmouth should encourage and support these efforts. It may wish to consider partnering with the Land Trust in applications for funds to do so.

E. OTHER WATERSHED DISTRICT PROTECTION RECOMMENDATIONS

1. Cluster Development
 - a) Clustering is not appropriate for all new growth within the watershed, but it is a land management tool that could more effectively guide development to be less damaging to the watershed area. This is particularly true on larger parcels where septic systems and paved areas could be kept further away from the reservoirs than would be possible with conventional development.
2. Residential Density
 - a) Establish minimum lot sizes compatible with protecting the quality of the public drinking supply.
3. Maximum Impervious Surfaces
 - a) Pollutants such as sediments, toxic chemicals, oils, and metals accumulate on impervious surfaces. Precipitation on these surfaces has little or no chance to percolate into the ground, which, in turn, cleanses the pollutants. Instead the storm water carries the pollutants closer to the reservoirs.
 - b) As development exceeds an average of 10% impervious area in a watershed, the resulting surface water often effects stormwater runoff contamination.⁴
4. More Stringent Septic System Regulations
 - a) Septic systems are a source of nitrogen and phosphorous which stimulate the growth of algae in water bodies. Septic system effluent can contain viruses and other pathogens that can travel up long distances downgradient depending upon soil type and the direction of groundwater flow ⁵. Many household chemicals are found in septic systems effluent. Even subsurface leaching can seep into water bodies as many of these chemicals do not readily degrade in the soil, and can

⁴ RI Div of Planning - Scituate Reservoir Watershed Management Plan.

⁵ State Guideplan Element 715, Report 71, "Comprehensive Conservation and Management Plan for Narragansett Bay", 1991, p. 485.

travel long distances in the groundwater. State ISDS regulations do not address the special concerns of watershed areas.

- b) Great care must be taken in the location of septic systems within the watershed.
 - c) Extra large septic systems plus equal size reserve area for replacement systems should be studied for requirement in Zone UD of the Watershed Protection District.
 - (1) The concept of dual alternating septic systems, where the idle one is allowed to clean itself out over time, should be studied.
 - (2) Prohibit septic systems in Zone A.
5. Site Design Standards
- a) Environmentally sensitive site design standards (best management practices) should be required for all permitted uses, whether by special use permit or otherwise, in the Watershed Protection Overlay District. These standards should be developed to optimize water quality, as opposed to technical “make do” compliance, and to particularly directed at non-point source pollution.
 - (1) Vegetated buffer around the primary impoundments that comprise the reservoirs.
 - (2) Surface water runoff directed towards areas covered with vegetation for surface infiltration.
 - (3) Where the premises are partly outside the WPOD, locate potential pollution sources outside the District.
 - (4) Direct surface water runoff towards the lesser restricted district where the premises are located within two or more districts.
 - b) No cut zones to ensure that trees and vegetation in critical locations are not removed.
 - c) Parking lot controls.
 - d) Adopt/encourage other innovative site design techniques to control source of pollution, such as:
 - (1) Addressing Development Constraints with Respect to Site Features
 - (i) Avoiding steep slopes.
 - (ii) Minimizing impacts to groundwater.
 - (iii) Recognizing soil limitations.
 - (iv) Avoiding wetlands.
 - (2) Considering ‘Sustainable Development’ Principles
 - (i) Designing with topography and natural features.
 - (ii) Creative preservation of open space.
 - (iii) Compatibility with surrounding land uses.

- (iv) Compacting or clustering development.
- (3) Employing 'Mesi-scaping' Principles
 - (i) Planting or preserving native vegetation to minimize need for irrigation and use of chemical additives.
 - (ii) Limiting areas devoted to traditional turf/using alternative turf.
- (4) Use of Vegetative Buffers
 - (i) Creating or restoring vegetative buffers for non-point source pollution control and wildlife habitat.
 - (ii) Linking with existing buffer areas to protect stream and river corridors.
- (5) Orienting Layout to Minimize Pollutant Loading and Energy Consumption
 - (i) Minimizing dimensions of roadways; locating roads to reduce de-icing requirements.
 - (ii) Designing to accommodate wind, shadow, and solar features of site.
 - (iii) Considering alternative ISDS/treatment systems.
- 6. Development Plan Review
 - a) All proposed construction and development in the watershed should undergo formal Development Plan Review, per the above standards.
 - b) Small projects under some set threshold would be exempt.
 - c) This would be a function of a Town engineer, or, if none, the site review service of a consultant to the Town
- 7. Buffers Between Farms and Reservoirs
 - a) Vegetated buffers to be required between lands used for agricultural production of all types and the reservoirs.
 - b) This requirement should be attached to Town's agricultural assessment program. Buffers should be in place at the time of application or renewal.

Best Technologies

The Town should keep track of the evolution of natural resource protection technologies, encouraging their use and incorporating in regulations as appropriate.

F. COORDINATION WITH MIDDLETOWN and NEWPORT

A considerable portion of the Watershed Protection District is in Middletown, and much of the water supply here goes to Newport. Policies and implementation efforts should be coordinated.

G. PRUDENCE AND HOG ISLAND-WELLHEAD PROTECTION PROGRAMS

1. There are no municipal wells in Portsmouth. There are six community wells (wells that serve a number of households) on Prudence Island, and two on Hog Island. These

- are privately owned, but serve a public purpose. There are a number of private individual wells, especially on Prudence Island.
2. DEM has a Wellhead Protection Program designed to prevent contaminants from entering groundwater resources supplying public wells. This program is designed to be interactive between the State and local governments. The Town will, and the Prudence Island Utilities Corporation is urged to work with DEM, on implementing the program.
 3. The principal elements of the Rhode Island WHP Program are as follows:
 - a) Delineation of the WHPA's by DEM.
 - b) Identification of known and potential sources of groundwater contamination within the WHPA's by the Town or supplier.
 - c) Development of management approaches by the local governments and by the suppliers to protect groundwater within the WHPA's and the incorporation of WHPA's into appropriate state regulatory programs.
 - d) Preparation of contingency plans by major public water systems in the event of well or wellfield contamination.
 4. Data and Plans for Prudence Island and Hog Island are contained in those elements.

NATURAL RESOURCES PROTECTION

I. GOAL

Protect Portsmouth's Freshwater and Shoreline Ecosystems and Habitats

Protect sensitive lands such as wetlands, swamps, coastal features, water bodies, wildlife habitats and flood prone areas from intensive development. Such lands serve as aquifers and natural pollution filters, provide flood protection, are used as refuges for wildlife and may have recreational value.

It is in the interest of the health, safety and welfare of the inhabitants of the Town to encourage protection of environmentally sensitive areas. Protection of the said features stabilizes and preserves real property values, encourages passive recreation and appreciation of aesthetic and scenic beauty, and safeguards the public from flooding, pollution and erosion.

NOTES: Readers of this section are particularly referred to maps #12 – 16 and 42 - 44.

II. DEFINITIONS

A. Environmentally Sensitive Areas, Sites and Features

The following are determined to be Environmentally Sensitive Sites and Features when present on or within buffer distances of mapped locations at or more than the threshold quantities.

1. Water resource, including perennial or intermittent water courses, ponds, lakes, reservoirs, retention basins and watersheds therefore, groundwater resources and exchange areas.
2. Wetlands, as defined in the R.I. Freshwater Wetlands Act.
3. Floodplains.
4. Coastal areas, including the 200 foot Coastal Resource Management Council (CRMC) threshold for the coastline, plus any further inland estuarine areas.
5. Highly erodible soils according to the US Dept. of Agriculture (USDA) criteria.
6. Steep slope areas.
7. Rare species habitats and exemplary natural communities (See maps #14 & 43 and the RIDEM Natural Heritage Program for data).
8. Watershed protection as defined in Water Quality element.
9. Forests, especially unique forests. Oakland Forest behind Oakland Farms is the only unique forest in Portsmouth. (See map #13.)

B. What is a Wetland?

1. A wetland is any wet area where the groundwater level is at or within 36" of the surface of the ground for a long enough period during the year to support a community of wetland type vegetation. Wet areas include any salt or fresh water marsh, meadow, swamp, or bog.
2. Areas which should be subject to protection under the Act cover much more than land where you might get your feet wet. Also included are all related buffer areas such as banks, dunes, beaches and flats.
3. Land subject to flooding.

C. Why are Wetlands Important?

1. Left in their natural state, wetlands provide many free services.
2. These low areas provide floodways to channel storm waters and act as a buffer to prevent storm damage to nearby roads and buildings. These functions minimize the need for extensive engineering systems and sea walls. Wetlands provide temporary storage of flood waters, allowing floods to slowly recede and, in fresh water wetlands, recharge the groundwater aquifer.
3. Directly or indirectly, some resource areas serve as sources of public or private water supply.
4. The wetland can purify the water it receives. Wetlands provide natural settling ponds whose vegetation traps sediments.
5. Vegetated banks bind the soil, preventing erosion caused by wave and surface water flow. Both banks and dunes, left in an undisturbed state, perform the same services as do truckloads of sand.
6. Beaches, dunes, and coastal banks are dynamic systems that are continually shifting. Our construction activities must be planned carefully in these areas to allow this shifting to occur.
7. Wetlands are valuable to wildlife as a food source, nesting area and protective cover.
8. Shellfish beds and commercial and recreational fisheries are dependent on healthy estuaries and salt marshes.

D. Non-Point Source Pollution

Much of what we are trying to protect these environmentally sensitive areas from can be grouped under the term "Non-Point Pollution". Non-point source pollution refers to the many diffuse sources of sediments, toxic contaminants, nutrients, and pathogens that come not from an identifiable "pipe outfall" (like industrial discharges to streams), but from septic

systems, road runoff, eroding soil surfaces, chemicals used on home lawns and in agriculture, underground storage tanks, salt piles, and other areas affected by human use.

E. Overlay District

A district established in a Zoning Ordinance that is superimposed on one (1) or more districts or parts of districts and that imposes specified requirements in addition to but not less than those otherwise applicable for the underlying zone.

III. THE NEED FOR TOWN ACTIONS TO PREVENT AND REDUCE POLLUTION

- A. The protection of environmentally sensitive resources is important to the sound planning and development of the community.
- B. Continuing pressure to develop has made economically attractive the development of properties previously considered not feasible for development due to physical conditions.
- C. Development in environmentally unsuitable areas can pose a threat to human health and welfare, destroy wildlife habitats, and diminish aesthetic values.
- D. The application of existing State and local regulations have been inconsistently effective in assuring protection of sensitive geophysical features in well-planned development.
 - 1. The only references to wetlands in our current subdivision ordinance is section 3.8 in which the developer is required to obtain a statement from the Department of Environmental Management (DEM) that the RI Wetlands Bill is not violated. So we cede our power to the State.
- E. Problems with Resource Protection by the State.
 - 1. RI Department of Environmental Management (DEM).
 - a) While there is the prevailing notion that DEM is primarily responsible for protection of the environment in Rhode Island, the fact is that DEM regulations are not land use regulations and are aimed at minimal standards to prevent major pollution.
 - b) DEM's role is generally reactionary, not preventive.
 - c) DEM has the perception of being inconsistent in their rulings.
 - d) This inconsistency is often due to that fact that DEM does not have sufficient funding, particularly with regard to the 30 day limit on a determination of significance, and is often not able to adequately enforce its own regulations.
 - 2. Coastal Resources Management Council.
 - a) Many of the same problems as DEM.
 - b) Jurisdiction is within 200 feet of coastal features (the coastline, coves, saltwater marshes, etc.), plus specific inland areas identified in a RIGIS map dated June

1997. They also have jurisdiction over tidally influenced streams and certain uses regardless of location. Thus many municipalities have taken it upon themselves to provide additional protection through land use regulations.

F. Community Support

According to the Portsmouth Citizen Advisory Committee (PCAC) surveys, Portsmouth residents are very concerned with the quality of their environment.¹

IV. OBJECTIVES

- A. Identify all environmentally sensitive areas to be protected from development.
- B. Map and create overlay zones to protect complete ecological units by retaining natural areas large enough to:
 - 1. Serve as wildlife habitat.
 - 2. Store flood waters.
 - 3. Abate air and water pollution.
- C. Develop stringent Town regulations for protecting the land, wetlands and water from pollution.
 - 1. Identify where State or Federal regulations or the enforcement thereof are less than the standards desired for Portsmouth.
- D. Adopt zoning, subdivision and related ordinances, or revisions thereto, which protect sensitive lands from improper development.

V. IMPLEMENTATION

A. GENERAL PLANNING

- 1. Identify potential land to be protected. Identify the environmental value of each parcel.
 - a) Develop criteria for identifying important natural areas. Criteria could include minimal size, location, flood absorption capacity, pollution filter importance, habitat value, and value to the local ecosystem.
- 2. Encourage linkage of preserved natural areas to create a continuous network with significant buffering potential.
 - a) Develop a network to preserve key natural resources, especially in areas where open space can overlap with natural resource protection. (e.g., a linear park system).

¹ See Appendix PCAC Survey Results, Question 20 of 1990 PCAC Survey, Question 20.10 of 1990 PCAC Survey

- b) Where dedicated open space to provide a linkage is not available, negotiate conservation easements on private property to provide linkage.
- 3. Coordinate open space preservation efforts with environmental protection efforts and regulations. Clearly, there is a good deal of overlap. Areas with open space value are often environmentally sensitive areas as well.
- 4. Study existing State and Federal regulations and enforcement practices to avoid overlap or conflict in areas where those agencies are doing a good job, and to coordinate Town efforts with theirs.
- 5. Study existing State and local practices in and around sensitive areas.
 - a) Uncovered RIDOT salt piles should be covered.
 - b) Encourage RIDOT to increase its sand/salt ratio in watershed areas to 5:1.
 - c) Town direction of storm water runoff directly into sensitive areas without any mitigating measures.
- 6. DEM and CRMC generally do review applications prior to approval by the Town. However, there is today no formal follow-up or coordination between the Town and the State to see if changes in development plans mandated by one agency change the nature of the project presented to the other agency or the restrictions imposed. A checklist was added to the 1995 revised Subdivision Regulations in which the Planning Board is not supposed to formally accept a preliminary application for processing unless all permits from State agencies have been received. This has helped.
 - a) Proper procedures and record-keeping, formal liaison between the Town and these agencies, along with amendments to Town ordinances stating that the Town reserves the right to review DEM or CRMC directives, should do the job.
- 7. The Watershed and Wetland Protection Overlay District regulations shall be given a high priority of implementation and, if possible, be adopted by the Town within 18 months of the acceptance of the Comprehensive Plan. The Coastal and High Water Table protection districts are in the 2-5 year time frame. (The Watershed Protection District was incorporated into the Zoning Ordinance in 1997.)

B. COMMON REGULATORY RESOURCE PROTECTION DISTRICTS AND STANDARDS

- 1. Used to protect specific environmental resources and/or to prevent pollution impacts. The standards do not generally preclude all development but may stipulate restrictions on certain land uses, on densities, on methods of construction, or on performance of certain operations or activities.
- 2. Some sort of Resource Protection standards exists in all 39 Rhode Island communities as shown in Tables 1 and 2 in Section LU.
- 3. The major point here is there is an abundance of legal and planning precedent in Rhode Island for the imposition of these methods, and plenty of examples to follow.

C. RESOURCE PROTECTION OVERLAY DISTRICTS

1. This regulatory method concentrates on the protection of mapped environmentally sensitive areas. Resource Protection Overlay Districts, while protecting different things, all work the same way.
2. An overlay zone imposes a set of requirements in addition to those of the underlying zoning district on specific mapped areas. Overlay districts are commonly used to protect special environmental features.
3. Develop Threshold Sizes
 - a) Develop minimum sizes of sensitive areas to be protected and distances from them within which all building, development or other alteration of the land would be subject to Resource Protection provisions. DEM regulations are a starting point for minimum sizes to be protected by the Town. RIGIS maps show such areas as small as 1/4 acre (10,890 sq. ft.)
4. Development Plan Review
 - a) More comprehensive and detailed Development Plan Review regulations for proposed projects over certain threshold sizes with the Resource Protection Districts. (See model Development Plan Review Ordinance in Appendix).
5. Environmental Impact Review
 - a) Require an Environmental Impact Review (a written analysis by a qualified professional) of proposed projects over certain threshold sizes and any measures proposed to help reduce environmental impacts.
6. Specific Regulations to be Adopted or Added to Our Existing zoning, Subdivision and Building Regulations
 - a) Wetland areas should not be counted toward minimum lot size.
 - (1) This would reduce the amount of wetland that can be part of a developed site. As a result, development will be further away from wetlands and have that much less impact.
 - b) Strictly limit the amount of wetland area that can be filled.
 - c) Limited and/or prohibited building or impervious surfaces within set buffer distances of defined areas.
 - (1) Protects wetland from pollution.
 - (2) Protects basements from season groundwater flooding.
 - d) Mandatory vegetative buffers around all critical areas.
 - (1) Increases their flood holding and pollution abating capacity.
 - (2) Helps protect them from flooding or being polluted.
 - (3) Buffers Between Farms and Reservoirs.

- (4) Vegetated buffers to be required between lands used for agricultural production of all types and the reservoirs.
- (5) This requirement should be attached to the Town's agricultural assessment program. Buffers should be in place at the time of application or renewal.
- e) Minimum tree removal regulations.
 - (1) Beside aesthetic value, trees absorb tremendous amounts of water. They are essential to the way the land and wetlands function.
- f) Strict compliance with use of certain pesticides and lawn chemicals in protected areas.
 - (1) Don't kill the wetlands vegetation.
- g) Work with DEM and Soil Conservation Service. Consider banning certain pesticides.

D. Town Engineering Services

1. The Town should provide for hiring specific engineering services as needed, such as the U.S. Soil, Conservation Service's "Stormwater Management Plan Review and Inspection Service". It may need to consider the addition of a Registered Professional Engineer (P.E.) as Town Engineer, a person specifically trained in designing, reviewing and inspecting alterations to the land. In order to effectively implement these goals, these people would concentrate on:
 - a) Septic waste disposal where stricter than State requirements are necessary
 - b) Review plans for and inspect road construction, drainage systems, erosion control, wetland and coastal protection, and other environmental and civil engineering issues.
 - c) Design or oversee the design of all such projects done by the Town.

E. Public Education

1. Develop an educational information package for the public to be distributed at time of permit issuance.
2. The educational package should identify those things individual homeowners can do to lessen the impact on the environment. The package could address items like as tree cutting, excavation, setting of home, septic system maintenance, etc.

F. Open Space Preservation Methodologies

1. There are a number of methods detailed under the Open Space element that apply here and are not repeated.
2. While open space methods are aimed at minimizing the amount of land developed, the land kept open is often the same, as we would choose to protect for environmental reasons.

NATURAL RESOURCES - SEPTIC

I. GOAL

Minimize pollution by ensuring that existing septic systems are properly maintained and to ensure that new septic systems are properly set back from environmentally sensitive resources and properly maintained.

NOTES: Readers of this section are particularly referred to maps #17, 18 and #45.

II. DEFINITIONS

A. Failed Septic System.

1. Any sewage disposal system that does not adequately treat and dispose of sewage creating a threat to public health and/or environmental quality, as evidenced by, but not limited to, the following conditions:
 - a) Failure of a system to accept wastewater discharge or pickup of wastewater into the building sewer.
 - b) Discharge of wastewater directly or indirectly to a subsurface drain, surface drain, or surface water.
 - c) Effluent rising to the surface of the ground over or near any part of the septic system or downgrade from the absorption area.
 - d) Discharge of improperly treated effluent to groundwater including, but not limited to, inadequate separation from the bottom of the leaching system to groundwater or impervious layer and resulting in contamination of ground or surface water.
 - e) Condition of deterioration, damage, or improper design, to any Individual Septic Disposal System (ISDS) that would preclude adequate treatment and disposal of wastewater.
 - f) Pumping records that indicate very frequent maintenance. A system shall be considered in need of repair or alteration if the system has been pumped, or in need of pumping, four or more times in a twelve month period.

III. NEED FOR TOWN ACTIONS TO PREVENT AND REDUCE SEPTIC POLLUTION

- A. As explained further in the Water Quality Protection section, pollution from septic systems can have severe health consequences if it gets in the drinking water. But pollution into wetlands, the coast or our back yards, is also a very real, if less direct threat, to our health.
- B. We cannot absolutely prevent pollution from septic systems from happening. But in a Town like Portsmouth, where most of the easily drained land has been developed and most of the rest has severe restrictions for septic fields, we must be more on guard than

ever. There are steps our Town can take to help ameliorate existing situations and help prevent further problems from occurring.

- C. In 1979-80 a thorough study of the feasibility and cost of a full scale sewage treatment plant and collector lines was conducted. That cost, updated for inflation, would now be over \$60 million. Since then, Federal programs supplying 75%-90% of the cost have been cancelled.¹

1. This plan assumes that Portsmouth will not have a full scale sewer system within the 20-year planning period.

D. WHY ABSORPTION FIELDS FAIL.

1. Sewage absorption fields fail to work properly primarily because the soils either are poorly drained or are so compact that the absorption rate is very slow.
2. Poorly drained soils are saturated with water during wet weather; there is no space left for septic effluent.
3. If a soil has a very slow absorption rate, the effluent may rise to the surface even in dry weather. In wet weather the absorption field usually is a boggy mess.
4. If there is a seasonal high water table, or a shallow layer of soil over bedrock, the absorption field is flooded periodically.
5. If the groundwater level rises to the subsurface tile or pipe, the saturated soil cannot absorb effluent. This happens particularly where a portion of nearby wetlands has been filled in either directly or gradually from uphill erosion. When it rains, the water that used to collect in the wetland now might collect in your basement!
6. In Portsmouth there is an abundance of soils poorly suited to septic systems:
 - a) 86% of Portsmouth soils are rated as poor by the USDA Soil Survey² (See Development Constraints Maps #17 and 45)
 - b) 29% of Portsmouth has a high-water table (within 30" of surface³ (See ISDS Constraints Map.)
7. Inadequate stormwater drainage from State roads sometimes inundates domestic leaching fields.

¹ Metcalf and Eddy, "Wastewater Facilities Volume I", January 1981.

² U.S. Dept. of Agriculture Soil Conservation Service, "Soil Survey of Rhode Island", 1981.

³ See Resource Protection Overlay District Appendix for details

Table 1 - **HYDROLOGIC SOIL CATEGORIES IN PORTSMOUTH****HYDROLOGICAL GROUP A--Sand, loamy sandy, sandy loam:**

Low runoff potential, high infiltration, deep, well drained,

High rate of water transmission (> 0.30 in/min).

< 3.3 min./inch

% OF PORTSMOUTH SOIL: 6.75%

HYDROLOGICAL GROUP B--Silt loam or loam

Moderate infiltration rate, moderately deep, moderately

Well drained, moderate water transmission

3 - 7 min./inch

(.015 - 0.3 in./min).

5.13%

% OF PORTSMOUTH SOIL:

HYDROLOGICAL GROUP C--Sandy clay loam.

Low infiltration rate, has layer that impedes

Downward movement of water,

Low rate of transmission (0.05 - 0.15 in/min).

7 - 20 min./inch

% OF PORTSMOUTH SOIL: 77.10%

HYDROLOGICAL GROUP D--Clay loam, silty clay loam, sandy clay, silty clay, clay.

Very low infiltration rate, mainly clay, high swell potential,

Permanent high water table; claypan or hardpan at or near
surface, shallow soils over nearly impervious material;

Very low rate of transmission (0 - 0.05 in./min)

> 20 min./inch

% OF PORTSMOUTH SOIL: 8.77%

HYDROLOGICAL GROUP E -- Other unbuildable soils such as beaches and rock outcroppings.

% OF PORTSMOUTH SOIL: 2.25%

HIGH WATER TABLE

		ACRES	% of TOWN
A	WITHIN 18" OF THE SURFACE	2,905	19.23%
B	WITHIN 18" - 30" OF THE SURFACE	1,530	10.13%
		-----	-----
		4,435	29.35%

E. Problems with Septic Pollution Protection by the State

1. DEM policies, as set by the State legislature, are for minimum requirements.
2. Their requirements do not take necessarily into account nearby wetlands, or other environmentally sensitive areas, unless they are within 50 feet of the proposed septic field. The problem is that 50 feet may or may not be enough, depending on the

absorption capability of the soil. Many septic pollutants are known to travel 200 feet underground.

3. Previously, DEM could only respond after subdivisions have been approved, lots laid out, etc. New subdivision procedures adopted in 1996 require subdivision suitability approval from DEM, which lays out approximate septic locations, prior to Preliminary Plan approval.

F. Public Attention to Their Own Septic Systems

1. A number of questions about septic systems were asked by the Portsmouth Citizen Advisory Committee (PCAC) Surveys. The answers are revealing both about septic system problems and the average homeowners awareness of them.⁴ For example, 21% did not know if they needed their septic systems serviced, while 23% said it hardly ever needs service.
2. The Town Planner will have available information on how to properly maintain a septic system, and a Wastewater Management Plan will include a public education component.

IV. OBJECTIVES

A. Environmental Standards in Land Use Regulations.

1. Incorporate specific environmental standards in Town land use regulations.

B. Localized Treatment Systems

1. Work with DEM to plan, design and establish several small localized “community sewerage systems” in areas of existing failed systems.

C. Wastewater Management District

1. Study the feasibility of a Wastewater Management District program for areas with soils rated as poor for septic absorption by the Soil Conservation Service Soils Survey.
2. 92% of the homes use septic systems, 82% of the soils are poor for septic.

D. Development Plan Review

1. Require Development Plan Review for all developments over some threshold size, particularly in resource protection districts.

E. Retain On-Lot Systems Where they are Viable in the Long Run.

⁴ See Appendix, PCAC Survey Results, 1989 Survey Question 16), 1989 Question 16.1, Question 16.2 of the 1989 Survey, Question 20.6 of the 1990 Survey

1. Realizing that a full scale sewer system covering most of the Town is unlikely, Portsmouth must continue to rely on septic systems as the predominant mode of sewage disposal in most areas.
2. Adopt policies and programs which will keep septic systems operational and non-polluting.

F. Enforcement

1. DEM is responsible for enforcement on failed septic systems, but many have expressed frustration with enforcement. The Town should help improve enforcement through active coordination.

G. Water Conservation Program

1. Water conservation translates directly to less septic system usage, resulting in longer septic system life. See Water Supply element.
2. The Town should encourage DEM to increase its enforcement effort.

V. IMPLEMENTATION

An update of the Wastewater Facilities Plan for the Island Park and Portsmouth Park areas is under way. The conclusions of such a plan might also be applicable to certain other problem areas where the continued use of septic systems might be problematic.

1. A Wastewater Management Plan for the remainder of Town, featuring ways in which the continued use of septic systems would be environmentally sound, will be completed by May 2002.
2. Consider Adopting Town Requirements for Septic System Absorption Fields beyond DEM's
3. Study feasibility of prohibiting new sites for an absorption field within 150 feet of a stream or other water body (DEM's ISDS regulations call for only 50 feet).
4. Study feasibility of prohibiting new sites for an absorption field on floodplains.
5. Stricter septic system size and design regulations near wetlands, ponds and streams.
6. No conversion of summer houses to year around may be done without a determination by DEM that the septic system is adequate for year-round use.
7. Regulations should be adequate to protect watershed areas.

B. Consider Developing Localized Treatment Systems for Problem Areas

1. Specific Areas:
 - a) Sherwood Park

- b) Common Fence Point
 - c) Island Park
 - d) Portsmouth Park, the Water Street area and other areas should also be considered.
2. Technology Assessment and State Approval.
- a) Today, DEM policy is to allow only septic systems and full scale treatment plants.
 - b) Technologies exist and are being developed that might be implemented in these areas:
 - (1) Portsmouth should investigate such methods.
 - (2) DEM should recognize that, given the lack of Federal funds for full scale treatment plants and the difficulty of siting them, alternate methods must be incorporated.
 - (3) The Narragansett Bay Commission's experiment with a biological treatment plant is encouraging.
3. Maintenance Considerations.
- a) One of the major objections to localized treatment systems is that they require frequent inspection and regular maintenance.
 - b) Homeowners associations and the like have proven ineffective over the long run due to lack of a knowledgeable, responsible individual, as well as a lack of funds when major problems occur.
 - c) Therefore, the Town will have to take responsibility for these chores:
 - (1) The added expense can be recovered via special assessment district revenues and requiring developers to pay into a municipal fund for maintenance and equipment replacement.

C. Study Feasibility of Implementing a Wastewater Management District Program

A Wastewater Management District is a Four Part Program:

- 1. Identification of geographic areas in which soils are not well suited for septic systems.
- 2. Mandatory pumpout of septic tanks or proof of satisfactory inspection, usually every 2 or 3 years.
- 3. A Financial Incentive System.
 - a) The best method seems to be an annual payment to the Town which can be recovered upon satisfying the pumpout/inspection requirement.
 - b) Interest earned on these funds would be enough to make the program self-sufficient.

4. A Place to Dispose of the Effluent.

Requiring septic pumpout means that the Town would have the responsibility of providing a place to dispose of and treat the effluent. The two options are:

- a) Building our own facility or permitting a private facility in Town.
- b) Contracting with several nearby municipalities which already have sewage treatment plants.

5. The State's model ordinance is a good starting point.

D. Study the Relationship of Minimum Lot Sizes Required for Septic to Minimum Lot Sizes Required by Zoning

1. The 1981 Metcalf and Eddy Sewer Feasibility Study⁵ estimated the minimum lot sizes required to accommodate a 3-bedroom house with septic system in three types of soils:
 - a) “No Soil Restriction” has groundwater table more than 4 feet below the surface and an impervious layer (hardpan or ledge) more than 6 feet below the surface.
 - b) Soil Condition “A” has groundwater table within 3-4 feet of the surface or an impervious layer (hardpan or ledge) within 5-6 feet of the surface. The seepage (leaching) area is oversized by 1-1/2 times and the perimeter of the seepage area is 30 feet from all property lines.
 - c) Soil Condition “B” has groundwater table within 2-3 feet of the surface or an impervious layer (hardpan or ledge) within 4-5 feet of the surface. The seepage (leaching) area is oversized by 2 times and the perimeter of the seepage area is 30 feet from all property lines.

Table 2

Lot Size Required to Accommodate a Conventional On-Lot Septic System and a Three-Bedroom House

	Percolation rate min. per inch	MIN. LOT SIZE REQUIRED		
		No Soil Restriction	Soil Conditions A	B
Without area for future replacement	30	5,700	9,600	10,400
	40	6,000	10,900	12,000
With area for future replacement	30	9,600	17,800	19,600
	40	10,800	20,800	23,100

⁵ Metcalf & Eddy, Inc.; “Wastewater Facilities - page 3-17, Volume I”, January 1981.

- d) These figures assumed a 25 feet by 30 feet foundation with a 25 foot front setback and 10 feet side setbacks. Portsmouth's zoning regulations actually require significantly more frontage and a little bit greater setbacks. The above square footages are, therefore, minimums for the denser developments such as cluster.
- (1) Newer "Innovative/Alternative Technologies" are shrinking the size of the leach field needed for a septic system. The Town needs to keep up to date with the space requirements of these new technologies and plan accordingly.
- 2. It will be necessary to map Portsmouth's soils and overlay with Portsmouth's zoning current requirements to see how our zoning map accommodates septic requirements. Some adjustments to the Zoning Map may be necessary.

E. Enforcement.

- 1. Follow-Through on Enforcement
 - a) Too often DEM issues a notice of violation but fails to follow through on the notice by taking the violator to court.
 - b) The Town should institute a record-keeping system in which it will issue reminders to DEM when violations persist and enforcement has lagged.

F. Public Education

- 1. It is a fact that most people know little about their septic systems. In a Town with severe septic problems, a high level of knowledge in this area is critical, both for maintaining their own systems and supporting Town initiatives to solve problems.

G. Staff

- 1. The Town should have staff capable of:
 - a) Doing inspections.
 - b) Investigating the details of alternate systems.
 - c) Reviewing consultant reports, etc.

SOIL PRESERVATION

I. GOAL

To preserve the natural and functional characteristics of the soil in Portsmouth so it may be used by future generations without fear of pollution, flooding or other contamination.

NOTES: Readers of this section are particularly referred to maps #–19 and 20.

II. DEFINITION OF SOIL PRESERVATION

- A. Soil preservation is any effort to maintain the integrity of the soil so it can perform its natural functions, such as providing a proper nutritious base for vegetation and wildlife, absorb rain water, provide a stable base for roads and houses, etc.
- B. This section does not deal with preservation of open space nor protection of environmentally sensitive areas, both of which are covered elsewhere.

III. THE NEED FOR TOWN LAND PRESERVATION EFFORTS

- A. Damage to the soil can be classified in two basic types:
 - 1. Erosion and Sedimentation from:
 - a) Stormwater runoff.
 - b) Eroding soil surfaces, particularly at construction sites.
 - 2. Pollution from:
 - a) Chemicals used on home lawns.
 - b) Chemicals disposed of in the septic system.
 - c) Chemicals used in agriculture.
 - d) Underground storage tanks.
 - e) Salt piles.
 - f) Hazardous waste.
 - g) Other areas affected by human and animal use.
- B. Erosion is the combined actions of beating rain and flowing water. This action removes continuous layers of soil from fields. Erosion causes more erosion because it wears away vegetation and topsoil that absorb water and retard water velocity.
- C. Pollution seeps into groundwater and wetlands, kills vegetation (including vegetation that helps absorb septic effluent) and can make land, even at some distance, unsuitable for growing.

- D. The State and Federal governments have a limited regulatory role in soil preservation. They concentrate on pollution that may negatively affect the particular environmentally sensitive areas that they are mandated to protect and particular types of pollutants, like hazardous waste and underground fuel storage tanks over 1100 gallons, which are regulated by the Department of Environmental Management (DEM).
 - 1. The U.S. Soil Conservation Service, of course, plays a major advisory role with respect to farm soil preservation and erosion, but has no regulatory powers.
- E. Except in specific areas, the State and Federal Governments do not have the authority to:
 - 1. Protect your house or lot from erosion or pollution caused by construction or development in a neighboring lot.
 - 2. Protect the wetland from filling up with sediment and displacing water that then may end up in your basement.
 - 3. Have a role in preventing trees from being cut down.
 - 4. Have a role in preventing eroded soil from a nearby construction site ending up in the street or in your yard.

IV. OBJECTIVES

- A. Reduce and control erosion and sedimentation in order to minimize its effects both on surrounding properties and the source site.
 - 1. Reduce and control stormwater runoff from roads and drainage systems.
 - 2. Reduce and control stormwater runoff from agricultural uses.
 - 3. Reduce and control soil erosion from construction sites.
 - 4. Reduce and control runoff from highways and work with the State to map drainage to see where it is directed.
- B. Reduce hazardous waste and pollution.
 - 1. At the household level.
 - 2. At the commercial and industrial level.
 - 3. At the agricultural level.

V. IMPLEMENTATION

- A. Stormwater Runoff Regulations
 - 1. Adopt a stormwater management ordinance which:

- a) Applies to all existing Town and private roads and facilities, construction including building permits, subdivisions and zoning decisions.
- b) Requires that storm water devices be installed.
- c) Establishes management requirements.
- d) Establishes maximum impervious surface limits.
- e) Mandates innovative low-tech stormwater controls.
- f) Utilizes available natural buffering capacity.
- g) Requires adequate landscaping
- h) Adopts thresholds and design standards for:
 - (1) Infiltration trenches.
 - (2) Filter strips.
 - (3) Grassy swales.
 - (4) Minimum tree and vegetation clearance.
 - (5) DEM is drafting a design and installation manual which could be used.
- i) Encourages farmers to adopt many of the above practices, especially the natural devices above which can be placed at the bottom of hills.
 - (1) Considers regulatory actions if they prove necessary.
 - (2) Encourages farmers to utilize Soil Conservation Service assistance in developing conservation management plans.
 - (3) Promotes regional stormwater management planning through the development permitting processes where feasible.

2. Zero Runoff Provisions

- a) These regulations are contained within storm runoff regulations. They require any increase in runoff or rate of runoff to be contained within the development. Quite often this causes the designation of a “drainage lot” or an easement on a parcel, dedicating a section to drainage. Portsmouth does not have this type of regulation.
 - (1) It is important that road drainage has “a place to go.” This “place” has often been a nearby public or privately owned stream or wetland. The problem is we are running out of acceptable “places” for the drainage to go, and the definition of “acceptable” is becoming more stringent. Open drainage ditches are specifically not allowed.
 - (2) Zero Runoff Provisions are common and generally regarded as effective in preventing off-site environmental or flooding damage.

B. Soil Erosion and Sediment Control Ordinance

- 1. The State’s Model Soil Erosion and Sediment Control regulations were adopted by the Town in 1993. It:

- a) Applies to any disturbance to the terrain after determination of applicability based upon established criteria, including building permits, subdivisions and zoning decisions.
 - b) If applicable, require submission of an erosion and sediment control plan which contains enough information to form a clear basis for review and to assure compliance.
 - c) Requires that erosion and sediment control devices be installed.
 - d) Establishes management requirements.
 - e) Mandates innovative low-tech stormwater controls.
 - f) Utilizes available natural buffering capacity.
 - g) Sets thresholds and design standards including:
 - (1) Due regard for natural drainage and topography.
 - (2) Steep slopes avoided as much as possible.
 - (3) Minimize the grade of slopes created.
 - (4) Post development runoff rates should not exceed pre-development rates.
 - (5) Original boundaries, alignment, and slopes of watercourses preserved to the greatest extent feasible.
 - (6) Drainage is directed away from structures and utilities.
 - (7) All drainage provisions adequate to handle stormwater runoff, including runoff from tributary upstream areas which may be outside the project site.
 - (8) Drainage facilities installed as early as feasible during construction, prior to site clearance, if possible.
 - (9) Fill and stockpiles located near watercourses suitably protected from erosion.
 - (10) Temporary vegetation and/or mulching used to protect bare areas and stockpiles from erosion during construction. Expose the smallest areas feasible at any one time. Disturbed areas protected during the non-growing months.
 - (11) Permanent vegetation placed immediately following fine grading.
 - (12) Trees and other existing vegetation retained as feasible.
 - (13) All areas damaged during construction re-sodded, re-seeded, or otherwise restored. Monitoring and maintenance schedules, where required, as predetermined.
2. “Best Management Practices” (BMP’s) require a builder or developer to show that the land alteration, drainage and flooding control, etc. methods he/she intends to employ are the best practical measures for the site.

Encourage farmers to adopt many of the above practices, especially the natural devices above which can be placed at the bottom of hills.

- a) Consider regulatory actions if they prove necessary.

C. Maximum Tree Removal

1. Inclusion of maximum tree removal regulations as specified under the Land Use, Resource Protection and Water Quality elements. Maintenance of trees is also critical to this section, as trees hold the soil, and absorb both groundwater and air pollution.

D. Local Underground Storage Tank (UST) Regulations

1. Adopt a local underground storage tank ordinance which:
 - a) Requires registration of all underground storage tanks.
 - b) Requires periodic testing of those in watershed or wellhead protection areas.
 - c) Prohibits installation of new underground storage tanks, regardless of size, in all Watershed and Wellhead Protection Districts and natural resource protection districts.
 - (1) Special use permits with design review for proper tank selection, siting and installation for replacement of existing tanks in such areas.
 - (2) Tank removal schedule for all existing tanks in such areas.
 - d) Design standards applicable to all new and replacement underground storage tanks under 1100 gallons (State law threshold), including:
 - (1) Double-hulled, non-corrodible material.
 - (2) Above ground continuous leak-detection monitoring devices, record keeping and report schedules.

E. Existing Hazardous Waste Site Cleanup

1. Continue and, if necessary, increase Town's current monitoring of the Navy Superfund site cleanup efforts, now being done by Town representatives in the Navy's Restoration Advisory Board.
2. Identify all other known and potential hazardous waste sites, determine accountability, and devise cleanup methods and schedules in concert with appropriate State and Federal agencies.

AIR QUALITY

I. GOAL

To maintain the quality of the air we breathe by limiting or prohibiting uses which generate or emit chemicals that pollute the air.

II. DEFINITION OF AIR QUALITY PROTECTION

- A. Within the confines of a Comprehensive Plan, protection of air quality is achieved by inhibiting the possibility of air pollution, and planning measures that can help cut down the amount of air pollution we ourselves produce.

III. THE NEED FOR TOWN ACTION

- A. The subject of air pollution is mainly handled at the State and Federal levels, where scientific and inspection expertise and facilities exist. Portsmouth cannot expect to improve on what other agencies do in this area.
- B. Through its Zoning Ordinance the Town can help prohibit noxious air emissions.
- C. The automobile is the major source of air pollution. As the Island becomes more crowded and its limited highway system more congested, air quality will become threatened. The Town has a definite role in promoting non-polluting modes of travel.
- D. The comprehensive plan plays a major role by limiting or prohibiting land uses that produce or lead to increases in polluting emissions.

IV. OBJECTIVES

- A. Prohibit through zoning any types of industry which regularly emits hazardous materials.
- B. Encourage car-pooling and use of mass transit as a means of reducing pollution for auto emissions.
 - 1. In a spread out Town like Portsmouth, where virtually everyone commutes a few miles to work and in which there is effectively no mass transit opportunity, this is a difficult objective to achieve. It is unlikely in the future that even most residents will use mass transit regularly. Nonetheless, we can encourage people to do so by making it possible and attractive to do so.

V. IMPLEMENTATION

- A. Prohibit, through zoning, any types of industry which regularly emit hazardous materials.

1. Consult with EPA and DEM on hazardous materials which should be prohibited and the types of industry that use them.
- B. Enact performance standards for industrial zones.
1. The ordinance would establish certain standards for smoke, noise, dust, toxic emissions, glare, vibration, radioactivity, electrical disturbances, heat, odors, etc.
 2. The performance standards would apply to industrial zones and allow any use that meets these standards.
 - a)
- C. Encourage car-pooling as a means of reducing pollution from auto emissions.
1. Continue to encourage the development of commuter parking lots in key locations. (See Circulation V. D.)
 2. Ensure that the RI Passenger and Transit Authority (RIPTA) and private bus service serves these lots.
 3. RIPTA should maintain regular bus service on both East and West Main Roads. The State should consider subsidizing the fare to make it more attractive to ride the bus.
 4. Work to educate the public as to the financial and other benefits of mass transit.
- D. Encourage Development and Use of Mass Transit.
1. At the current level true mass transit via rail seems unlikely. However, it is of utmost importance that Portsmouth and the Island not discount the possibility of future rail lines traveling both within and off the Island.
 2. Ensure that the railroad right-of-way is maintained intact for the future possibility of mass transit.
 - a) Elimination of even the possibility of mass transit could be a very costly mistake if it becomes a dominant or even popular mode of travel in this country.
 - b) Once it's lost, it's lost.
- E. Encourage the development and use of bicycle paths.
1. Distribute "A Bicyclist's Guide to Aquidneck Island"¹ to encourage recreational biking.

¹ Produced by Aquidneck Island Planning Commission, 1999 and 2000.

WATERFRONT AND COASTAL

This section combines the work of the Waterfront Subcommittee of the Portsmouth Citizen Advisory Committee (PCAC) and the Coastal Committee, which worked independently from the PCAC on a Harbor Management Plan. Common goals and overlapping geographic areas of concern make it logical to combine the work of these two groups in the Comprehensive Plan.

NOTES: Readers of this section are particularly referred to maps #21 – 22 and & 51.

I. GOAL

Preserve the environmental and ecological integrity of Portsmouth's waterfront and coastal waters. Ensure that the quality and beauty of the coast is maintained.

Protect sensitive coastal areas from intensive development. Such lands are a valuable resource. They provide flood protection, are used as refuges for wildlife, and may have recreational value. Protection of said features stabilizes and preserves real property values, encourages passive recreation and appreciation of aesthetic and scenic beauty, and safeguards the public from flooding, pollution and erosion.

Narragansett Bay and the Sakonnet River are estuaries for life forms that feed the sea. The land should not be allowed to pollute the rivers and cut off this vital part of the ecosystem. Portsmouth has, for the most part, a virgin coast which, along with the abutting land, should retain the beauty of nature.

II. DEFINITIONS

A. Environmentally Sensitive Sites and Features

When present on or within defined distances of mapped locations at or more than the defined minimum quantities, fall under one or more of the following:

1. Floodplains, per the Federal Emergency Management Administration (FEMA) maps.
2. Coastal features, including the 200 foot Coastal Resource Management Council (CRMC) buffer from coastal features, such as estuaries, salt marshes, coves and inlets.
3. Class SA (DEM designation), and/ or Type 1 (CRMC designation) waters and the directly adjacent coastal areas, and/or Pristine, as defined by the Portsmouth Harbor Management Plan. These classifications are the cleanest or targeted to be the cleanest quality.

B. Public Access (Right-of-Way) to the Shore

1. A strip of land and/or a deeded right-of-way, which is owned by the Town or State, leading to the shore, which is designated for use by the general public.

C. Water-Related Uses

1. Land uses which actually use or derive specific economic and use benefit from being located on the water, or with a view of the water
2. Facilities which provide anchorage, dockage or access to the water from the land for marine vessels.

D. Coastal Waters Classifications

For the purpose of this elements, the Plan uses water classifications developed by the Portsmouth Harbor and Coastal Water Management Commissions.

1. P = Pristine (basically no further use allowed)
2. RU = Residential Use Only (such as moorings for adjacent residences)
3. IU = Intensive Use (i.e., marinas and other water-related commercial)
4. SRU = Special Restricted Use
5. SIU = Special Intensive Use

E. Non-Point Source Pollution

Much of what we are trying to protect these environmentally sensitive areas from can be grouped under the term “Non-Point Pollution.”

1. Non-point source pollution refers to the many diffuse sources of toxic contaminants, nutrients, and pathogens that come not from an identifiable “pipe outfall” (such as industrial discharges to streams), but from septic systems, road runoff, eroding soil surfaces, chemicals used on home lawns and in agriculture, underground storage tanks, salt piles, and other areas affected by human use.
2. Within coastal waters it also refers to chemicals leached from bottom paint on boats.

F. Point Source Pollution

This is pollution from identifiable sources like marinas, boat heads, and sewage outfalls.

III. THE NEED FOR TOWN ACTIONS TO MINIMIZE POLLUTION AND MANAGE THE USE OF THE COASTAL AREAS

- A. The Protection of the Coastline and Coastal Waters is Important because left in their natural state, coastal areas provide many free services to the Town:

1. These low areas provide floodways to channel stormwater and act as a buffer to prevent storm damage to nearby roads and buildings. These functions minimize the need for extensive engineering systems and seawalls.

2. Vegetated banks bind the soil, preventing erosion caused by wave and surface water flow. Banks and dunes, left in an undisturbed state, perform the same services as truckloads of sand.
 3. Beaches, dunes, and coastal banks are dynamic systems that are continually shifting. Our construction activities must be planned carefully in these areas in order to allow this shifting to occur.
 4. Shellfish beds and commercial and recreational fisheries are dependent on clean water, and healthy estuaries and salt marshes.
 5. Recreational boating, fishing and swimming.
- B. The protection and preservation of the environmentally sensitive coastline is important to the sound planning and development of the community
1. Continuing pressure to develop, as well as advances in septic system technology, has made economically attractive the development of properties previously considered not feasible for development due to physical conditions such as rock outcroppings, salt marshes, steep slopes, poor drainage and other similar constraints.
 2. There is also continuing pressure to use the waterfront and Town waters for pleasure boating.

C. Resource Protection by the State

Due to their regulatory, enforcement and geographic limits, the application of existing State regulations has been inconsistently effective in assuring protection of the coast.

1. RI Department of Environmental Management (DEM)
 - a) While there is the prevailing notion that DEM is primarily responsible for protection of the environment in Rhode Island. DEM regulations are not land use regulations and are aimed only at minimal standards to prevent major pollution.
 - b) DEM has adopted three classifications of water quality goals for the Bay, but has not coordinated the locations with land uses. The locations of these classifications do not necessarily coincide with real water conditions nor land uses on the coastline.
2. Coastal Resources Management Council (CRMC)
 - a) Jurisdiction is strictly within 200 feet of the coastal features and coastal ponds. No jurisdiction as to contributions to pollution from beyond that point. They are not land use regulations.
3. Both of these State agencies have water classifications and independent interpretations of what they mean to coastal water quality assurance. Portsmouth's Harbor Management Plan combines these with knowledge of adjacent land uses in coming up with a separate classification and maps.

D. Town Policies and Practices

1. Our Zoning Ordinance does have a special section on flood hazard areas that does a good job of covering the subject.
2. The Town has also been a participant in the National Flood Insurance Program since 1973. There are 638 policies protecting property from flood damage as of May 2001. Of these, 123 are in the “V” (velocity) zone, and 394 in the “A” (accumulation) zone. Since 1978, there have been 128 claims made, (only 8 for repetitive losses).
3. There is also a separate Waterfront District Zone, which represents a good start toward directing and controlling water-related uses. But it is only one small area, has a minimum size of fifty acres, and it allows many non-water related uses.
4. There is no reference to the coastline or waterfront in our Subdivision Ordinance. There is no provision for preventing stormwater flow directly into the coast or to streams that go to the coast.
5. The current Harbormaster Ordinance that was adopted on March 26, 1990 created Town water zones that regulate mooring/access issues. This vehicle should be expanded upon to address other water quality and coastal use issues.
6. The Town, through its Public Works Department, often directs road runoff directly to the coast. This is particularly a problem on Prudence Island.
7. The Town has a Harbormaster within the Police Department, a volunteer assistant Harbormaster, and a set of regulations to enforce. CRMC has required all coastal communities to adopt a harbor management plan. Portsmouth adopted its Plan in 1993.

E. Community Support

1. PCAC survey questions related to the waterfront reveal a high percentage of community support for protecting the waterfront.¹

IV. OBJECTIVES

A. OBJECTIVE 1

Minimize changes to the coastline of Portsmouth.

Preserve as much of Portsmouth’s coastline in its natural state as possible.

B. OBJECTIVE 2

¹ See Appendix PCAC Survey Results, Question 22 of the 990 PCAC Survey, Question 22 of the 1989 and Question 22.1 of the 1990 PCAC Surveys, Question 54 of the 1989 PCAC Survey

Preserve, protect and improve the water quality of coastal waters under the Town's jurisdiction.

This objective relates to pollution and has both land use and water use elements. On the land, pollution from sewage and stormwater must be abated. In the water, boaters must not be allowed to dump effluent. Commercial fishing and shellfishing areas must be especially well protected.

C. OBJECTIVE 3

Manage shoreline development in a manner that preserves the character, water quality, air quality and natural attributes of the land/water interface, and promotes marine-related and marine-dependent uses in selected areas.

Ensure that what is developed is compatible with, and has minimal impact on, the natural environment. In areas in which waterfront development is to be allowed, as well as in areas to be developed which could have an impact on the coast, develop stringent regulations in coordination with DEM and CRMC efforts.

Designate areas like the current Waterfront District for water-related uses only (as defined in II.C. above). Ensure that such zoned areas contain both land and water that is able to support such intense development.

D. OBJECTIVE 4

Create the Town's first Harbor Management Plan which will coordinate the placement of moorings, docks and piers with coastal water quality zones and with protection of important commercial fishing areas.

Provide for the efficient utilization and allocation of mooring space consistent with CRMC and HCWMC (Harbor and Coastal Water Management Commission) guidelines.

E. OBJECTIVE 5

Preserve and increase public access to the shore for both boating and non-boating activities.

Despite its coastal location, Portsmouth has limited public access to the shore. Improve the quality of existing access opportunities and increase the number of viable access sites within the Town by requiring public access as part of, or all of, the open space requirement for coastal development.

V. IMPLEMENTATION EFFORTS

A variety of State and Federal agencies have considerable, but not complete, jurisdiction over the use of coastal waters and the immediate coastline. None of those bodies has actual land use regulations governing new construction beyond 200 feet from the water or coastal ponds. Two hundred feet is much more than a house lot, yet uses and development far beyond 200 feet can

have a significant impact on the coast. Implementation efforts should be designed to achieve the above objectives in coordination with these regulatory bodies.

A. ZONING DISTRICTS ALONG THE COAST

1. Zone Coastal Areas according to their relationship to the water and ability to support development and revise the Zoning Ordinance Permitted Uses section accordingly. This should relate to the Coastal Zone Overlay regulations. (See Coastal Water Zoning Map.)
2. The water zones and mooring areas defined in the Town's new Harbor Management Plan (see map and description) should be adopted by Portsmouth. This plus DEM and CRMC existing water classifications should be used to identify and zone areas for water-related land uses. Within such areas shall be specifically permitted water-related land uses with proper controls so that they do not represent a threat to water quality. A mechanism needs to be set in place for amending the water zones as needed to make sure land uses and coastal water zones are compatible.
3. Zone land areas adjacent to both SC (DEM) and IU waters (Harbor Management Plan) to permit relatively intensive, but strictly water-related commercial and industrial uses, such as now exists in the Melville-Bend Boat Basin area.
4. Zone land areas adjacent to SB and either IU or RU waters to permit mixed residential and water-related commercial uses which are less intensive than the above, such as marinas.
5. Zone land areas adjacent to both SA and either P or RU waters to be classified within the Resource Protection District concept (detailed in the Natural Resources element), with uses limited to residential, open space, public recreation, and agriculture.
6. Zone/regulate our barrier beaches (west side of Common Fence Point, McCorrie Point, Sandy Point, Mussel Bed Shoals) so that they cannot be developed. Include them and buffers around them in the Coastal Resource Protection District regulations. Regulate all vehicular access to these areas, while still allowing pedestrian access.

B. ZONING LAND USES ALONG THE COAST

1. The coast represents a significant economic development opportunity for Portsmouth that should not be overlooked. Define water-related activities as land uses which actually use the water or derive specific economic and use benefit from being located on the water, other than increased property value because of the view:
 - a) Decide which are to be allowed in Portsmouth.
 - b) Decide which are to be prohibited from shoreline location in Portsmouth.
 - c) Protect and maintain to the extent feasible, existing coastal water quality.

C. WATER QUALITY PROTECTION

1. Coastal water quality in Portsmouth is a result of five factors:

- a) Pollution from major sewage treatment plants and combined sewage overflows (CSO's) in the upper bay, over which we have little control, whose waters are classified SC or SB.
 - b) Smaller local sewage treatment facilities serving specific areas (Raytheon, Kaiser, Pearson Yacht, Portsmouth Abbey, Portsmouth Middle School, etc.), whose operation is controlled by the State and/or Federal Governments.
 - c) Commercial and residential septic systems at or near the coast which have failed, have not been pumped out, or which are inadequate from:
 - (1) Old and/or undersize residential septic systems, particularly converted summer houses.
 - (2) Septic systems located within the floodplains that are regularly flooded during, say, 2 or 10-year storms.
 - d) Storm water runoff from streets and parking lots.
 - e) Boat heads that dump directly into the Bay or Sakonnet River.
2. Septic systems that empty directly into the coastal waters (there are about 12) should be cited by the Town to DEM targeting this problem. Systematic follow-up should be initiated by the Town in coordination with DEM.
3. Adopt an ordinance which requires shorefront property owners to have their sewage systems pumped out and/or inspected biannually, plus whenever a property is sold. The Town should have the power to require repair or replacement of septic systems that have failed.
- a) This is essentially a "wastewater management district" in which all properties within a mapped area must comply. There are two possible methods (which can work together or separately) of ensuring compliance:
 - (1) A "special assessment district" in which all property owners pay a slightly higher property tax (income tax deductible) and get their money refunded whenever they provide proof of inspection or pumpout; and/or
 - (2) A master contract between the Town and a septic pumpout service to make compliance more affordable.
 - b) Increase utilization of CDBG (Community Development Block Grant) low-income loan program (operated for Portsmouth by the Church Community Foundation in Newport) for lower and moderate-income households cited.
 - c) Designate a Town official to follow-up and act as a liaison between property owners and DEM in cases of failed septic systems. DEM has a complaint and notification system, but has been inconsistent in enforcement.
 - d) Investigate a civil violation/fine procedure if violator fails to perform following DEM involvement. (The proof requirements of a criminal violation are too difficult for this type of violation.)
4. For applications for building permits to convert summer houses to year round, DEM is encouraged to certify that a septic system is adequate for proposed increased use:

- a) Usage for a few weeks during the dry summer season is not an indication of a system's viability on a year 'round basis.
5. Adopt more complete stormwater runoff regulations and a Soil Erosion and Sediment Control Ordinance to govern all subdivision and construction activities. (See Soil and Air Element).
6. For boat pumpout:
 - a) Adopt an Ordinance that requires the operation of boat sewage pumpout facilities at all marinas.
 - b) Adopt an Ordinance that authorizes the Harbormaster to visually inspect all vessels to determine if Coast Guard approved marine sanitation devices are in use.
 - c) Assist the Harbor Management Commission in developing a handout for boaters using Portsmouth waters that describes the rules and regulations, and lists the location of pumpout and other services.
 - d) Support the presence of a mobile water-borne pumpout vessel in Portsmouth waters which would pump out boat heads and off-load to a truck on land as needed. Some Towns have purchased their own boat and facilities and have found them to be financially self-sustaining.
7. Implementation efforts will also be guided by recommendations contained in the "Comprehensive Conservation and Management Plan for Narragansett Bay".²

D. HARBOR MANAGEMENT PLAN

Promote preservation and enhancement of Town's waterfront through the adoption of the proposed Harbor Management Plan (see Harbor Management Plan and water type definitions in the Appendix) which:

1. Defines boundaries for the Town's coastal waters.
2. Creates salt water zoning to allow areas of conservation, limited usage, and intensive usage.
3. Modifies the Harbor Master Ordinance to come into alignment with the permits and zoning above.
4. Identifies:
 - a) Existing boat distribution.
 - b) CRMC water usage classification.
 - c) DEM water quality standards.
 - d) Principle grounds of commercial shellfish.
 - e) Marine life management areas.

² This plan, dated December 1991, was a product of the Narragansett Bay Project, a 5 year project sponsored by EPA and the State. It is State Guide Plan Element 715.

- f) Conservation/research areas.
 - g) Public access sites.
5. Compiles a chart of the location and distribution of all seasonal moorings and anchorages. Determine compliance with the International Shellfishermen's Sanitation Committee (ISSC) density formula. Creates special management plans for the most severe problem areas.

VI. PUBLIC ACCESS TO THE SHORE

Portsmouth Rights-Of-Way To The Shore Officially Designated By CRMC

In the late 1970's the State Coastal Resources Management Council did a detailed study, including title searches and descriptions of all publicly owned rights-of-way to the shore. Those fully researched and identified were designated V-1 through V-17. Funds for this project ran out well before all the work was done. There are 59 other possible rights-of-way listed in the original study on Aquidneck Island plus 20 on Prudence Island, but they have not been legally verified. Those are not listed here.

The Town owns a number of additional rights of way that may not have been identified by CRMC, especially town roads that extend to the shore. There are also many rights-of-way that belong to owners of property in various developments, which are not listed here because they are not truly "public".

1. Mount View Road (V-1). A strip of land that runs perpendicular to the northeast end of Anthony Road, extends southeast, over a section of grass and a concrete wall, to a cobble beach bordering the Sakonnet River; and northwest, over a section of pavement, a concrete sidewalk, and an area of brush and marsh grass, to a cobble beach bordering Mt. Hope Bay. At poles #55 and #56. (Common Fence Point) L-683'/W: 20'
2. Anthony Road (V -2). A parcel of land, covered with thick brush that extends southeast from Anthony Road to a cobble beach bordering the Sakonnet River. At pole #39 (Common Fence Point) L: 71'/W: 29'
3. Narragansett Road (V-3). An area of grass and gravel, leading to a steep bank that extends southeast from Narragansett Road to a cobble beach bordering the Sakonnet River. At pole #40 (Common Fence Point) L: 100'/W: 20'
4. Cedar Avenue (V-4). A brush covered bank that extends northeast from the intersection of Cedar Avenue and Leedham Street to an area of marsh grass bordering Blue Bill Cove. At pole #16 (Island Park) L: 21'/W: 50'
5. Point Street (V-5) A paved roadway, leading to an area of grass and a steep brush covered bank, that extends west from the north end of Bay Street to an area of sand and marsh grass bordering Blue Bill Cove. At pole #1 (island Park) L: 112'/W: 30'

6. Green Street (V-6). A grass path, leading to a set of concrete steps, that extends southeast from Green Street (just north of the Coral Street intersection) to an area of sand and marsh grass bordering Blue Bill Cove. At pole #6 (Island Park) L: 145'/W: 6'
7. Seaconnet Boulevard 2 (V-7) A grass strip, leading to a small rocky bank, that extends south from the intersection of Seaconnet Boulevard, and Ivy Avenue to a cobble beach bordering the Sakonnet River. At pole #14 (Island Park) L: 78'/W: 30'
8. Seaconnet Boulevard 2 (V-8) A portion of a dirt and gravel parking lot, leading to a concrete ramp and a set of concrete steps, that extends south from the intersection of Seaconnet Boulevard, and Edith Avenue to a cobble beach bordering the Sakonnet River. At pole #12 (Island Park) L: 88'/W: 30' On Appeal
9. Seaconnet Boulevard 3 (V-9) A paved road, leading to a concrete ramp, that extends south from the intersection of Seaconnet Boulevard and Gould Avenue to a cobble beach bordering the Sakonnet River At pole #9. (Island Park) L: 7'/W: 30'
10. Seaconnet Boulevard 4 (V-10) A grass strip, leading to a concrete wall and an area of small rocks, that extends south from the intersection of Seaconnet Boulevard and Island Park Avenue to a cobble beach bordering the Sakonnet River, at pole #6. (Island Park) L: 97'/W: 30'
11. Ruth Avenue (V-11) A strip of grass and brush, leading to an area of small rocks, that extends south from the intersection of Seaconnet Avenue and Ruth Avenue to a cobble beach bordering the Sakonnet River. West of pole #6. (Island Park) L: 39'/W: 30'
12. Fountain Street (V-12) A paved drive, leading to a concrete ramp, that extends south from the intersection of Morgan Street and Fountain Street to a cobble beach bordering the Sakonnet River, south of pole #3993 (Island Park) L: 48'/W: 30'
13. Aquidneck Avenue (V-13) A grass path, leading to a concrete ramp and a set of concrete steps, that extends west from Aquidneck Avenue to a cobble beach bordering the Sakonnet River. At pole #5 (Portsmouth Park) L: 110'/W: 12'
14. Atlantic Avenue 1 (V-14) A paved drive, leading to an area of grass and a small, brush covered bank, that extends east from the intersection of East Corys Lane and Atlantic Avenue to a cobble beach bordering the Sakonnet River, just south of pole #7 (Portsmouth Park) L: 76'/W: 40'
15. Atlantic Avenue 2 (V-15) A paved walkway, leading to a concrete ramp and a set of concrete steps, that extends east from the intersection of Tallman Avenue and Atlantic Avenue to a cobble beach bordering the Sakonnet River. At pole #1 (Portsmouth Park) L: 60'/W: 40'

16. Child Street (V-16) A grass strip, leading to an area of small rocks, that extends east from the east end of Child Street to a cobble beach bordering the Sakonnet River, at pole #37. (Portsmouth Park) L: 73/W: 29'
17. Morningside Lane (V-17) A grass and gravel path that extends east from the east end of Morningside Lane to a cobble beach bordering the Sakonnet River, at pole #2 (Portsmouth Park) L: 101'/W: 40'

Public Access to the Shore should be directed toward certain areas, being sure not to violate private riparian property rights.

1. Refine the list of public rights-of-way to those truly usable and in non-sensitive areas with respect to both the environment and the neighborhood.
 - a) Such rights-of-way can then be signed.
 - b) Small parking areas or bicycle racks installed where feasible.
 - c) Consider the sale of unusable rights-of-way to abutting property owners both to help fund the above efforts and to relieve Portsmouth of unwanted liabilities.
 - d) The Town's Conservation Committee has done considerable work on rights-of-way to the shore, and could advise on this issue.
2. Establish public access boat launch areas with parking and police supervision.
 - a) Develop a list of potential boat ramp sites, estimate construction and acquisition costs, and obtain funding.
 - b) Investigate the feasibility of dinghy storage racks at the Town Beach and other Town-owned access sites to be developed.
3. Establish and enforce rules for the use of Stone Bridge as a fishing pier for the general public.
4. See also the Town's Harbor Management Plan in the Appendices.

A. CONSIDER ESTABLISHING A COASTAL WATERS ADVISORY COMMITTEE

1. Propose policies, ordinances, and programs to preserve, protect, and improve water quality as well as to implement the Harbor Management Plan.
2. Review all applications before submission to the CRMC. and/or the Town should ensure that planned construction will have no substantial adverse impact on the Portsmouth waterfront.
3. Improve efficient utilization and allocation of mooring space consistent with adequate access from the land.
4. Create Development Plan Review requirements for local marinas and incorporate the process into Zoning Ordinances.

5. Maintain communication with the Towns of Tiverton, Bristol and Middletown to coordinate jurisdictional responsibilities and shared bodies of water.
6. Establish and maintain a dedicated fund to manage the Town's coastal waters. Create a fee structure adequate to pay all costs of the Harbor Master, his assistant, and the coastal waters review group in such a way as to not impact on property taxes.
7. Provide safe boating for all users of Town waters.
8. Enforce an anti-litter campaign through fines and public education.

HISTORICAL

A CONTEXT FOR UNDERSTANDING HISTORIC RESOURCES

Occupying the northern half of Aquidneck Island and seven large and small islands to its east and west, Portsmouth's a largely rural-though increasingly light industrial and suburban-community with man-made resources that relate to important broad patterns of Rhode- Island history, including agriculture, the Revolutionary War, maritime activity], summer communities and country houses, the development of transportation networks, education, and religion.

Portsmouth's sedimentary bedrock, including both shale and coal (the later actively mined in the nineteenth century), has gradually worn to a rolling hilly topography. Forest clearings over the past two centuries have left a largely open landscape that, combined with interior elevations of nearly 300 feet, affords many beautiful views of the surrounding water, islands, and mainland. Bodies of water include about a dozen small brooks and streams, several man-made ponds and a reservoir, and, on the northeast, The Cove, a large, irregular inlet with a breachway to the Sakonnet River. The absence of a natural harbor inhibited shipping activity, and the lack of rivers discouraged industrial development until well into the twentieth century. Access from the mainland to the north is across either the Mount Hope Bridge to Bristol or the Sakonnet River Bridge to Tiverton. Two major north-south arteries roughly parallel the coastlines: Route 114(West Main Road) on the west and Route 138(East Main Road) on the east. Railroad tracks for the New England RI Corporation hug the western shoreline.

Founded in 1638 by John Clarke and William Coddington, Portsmouth is the second oldest settlement in the state. Political differences among the settlers, especially after the arrival of Anne Hutchinson, provoked Clarke and Coddington in 1639 to move to the south end of Aquidneck and establish Newport, which included Middletown until 1743. Early settlement of Portsmouth occurred at the north end of town on three-acre lots near Founder's Brook and Town Pond, but nothing survives of this settlement.

Several important early institutional buildings remain. Like Newport, Portsmouth attracted Friends in the seventeenth century, and they erected a meetinghouse in 1700 on East Main Road. Public education developed early in Portsmouth, and the southernmost Schoolhouse (1716-25), now on East main Road, documents that phenomenon.

The early settlement was gradually abandoned after 1740 for Newtown, a village platted overlooking the Sakonnet River from the east slope of Butts Hill. By the late eighteenth century, it had several stores, a livery stable, a blacksmith shop, two churches, a market, and a music hall. This area has remained Portsmouth's center and retains a variety of residential, commercial, and institutional buildings over the years since settlement. Twentieth-century incursions have somewhat diminished the area's historic integrity, but a number of important buildings remain.

The livelihood of early Portsmouth residents was largely tied to agriculture, especially in supplying produce, meat, and dairy products to the rapidly growing eighteenth-century town of Newport to the south. Across the town remain several early farmhouses and complexes, such as the Lawton-Almy Hall Farm (ca. 1700 et seq.) at 559 Union Street. New farms continued to be created through the eighteenth and early nineteenth centuries, and many remain. A common

adjunct agricultural building was the wind-powered gristmill; Portsmouth had more windmills than any other Rhode Island municipality, but only one, Boyd's Windmill, survives.

Two important Revolutionary War events occurred in Portsmouth: the capture of General Richard Prescott in July 1777 and the Battle of Rhode Island in August 1778, unique in the history of the Revolution as the only engagement in which black Americans participated as a distinct racial group, in the First Rhode Island Regiment. The Battle of Rhode Island site is a National Historic Landmark.

During the nineteenth century, coal was mined in northwest Portsmouth, off Willow Lane. On the same location, copper was smelted between 1866 and 1883. Only an open field, covered with rock and coal, and a handful of modest, shingled workers' houses remain.

While Portsmouth's lack of natural harbor inhibited its links to maritime activity, its location, adjacent to shipping lanes, occasioned the construction of two lighthouses, one at Sandy Point (1823, 1852) and one on Hog Island (1901).

During the nineteenth century, Newport in particular and Aquidneck Island in general became desirable as places to pass the summer. Summer houses had first appeared here in the late eighteenth century, but both Metcalf Bowler's House and "Vaucluse" are gone. Nineteenth and twentieth-century country houses range from the picturesque informality of the medium-size John Barstow House, "Greenvale Farm"(1864-65); John Hubbard Sturgis (Boston), architect) to the monumental Moses Taylor House, "The Glen" (1923, John Russell Pope (New York), architect). These houses were usually sited near Narragansett Bay or the Sakonnet River to exploit fine views; one of the best concentrations lies east of East Main Road and retains not only houses, but also remarkable landscaping and extensive, meticulously laid stone walls. A summer colony developed at the north end of the island around Bristol Ferry. In addition to the remaining shingled summer cottages were a hotel and rail station. An amusement park, located south of Blue Bill Cove, thrived between 1898 and 1938, when a hurricane destroyed it. A group of small houses north of Park Avenue, built originally as summer cottages, survives. In the late nineteenth-century summer cottages began to appear on the islands as well, especially Prudence and Hog Islands.

Nineteenth-century institutional growth included the construction of several churches, including St. Paul's Episcopal (1833, Russell Warren, architect), St. Mary's' Episcopal (1849, Richard Upjohn (New York), architect), and St. Anthony's Roman Catholic (ca. 1901).

The construction of the Mount Hope Bridge in 1929 and the Sakonnet River Bridge in 1957 greatly increased Portsmouth's accessibility. Consequently, the town has seen considerable growth in residential construction, first single-family houses and later apartments, condominiums, and industrial facilities. The growing population has encouraged commercial development, especially along East Main Road.

The varied and abundant historic resources of Portsmouth include a number of early farms and farmhouses; important summer houses, many designed by nationally important architects; large nineteenth- and twentieth-century recreational farms; houses of worship important both for their architecture and documentation of religious and social history; two key lighthouses; and several historic districts. Moreover, Portsmouth retains one of the State's most impressive countrysides,

dramatic in its whole and with important evolved and designed landscapes. The town's strong sense of place plays an important role in its appeal and should receive strong consideration in planning for the town's future.

I. GOAL

Promote the preservation of Portsmouth's historical sites and buildings.

Portsmouth has a rich history with many historic homes and landmarks. While it has no concentration from which to form a traditional historic district, it is possible to foster an appreciation of our heritage and encourage the preservation of our historical sites and landmarks.

Portsmouth is Rhode Island's second oldest community. It was founded in 1638 by a group of prosperous and prominent religious dissenters from Boston led by John Clarke and William Coddington, who incorporated themselves as a "Body Politic" for a secular government via the "Portsmouth Compact". Soon after, Anne Hutchinson and some of her followers arrived. In 1639 Coddington's group left to found Newport, and Hutchinson's group started what is often called the world's first true democratic form of government.

Although including seven separate islands in Narragansett Bay and the Sakonnet River, as well as most of the Bay's principal landform, Aquidneck Island, Portsmouth's economic history has been agrarian rather than maritime because of the lack of a good harbor. It remained a farming community well into the twentieth century. Supplementing agriculture were several summer colonies established on Portsmouth's shores during the late nineteenth and early twentieth centuries. Since World War II, farming has given way to residential subdivisions and light industry on the Aquidneck Island portion of the Town. Despite these changes, Portsmouth is a Town rich in both natural beauty and cultural significance.

NOTES: Readers of this section are particularly referred to map #23.

II. DEFINITION OF HISTORICAL RESOURCES

Many people regard historic resources simply as old buildings. While old buildings certainly are a major part of a Town's heritage, it includes much more. Historic resources are reminders of the past, evidence of how the community developed; things like farms and farmhouses, historic plaques and memorials, cemeteries, homes and buildings, stone walls, and geographic places where events that helped shape the Town and the Country happened.

An inventory rich with descriptions of historic resources and their significance was compiled by the Portsmouth Citizen Advisory Committee (PCAC) Historical Committee in 1989-91 and is included in the Appendix. This inventory includes over 200 homes and buildings, 45 historical and active cemeteries, and 33 plaques and memorials. 31 of these are (or may be) eligible for the national Register of Historic Places.

III. THE NEED FOR HISTORIC PRESERVATION

- A. Part of the identity and character of any Town is its historical background. Pride and feelings of community spirit derive more from history than any other factor. The form historic preservation takes depends very much on the geographic nature of the Town. Towns with compact historic villages or Town centers can simply concentrate on the preservation of those relatively small areas. Such areas are easy to identify visually. Towns which developed without compact villages may need to promote historic awareness more.
- B. Promote the preservation of our historical sites and buildings. The people of Portsmouth must be aware of these sites and relate them to our historical past. Our past is part of our identity as a people and as a community. The objective of the Town leaders and interest groups should be to educate the people of Portsmouth and promote its historical heritage.
- C. Threats to Historic Preservation

- 1. Farms

The character of a town is not just its buildings. Portsmouth was, for all but the past generation, a predominantly farming community. Only with the construction of the Sakonnet River Bridge in 1957 did Portsmouth start to become a suburb. Given its beauty and now convenient location, Portsmouth's farms have been giving way to residential developments.

- 2. Stone Walls

One of the Town's remaining visual reminders of Portsmouth's farming heritage is its stone walls, used to separate fields and herds of cattle. Modern development threatens to remove many of the Town's stone walls.

- 3. Portsmouth's New England character can also be described by its colonial architecture. Yet along its main roads, commercial structures are generally the flat-roof cinder block boxes that can be found anywhere.

- D. Community Support

Community support for historic preservation in general can be measured from the two PCAC surveys.¹

IV. HISTORIC PRESERVATION OBJECTIVES

A. OBJECTIVE 1

Promote Historic Awareness

¹ SEE APPENDIX-RESULTS OF PCAC SURVEYS, 1989 PCAC SURVEY QUESTION 31, QUESTION 50, 1990 PCAC SURVEY QUESTION 29:

The Town, the School Department, and existing and proposed committees should take an active role in fostering a knowledge of the Town's history.

Portsmouth has a rich and important history, particularly during the Colonial period and the Revolutionary War. Documentation exists, but is scattered. Recognition exists among interested parties, but it is not systematically included in the activities of the Town.

B. OBJECTIVE 2

Promote the Preservation of Historic Buildings, Sites, and Areas

Historic resources have largely been documented by the PCAC Historical Subcommittee's report, and in the "Historic and Architectural Resources of Portsmouth, Rhode Island" by the Rhode Island Historic Preservation Commission, 1979. There are also many potential archeological sites. However, there is today no plan in effect for a responsible entity to help ensure that these important structures and sites are maintained.²

C. OBJECTIVE 3

Preserve the Historic and Traditional Architectural Character of Portsmouth

Maintaining the "feel" of Portsmouth is not confined to preserving the historically significant. Particularly due to the lack of a Historic Town Center, care must be taken to ensure that the old does not become hidden or overwhelmed by the new. This is done by helping new development blend in with the old, so that it adds to the historic, rather than competing with it. Maintaining old stone walls is an example.

V. IMPLEMENTATION EFFORTS

The townspeople wish such efforts to be voluntary by private citizens, businesses, developers and property owners. Implementation efforts are designed to be things people should want to do.

A. HISTORIC AWARENESS.

1. The history of Portsmouth should be written and included in the curricula in our schools, in the elementary grades as well as in later history classes.
 - a) A full credit elective history course in high school.
 - b) Field trips to monuments and sites should be part of the course.
 - c) Pursue financing for documenting and publishing the history of Portsmouth.
2. The Town Council should promote our historical identity. Along with everyday business, they should be concerned with who we are.
 - a) The Town Council should issue Proclamations of Historical nature.

² Historic and Architectural Resources of Portsmouth, Rhode Island; Rhode Island Historic Preservation Commission, 1979.

- (1) Examples are the declaration of Anne Hutchinson Day, Founder's Day, Compact Day, Fort Butts Day, Battle of RI Day, etc.
3. Utilize the "Historic Marker Program" as a tool for raising site specific historic consciousness.

B. PRESERVATION OF HISTORIC BUILDINGS, SITES AND AREAS

1. Establish a Historical Oversight Committee, to be chartered by the Town Council, to meet regularly, to watch over the condition of our public historical sites and to promote an awareness of our historical identity.
 - a) The existing Historical Society has no real program other than a museum. Nonetheless, they are a starting point for any serious effort.
2. Restore and preserve our monuments and historic sites and publicize them, provide parking for visitors, print pamphlets, etc.
 - a) The Historical Oversight Committee should identify which sites need attention and potential funding
3. All historic cemeteries shall be declared protected property and not eligible for development.
 - a) Efforts should be made to get unmarked cemeteries, which are mostly on private property, marked and legally recognized.
4. Portsmouth has several identifiable historical neighborhoods from which to create historical areas.
 - a) Map these areas
 - b) Establish local neighborhood committees like the Point Committee and the Hill Association in Newport to promote awareness and preservation.
 - c) Promote the various historic preservation programs like the State and National Register available to properties within an historic district.
5. Consider an Ordinance covering the maintenance and preservation of stone walls, a major part of the visual character of a farming heritage.
6. Make every effort to preserve active farms and open space. Preserving this essential part of Portsmouth's heritage is covered in more detail in the Open Space and Agriculture elements.
7. Consult with the State on important archaeological sites and methods of identifying and protecting them.
8. Consider a voluntary "historic marker" or "historic plaque" program to identify important buildings, sites and landscapes.

C. PRESERVATION OF HISTORIC CHARACTER

1. Publish a set of non-binding architectural design standards, with examples of historic architectural styles for builders, contractors, businesses and utilities who want to maintain the character of Portsmouth.
 - a) This would include examples of Federal, Colonial, and Victorian design.
2. Consider offering builders and developers zoning or other site condition incentives for compliance where possible. Identify predominant architectural styles around the subject site. With non-binding guidelines.
3. In all likelihood, if we identified for developers the styles we prefer they would probably make every effort to go along.
4. Provide site specific design review to builders and developers.
5. This could be a mandatory or voluntary part of the zoning review process, in which a standing committee of volunteer experts does the review. Recommendations need not be binding. Enlist the assistance of the local citizens for architectural design guidelines and design review.
6. Consider revising height restrictions in commercial areas to allow pitched roofs, which are much more historic in character than the flat roof current zoning encourages. Study Zoning Ordinance for other regulations that might inhibit historic style architecture.

D. Land Use Regulations

In the late 1980's, an attempt was made to pass an Historic Zoning Ordinance. Attempting to do too much at once, it failed. Nonetheless, there are available mandatory and voluntary methods to help preserve Portsmouth's heritage. Architectural guidelines, above, and incentives to cluster housing to preserve open space (open space element), maintenance and/or installation of trees in new residential developments (land use) are but a few of the types of land use regulations and incentives that can help preserve Portsmouth's history.

FACILITIES AND SERVICES

I. GOAL

Plan for future support of facilities and services for the Town. Use existing data and future projections to provide for a positive, high quality, and consistent level of services commensurate with cost conscious considerations.

This section deals with Capital Facilities Planning in general, Police/Fire/Rescue services, trash and recycling services, and schools. The goals, definitions and needs sections for all of these items are the same, so individual discussions start with the Objectives sections.

NOTES: Readers of this section are particularly referred to map #24.

II. DEFINITION OF FACILITIES AND SERVICES

For the Comprehensive Plan, the Facilities and Services element is a diverse subject. It covers items not addressed elsewhere in the Comprehensive Plan relating to the Town's buildings and vehicles, as well as services that may require special facilities. This section has a very important financial impact on the Town's long-range Capital Improvement Program.

III. THE NEED FOR FACILITIES AND SERVICES PLANNING

A. CAPITAL FACILITIES PLANNING

1. Town Government, like any other service business, is concerned primarily with day-to-day operations. On that score, Portsmouth has an outstanding record. However, like any business, a Town must plan for replacement of major equipment, facilities and buildings as they become obsolete or beyond repair; plan for expansion of services as growth and perceived need demand. Due to the long and ever increasing list of needs within any of the service areas, having a plan is essential.
2. The Town will ensure that all special needs groups, including but not limited, to the elderly, disabled and low-income, will have full access to community services by retrofitting existing public buildings to meet the needs of said groups.

B. THE CURRENT CAPITAL BUDGETING SYSTEM

1. Portsmouth does not have a long term Capital Improvement Plan. It handles major expenditures on a two-tier basis. Major and mid-size equipment needs are requested by departments and evaluated separately as "warrant" items during the annual budget process. Included are items as small as typewriters and copy machines (\$1-5,000) and as large as fire trucks (\$100,000+). They also include building and major equipment repair items (in the proposed 1991-92 budget these ranged from \$2,500-\$15,000). Items like new buildings are, properly, bonded.
2. However, the warrant system has its shortcomings.

a) Financing Principles.

- (1) It is a common financing principle that payment for items should be matched to their useful lives. Items with long lives paid for over the long-term and items with short lives paid for out of operating expenditures. The warrant system for the most part fails to make this distinction. A copier may be good for two years, while a fire truck lasts 10-15 years; but both are usually financed out of the current operating budget.
- (2) For more expensive, long life items, purchasing decisions that affect the Town for years to come are made based upon current financial conditions.
- (3) The system encourages funding of small requests in financially leaner years. Large requests, regardless of need or size, have to wait for good years.

b) Affect on Department Operations

- (1) Departments cannot undertake multi-year modernization of equipment and operations, because the system does not allow multi-year commitments.
- (2) Major purchases sometimes have to wait for emergencies that make the need unavoidable.

c) Affect on Long-Term Financial and Facilities Planning

- (1) Long-term financial planning is less possible, annual budgets less predictable.
- (2) Long-term facilities planning is not accommodated. Major item and bonded indebtedness budgeting is done as problems or opportunities present themselves.

C. THE LEVEL OF CURRENT OPERATIONS

1. Portsmouth's level of governmental services is appropriate to the size and type of Town. Necessary Administrative, Police, Fire, Public Works services are well run.
2. There are no recommendations herein to change the level of public services now. Monitoring of the levels of service, facilities and personnel, including adequacy as to population growth, should be done annually.
3. Major Building and Facilities Inventory

Schools ¹:

NAME	GRADES	STUDENT CAPACITY	
		1999	ENROLLMENT 1999
ELMHURST	K-4	440	398
HATHAWAY	K-4	463	414
MELVILLE	K-4	372	327
PRUDENCE ISLAND	K-4	10	5
MIDDLE SCHOOL	5 - 8	1056	906
HIGH SCHOOL	9 - 12	1000	820
		3341	2870

¹ Source: "Student Population and School Capacities", Interim Report, Oct. 1999; Portsmouth School Department.

Town Vehicles
Overall Fleet Status

July-99

<u>AVERAGES</u>	NUMBER	USEFUL LIFE	Average Age	Average % Life	% at least 1/2 through life	% over useful life
Admin. Vehicle	6	7	5.3	76%	83%	33%
Patrol Vehicles	23	4	1.4	35%		
Pickup Trucks	16	7	5.4	77%	38%	31%
Heavier Truck / Equip.	21	10	14.2	142%	62%	48%
Fire Engines	16	20	20.4	102%	81%	50%

4. Department of Public Works

- a) DPW Garage, built in 1970 and is approximately 9,970 sq. ft. and in fair condition.
- b) The Public Works inventory is distributed between Portsmouth and Prudence Island. The Town currently owns twelve (12) medium-duty chassis vehicles; nine of these vehicles are dump trucks primarily used for snow plowing, sanding and general hauling. Two vehicles are used strictly for garbage disposal and one truck is specially configured for drain basin cleaning and maintenance. The average age of the vehicles in this class is 20.5 years, with actual ages ranging from 2 to 40 years.

The Town owns eleven (11) *light-duty trucks and pick-ups*. Eight of these vehicles are small 1-ton dump trucks primarily used for snow plowing in the winter and for general use road service and hauling when not used for plowing. Two pick-up trucks are for general use at the public works department and one military surplus pick-up is used for grounds maintenance at Melville campground. The average age of the vehicles in this category is 10 years, with actual ages ranging from 1 to 24 years.

The Town owns eleven (11) pieces of *heavy-duty equipment* consisting of 2 loaders, 3 backhoes, 1 bulldozer, 1 brush chipper, 1 street sweeper, one grader and two compressors. The average age of the equipment in this category is 18.5 years, with actual ages ranging from 5 to 31 years.

The Town owns eight (8) *tractors* of various types primarily used for mowing, grounds and beach maintenance tasks. The average age of the equipment in this category is 19 years, with the actual ages ranging from new to 39 years old. (Very old vehicles are generally used for spare parts or use strictly within the department's property.)

TABLE 1
DEPT. OF PUBLIC WORKS FLEET JULY, 1999

YEAR	ITEM	USEFUL LIFE	AGE (1999)	% LIFE	
1960	Mack Garbage Dump 8 Yd.	Heavier Truck / Equip.	10	39	390%
1967	Tractor, Mower	Heavier Truck / Equip.	10	32	320%
1968	Tag Along Platform	Heavier Truck / Equip.	10	31	310%
1969	Loader, John Deere	Heavier Truck / Equip.	10	30	300%
1970	International, Garbage Truck	Heavier Truck / Equip.	10	29	290%
1978	Ford Back Hoe	Heavier Truck / Equip.	10	21	210%
1979	Dump Body, 8 Yd	Heavier Truck / Equip.	10	20	200%
1980	Dump Body, 8 Yd	Heavier Truck / Equip.	10	19	190%
1982	Ford Dump 8 Yd.	Heavier Truck / Equip.	10	17	170%
1984	Ford 4 Yd.-1 Ton (Campground)	Pickup Truck	7	15	214%
1984	Intl Dump W/Basin Cleaner	Heavier Truck / Equip.	10	15	150%
1999	GMC 4 Yd.	Pickup Truck	7		
1988	GMC 4 Yd. 1 Ton	Pickup Truck	7	11	157%
1989	Asplundh Chipper (Beevers)	N/A	10		
1989	GMC 4 Yd. 1 Ton	Pickup Truck	10	10	100%
1989	Elgin Sweeper	Heavier Truck / Equip.	10	10	100%
1991	GMC Pickup	Pickup Truck	7	8	114%
1996	Intl Dump 8 Yd	Heavier Truck / Equip.	10	3	30%
1997	Chev 1 Ton P/Up-Sm. Dump	Pickup Truck	7	2	29%
1997	Chev 1 Ton P/Up-Sm. Dump	Pickup Truck	7	2	29%
1997	Ford Tiger Tractor	Heavier Truck / Equip.	10	2	20%
1998	Lg. Dump	Heavier Truck / Equip.	10	1	10%
1999	Dump Truck, 4 Yd, 1 Ton	Pickup Truck	7		
1995	Sedan, Ford Crown Victoria	Admin. Vehicle	7	4	57%
1986	GMC 4 Yd. 1 Ton	Pickup Truck	7	13	186%
1990	Dump Body, 8 Yd	Heavier Truck / Equip.	10	9	90%
1984	GMC Pickup	Pickup Truck	7	15	214%
1990	Sedan, Chevrolet	Admin. Vehicle	7	9	129%
1991	Sedan, Ford Crown Victoria	Admin. Vehicle	7	8	114%
1994	Caterpillar 928-F	Heavier Truck / Equip.	10	5	50%
1995	Ford Crown Victoria	Admin. Vehicle	7	4	57%
1995	Caterpillar 426-B	Heavier Truck / Equip.	10	4	40%
1996	Internt'L Cab & Chassis	Heavier Truck / Equip.	10	3	30%
1997	Chevrolet 1-Ton Pickup	Pickup Truck	7	2	29%
1997	Chevrolet 1-Ton Pickup	Pickup Truck	7	2	29%
1997	Ford Tiger Tractor	Heavier Truck / Equip.	10	2	20%
1998	International 4700	Heavier Truck / Equip.	10	1	10%
1999	Chevrolet 1-Ton Pickup	Pickup Truck	7		
1999	Chevrolet 1-Ton Pickup	Pickup Truck	7		

- c) Replacement Policy: Major DPW equipment is replaced on an anticipated need basis, rather than a regular schedule, because it is quite expensive and condition is much less predictable than consistently utilized vehicles like Police cars.

5. Major Police Facilities and Equipment

- a) Police headquarters, built in 1974 and renovated in 1998, is approximately 4,371 Sq.Ft. and in good condition.
- b) Vehicles: 13 squad cars, 1 Harbormaster's Patrol Boat, two motorcycles, 3 pickup trucks.
- c) Replacement Policy: The Police Dept. maintains a regular 3-year rotation on squad cars, keeping its fleet up-to-date.

6. Major Fire Department Facilities and Equipment

In the Fire Department inventory, which is also distributed between Portsmouth and Prudence Island, the Town currently owns twelve (12) *front-line fire fighting and rescue vehicles*. The front-line inventory is made up of 5 pumper trucks, 1 mini-pumper truck, 1 tanker truck, 1 ladder truck, 1 rescue vehicle and 3 brush trucks. The Town also operates three (3) rescue vehicles that are owned and supported financially by the Portsmouth Volunteer Fire Department. The average age of vehicles in this category is 19.3 years, with the actual ages ranging from 4 to 47 years.

The Town owns seven (7) *general and light-duty vehicles* used primarily used for routine transportation and general use. Three of these vehicles are late model sedans used by the chief, deputy and fire prevention officer. Four of the vehicles are pick-up trucks used for general duty. The average age of the vehicles in this category is 12 years, with actual ages ranging from 2 to 22 years.

The Town owns six pieces of watercraft and miscellaneous equipment for general use and water borne rescue. The average age of this equipment is 8 years, with the actual age ranging from 1 to 15 years.

Major Firefighting Equipment is very expensive but long-lived. The Fire Dept. maintains five pumpers as primary firefighting equipment, with the remainder kept as backup. Cars and pickup trucks are used for the many inspections and other tasks assigned to the department.

TABLE 2
FIRE DEPARTMENT FLEET JULY 1999

YEA R	ITEM	USEFUL LIFE	AGE (1999)	% LIFE
1952 Ford Tank Truck	Fire Engine	20	47	235%
1961 Maxim Pumper	Fire Engine	20	38	190%
1970 40' Office Trailer		N/A	29	
1973 Maxim Ladder Truck	Fire Engine	20	26	130%
1977 Dodge 4X4 Pickup	Fire Engine	7	22	314%
1977 Dodge 4X4 Pickup	Fire Engine	7	22	314%

1977 Dodge 4X4 Pickup	Fire Engine	7	22	314%
1978 Ford C8000 Tank Truck	Fire Engine	20	21	105%
1978 GMC Pumper	Fire Engine	20	21	105%
1982 GMC Pumper	Fire Engine	20	17	85%
1983 Continental Pumper	Fire Engine	20	16	80%
1983 Long Boat Trailer	Fire Engine	20	16	80%
1985 GMC Grass Truck	Fire Engine	20	14	70%
1985 GMC Skid Pump Truck	Fire Engine	20	14	70%
1987 Onan Diesel Generator	Fire Engine	N/A	12	
1989 Unus 5 Bauer Compressor	Fire Engine	N/A	10	
1990 Maxim Pumper	Fire Engine	20	9	45%
1993 Chevrolet Rescue Truck	Heavier Truck / Equip.	10	6	60%
1993 Ford Crown Victoria /Deputy	Admin. Vehicle	7	6	86%
1995 Ford Brush Truck	Heavier Truck	10	4	40%
1996 Ford Explorer 4Wd	Pickup Truck	7	3	43%
1996 Ford Utility Truck	Pickup Truck	7	3	43%
1998 Ford Crown Victoria/ Chief	Admin. Vehicle	7	1	14%
1998 Cairn's Thermal Camera		N/A	1	

- a) Replacement Policy: Major firefighting equipment is replaced on an anticipated need basis, rather than a regular schedule, because it is quite expensive and condition is much less predictable than consistently utilized vehicles like Police cars.

7. OTHER TOWN FACILITIES AND SERVICES

- a) The Town owns a number of facilities, listed in Table 1 below, that are operated by separate organizations, most of which are financially supported by the Town:
- b) The Glen Manor House is operated by a semi-independent committee and staffed by two resident managers. It is rented for functions such as weddings and banquets. Profits are kept in a capital improvements account.
- c) Glen Park is operated by the Glen Farm Committee for public and event usage.
- d) Glen Farm is primarily operated by the Town, under the guidance of an advisory committee. It is used for recreation and special events. Approximately a third of the acreage, including the barns area, is leased to a private equestrian-oriented organization.
- e) Coggeshall School is currently leased to the Pennfield School, a private school.
- f) A resident manager operates Melville Campground during the summer months. Mobile Home sites are leased, but the 100-acre property is available to the general public. Profits are available to the Town for recreational usage, with a priority to the Campgrounds' maintenance.
- g) The Portsmouth Senior Center provides a wide range of community services to all seniors. There are currently over 7,000 members. Built in the 1920's as a school, it is generally in need of repair. An elevator is needed for full use of the second floor.

- h) The Transfer Station is operated for the Town by a private contractor, which collects the trash and transports it to one or more out of Town landfills.

8. Other Buildings:

- a) Other than the school department, the Town of Portsmouth owns a total of 24 buildings, not including small sheds and the like, valued at \$11,400,000 (1996). Those operated by Town departments are discussed above.

Table 3 – Non-School Buildings

<u>NAME</u>	<u>LOCATION</u>	<u>ORIG. CONSTR.</u>	<u>FLOORS</u>	<u>SQ.FT.</u>	<u>USE</u>
<u>Glen Manor House</u>	<u>Frank Coelho Drive</u>	<u>1923</u>	<u>3</u>	<u>21,396</u>	<u>Rent for Functions</u>
<u>Gate House</u>	<u>Glen Farm Road</u>	<u>1923</u>	<u>2</u>	<u>1,168</u>	<u>Private Lease</u>
<u>Toilet Building</u>	<u>Glen Park</u>	<u>1975</u>	<u>1</u>	<u>400</u>	<u>Glen Park</u>
<u>Phelps House</u>	<u>Glen Farm</u>	<u>1925</u>	<u>2</u>	<u>3,304</u>	<u>Private Lease</u>
<u>Office</u>	<u>Glen Farm</u>	<u>1980</u>	<u>1</u>	<u>1,152</u>	<u>Private Lease</u>
<u>Brown House</u>	<u>Glen Farm</u>	<u>1840</u>	<u>2</u>	<u>2,520</u>	<u>Commercial Recreation</u>
<u>Barn #4</u>	<u>Glen Farm</u>	<u>1920</u>	<u>1</u>	<u>3,600</u>	<u>Private Lease</u>
<u>Barn #5</u>	<u>Glen Farm</u>	<u>1920</u>	<u>1</u>	<u>960</u>	<u>Private Lease</u>
<u>Shed #3</u>	<u>Glen Farm</u>	<u>1920</u>	<u>1</u>	<u>4,320</u>	<u>Private Lease</u>
<u>Coggeshall School</u>	<u>East Main Road</u>	<u>1930</u>	<u>2</u>	<u>28,327</u>	<u>Private Lease</u>
<u>Bath House</u>	<u>Sandy Point Beach</u>	<u>1985</u>	<u>1</u>	<u>800</u>	<u>General Public Use</u>
<u>Mobile Home</u>	<u>Melville Campground</u>	<u>1998</u>	<u>1</u>	<u>840</u>	<u>Campground Manager</u>
<u>Pavilion</u>	<u>Melville Campground</u>	<u>1994</u>	<u>1</u>	<u>3,040</u>	<u>General Public Use</u>
<u>Comfort Station</u>	<u>Melville Campground</u>	<u>1980</u>	<u>1</u>	<u>960</u>	<u>General Public Use</u>
<u>Office</u>	<u>Melville Campground</u>	<u>1980</u>	<u>1</u>	<u>144</u>	<u>Campground Office</u>
<u>Senior Center</u>	<u>Bristol Ferry Road</u>	<u>1935</u>	<u>2</u>	<u>20,842</u>	<u>Portsmouth Senior Center</u>
<u>Transfer Station</u>	<u>Hedly Street</u>	<u>1973</u>	<u>1</u>	<u>3,125</u>	<u>Trash Transfer Station</u>
<u>Highway Dept. Bldg.</u>	<u>Hedly Street</u>	<u>1970</u>	<u>1</u>	<u>9,920</u>	<u>Dept. of Public Works</u>
<u>Fire Station</u>	<u>East Main Road</u>	<u>1972</u>	<u>2</u>	<u>12,112</u>	<u>Fire Department</u>
<u>Police Station</u>	<u>East Main Road</u>	<u>1974</u>	<u>2</u>	<u>4,371</u>	<u>Police Department</u>
<u>Town Hall</u>	<u>East Main Road</u>	<u>1898</u>	<u>2</u>	<u>15,398</u>	<u>Town Hall</u>
<u>Prudence Island Garage</u>	<u>Narragansett Ave., Prudence Island</u>	<u>1950</u>	<u>1</u>	<u>3,640</u>	<u>Dept. of Public Works</u>
<u>Melville Bldg. #104</u>	<u>Melville</u>	<u>1940</u>	<u>1</u>	<u>1,040</u>	<u>Dept. of Public Works (storage)</u>
<u>Melville Bldg. #77</u>	<u>Melville</u>	<u>1940</u>	<u>1</u>	<u>7,251</u>	<u>Dept. of Public Works (storage)</u>

9. PORTSMOUTH FREE PUBLIC LIBRARY ²

The Portsmouth Free Public Library has one building of 9,515 square feet serving the Portsmouth community (4,800 sq. ft. were added in 1991). The Library is undergoing a renovation (8/2001), which will add nearly 4,000 sq. ft. This will result in a new and

² Information provided by Rosemary Finneran, Library director, March 7, 2000.

expanded Children's Library, and additional space for technology and collections. The Library has one separate meeting room for public use. It has 47,508 books plus 4,330 non-print materials and 11 computers with Internet access. Annual circulation was 106,668 in 1999. There are 7,824 registered borrowers, of whom 2,680 are children. It has nine full-time and 10 part-time staff. It is open 64 hours per week. The Library is owned and operated by the "The Portsmouth Free Public Library Association", which has a 15-member Board of Trustees.

Constant growth in demand for library services fueled the expansions of 1991 and 2001. The Library maintains a Long Range Plan for 2000-2005.

D. COMMUNITY SUPPORT ³

1. The Portsmouth Citizen Advisory Committee (PCAC) 1989 survey revealed that 98.9% of the Town feels that safe neighborhoods, free from crime, traffic accidents, needless injuries and property damage are important or very important.
2. Portsmouth Action for Youth (PAY) provides recreational activities for youth regardless of disability. PAY is supported in the annual Town budget.

IV. FACILITIES AND SERVICES OBJECTIVES

A. OBJECTIVE 1

IMPLEMENT A CAPITAL IMPROVEMENT PROGRAM

1. A specific Capital Improvement Program is not included here. Although some individual items are recommended within the departments below, none of them today have a comprehensive inventory or analysis. A full inventory and analysis are recommended to be done over the next 12 months.
2. While regular Town services are rated as good by the residents, maintaining that high level is dependent upon four things: The Town's leadership, the competence and morale of the employees, their operating budget, and the facilities and equipment provided to do the job. The latter item is addressed in a comprehensive plan. The current informal system is inadequate to plan for the future, a future in which increasing responsibilities of the Federal and State governments are being handed down to the municipal level without adequate funding support.
3. EXPLANATION OF A CAPITAL IMPROVEMENT PROGRAM
 - a) A Capital Improvement Program is for six years with an annual funding component. It identifies all capital purchase and development items that are expected to come up during the six-year planning period. It defines "capital items" according to a minimum useful life (usually five to seven years at a

³ See Appendix PCAC Survey Results, 1989 PCAC Survey Question 11.1 1990 PCAC Survey Question 27.2 , 1990 PCAC Survey Question 27.4.; 1989 PCAC Survey Question 8: 1989 PCAC Survey Question 9: 1989 PCAC Survey Question 10.; 1989 PCAC Survey Question 21.1, 1989 PCAC Survey Question 25.1:

minimum) and minimum dollar amount that could not be routinely included in departmental operational budgets.

- (1) They are usually one-time discrete individual items, which are not intended to become part of the regular operating budget, or a multi-year project, with a beginning and an end.
- (2) Equipment purchases depend upon size and useful life. For instance a photocopier, because it is under \$5,000 and will last only two to three years, may not belong in a Capital Improvement Program. A fire truck, over \$100,000 and lasting ten to twenty years, is large enough and long-term enough to be planned for as a part of the Capital Improvement Program. Its cost has a major impact on the Town's budget.

4. RATIONALE

- a) "A multi-year Capital Improvement Program identifies capital needs, ranks them in order of priority, and systematically considers alternative financing methods, innovative ones. Capital programming provides a framework for analyzing the feasibility of financing options of the total capital and operating costs of proposed projects." ⁴
- b) A Capital Improvement Program provides a predictable framework for long-term financial and departmental planning. The process of setting up a CIP alone accomplishes much long-range planning, simply because it forces long-range thinking.
- c) Because it is multi-year, a Capital Improvement Program has built-in flexibility. In lean years, larger items can be pushed back and smaller items brought forward; in good years the reverse. Larger items can be funded over two or more years without having to resort to bonding.

B. OBJECTIVE 2

POLICE/FIRE/RESCUE/PUBLIC WORKS/CIVIL DEFENSE

Maintain or improve the present level of Police, Fire, Rescue and Civil Defense services in a cost-effective manner. Current service levels are satisfactory. Service levels indicate that the future levels of service will be satisfactory, with no major deficiencies.

Special areas of potential weakness should be addressed.

1. Maintain Fire Department facilities, personnel and performance at a level that provides above average or better rating by the monitoring agencies.
2. Use public education and Police Department services to prevent increases in crime.
3. Maintain rescue service at current (1989) per capita levels.

4 CAPITAL FINANCING STRATEGIES FOR LOCAL GOVERNMENTS, WASHINGTON, DC, INTERNATIONAL CITY MANAGEMENT ASSOCIATION, 1983.

4. Continually review, update, and evaluate problems relative to an emergency plan that can be implemented within 24 hours.
5. Improve cost effectiveness of operations through optimum island-wide cooperation.

C. OBJECTIVE 3

EDUCATION

Maintain the current degree of quality in the Portsmouth School System and improve programs and services wherever possible within the constraints of budgetary realities and regulatory guidelines. Offer educational opportunities to all residents, including, but not limited to, special-needs groups (i.e. minorities, youth groups, homeless groups and those with mental health, developmental, behavioral and physical disabilities) and assist in the expansion of special-needs services and facilities as the population's needs change. Promote the coordination of federal, regional, state and local policies for special-needs populations. Establish an information network to allow access to public information for the Portsmouth Public Library for all parts of the community.

1. Physical Facilities

- a) Total enrollment in the Portsmouth Public Schools as of October 1989 was 2,614 students. Projected enrollments for a ten-year period indicate a modest annual increase with 1998-1999 projected enrollment at 2,811 students. Overall, there appears to be enough capacity within the systems three elementary, one middle and one senior high school to handle future enrollment needs. However, the Middle School may exceed capacity over the next few years.
- b) Provide improved facilities (buildings, labs, library, etc.) where below standard; maintain facilities. Complete renovations and additions to each of the schools, per the 1998 bond issue.
- c) Provide for increased usage of school buildings and facilities by Town and community during off-hours.

2. Financial and Capital Planning

- a) Look at ways to control school budget expenditures to coincide with reasonable expectations for anticipated tax revenues.
- b) Implement joint purchasing with other functions and other communities to reduce costs.

3. Services

- a) Reduce drop-out rate by 50% over the next ten years.
- b) Increase the performance rating of the school system.
- c) Define scholastic areas in need of improvement. Establish tracking methods.
- d) Provide teacher/pupil ratios at State recommended criteria or better.
- e) Design curriculum with the Island economy in mind.

4. EXISTING EDUCATIONAL AND MEDICAL FACILITIES:

a) Portsmouth: Currently the educational facilities and services are:

Melville Elementary School offers programs to meet the needs of children with special-needs. The three elementary schools direct their children to these special-needs programs.

Portsmouth High School provides to all residents vocational education programs (business data programming, carpentry, childcare and guidance management and service, general drafting, marine operations, millwork and cabinet making, type setting, make up and composition, typing, general office programs, computing and word processing.)

The Bradley School (private) provides services to children with behavioral disabilities.

The East Bay Educational Collaborative provides occupational therapy to students, as well as math and science workshops for educators.

(1) Aquidneck Island: Other special-needs educational and medical facilities and services:

- Newport Hospital
- Newport Council of Community Services details the programs and facilities (public and private) in Newport County
- Newport County Regional Special Education Programs
- Newport Area Vocational Center provides a wide range of vocational training which links to Portsmouth's facilities.
- Newport County Mental Health Center, Middletown: mental health programs
- Maher Center, Middletown: services for the developmentally disabled and mentally retarded.
- Lucy's Hearth, Middletown: shelter for homeless women and children.
- R.I. Dept. Human Services provides services in the community -- AFDC, general public assistance, medical assistance programs (Medicaid), food stamps, the Well Infant Care (WIC) program (nutritional supplement program for women with children), and related programs.
- Federal Social Security Administration, Newport, provides application assistance to individuals who are aged, blind, disabled, or entitled to survivor's benefits.
- R.I. Dept. for Children And Families maintains an office in Newport and provides casework for families and children at risk for abuse or neglect.

D. OBJECTIVE 4

RECYCLING/SOLID WASTE DISPOSAL

Provide for adequate solid waste disposal and recycling that will serve the community

with a minimum impact on the environment and with due regard for resource conservation.

Increased awareness of environmental concerns and continued population growth requires a formal plan for waste control. Recycling can be used as a mechanism to control disposal and should be a major part of that plan.

1. Have a fully operational recycling plan in place, in cooperation with other Newport County towns and with the State, that will reduce per capita waste by 25% relative to January 1989.
2. Maintain the operating capability of the Town compactor station to match population.
3. Establish solid waste disposal and recycling services for Prudence Island and Hog Island at a level comparable to the Aquidneck Island portion of Portsmouth.

V. IMPLEMENTATION

A. CAPITAL IMPROVEMENT PROGRAM

1. Inventory all buildings, facilities, and major equipment for:
 - a) Long-term size adequacy.
 - b) Long-term condition adequacy.
 - (1) At what point will regular maintenance of major equipment be insufficient.
 - c) Long-term obsolescence and/or desired improvement in operations.
 - (1) For example, computerization offers the opportunity of increased efficiency.
2. Identify Additional Future Capital Needs.
 - a) Needs for additional facilities due mainly to growth.
 - b) For instance, future traffic growth may make fire coverage of the extreme northern and southern parts of Town within a NFPA standards impossible. While this may not be needed for many years, an evaluation of potential sites and either purchasing a lot or dedicating a lot we already own to that purpose needs to be done well in advance.
3. Rank-Order Capital Projects in Terms of Priority.
 - a) Relative seriousness of the need for the project or item.
 - b) Relative timeliness of the need.
 - c) Relative costs so that the overall Capital Improvement Program can be spread out evenly.
4. Evaluate Financing Methods Appropriate to the Projects.
5. Perhaps the most important part of a Capital Improvement Program is doing the initial work thoroughly and then sticking with the plan year after year.

- a) For example, if the average roof has a 15-year life and it is 12 years old, plan to replace it in 3 years. Do not use funds set aside for the roof for something else and then have to use operating budget or other targeted funds when the roof leaks.

B. POLICE/CIVIL DEFENSE DEPARTMENT

EQUIPMENT AND CAPITAL IMPROVEMENTS

1. Study decreasing vehicle replacement period, based upon population growth and staff growth projections.
2. Establish a 5-year plan for expanding the office facilities. Alternatives include a second story or first floor expansion of the present building. (Offices modernized 1995)
3. Improve water patrol/transport capability to accommodate population increases on the outer islands.
4. Provide adequate space for a Civil Defense operation center.
5. Install a "sally port" in which to process detainees. (Completed 1995)

SERVICES

6. Provide insurance for emergency air coverage.
7. Increase work force as necessary as the population grows to maintain standard ratios.
8. Establish a 5-year plan for addressing population growth on outer islands.
 - a) Expanding auxiliary or full-time work force, within budget restraints.
 - b) Permanent structure on Prudence will eventually be required.
9. Funds to assist in continuing education.
10. Expand the neighborhood crime watch program.
11. Update Civil Defense Emergency Preparedness Plan.

C. FIRE/RESCUE DEPARTMENT

EQUIPMENT AND CAPITAL IMPROVEMENTS

1. 10-year plan to account for vehicle maintenance and replacement.
2. Replace communications system with a modern U.H.F. system including mobile and hand-held units. This will eliminate the existing communications problems in low-lying areas.

3. Consider adding more non-emergency space for such activities as building permit analysis.
4. Upgrade school and public buildings, where required, based upon the National Fire Protection Agency (NFPA) standards, including removal of asbestos and lead base paint.
5. 10-year plan to add radio control lights or a strobe system at strategic locations to facilitate emergency traffic flow. Coordinate with the State.
6. Investigate additional fire station sites. Possibilities include the Park Avenue area, Black Point Farm area and other south Portsmouth locations.
7. Exhaust system for Fire Department building.

SERVICES

8. Work force should be expanded as needed, based upon long-term projections.
9. Continued training with updates in methods and technology is required.
10. Maintain present NFPA fire hydrant requirements prior to allowing expansion of neighborhoods.
11. Establish a public education program to address fire and safety issues.
12. Update commercial automatic alarm system requirements per latest NFPA line reversal system.
13. Continue mutual aid program with Middletown and the Navy.

D. DEPARTMENT OF PUBLIC WORKS

EQUIPMENT AND CAPITAL IMPROVEMENTS

1. Many of DPW's vehicles and equipment is old and/or functionally obsolete. Develop a program to replace key inventory over the next ten years, so that the department will have a modern fleet.
 - a) After the above is accomplished, develop a more regular replacement program for key vehicles and equipment.
2. The Department retains a number of vehicles that it does not use, as backup or for parts. Determine which vehicles and equipment are essential to be retained for these purposes and dispose of the rest.
3. Install an efficient exhaust system in the DPW garage.
4. Add two bays for vehicle storage.

5. Install a separator wall between the garage and the rest of the building.
6. Develop and implement a buildings and grounds maintenance program.
7. Continue and expand the Pavement Management Program.

SERVICES

8. Work force should be expanded as needed, based upon long-term need projections.
9. Continued training with updates in methods and technology.
10. Install a computer system for various scheduling and maintenance activities.

E. SCHOOL DEPARTMENT

EQUIPMENT AND CAPITAL IMPROVEMENTS

1. Monitor enrollment to assure adequate facilities.
2. Obtain periodic facility inspections to assure compliance with regulations codes and make necessary repairs, renovations and improvement.
3. Plan for additions and renovations to current facilities as required.

SERVICES

4. Survey the educational community periodically to assess the quality of the educational services provided and adequacy of the facilities available.
5. Evaluate the use of privatizing some services either as a sole activity by our schools, or in cooperation with the other communities.
6. Continue to investigate duplications of services and facilities between the School Department and the remainder of Town Government. Investigate joint purchasing, plus sharing of certain personnel and equipment, in order to save costs and increase efficiency without sacrificing quality.
7. The same exercise would be useful with neighboring communities.

F. RECYCLING/SOLID WASTE DISPOSAL.

1. Continue the Town recycling program, plan for additional types of materials to be recycled, and request available State grants.
 - a) The Town has not been required to comply with recycling regulations due to delays at the State level and due to the existing landfill contract. The ability of the State central landfill to accept additional refuse and recyclables over the long term is unclear.

2. Joint planning of solid waste disposal and recycling need to happen at the same time anyway.
 - a) The contract with Waste Management Incorporated to operate the Compactor Station and dispose of the waste at a Fall River site expires in 1994.
 - b) This is probably the same year that the State will have phase two of its recycling facility in Johnston ready for Portsmouth's use.
3. Ensure plans can accommodate projected population growth.
4. Current Efforts "The Town Administrator and the Town Council are now planning the solid waste and recycling future".⁵
 - a) Portsmouth currently disposes of 9,269 tons of refuse per year. To use the State's landfill, the Town must recycle. The maximum amount of solid waste that the State landfill will accept is 7,404 tons.
 - b) The difference of 1,865 tons per year, in effect, establishes Portsmouth's minimum goal for recycling, or about 20% of its solid waste.
 - c) A major problem with the State's formula is that it does not consider seasonal populations. On Prudence Island, the summer population swells to over 2,000 persons.
5. The Town Administrator has identified the following implementation steps:
 - a) Recycling
 - b) Composting
 - c) Source Reduction
 - d) Monitor the Compactor Station to ensure that we pay for Portsmouth trash only, and for actual use only.
6. Study feasibility of adding onto the existing Town Compactor Station recycling transfer facility.
 - a) Identify a location of an alternate transfer station (a site that is capable of handling recyclable and non-recyclable waste, and identify an acceptable site for composting.
 - b) Composting can greatly reduce both the volume and tonnage disposed of at the Compactor Station.
7. Address problems associated with accommodating Prudence and Hog Island waste.
8. Consider the implementation of a curbside pick-up trash/recycling program in Town.
 - a) A state sponsored pilot experiment is ongoing in West Greenwich to see if commercial curbside pickup for recycling can be accommodated economically. The Town should watch the results of this study to see if it could be applied here.

⁵ Excerpted from a December 28, 1990 memo from the Town Administrator to the Town Council.

9. The Town should study the feasibility of taking over the operation of recycling and solid waste disposal.

WATER SUPPLY

I. GOAL

To have a reliable long-term supply of clean drinking water, water for agriculture and industry at all times, both for the present and for the future planned population growth.

NOTES: Readers of this section are particularly referred to maps #10 – 11, and 25.

II. DEFINITIONS

A. DRINKING WATER

“Water. It is the single most universal need ‘Without it, you die.’ In a list of basic life necessities, it outranks food, clothing and shelter. It requires no elaborate introduction.”¹

III. THE NEED FOR PLANNING THE USE OF OUR WATER RESOURCES

A. WATER SUPPLY

1. The Need to Plan for Water Supply

- a) The build-out analysis has shown that the Town’s ultimate population, under current land use regulations, could reach nearly 30,000. According to studies commissioned by the Portsmouth Water and Fire District and the City of Newport, it appears there will be enough water in the present supply system to supply only 25-30,000 people. So some tough decisions need to be made about growth, control over water supply, contracts, and the provision of public water.
- b) The Town and the Water and Fire District have a shared obligation to ensure there will be a balance between the availability of water and the potential demand for water.
- c) Although the Portsmouth Water and Fire District is a quasi-municipal entity legally separate from Portsmouth as a governmental entity, it is, nonetheless, impossible for the Town to plan for the future of Portsmouth without planning for its water supply and distribution. While neither entity should interfere with the other’s operations, it is essential that the two jointly plan Portsmouth’s water future, as it relates to population and economic growth; identify areas of joint interest; and adopt a regular policy of consultation and joint planning in such areas. Conflicts or gaps in planning can, in the long run, cause severe problems.
- d) Public water is currently available on every public street within the PWFD service area (as well as most private streets). (On Map #25 Water Supply, it may be

¹ N.E. MONTHLY, JULY 1990

assumed that every public street on the Aquidneck Island portion of Portsmouth has public water.)

2. Problems with Current Water Supply Planning

a) Current Supply Contracts

- (1) Having no water supply of its own, the Portsmouth Water and Fire District is dependent upon contracts with outside suppliers.
- (2) The Portsmouth Water and Fire District has a minimum required annual purchase of water from Stone Bridge. The minimum purchase amount is also the maximum amount that Stone Bridge is currently able to reliably deliver to Portsmouth.
- (3) The new water supply contract with Newport increases supply by 29% for the next 10 years and continues to provide that all three communities served by the Newport system be subject to the same restrictions.
 - (i) Although Portsmouth water availability appears to be adequate for at least 10 years, Island-wide projections indicate a potential shortfall beyond the year 2020. The greatest potential growth on the Island for water demand is in Portsmouth.

b) Prudence Island Water Supply

The public water supply is actually the privately owned Prudence Island Utility Company. It supplies most of the eastern portion of the Island, and has been at or near capacity for many years. It currently has a waiting list for new connections, but it is highly unlikely that any new connections can be accommodated. There are no current plans to expand the system. According to the Company it is also unlikely that any new connections could be accommodated, because of both limited supply and inadequate pressure.

c) Water Supply Planning at the State Level

- (1) The State government has concentrated on long-term supply mainly for the Providence metropolitan area. Even a recently presented “Water Supply for the State of Rhode Island”² dealt very little with Aquidneck Island (it basically lumped us with “East Bay”).

IV. OBJECTIVES

- A. Provide an adequate water supply for the present and projected residential population of the Town.
- B. Provide an adequate water supply to meet the agricultural needs of the Town and endeavor to provide this water under conditions and pricing structure that encourage farmers to continue farming.

² Draft presented October, 1990

- C. Provide an adequate water supply for current and planned industrial and commercial developments that are required to provide desired employment and tax base.
- D. Promote water conservation through such means as education, pricing structure, and building code regulations.
- E. Promote water supply management through such means as system monitoring, leak detection and 100% metering.

V. IMPLEMENTATION

A. WATER SUPPLY MANAGEMENT PLAN

1. In accordance with Rhode Island General Law Title 46, Chapter 15.4 enacted June 17, 1991, the implementation of this portion of the Town's Comprehensive Community Plan is being prepared by the Portsmouth Water and Fire District for the main island and by the Prudence Island Water Company for Prudence Island.

This law requires each entity engaged in or authorized to engage in the supply, treatment, transmission or distribution of drinking water to prepare, maintain, and carry out a water supply management plan for approval by several state agencies by July, 1993. Each such plan, when approved, is to become part of the community's comprehensive plan and therefore must be compatible with the plan, and likewise, the community plan must be compatible with the water supply management plan.

2. The water supply management plan must address the following issues:
 - a) A statement of the goals that the plan is designed to achieve.
 - b) A description of the water system(s) covered, including sources of water, the service area, present and anticipated future users, and other important characteristics.
 - c) Data collection in a form that can be accepted directly into the Rhode Island Geographic Information System. Monitoring of system operations shall be performed at intervals approved by the Director of the Department of Environmental Management in coordination with the Office of Strategic Planning of the Division of Planning so as to evaluate all critical aspects of the system, compare performance with capabilities and expectations, and provide a basis for continuing water supply planning at the system, municipal, regional, and state levels.
 - d) Demand management measures that will achieve a high level of efficiency in the use of a limited resource, through the application of metering of one hundred percent (100%) of the water used; sanitary device retrofit; technical assistance to and performance of water use audits for major industrial, commercial, institutional, governmental, agricultural and other outdoor water users; education and information; and use of appropriate fees, rates, and charges to influence use.
 - e) System management measures to insure that the physical components of the water system are properly operated and maintained, including leak detection and repair;

rehabilitation of infrastructure; criteria and procedures for service extensions; meter installation and replacement; and frequency of reading meters. Maintenance or reduction of non-account water to stated goals shall be considered an essential component of system management.

- f) Supply management measures to insure present and future availability of drinking water in adequate quantity and quality, including protection of the capacity and quality of drinking water sources; retaining water sources for standby or future use that are or can be improved to drinking water quality; reactivation of any water sources not in use; interconnection of systems for ongoing, standby, or emergency use; and supply augmentation.
 - g) Emergency management, including risk assessment, for responses to temporary or permanent loss of supplies due to natural or manmade causes, for extraordinary treatment processes, for interruptions in the delivery system; and for contamination of water sources or delivery systems.
- 3. The Portsmouth Water and Fire District has already completed, or is currently undertaking, most of the effort needed to develop the plan. The plan shall be completed by July 1, 1993 except that the section on emergency management shall be completed by July 1, 1992.
 - 4. The Administrative Board of the Portsmouth Water and Fire District fully supports the goal of having a reliable long term supply of clean drinking water for people, agriculture and industry at all times, both for the present and for the future population growth. The District has been pursuing and will continue to pursue this goal, however, the best information presently available indicates that 4.0 mgd is the maximum amount of water likely to be available to the District in the foreseeable future. This volume of water is sufficient to support a population of approximately 25,000-30,000, assuming that the current mix of residential, commercial, industrial and agricultural usage remains consistent in the future.

B. AVAILABLE WATER SUPPLY

- 1. The total water supply volume currently available to the District on maximum day is on the order of 2.9 mgd to 3.0 mgd. This includes 2.25 mgd from Newport and 0.65 mgd to 0.75 mgd from Stone Bridge.
- 2. The District presently has about 5100 customers representing a maximum day demand exposure of approximately 2.3 mgd. In essence, the available supply exceeds the present demand by approximately 0.6 mgd to 0.7 mgd. Based on historical usage, this represents approximately 1300 to 1500 additional residential customers including commercial and industrial growth consistent with the current ratio of commercial/industrial demand to residential demand.
- 3. A review of the District's records shows that for the twenty year period prior to the moratorium, the District has tied-in an average of 131 service connections per year. Consequently, the currently available supply should allow for ten to twelve years of growth assuming that the historical ratio of residential to commercial/industrial demand remains consistent for new the growth.

C. DEMAND ANALYSIS

1. The updated build-out demand analysis prepared by the District indicates that the potential system demand for the District may range between 4.4 mgd and 4.8 mgd.
2. The upper range in this analysis considers the savings induced by the 1990 plumbing code for new construction and assumes that the current 1990 base demand remains the same. In addition, the upper range assumes a maximum day peaking factor of 2.0, instead of the traditional 1.8, for the future customer base. This peaking factor increase is appropriate to account for the fact that the non-sanitary use on maximum day will not be reduced by the water conservation fixtures, even though the average day demand has been reduced. The lower range also considers the savings induced by the 1990 plumbing code for new construction but additionally assumes that the current 1990 base demand decreases by nine percent through normal plumbing renovations and moderate retrofitting over time. In addition, the lower range assumes a maximum day peaking factor of 1.8 for all future demand. This represents an effective reduction of ten percent under the 2.0 peaking factor for new construction and renovations. It is assumed that this reduction would be accomplished through seasonal conservation brought about through increasing water rates and the District's public education program.
3. It is recommended that this analysis be reviewed and updated to account for any changes in zoning or overlay Districts resulting from the comprehensive plan. In addition, as more technical data becomes available on the impacts of the 1990 plumbing code it is recommended that the analysis be updated accordingly. Also, upon further expansion of the District Billmaster database to include lot size and zone type for each customer, a more comprehensive analysis of customer demand should be performed and the demand analysis should be updated at that time.
4. With the exception of a portion of Southwest Portsmouth that is served by Newport, present plans are to expand water service geographically as the market demands. No areas of Town will be denied extension of public water service in the foreseeable future. Changes in supply, demand, and contract parameters in the future may necessitate a change in the current policy

D. WATER SUPPLY MANAGEMENT

It is recommended that the District continue to pursue the following management practices to ensure a reliable water supply for the Town:

1. Adoption of a policy to carefully review future applications by large water customers, i.e., those that may have a substantial negative impact on the District's ability to service its customer base.
2. Continue to monitor the water main frontage and demand exposure created by water main extensions.

3. Continue to routinely monitor and assess the District's water supply availability, system demand and future demand through an annual review similar to the moratorium review.
4. Prepare and maintain a Water Supply Management Plan in accordance with Rhode Island General Laws, Title 46, Chapter 15.4.
5. Maintain the current procedures for assigning water service application numbers and approval of each application by the Administrative Board. Continue to provide a finite expiration date for each approval.
6. Investigate the imposition of impact fees to be assessed on each new lot created by extending water mains. The impact fees would be used to offset the cost of system expansion necessary to service new customers and/or to possibly retrofit existing households with water conservation plumbing fixtures.
7. Available data indicates that it is unlikely that the District will ultimately have enough guaranteed water supplies to adequately service the entire District.³ PWFD policies and Town land use regulations should be compatible for the long run. Joint planning between the PWFD and the Town on matters of overall growth and geographic areas of growth is necessary.
 - a) Cooperative efforts should concentrate on where the Town wants growth, what types of growth it wants, location, environment, and the physical ability (water main size, pressure, etc.) of the Water and Fire District to serve increased demand in specified areas.
 - b) In areas of specific interest, such as areas the Town may wish to target for economic development, the Town and Water District should work together to provide adequate water service to the extent practicable. Work together to determine any areas where future growth would be undesirable or unwarranted and have the Town to adjust zoning accordingly.
8. The Town should promote low water use industry and commerce in its efforts to expand its tax base.
9. Continue the leak detection program and water conservation program set forth in the District's Master Plan.
10. Continue to implement the District's capital improvements program.
11. Continue to investigate new sources of water supply in accordance with the District's Master Plan as follows.
 - a) Negotiate with City of Newport for Expansion of Present Supply Contract.

³ The District's potential buildout demand is 4.8 mgd on maximum day.

Inclusion of the proposed power plant project at Arnold Point and the Eastern Passage Trust development increases this demand to 5.4 mgd. The long-term maximum day supply available from Newport will not exceed 3.90 mgd according to Metcalf and Eddy's Water Supply Management Study. According to notice from the Division of Statewide Planning, the Stone Bridge supply may ultimately be reduced to 0.11 mgd on maximum day. This results in a long term potential maximum day supply of 4.01 mgd and a shortfall of approximately 1.39 mgd.

- (1) Recent discussions with City of Newport officials regarding a future supply to the District on the order of 3.9 mgd have suggested a willingness and availability of supply once Newport's cross-river pipeline is completed. The underlying agreement between the City of Newport and the Portsmouth Water and Fire District has a termination date of December 31, 1995. Though, at this time, discussions have not resulted in an extension of this contract, it is likely that the present contract will be extended for a significant period of time, and the available volume to the District will be increased.
 - (2) It is recommended that the Portsmouth Water and Fire District continue to pursue a long-term contract extension and additional guaranteed supplies from the City of Newport.
- b) Negotiate with Stone Bridge for a Guarantee and Expansion of Present Supply.
- (1) The potential for expansion of the Stone Bridge Plant does exist. However, an analysis of Stone Bridge's current supply commitments and the potential customer base in Tiverton indicates that there will be little if any additional water available for Portsmouth. If the plant were expanded to treat the full volume available from the pond, Stone Bridge may be able to continue to supply Portsmouth with 0.75 mgd on a long-term basis. However, based on Stone Bridge's history of management of their supply and water system, it is unlikely that they will take the necessary steps to undertake such a massive and costly expansion.
 - (2) It is recommended that the District continue to investigate Stone Bridge even though it is not expected to be a reliable long-term water supply option.
- c) Negotiate with Fall River for Water Supply Contract.
- (1) Unofficially, Fall River officials indicate their willingness to consider servicing Portsmouth should the South Watuppa Pond become available as a supply source. Though there is optimism that this will eventually happen, the experience of the Big River Reservoir project suggests that, before it becomes a reality, a significant period of time may pass.
 - (2) In the interim, it is recommended that the District periodically continue to seek supply from Fall River's present system, even though recent efforts have been unsuccessful.
- d) Investigate the Possibility of Three-Party Agreement with Fall River and Tiverton for Water Supply Contract.
- (1) However, with the settlement between Fall River and Stone Bridge over the Stafford Pond water rights, it does not appear that this issue has any further relevance.
- e) Investigate Feasibility of Construction and Maintenance of a Surface Water Reservoir.
- (1) Preliminary findings on the Barker Brook Watershed study conducted by the District indicate that the development of the project could cost approximately \$12 million and provide a safe yield of approximately 1.0 mgd or less. Camp Dresser and McKee, the engineer that performed the study, indicated that the

ratio of cost to available yield exceeds what, in their professional opinion, is justifiable.

- (2) The preliminary findings on the Melville Ponds Watershed study indicate that the ponds are not desirable for development as a public water supply and will not likely be approved by the Rhode Island Department of Health.
 - (3) It is recommended that the District perform a feasibility study on the Glen water shed and a prefeasibility study on the Lawton Valley gorge on the west side of West Main Road.
- f) Feasibility of Municipal Wells.
- (1) A prefeasibility study conducted by Maguire Group, Inc. in 1988 concluded that the probability of developing a reliable municipal well of any significant magnitude in the Town of Portsmouth is low. Based on this prefeasibility study, it does not appear that municipal wells are a viable alternative for increasing the available water supply to the District.
 - (2) The PWFD is in the midst of a “fractured bedrock study” at various locations in Portsmouth.⁴
- g) Investigate the Feasibility of Construction of Desalination Plant.
- (1) Due to the cost of desalination, as well as the resulting environmental concerns with brine disposal, it appears prudent for the Administrative Board to pursue more traditional means of augmenting its water supply before expending any effort or money on the study of desalination for the District.
 - (2) It is recommended that the District monitor the State's research on this issue for future consideration.
- h) Track progress on the connection of the Providence Water Supply System to the Bristol County Pipeline.
- (1) Augmentation of the District's present supply via the Providence Water Supply Board's system can be considered a long-range solution to the District's water supply situation, at best.

E. COORDINATION WITH TOWN'S LAND USE POLICIES

1. Current zoning requirements call for a minimum of 40,000 Sq. Ft. for lots that do not have public water and have to rely on on-site wells. That figure is based on old requirements for the distance between water supply wells and septic systems. Current (2001) regulations call for a 400 ft. distance between wells and septic systems, so that minimum will have to be changed.
2. Should the PWFD develop its own water supply, the Town will coordinate land use policy with the PWFD to ensure that hazardous uses are not allowed in the wellhead protection area, and other elements of a wellhead protection program are properly developed.

⁴ Per conversation May 16, 2001 with William McGlinn, General Manager, Portsmouth Water and Fire District.

OPEN SPACE

I. GOAL

Preserve Portsmouth's rural and country atmosphere created by undeveloped land, farms, fields, wooded areas, wetlands and shoreline.

NOTES: Readers of this section are particularly referred to maps #26 – 29 and 46 - 48.

II. DEFINITION OF OPEN SPACE

An Open Space is an area of undeveloped land. The land may be either protected from development or unprotected but not yet developed. The land may be a public holding or privately owned. Private open spaces include those owned by businesses (golf course, horse stables,), churches, and individuals (farms and estates).

III. THE NEED FOR OPEN SPACE PRESERVATION EFFORTS

- A. Open space is a part of the essential character of Portsmouth, part of its identity. The increased pressure for residential development has added to demands upon land once characterized by farming, open land and wetlands.
- B. While there may remain a feeling of spaciousness, the Town should act to ensure that as much of it as possible remains open space. There has been a growing interest in protecting land and water bodies for conservation purposes. The growth of Portsmouth has created the realization of the need to protect land for conservation purposes.
- C. Portsmouth people value their open space. For many, that is why they came here. The problem is that the natural beauty of the area is its own worst enemy - the person who wants to live next to it also takes a piece of it. While we cannot stop that process from happening, we can manage it so that as much open space is preserved as possible.

D. OPEN SPACE INVENTORY

Table 1 - PARCELS PROTECTED FOR OPEN SPACE OR AGRICULTURE ¹
SUMMARY INFORMATION - JANUARY, 2002

	<u># OF PARCELS</u>	<u>ACREAGE</u>
ON AQUIDNECK ISLAND		
Permanent Protection:		
State Acq. Development Rights	5	218
Town Owned Property	54	369
Aquidneck Island Land Trust	16	346
Newport Water Department	3	354
State Owned Property	<u>13</u>	<u>65</u>
SUBTOTAL	77	1,352
Temporary Protection:		
Farm-Forest-Open Space	0	0
Portsmouth Farm Assessment Program	<u>148</u>	<u>2,926</u>
SUBTOTAL	<u>148</u>	<u>2,926</u>
TOTAL ON AQUIDNECK ISLAND	227	4,278
ON PRUDENCE ISLAND		
Permanent Protection:		
State Acq. Development Rights	0	0
State Owned Property	29	2,137
Town Owned Property	4	13
Prudence Conservancy	68	214
Other Land Trusts	35	518
Prudence Improvement Association	<u>3</u>	<u>14</u>
SUBTOTAL	136	2,882
Temporary Protection:		
Farm-Forest-Open Space	<u>10</u>	<u>28</u>
TOTAL ON PRUDENCE ISLAND	146	2,910
TOWN TOTALS		
Permanent Protection	213	4,006
Temporary Protection	<u>158</u>	<u>2,954</u>
TOTAL	371	6,960

Source: Portsmouth Tax Assessor Records

¹ See also the description of and detail for the Portsmouth Farm Tax Assessment Program in the Agriculture element.

Table 2 - MAJOR OPEN SPACE PARCELS include:**AQUIDNECK ISLAND****PUBLICLY OWNED**

NAME	LOCATION	OWNERSHIP/ DEVELOPMENT RIGHTS	USE	ACRES	MAJOR FEATURES
St. Mary's & Sisson Ponds	Union St.	Newport Water Dept.	Water supply	247	Drinking water reservoir
Lawton Valley Reservoir	Union St.	Newport Water Dept.	Water supply	90	Drinking water reservoir
Phelps Farm	Middle Rd.	State owns development rights	Farmland	86	Pasture
Thurston Farm	Union St.	State owns development rights	Farmland	17	Protection of Sisson Pond
Van Hof Farm -1	Jepson Lane	State owns development rights	Active farmland	64	Protection of Sisson Pond
Van Hof Farm -2	Off Jepson Lane	State owns development rights	Active farmland	11	Protection of Sisson Pond
Glen Park	Glen Road	Town of Portsmouth	Recreation/ Open Space	55	Recreation fields
Glen Farm	Linden Lane	Town of Portsmouth	Recreation/ Open Space	92	Recreation fields, open space
Melville Pond Campground	West Side	Town of Portsmouth	Camping/ trails/fishing	153	Woodlands, ponds
Fort Butts	Sprague St.	Town of Portsmouth	Open Space/ Historic	11	Historic
Sandy Point Beach	Sandy Point Ave.	Town of Portsmouth	Recreation	9	Swimming
Island Park Playground	Highland Ave.	Town of Portsmouth	Recreation	9	Totlot, ballfields

LAND TRUSTS

NAME	LOCATION	OWNERSHIP/ DEVELOPMENT RIGHTS	USE	ACRES
Pierce/Anthony Farm	East Main Rd.	Aquidneck Island Land Trust	Farmland	17
AILT	Oakland Farms	Aquidneck Island Land Trust	Forest	30
Cousens	Mitchell's Lane	Aquidneck Island Land Trust	Farm	6
Farmlands	Wapping Road	Aquidneck Island Land Trust	Open Space	43
Greenscape	Braman's Lane	Aquidneck Island Land Trust	Open Space	11
Newport National Golf	Wapping Road	Aquidneck Island Land Trust	Golf Course and Trails	133
Pennfield School	Sandy Point Avenue	Aquidneck Island Land Trust	School	7
Sandy Point Avenue/ 3S	Sandy Point Avenue	Aquidneck Island Land Trust	Active farmland	50
Peters Farm	Bramins Lane	Aquidneck Island Land Trust	Active farmland	50
Common Fence Point Salt Marsh	Common Fence Point	Common Fence Point Improvement Assoc.	Conservation	10

PRIVATE

NAME	LOCATION	OWNERSHIP/ DEVELOPMENT RIGHTS	USE	ACRES
Bloody Run Golf Course	West Side	Private	Golf	250
Montaup Country Club	Anthony Rd.	Private	Golf	119
St. Mary's Church	East Main Rd.	Religious	Active farmland	107
Green Valley Country Club	Union St.	Private	Golf	106
Pocasset Country Club	Bristol Ferry Rd.	Private	Golf	81
Black Point Swamp	Wapping Rd.	Private	Conservation	72
Bertha K. Russell Preserve	Bayview Ave.	Audubon Society	Conservation	52
Doris Duke Estate	West Main Rd.	Private	Conservation	28

PRUDENCE ISLAND & OTHER ISLANDS

NAME	LOCATION	OWNERSHIP/ DEVELOPMENT RIGHTS	USE	ACRES
National Estuarine Research Reserve System	Prudence - North End	State of Rhode Island	Conservation & research	736
National Estuarine Research Reserve	Prudence - South End	State of Rhode Island	Conservation & research	801
-	Prudence - Middle	Preserve Rhode Island (Heritage Trust)	Woodland	458
-	Prudence - Middle	Audubon Society	Conservation	250
-	Prudence - various	Prudence Conservancy	Conservation	214
Little Property	Prudence - west shore	State of Rhode Island	Conservation	40
Rossi Farm	Prudence - North End	State of Rhode Island	Conservation	27
Bay Island Park	Patience	State of Rhode Island	Conservation	205
Bay Island Park	Hope Island	State of Rhode Island	Conservation	90

Public Access

Properties owned by the Town and State are generally open to the public. Access to the Research Preserve on north Prudence Island is subject to restrictions. Most properties owned by land trusts and properties for which the development rights have been purchased are still in private ownership, not open to the public. In many cases they are working farms. Properties owned by the Audubon Society, the Prudence Conservancy and Preserve Rhode Island are open to the public with restrictions.

E. Community Support ²

The PCAC survey results make it clear that the Townspeople want the Town to take an active role in open space preservation. It is, perhaps, the number one goal of the Town through survey-expressed support. Therefore, and because the next real estate development boom could soon claim another major area of open space, the recommendations herein are aggressive and are given in a fair amount of detail.

IV. OPEN SPACES OBJECTIVES

The following objectives further define the goal.

A. OBJECTIVE 1

Protect 100% of current wetlands and wildlife habitat.

Areas targeted for open space often are those which are also environmentally sensitive. Used together, these two elements create a strong argument for preservation of specific open spaces.

The salt water and fresh water marsh areas and other irreplaceable inland wet areas and water bodies are a valuable asset to Portsmouth. Wetlands and wildlife habitat must be preserved.

Create open space to protect complete ecological units by retaining open spaces large enough to:

1. Serve as wildlife habitat.
2. Store flood waters.
3. Abate air and water pollution.
4. Provide a sense of openness.

The Town should do as much as it can to preserve these opportunities for its present and future residents by using wetlands and water bodies for passive recreational uses, while discouraging intense development in such areas. A number of these areas could be preserved by effective use of such regulatory tools as zoning, tax incentives and subdivision regulations at the local level, and working with the State in administering of the Wetlands Act and the Coastal Resources Act.

B. OBJECTIVE 2

Preserve a minimum of 50% of current farmlands.

² See Appendix PCAC Survey Results-Question 49) of the 1989 PCAC Survey, Question 23) 1990 PCAC Survey, Question 23.8) 1990 PCAC Survey, Question 23.6) 1990 PCAC Survey, Question 26.8) 1990 PCAC Survey

The most effective way to preserve open spaces in Portsmouth is to preserve farms. Unlike residential property, farms provide more revenue to the Town than they require in services. The short-term costs to preserve farms through tax incentives to farmers and the purchase of development rights is less than the long-term cost to lose farms. These long-term costs include higher taxes for services for the new residential areas, more residential traffic, etc.

On the Aquidneck Island portion of Portsmouth, farms provide the majority of remaining open space. In 1969 there were 140 farmers working 8,000 acres of farmland in Portsmouth. Today, 45 farmers work 2,700 acres. This represents a loss of over 65% of Portsmouth's farmland.

Keeping these farms active is important for the character of the community as well as their open space value.

Because of the importance of farm preservation to a variety of objectives (open space, natural resources, economic development, etc.) and because of the fact that implementation items are specific to the maintenance of working farms, agriculture is the subject of a separate section of the Comprehensive Plan.

C. OBJECTIVE 3

Preserve and promote open space character within existing neighborhoods and new developments.

Encourage development patterns that conserve, protect and maintain access to open space and promote a feeling of openness. Minimize the effects of existing and future development on fragile resources.

Different plot plans preserve different levels of open space while providing the same number of housing units per acre of developed land. With proper planning, Portsmouth can provide managed residential growth and yet preserve open spaces. Open space character can be created by properly located neighborhood parks, vacant lots, and landscaping. This objective addresses the desire to provide the maximum open space and open space character while providing adequate housing.

D. OBJECTIVE 4

Protect scenic vistas, views of historic properties, and other visually important areas that help make Portsmouth a special place.

Besides environmentally important areas and the maintenance of farms and open space in neighborhoods, there are other select places that help make a Town unique and memorable. Portsmouth has such places and visual access to them should be protected.

E. OBJECTIVE 5

Maximize the amount of temporarily and permanently protected open space.

The ultimate way to preserve open space is for the form of ownership or control be such that it can never be developed, or at least cannot be developed for a long time. Ownership by a non-profit organization is not, in itself, a permanent guarantee.

1. We have a good start. The Aquidneck Island Land Trust has become a large, well-funded and influential organization. The Town of Portsmouth is now dedicating most of its real estate transfer revenue to open space acquisition and development. With the current slowdown in real estate development, it is time to make as many further and permanent gains as possible.

V. IMPLEMENTATION EFFORTS

Most people think of either large lot zoning and purchase of either development rights or outright acquisition as the only answers. The problem is that large lot zoning merely gobbles up the land faster (bigger backyards and more roadway) and the money for outright purchase is too limited to accomplish preservation of open space in the long run as we might like. There are other methods, however, that cost the Town little or nothing: clustering, mandating a percentage of open space in every development; land trusts; and others. (Those implementation methods whose primary purpose is open space preservation are detailed here. Those which are covered in greater detail in the land use, natural resources and agriculture sections are only mentioned here.) People interested in maintaining open space must support these methods. Open space planning identifies the areas we want most to protect, which of it is most valuable for recreation, and helps set up a long-term program for doing it.

The 1990 PCAC survey tested a number of these options.³

While protecting wetlands and wildlife habitat certainly preserves open space at the same time, most regulatory efforts fall under the purview of Natural Resources and Land Use, and preservation of farms is a separate section. Nonetheless, a number of implementation steps relating specifically to Open Space belong here.

The following implementation tasks identify specific steps to be taken to ensure that the above objectives are met.

The implementation tasks should:

1. Identify current protected open spaces.
2. Identify new areas to be protected.
3. Identify funding to protect open spaces.
4. Provide support to farming.
5. Identify zoning techniques that protect open spaces.
6. Get the public involved.

³ See Appendix PCAC Survey Results, 1989 Survey Question 26.7., 26.3., and 26.8.

7. Plan for the long-term.

A. GENERAL PLANNING

1. Identify current protected open spaces, under Town, State or Federal control. Identify the open space value of each parcel.
 - a) Classify public open space into three categories and make them binding by ordinance or otherwise.
 - (1) Permanent, natural areas (limited development).
 - (2) Permanent park and recreation areas (recreational development with limits on percentage of impervious cover).
 - (3) Temporary (areas reserved for eventual non-open space public use).
 - b) STATUS: Most of this task has been completed.
2. Identify potential land to be protected as Open Space (wetlands, large parcels, and farms). Identify the open space value of each parcel.
 - a) Consider developing criteria for identifying important open space areas. Such criteria could include farmland, important views, wildlife habitat, and open space in otherwise developed area. Map a finalized list of open space areas. Develop plan for protecting these areas.
 - b) This effort should involve public input to develop a broad consensus on important open areas in the community.
 - c) In 1998 the Aquidneck Island Partnership created six “Preferred Preservation Maps”, each of which evaluates critical resources by type. This mapping will provide the basis for this effort.
3. Prepare open space plan identifying desired locations of future parks; major buffers, trails, and greenways.
 - a) Adopt the Greenways Plan of the Aquidneck Island Land Trust within this Plan. (See Maps #28 and 48.)
4. Develop an inventory of important scenic areas and view corridors to establish areas that could be protected under the Resource Protection District for scenic and visual purposes.
 - a) Develop criteria for determining important scenic areas. Present to the public. Establish list of important scenic areas, map them and present to the public.
 - b) A State study identifies several broad areas, but is not specific enough.
5. Identify scenic roads in Town and adopt provisions to preserve the qualities and character of these roads.
 - a) Consider developing criteria for identifying scenic roads. Develop list of roads meeting these criteria. Present to the public.

- (1) Consider adopting provisions governing maintenance, reconstruction, and/or paving work on scenic roads.
 - (2) Consider regulating cutting or removal of trees, tearing down or destruction of stone walls, etc., through special permit.
 - (3) Relate scenic roads to buffer areas and cluster development to maximize the potential for preserving rural character.
 - (4) Seek to create new scenic roads and scenic road linkages when reviewing development proposals.
6. Encourage linkage of open space throughout the Town to create a continuous open space network with significant buffering potential and potential passive recreations uses.
 - a) Develop an open space network to preserve key natural resources, scenic views and vistas, and historic areas, as well as to provide opportunities for passive and active recreation, especially in areas where open space can overlap with natural resource protection. (E.g. a linear park system).
 - b) Where dedicated open space to provide a linkage is not available, negotiate rights-of-way on private property to provide linkage.
7. Coordinate open space preservation efforts with environmental protection efforts and regulations. Clearly, there is a good deal of overlap here that should be carefully coordinated. Areas with open space value are often environmentally sensitive areas as well. Thus, starting with an identification of environmentally sensitive areas is a logical first step.
8. A note on mapping is important here. Implementation of an Open Space or Greenways Plan is opportunity driven, in that any individual parcel may or may not be available for purchase of development rights or outright purchase, or preservation through land use regulations or tax incentives. The Open Space and Greenways Maps, as shown on Maps #28 and #48, show general locations only. As explained in subparagraph 6 above and elsewhere in the subsection, the key is developing a linkage of open and preserved areas in preferred areas. So, for example, the greenway on the map is a wide swath that may, upon implementation, wander somewhat from what is shown.

B. ZONING AND SUBDIVISION ORDINANCE PROVISIONS FOR OPEN SPACE

1. OPEN SPACE ZONING

- a) Open spaces provide for the retention of land as either natural or managed open space for a variety of uses ranging from agriculture to commercial recreation (e.g. golf courses).
- b) Open space zones work by severely limiting permitted uses and via minimum lot size.
- c) Open Space Zoning exists in 14 Rhode Island communities.

- d) Portsmouth's current "Open Space and Public Lands" zoning designation applies only to existing publicly held open space areas. The Future Land Use Plan includes expanding this zone to include parcels, particularly on Prudence Island, which are owned by conservation land trusts.

2. REGULATORY RESOURCE PROTECTION DISTRICTS AND STANDARDS

- a) Used to protect specific environmental resources and/or to prevent pollution impacts. The standards do not generally preclude all development but may stipulate restrictions on certain land uses, densities, methods of construction, or on performance of certain operations or activities. There is the prevailing notion that the Department of Environmental Management (DEM) is primarily responsible for protection of the environment in Rhode Island. The fact that DEM regulations are not land use regulations, but rather are aimed at minimal standards and prevention of major pollution only. Thus most municipalities have taken it upon themselves to provide additional protection through land use regulations.

These methods are discussed in greater detail in the Natural Resources section.

The major points here are:

- b) There is an abundance of legal and planning precedent in Rhode Island for the adoption of such methods, and plenty of examples to follow within our own State.
- c) Special resource protection provisions are also a way to help insure open space in Portsmouth, as many of the geographic areas we might wish to maintain for open space reasons, we need to protect for environmental reasons.

3. RESIDENTIAL CLUSTER PROVISIONS

Cluster ordinances allow the protection of open space through clustering of development on a portion of a site, and retention of open space on remaining portions of the site. Ordinances can include density bonus provisions to encourage the use of the cluster. See Land Use Element.

Portsmouth may adopt a cluster bylaw provision with the following considerations.

- a) Minimum parcel size required for clustering.
- b) Possible density bonus as an incentive for clustering.
- c) Investigate decreasing road widths as an incentive for developers to choose cluster development.

Residential clusters are allowed in 19 Rhode Island communities (1990) with density bonuses in 7. In Portsmouth, clustering applies only to single-family development. However, the Special Use Permit provisions of the Zoning ordinance for multi-family developments could be interpreted as cluster-type provisions.

4. PLANNED UNIT DEVELOPMENT (PUD) PROVISIONS

- a) This is somewhat like clustering as a means of retaining open space and cutting down construction costs through more compact development. In a planned development, a variety of residential and non-residential uses may be combined on a single parcel and are reviewed as a single proposal.
- b) In addition to retaining open space, this approach offers potential for reduced development costs by gaining approval for an entire project, rather than on a lot-by-lot basis.
- c) An additional advantage to the community is that Planned Unit Development (PUD's) can mandate a phasing scheme. This allows the community to control the pace of development to a certain extent and to know what will happen when.
- d) Considerations in designing a PUD ordinance are:
 - (1) Minimum parcel size required for PUD.
 - (2) If a density bonus is given as an incentive for PUD.
 - (3) Whether unbuildable land is defined and excluded from the lot area in density calculations.
- e) Planned Unit Developments are provided for in 16 Rhode Island municipalities. (Adopted in Portsmouth for non-residential developments in 2002.)

5. LARGE MINIMUM LOT SIZES

- a) Large lots are the first instinct in protecting open space. Large lots may protect open space and natural resources through large backyards, but they also increase the cost of housing through higher lot prices and increased costs to providing roads and utilities servicing a more dispersed development. Once the roads are accepted by the Town, large lots cost the Town more money in road and utility maintenance, including more stormwater drains and the pollution caused by increased stormwater runoff.
- b) Minimum lot sizes of 40,000 square feet or more are used as an open space tool in eleven Rhode Island communities.

6. REQUIRE DEDICATION OF A PERCENTAGE OF LAND AS OPEN SPACE

- a) An increasingly common method of retaining open space is to require a percentage of the development parcel to be dedicated to open space by setting aside a portion of the development parcel. Town. Such dedication can be required everywhere or in designated target zones where open space preservation has been found particularly important.
- b) Residential developers can also be required to dedicate land, or fees in lieu of, for parks that may service the area of the development, but not necessarily about it.
- c) Dedication of some percentage of open space is required in 10 Rhode Island communities, using innovative and/or flexible approaches. Usually, some portion of unbuildable land is allowed to be included in this open space dedication.

- d) Portsmouth's current Subdivision Ordinance gives the Planning Board the power to require an allocation of up to 5% of the area of a subdivision for parks and playgrounds (but not for open space). This provision has rarely been applied.
- e) Portsmouth's Zoning Ordinance says, "Open space shall be provided in appropriate places and every effort shall be made to preserve wooded areas and other desirable site amenities." However, no percentages or standards are set and the provision applies only under "Special Regulations" for Apartments, Condos, Cluster and New Business complexes.

7. PRINCIPLES TO BE CONSIDERED WHEN DESIGNING AND ENFORCING REGULATORY PROVISIONS FOR OPEN SPACE

- a) Utilize maps of open space areas and greenways (maps 24 – 27 and 44 – 46 herein) to be referred to by developers and by the Planning Board when reviewing proposals. .
 - (1) Open space in new developments should be adjacent to existing open space and agriculture wherever possible.
- b) Provide for and encourage "cluster development" in which smaller house lots are allowed in trade for permanent deeded open space land.
 - (1) Develop criteria for open space dedications.
 - (2) Require developers to submit two plans, one illustrating development of the site with cluster and the other illustrating a traditional subdivision. The Town can then decide which it considers to be the most appropriate site layout for the particular parcel.
- c) Establish overlay districts, including a conservancy district, to impose reasonable conditions on the use of the land in those areas. Consent must be obtained from the Planning Board before development.
- d) Discourage conventional sprawl development, which consumes land unnecessarily, in favor of more innovative land use techniques.
- e) Identify any zoning techniques that provide open space within developments.
- f) Develop a conservation easement form to protect critical areas in subdivision, and require recording as part of subdivision or building permit process.
- g) Use conservation easements to preserve key open space buffers and trail links on private property.
- h) Develop covenant language allowing the Town and adjoining landowners to enforce open space covenants and easements, and require it in all new development documents.
- i) Develop covenant language allowing the Town to assume open space maintenance if association defaults.
- j) When requiring open space to be set aside as part of a proposed development, consider both the existing and future opportunities for linking open space areas together.

- (1) Require developers to address the relationship of proposed open space to surrounding open space, and to show the linkage/relationship on site plans.
- k) Flexible zoning techniques offer the community and the developer more options, permitting the land-use planning process to be more responsive to specific problems and community objectives.
- l) Consider a “tree ordinance” to protect existing trees from the bulldozer and require new plantings in developments.

C. TEMPORARY AND PERMANENT DEVELOPMENT RESTRICTION TECHNIQUES

1. Identify State and Federal grant programs that would supply funds to acquire/protect open spaces. Keep the list active and monitor the programs. Apply for available funds, in coordination with the Aquidneck Island Land Trust and other land trusts.
 - a) Provide local coordination between landowner and the Department of Environmental Management (DEM) on the State’s purchase of development rights program.
 - b) Consider hiring a Grants writer on a consulting basis or sharing the services of a grants writer with other Newport County communities.
 - c) Dedicate a portion of the Town’s Real Estate Transfer Tax revenue to open space acquisition and development. Maximize the leverage of these funds by matching it with funds from the Aquidneck Island Land Trust and available State and Federal grants.
2. Consider disposing of unused and unplanned small parcels use revenues for future land acquisition.
3. Encourage the maximum preservation of open space through public and private land trust funds. Cooperate with the Aquidneck Island Land Trust, Nature Conservancy, Prudence Island Conservancy, the Preserve Rhode Island and other trustworthy land trusts seeking to preserve our natural heritage.
4. Promote the utilization of the Farm, Forest and Open Space Act, which is a tax incentive program for farmers and forestland owners to maintain their farms and woodlands over a ten-year period. Review assessment practices for farms and forestlands to provide incentive not to develop.
5. Provide protection and support for farmers in the form of tax relief.
 - a) The Town’s recently enacted Special Farmland Assessment Ordinance, which essentially lowers farmland property tax by an average of 25% for actively farmed land, is an excellent first step. This plan, enacted in December 1990 by the Town Council, reduce assessments on actively farmed land to a set minimum gradually over three years. There is an annual deadline of January 31st of each of the three years. The Town Council annually reviews this program in case it has an extreme

negative impact on revenues. (As of September 2001, every actively farmed parcel in Portsmouth was in the Town's Farmland Assessment program.)

6. Outright purchase by the Town (e.g. Glen Farm) is the most expensive option and should be done only in extraordinary circumstances when the above methods fail.

D. MOTIVATE PRIVATE LANDOWNERS TO BECOME INVOLVED IN PRESERVING OPEN SPACE

The best mechanism for preserving open space is informed, sympathetic private ownership.

1. Instill a sense of pride in what they have.
2. Provide published information on the value of open space and the long-term after-tax advantages of donating land for open space and environmental protection consistent with other plans such as bike trails, etc.
 - a) Develop a flyer summarizing some of the options available to landowners and the availability of certain publications on these issues.
 - b) Provide a comprehensive reference service for landowners interested in federal tax benefits for land and/or easements.
3. Provide a free referral service to help guide larger landowners toward open space preservation by advising them on the long-term disposition of their land (there are at least five methods), including estate planning and estate taxes, including how, over the course of years, parts of their property might be profitably sold or developed while the rest is planned for gifting to family members and land trusts.
4. Identify economic incentives, such as tree farms, for large landowners to maintain their property as wildlife habitat, conservation easements, tree farms, etc.
5. Identify tax abatement programs for landowners desiring to preserve open space and resist development pressures.
6. Encourage legislative support for tax abatement programs.

RECREATION

I. GOAL

Provide and maintain adequate recreational facilities for all age groups, all needs and interests. Provide recreational opportunities, both active and passive, which contribute to the overall quality of life for all segments of the population year-round (including special needs groups).

NOTES: Readers of this section are particularly referred to maps #30 and 49.

II. DEFINITION OF A RECREATION FACILITY

A recreational facility is any facility whose existence is primarily oriented toward recreational use by the general public. This applies whether the facility is indoor or outdoor, or owned publicly, privately, or by a non-profit organization. The important point is that the general public has access to the facility. This plan deals with both public-owned facilities and private facilities that are available for public use.

III. THE NEED FOR PLANNING RECREATIONAL FACILITIES

- A. Ballfields, playgrounds, and bike paths are fundamentally different from golf courses and athletic clubs. Ballfields, playgrounds, and bike paths could never become profitable and therefore will never be provided by private businesses. Portsmouth has a responsibility to provide its residents with recreational facilities not provided by local businesses.
- B. As in the past, Portsmouth will provide local funds for planning, acquiring, and developing recreational facilities. It must also continue to use State and Federal programs to assist in its recreational program.
- C. Develop a plan and investigate funding to make recreational facilities handicapped accessible and useable to people with disabilities.
- D. Community Support

Parks and recreation usage is mainly by children and younger adults. ¹

- E. Current Recreation Inventory, Usage, and Improvement Needs:

Recreational facilities are maintained and managed by the School Department and various committees and individuals. This section is a combined inventory and analysis, providing the current status, usage, and responsibilities relating to the existing recreational facilities. Deficiencies and recommended improvements are also identified.

¹ See Appendix PCAC Survey Results, 1989 PCAC) Survey Question 23, 1990 PCAC Survey Question 23.4 , 1990 PCAC Survey Question 23

Table 1

[illegible]

RECREATION FACILITY		Playground	Restrooms	Picnic Tables	Beach	Fishing	Basketball	Baseball	Soccer	Tennis	Boat Ramp	Benches	Hiking	Track	Scenic
Lehigh Overlook West Main Road	1			*											*
McCorrie Point McCorrie Lane	44														*
Melville Boat Ramp West Main Road	2										*				*
Melville Recreation Area West Main Road	152	*		*		*							*		*
Melville School West Main Road	1	*													
Patriots' Park Route 24/West Main Rd.	3											*			
Portsmouth High School Education Lane	10						*	*	*	*		*		*	
Portsmouth Middle School Jepson Lane	4						*	*	*			*			
Redwood Playground Redwood Road	1	*													
Sandy Point Beach Sandy Point Avenue	9		*	*	*	*									*
Teddy's Beach Park Avenue	2			*	*						*				*
Turnpike Ave. Playground Turnpike Avenue	2	*		*				*				*			

Cedar Island - On Blue Bill Cove off Route 24 offers a quiet spot for fishing along the water. Ample parking exists for the boat ramp. Needs signage and “danger - no swimming” signs. Entrance road needs leveling or paving.

Coggeshall School - Two Little League baseball fields are located to the rear of the Pennfield School. Lighting would expand usage.

Common Fence Point - Is a neighborhood playground owned and maintained by the residents of Common Fence Point.

Elmhurst School - Features a playground. Portsmouth school properties are reserved for school use during school hours; thereafter school related activities have first priority. Lighting at basketball court would expand usage.

Fort Butts - An earthwork redoubt dating from the Revolutionary War. The fort was occupied successively by British, Hessian, and American troops and anchored the American northern line during the Battle of Rhode Island (1778). It offers today the same commanding view of the central bay that made it such a strategic location during the Revolutionary War. The fort is located north of the tennis courts at Portsmouth High School.

Founders Brook - Off Boyds Lane, the Town's founding in 1638 is commemorated with memorials for Anne Hutchinson and the signers of the Compact of 1638. Needs parking.

Glen Farm - Includes the Gardner Seveney Sports Complex with soccer fields and ball fields. Lighting would expand usage. Needs restrooms.

Glen Park - Includes a horse ring, ball fields, picnic areas, bathroom facilities, and cooking facilities contained in a sixty-acre parcel that stretches to the Sakonnet River. Saltwater fishing is available from the Glen Manor House dock. Access to the Glen Manor House and grounds and the Manor House dock may be limited during functions at the Glen Manor House.

Hathaway School - Provides a basketball court, playground equipment, and athletic fields. Portsmouth school properties are reserved for school use during school hours; thereafter school related activities have first priority. Playground equipment is sparse.

Heritage Park - A scenic overlook providing panoramic views of north Portsmouth, the upper reaches of Narragansett Bay, and Bloody Brook.

Island Park Playground - Features a new modern playground, a basketball court, baseball field, and other amenities. Lighting would expand usage.

John F. Kennedy Park - Contains a small memorial to the late President at the corner of Freeborn Street and Turnpike Avenue.

Lehigh Overlook - Off Route 114 provides a panoramic view of Prudence Island and the central bay.

McCorrie Point - Is not a public facility, but this barrier beach is available for neighborhood uses. No services; protected open space.

Melville Boat Ramp - Located off Burma Road, is a modern boat launch facility accessible to the disabled.

Melville Recreation Area - One hundred and fifty acres of coastal woodland dotted by wetlands, ponds, and brooks. Hiking trails provide a variety of opportunities for bird watching and other forms of nature appreciation. Freshwater fishing is available at the upper and lower ponds. Access to the Melville Ponds Campground, which is located within the reserve, is limited to registered campers. Needs signage to get to and within hiking area; bridge over steep gorge to enlarge hiking area.

Melville School - Playground facilities – being completely renovated (2001) by PTO. Portsmouth school properties are reserved for school use during school hours, thereafter, school related activities have first priority.

Patriots' Park - Honors the 1st Rhode Island Regiment, the "Black Regiment," of free, black citizens who fought valiantly at nearby Bloody Brook during the Battle of Rhode Island. A mass grave of Hessian troops is located nearby.

Portsmouth High School (PHS) - Offers eight tennis courts, basketball courts, sports fields, and a modern, lighted track. Portsmouth school properties are reserved for school during school hours; thereafter school related activities have first priority.

Portsmouth Middle School (PMS) - Athletic fields are available. Portsmouth school properties are reserved for school use during school hours; thereafter school related activities have first priority. Lighting would expand usage.

Redwood Playground - Neighborhood playground. Old rusted equipment should be replaced.

Sandy Point Beach - Portsmouth's town beach is located on the Sakonnet River and is staffed by lifeguards from Memorial Day through Labor Day. Bathhouses and restroom facilities are available in season.

Teddy's Beach - On the Sakonnet in Island Park is not staffed by lifeguards, but provides a scenic view of the Sakonnet. There is no off street parking for the boat ramp and parking can be limited.

Turnpike Avenue Playground - Contains a modern playground and Little League ball field. Lighting would expand usage.

South Prudence Management Area - The Management Area is located at the south end of Prudence Island. It is owned and operated by the RIDEM Division of Fish, Wildlife & Estuarine Resources, and part of the National Estuarine Research Reserve System. It is open to the public. It contains a small beach, picnic area with two fireplaces and two tables, bike path, and fishing pier.

Deficiencies: This Management Area, a former Naval facility, was to be part of the now defunct Bay Island Park system. However, the State has allowed the entire facility to fall into disrepair. There are no ballfields, despite abundant flat, open, unused land. The State allows hunting on Prudence during the hunting season, but closes the management area at that time, meaning that hunters park on narrow roads, private property etc. This, in turn, means that the hunters are not clear as to where they may hunt. This has created a very dangerous situation that must be corrected.

F. SUGGESTED DEVELOPMENT STANDARDS FOR PUBLIC RECREATION FACILITIES ²

Table 2

ACTIVITY/FACILITY	NO. OF UNITS PER POPULATION	PROVIDED IN PORTSMOUTH	SURPLUS (DEFICIT)
Badminton	1 per 5,000	0	(4)
Basketball – Youth		9	0
– High School	1 per 5,000	2	0
– Collegiate		0	0
Handball (3 – 4 wall)	1 per 20,000	0	(1)
Ice Hockey	Indoor - 1 per 100,000 Outdoor – depends on climate	0	0

² STANDARDS SOURCE: National Park and Recreation Association, 1987

Tennis	1 court per 2,000	10	0
Volleyball	1 court per 5,000	0	(4)
Baseball– Official	1 per 5,000	0	3
	Lighted – 1 per 30,000	0	0
Field Hockey	1 per 20,000	0	0
Football	1 per 20,000	1	0
Soccer	1 per 10,000	4	0
Golf – Driving Range	1 per 50,000	0	0
¼-Mile Running Track	1 per 20,000	1	0
Softball	1 per 5,000 (if also used for youth baseball)	10	0
Multiple Recreation Court (Basketball, volleyball, tennis)	1 per 10,000	0	(2)
Trails	1 system per region	Melville Campgrounds	0
Archery Range	1 per 50,000	0	0
Combination Skeet and Trap Field (8 station)	1 per 50,000	1 skeet	0
Golf – Par 3 (18-hole)	--	0	0
– 9-Hole Standard	1 per 25,000	1	0
– 18-Hole Standard	1 per 50,000	2	0
Swimming Pools	1 per 20,000 (Pools should accommodate 3 to 5% of total population at a time.)	0	(1)
Beach Area	N/A	40 acres	0

TYPE OF FACILITY	ACRES/1,000 POPULATION	PROVIDED IN PORTSMOUTH	SURPLUS (DEFICIT)
Play Areas/Playgrounds Primarily a center for young children, but may also include a park for passive recreation for all ages.	1.25 22 required	10.8 in 8 locations	(11.2)
Playfields An area for active, organized activities that require more space than a playground, yet including one section as a developed playground, yet including one section as a developed playground.	1.25 22 required	45 in 5 locations	0
Neighborhood Parks	2.5 / 40 req'd	18.5 in 4 locations	(31.5)
Large Parks and Special Areas	5 to 8	147 in 2 locations	0
Conservation Area Areas so designated to conserve unique natural resources of the area.	Based on availability	194 Aquidneck, in 2 locations 2,754 Prudence in 3 major segments	0

Deficit (if any) is based upon 1990 population of 16,857. The 2000 Census population of 17,149 is not a large enough increase to affect this analysis.

IV. RECREATION OBJECTIVES

A. OBJECTIVE 1

Promote use of current recreational facilities and programs.

Town's facilities offer a variety of recreation opportunities. Optimizing use of these facilities will allow the Town to provide recreation opportunities for all age groups. A long-range plan for these facilities should address the deficiencies identified as well as consider the development of any additional facilities on Town-owned land. Expand the Town's active and passive recreation offerings, and promote local access to and enjoyment of some of the Town's waterfront.

Portsmouth does not have a formal recreation department or a recreation coordinator. The various sports leagues, and the School Department are largely responsible for coordinating organized sports activities. Portsmouth Action for Youth (PAY) handles most other recreation programs, particularly during the summer. PAY is funded through a grant from the Town and fees charged for services. It has paid staff that operates youth recreation programs, primarily during the summer.

Currently, the following groups are active:

Portsmouth Senior Center

Portsmouth Action for Youth (PAY)

Portsmouth Youth Team Programs (Little League, soccer, football, cheerleading, etc.)

B. OBJECTIVE 2

Provide maintenance and improvements to existing recreational facilities.³

C. OBJECTIVE 3

Develop a Long-Range Plan for Recreational Facilities.

1. A "Recreation, Conservation and Open Space Plan" was written and adopted in 1975, and was updated and re-adopted in 1981. It recommends, among other things, the acquisition of 12 parcels totaling 78.5 acres. In light of the acquisition of Glen Farm (92 acres) and the much higher relative land prices in Portsmouth than in 1975, a change in policy is recommended here.
2. Long-range planning should concentrate on the maximum utilization of existing facilities and development of currently owned parcels for recreation.
 - a) This includes properties under the control of the School Department. It makes sense for outdoor recreation facilities to be located at the schools.

³ See Appendix PCAC Survey Results, 1989 PCAC Survey Question 23.1, 990 PCAC Survey Question 23.3

- (1) School age children, the major users of most recreational facilities, can use recreational facilities both at school and at other times. This eliminates duplication.
 - (2) This is the case for many school facilities, but coordination of planning, funding and usage between the Town and the School Department needs to be more formalized.
 - (3) Elementary schools, in general, are scattered throughout the Town within residential concentrations. (Their service areas generally coincide with recreational service areas.)
 - (4) Recreational facilities at the schools should be subject to the age level of students attending.
- b) Other Town properties located in recreation deficient areas should be examined for possible recreational use.
3. Recreation planning needs to recognize that people in semi-rural communities use recreational facilities differently than those in cities (for which most national standards are developed). Due to the spread out nature of most of Portsmouth, most children do not use recreational facilities on a casual basis. Because most facilities are beyond walking distance of most residents, use tends to be much more structured.

V. IMPLEMENTATION

The following implementation tasks identify specific steps that must be taken to ensure that the above objectives are met. There is not a one for one relationship between the objectives and implementation tasks. Some implementation tasks help meet several objectives and some objectives require several implementation tasks to accomplish.

The implementation tasks are:

- Identify current facilities.
- Maximize use of the current facilities.
- Ensure adequate facilities in the future.
- Determine how to fund the development of future facilities.
- Plan and provide for maintenance of facilities.

A. Maximize Use of Current Facilities

1. Maintenance:

- a) Portsmouth's recreational facilities are a valuable asset in the community. Maximizing the recreational opportunities at existing facilities will require a commitment to maintaining the facilities and optimizing their use.

Create within the Department of Public Works a regular maintenance schedule with a single person responsible. (This was started in February 1991.)

2. Coordination

- a) The need for organizing and coordinating recreational activities and usage of various Town facilities is greatest during the summer. PAY currently does much of this. In the short-term, a part-time recreation coordinator to work from late spring to early fall is needed to coordinate facility usage and advise on the need for maintenance efforts.
- b) Coordination of recreational activities could alternatively be approached through existing organizations. The charge of Portsmouth Action for Youth could be expanded to encompass this role without having to add Town staff.

3. Expand / Modernize Existing Facilities

- a) An excellent example of maximizing the utility and use of existing facilities were the modernization of the Elmhurst and Melville School playgrounds recently, and the Turnpike Ave. Playground built in 1988. These were done entirely by volunteers.
- b) Consider a line item in the Town budget to upgrade deteriorated facilities.

B. Project future needs and additional facilities. Identify any potential recreational parcels.

Based on an inventory of Portsmouth's recreational facilities and population trends, further development of existing facilities will be required to provide outdoor recreational opportunities to meet the population needs of 2010. Additional facilities may be needed in selected recreation deficit areas.

Beside existing recreational facilities, 125 acres of vacant land in the southeast section of Town are planned to be part of a new semi-private golf course. 298 acres of vacant land belonging to the Portsmouth Abbey were recently converted (2000) to a private golf course.

The provision of opportunities and needs for all citizens and special segments of the population must be considered.

It is best to connect recreational areas where possible and create a complex with walkways, hiking trails, bikeways, greenbelts, and bridal trails. The complex concept is especially helpful to parents of children who use the ballfields regularly. Those parents who have more than one child would rather drive a few extra miles to a single complex where all of their children can compete in adjacent ballfields than be forced to travel between fields at opposite ends of Portsmouth.

Review current facilities versus population trends and future needs.

The following analysis is provided for each type of facility:

1. Ballfields/Basketball

- a) The following standard have been extracted from the Standards for Local Recreation, Conservation, and Open Space Plans. The document was distributed in 1989 by the Rhode Island Planning Council, Recreation Resources Review Committee.

Table 3

Facility	# of Units per Population	Service Radius
Softball Fields	1/5,000	1/4 to 1/2 mile
Soccer Fields	1/10,000	1 to 2 miles
Football Fields	1/20,000	15 to 30 min. travel
Baseball Fields	1/5,000	1/4 to 1/2 mile
Tennis Courts	1/2,000	1/4 to 1/2 mile
Basketball Courts	1/5,000	1/4 to 1/2 mile

- b) The Service Radius column applies to densely populated areas and does not strictly apply to much of Portsmouth. It would be impossible to have enough facilities in Portsmouth to meet these standards.
- c) Since it is impractical to apply an objective criteria to each district for these types of facilities, an overall analysis is provided in Table #___ below.

- d) Action:

(1) Continue to develop the Glen area as new ballfields are required.

2. Playlots/Playgrounds/Neighborhood Parks

- a) According to the Standards for Local Recreation, Conservation, and Open Space Plans, there should be one playground or neighborhood park for every 5000 people, and the service area for each should be from 1/4 to 1/2 mile radius. Each area should be within safe walking or biking distance. These standards were developed for urban areas.
- b) Playlots and small playgrounds are not extensively used in more sparsely zoned areas. Due to the more spread out development in such areas, either young children would have to travel too far to use them or there would have to be an enormous number of playlots and playgrounds to be within reasonable distance from home. Larger house lots generally have large yards to accommodate play for children in these areas. In the more densely developed areas, playlots and playgrounds are often a replacement for the large yards that exist in less densely zoned areas. Therefore, any study of playlot/playground needs will concentrate on more densely developed areas.
- c) Action:
- (1) Inventory existence and condition of playgrounds in densely populated areas of Island Park, Common Fence Point and Portsmouth Park.
- (2) Determine service areas of these existing facilities and any need for improvements or additional play equipment. Plan improvements.
- (3) Determine areas under-served by small playgrounds and inventory existing ballfields and other Town-owned lots to see which might serve such areas.

- (4) Determine under-serviced areas for which there is no Town-owned land and identify parcels to be purchased.
- (5) Consider a requirement in the Subdivision regulations to require new subdivisions over a certain size to build playgrounds and ballfields large enough to serve the new neighborhood developed.

3. Bike Path

- a) Aquidneck Island needs bicycle paths. Today it is not uncommon to find bicyclists on East Main Road along with fast moving traffic, a dangerous condition. There is no way to proceed from north to south without spending some time on East or West Main Road.⁴
- b) Study bike path feasibility over the following routes:
 - (1) Along the Sakonnet River over existing rights-of-way from Glen Farm to Island Park.
 - (2) Along Burma Road, (a wider bicycle lane, rather than the narrow shoulder recently added).
 - (3) Down the center of the Island along the abandoned trolley tracks and electric lines.
 - (4) Along Railroad tracks from the Sakonnet River to Newport.

4. Senior Citizens Center

The Senior Center at the former Hutchinson School on Bristol Ferry Road provides a variety of services and recreation opportunities.

- a) Senior Citizens Center Improvements:
 - (1) The following is a list of improvements provided by Michele Foster of the Planning Board and of the Newport Collaborative, which is working on the project:
 - (2) The roof was repaired in the winter 1991.
 - (3) Furnace replacement.
 - (4) Asbestos removal/boiler room.
 - (5) Elevator to otherwise unusable second floor.
 - (6) Handicap access.
 - (7) Plumbing and rest rooms generally.
 - (8) Electrical service and lighting.
 - (9) Fire alarm and sprinkler system for otherwise unusable second floor.
 - (10) Room layout reconfiguration.
 - (11) Other structural renovations.

⁴ See Appendix PCAC Survey Results, Question 23.5 of the 1990 PCAC Survey

(12) Cosmetic improvements.

5. Boat Ramp/Launch

- a) As a coastal community, Portsmouth should logically have public boat ramps on both sides of the Island: west into Narragansett Bay and east into the Sakonnet River.
- b) Two exist but have problems:
 - (1) State boat ramp at Stone Bridge -- too steep.
 - (2) Blue Bill Cove Park -- too shallow.
- c) The Town has received a \$500,000 State grant for a boat ramp to be built at the end of Willow Lane. An additional \$200 - 250,000 from the Division of Fish and Wildlife is likely as of this writing. The Town will actively pursue the development of the boat launch at the end of Willow Lane.

The proposed 1500 slip Hood Marina has provisions for a public boat ramp at the far end, as part of the last phase. (The Town purchased 1.7 acres plus an easement in 1994, and constructed the Weaver Cove Boat Launch in 1995-96.)

- C. Provide Town Funding as well as investigate State and Federal programs as well as local sources for funding recreational facilities.
 - 1. To expand the recreation program, Portsmouth must seek the financial assistance of the State and Federal Government and program facilities funding.
 - 2. Action:
 - a) Develop a Capital Improvement Program for the acquisition and development of recreational facilities within the financial capabilities of the Town.
 - b) Regularly investigate the availability of funds from the National Park Service and the State.
 - c) Utilize a portion of the Melville Reserve Funds for recreational facilities improvements.
 - 3. Develop a plan and investigate funding to make recreational facilities handicapped accessible and usable for people with disabilities.

CIRCULATION/TRANSPORTATION

I. GOAL

Provide transportation facilities and operating procedures that will continue to meet Town population growth needs and area regional population/living pattern changes. Provide for future circulation in the safest and most direct means possible.

NOTES: Readers of this section are particularly referred to map #31.

II. DEFINITION OF TRANSPORTATION/CIRCULATION

Transportation refers primarily to roads, access to, improvement of and maintenance of roads, as well as safety and traffic congestion issues. It also includes alternate modes of transportation as may be available now or in the future for people and goods.

Transportation for Prudence and Hog Islands are dealt with primarily in those elements of the Plan.

III. THE NEED FOR LOCAL TRANSPORTATION PLANNING

- A. Vehicular transportation, is part of the definition of modern American culture. In spread out rural/suburban areas like Portsmouth, where walking is for recreation or exercise and mass transit mainly belongs to the past and the future, a car is a necessity. Therefore, how a community plans to accommodate automobiles plays an important role in how a community functions .
- B. Nonetheless, a community that chooses to ignore mass transit may be choosing to make itself obsolete. Some time in the future, the need for mass transit, particularly for commuting to major employment centers, will become a necessity. Mass transit must be integrated into overall transportation planning.
 - 1. On an Island, land is finite, so regional access cannot be put in the next town over. On a narrow island where north-south roads are life-blood issues, transportation cannot be left to chance.
- C. Transportation planning is usually seen as something out of a Town's control. The State controls the design, development, placement and maintenance of main roads. While the Town Planning Board guides their location, developers propose where new residential roads will go. Municipalities feel that all they can do is mandate developers road construction specifications on one end, and on the other end, beg or fight with the State to consider local needs when they plan our major roads. In fact, the State's Transportation Improvement Program process (TIP) is a once every two to three year opportunity for the Town to petition the State to make specific improvements to roads under their jurisdiction. (See highway classification system below.)

D. Municipalities have more power and influence than they usually exercise in these matters, and they are in the best position to judge alternatives to make the transportation network work. They know where the local problems are, where future development is likely to cause problems, etc. The Town *does* have the authority to require more stringent conditions than the State imposes. As an island, the three Island communities' transportation situations are linked.. They must work together to define and solve common transportation problems. Jointly submitted TIP applications would help strengthen each municipality's requests.

E. MAJOR ROADWAYS

Most north-south traffic in Portsmouth is borne by the two primary arterials: West Main Road (Route 114) and East Main Road (Route 138). Prior state initiatives to construct a third arterial along the west shore were soundly defeated by local communities.

East Main Road is the major local artery, site of most retail/service business and adjacent to most of the residential areas. It runs from the Middletown Town Line to a ramp leading onto Route 245 North.. Traffic volumes on Route 138 range from an AADT of approximately 14,400 at Park Avenue to approximately 29,500 at its intersection with Turnpike Avenue. It has eight (8) signalized intersections. (An additional light is needed at the intersection of Hedly Street.)

Route 114, which includes Bristol Ferry Road and West Main Road, begins at the Mount Hope Bridge in Portsmouth and continues south to the Middletown Line. This segment of roadway is approximately 7.0 miles in length. The roadway allows four lanes for travel (two lanes northbound/two lanes southbound), the pavement is in good condition, and the posted speed limits (excluding school zones) are 35 miles per hour (MPH) on Bristol Ferry Road and 45 MPH on West Main Road. Route 114 carries substantial traffic volumes, ranging from an AADT of approximately 8,000 to its terminus at Bristol Ferry Road to 33,000 at the Middletown/Portsmouth town line. It has eight (8) signalized intersections. Much of the land abutting this roadway is undeveloped. The areas that are developed consist mainly of residential developments as well as two major commercial/industrial developments, Raytheon and the Hood and Little Harbor Marinas.

Burma Road (locally referred to as Burma Road, but more formally identified as Defense Highway by the Navy), which runs along the west coast parallel to West Main Road, begins in Portsmouth at Stringham Road, and continues south into Middletown. This is a two-lane roadway, and was recently repaved. The speed limit is 35 MPH throughout. The Portsmouth portion is approximately 2.5 miles in length. The majority of the land adjacent to the road is United States Navy property with limited development, including former Navy tank farms. The developed areas include the commercial/industrial (marine trades) area at the north end of Burma Road, and a public boat launch one mile south.

F. Functional Highway Classifications ¹

Highways are functionally designed and problems result when capacities and/or use vary from design purposes. An understanding of a roadway's function and design characteristics will enable a reasonable evaluation of demand pressures and prevent misuse of the system. Highways/streets are divided into the following four major categories:

1. PRINCIPAL ARTERIALS

- a) Carry a major portion of the longer distance trips passing through the urban area. (East and West Main Roads are principal arterials.)
- b) Serve the longer distance movements within urbanized areas, such as between the Providence central business district and outlying city and town centers of built-up areas.
- c) Carry a high proportion of the total urban area traffic on a minimum of road mileage.
- d) Frequently carry important intra-urban as well as inter-city bus routes.
- e) Provide continuity for all rural arterials that pass through the urban area.
- f) Include all limited access and most (although not all) roads that have interchanges with Interstate Highways.
- g) Typically, speeds are 45 mph or greater except in built-up areas.

2. MINOR ARTERIALS

- a) After principal arterials, these form the network or backbone of cross-travel within a community. (An example of a minor arterial is Sprague St.)
- b) May carry local bus routes.
- c) Often carry traffic through a large portion of a city or town.
- d) Often feed traffic from collectors into the principal arterials.
- e) Preferably do not penetrate neighborhoods.
- f) Provide the urban connections to rural collector roads.
- g) May parallel a principal arterial and carry shorter length trips, connecting built-up areas and traffic generators in one or more towns.
- h) May connect outlying smaller town centers and built-up areas with routes of higher classification.
- i) May carry the heaviest volume cross-traffic between two principal arterials that closely parallel each other.

¹ Source: Criteria for Highway Classification System, R.I. Department of Administration, Division of Planning, February 1988.

3. COLLECTOR STREETS

- a) Are spaced at intervals to collect traffic from local streets and channel it to the arterial system. In built-up areas, often are the cross-streets along arterials that have signalized intersections. (An example is Anthony Road.)
- b) Provide both land access service and traffic circulation to residential areas, as well as commercial and industrial areas. May carry traffic from a major industrial area or regional facility (i.e., institutional complex, landfill) to an arterial.
- c) Almost always are fed by two or more local streets. The exception would be a street connecting an arterial to a transportation terminal (which is still feeding travelers, but from another mode).
- d) May pass through neighborhoods.

4. LOCAL STREETS

- a) Serve primarily to provide direct access to abutting land. (For example, Water Street, like most small streets, is a local street.)
- b) Offer the lowest level of travel mobility. Through traffic movement is usually discouraged.
- c) Usually carry no bus routes.
- d) Comprise all streets not on the higher functional systems.

The following roads are formally classified by the RI Statewide Planning Program: RIDOT is responsible for maintenance of these roads. All others are classified “local”, and under Town jurisdiction.

Table 1
STATE OF RHODE ISLAND
1995 – 2005 FUNCTIONAL CLASSIFICATION SYSTEM ²
RI Division of Planning, Technical Paper No. 130, October 1988

<u>NAME</u>	<u>FROM</u>	<u>TO</u>	<u>MILES</u>
FREEWAY/EXPRESSWAY			
Route 24	Route 114	Tiverton TL	3.75
CONNECTING LINKS OF RURAL PRINCIPAL ARTERIES			
East Main Road	Middletown TL	Turnpike Avenue	4.50
Turnpike Avenue	East Main Road	West Main Road	1.00
West Main/Bristol Ferry	Middletown TL	Bristol TL	<u>6.50</u>
		SUBTOTAL	12.00
MINOR ARTERIES			
Boyd Lane	East Main Road	Bristol Ferry Road	0.80
East Main Road	Turnpike Avenue	Boyd Lane	1.75
Sprague Street	West Main Road	East Main Road	1.55

² RI Division of Planning, Technical Paper No. 130, October 1988

Union Street	West Main Road	East Main Road	<u>1.75</u>
		SUBTOTAL	5.85
<u>NAME</u>	<u>FROM</u>	<u>TO</u>	<u>MILES</u>
COLLECTORS			
Anthony Road	Boyd Lane	Mt. View Road	2.50
Boyd Lane	Chase Road	Park Avenue	0.35
Bramans Lane	East Main Road	Wapping Road	1.00
Burma Road (federal)	Stringham Road	Middletown TL	2.30
McCorrie Lane	East Main Road	William Street	0.75
Middle Road	Union Street	East Main Road	2.30
Mill Lane	West Main Road	Middle Road	0.55
Park/Point Hummocks	East Main Road	Anthony Road	2.50
Stringham Road*	West Main Road	Burma Road	0.75
Wapping Road	Middletown TL	Bramans Lane	<u>0.95</u>
		SUBTOTAL	<u>13.95</u>
TOTAL STATE/FEDERAL MILEAGE			<u>35.55</u>

*These roads are on federal property and under federal jurisdiction.

G. Highway Safety

Accident records are a key to identifying unsafe roads and intersections. In the past there were three major accident locations, two of which have been significantly improved.

1. East Main Road at Union Street, due to high speeds and poor visibility at the intersection. Situation has been greatly improved by the recent additional of a traffic signal.
2. East Main Road from Hedly Street to Turnpike Avenue is a problem for northbound traffic which, traveling at high speeds from the more rural south, suddenly encounters much slower traffic in the congested (29,000 vehicles per day) segment. Rigorous enforcement of speed limits by the Portsmouth Police Dept. has significantly slowed speeds and thus reduced accidents.
3. West Main Road at Hedly Street: "Speed Limit 45 mph" signs in the same immediate area as three closely spaced traffic signals encourages high speed on West Main Road just where vehicles should be slowing down. Vehicles unable to slow down for a red light at Hedly Street, combined with poor visibility coming out of Hedly Street, has been the site of many serious accidents.

H. Bridges

Three bridges connect Aquidneck Island with adjacent islands and the mainland:

1. The Sakonnet River Bridge (Route 24), currently carrying 40,000 vehicles daily (AADT), connects Portsmouth to Tiverton at the northeast end of the Island.
2. The Mount Hope Bridge (Route 114) carries 17,000 vehicles daily between Portsmouth and Bristol at the northwest end of the Island. This is the only bridge that allows bicycle traffic.
3. The Pell Bridge (Route 138), a toll bridge with 23,000 AADT, connects Newport with Jamestown on the west side of the Island.

I. Public Transit

RIPTA Bus service in Portsmouth is quite limited. RIPTA has indicated that regular service is unlikely due to the lack of demand. Two factors contribute: 1) The sprawl nature of development means that people use their cars wherever they go. 2) The lack of a central business district means there is no central destination point.

Thus RIPTA service would be used only to and from out of Town locations. There are three bus stops along West Main Road on the Providence to Newport Route. Bonanza Bus also picks up on east Main Road on its Newport to Fall River route.

1. Community usage and opinions about traffic conditions.
 - a) The 1989 Portsmouth Citizen Advisory Committee (PCAC) survey revealed that 77% of the population uses East Main Road daily, West Main Road 34%. 67% and 59%, respectively, rated them unsafe.³

IV. CIRCULATION OBJECTIVES

A. Traffic Safety

Determine areas of critical concern.

Install proper traffic control devices, access ways, increased visibility and other improvements where now needed.

Adopt land use regulations that will help reduce the impact of future development on traffic safety.

This is an objective with many relatively minor, relatively low cost implementation steps. It has to do with creating safer roads and especially safer intersections. There are many main and secondary road intersections, and exits from commercial establishments, where visibility is extremely limited, often to the point where a driver must place the car in the way of oncoming traffic just to see if it is safe to pull out.

³ SEE APPENDIX 1989 PCAC SURVEY-QUESTION 13, QUESTION 12.1, QUESTION 13.1

B. Traffic Congestion

Improve existing and create new alternate routes, particularly for north-south traffic.

Insure that thru-traffic is properly channeled to avoid already congested areas.

Adopt land use regulations that will help reduce the impact of future development on traffic congestion.

Reduce the impact of future traffic levels on East and West Main Roads. Population increases on the Island in the future, plus the trend toward every driving age member of a family having a car will result in a lot more traffic and congestion.

The congestion problem is already serious and threatening to plague Portsmouth with traffic jams. The time for action is now, before the major alternatives are closed out.

There are also a number of existing roads that will become more congested as the adjacent land is developed and as motorists seek other routes.

C. Road Maintenance and Improvement

East and West Main Roads and the principle cross-Island arteries must be in top condition to handle ever increasing demand. Local roads need to be regularly maintained and improved.

The States Department of Transportation (RIDOT) must be encouraged to accelerate major improvement programs, especially East Main Road, and to establish a Capital Improvement Program for the remaining local roads under its control. For roads that the State wishes to turn over to the Town, a gradual transition plan should be established. This plan must meet the State's objective of having less non-major roads under its jurisdiction, and the Town's objective of having the State roads it inherits meet the Town's historically high standards for its own roads.

On a municipal level, local roads have been well maintained over the years. Fiscal conditions, however, sometimes severely limit regular repaving. Given the many miles of roads under the Town's jurisdiction, deferred maintenance could accumulate to a set of major costs in the future. A Pavement Management Program was initiated in 1997.

D. Encourage alternate modes of transportation for commuter traffic and for the movement of goods on and off the Island must be encouraged. Ensure that planning for alternate modes is part of a comprehensive regional circulation plan.

This objective is important on many levels. As traffic increases and parking availability in downtown employment centers in the region shrinks, mass transit and car-pooling will become more important. Ensure that the Island has satisfactory transport links to the metropolitan centers of Providence and Boston. Today, the automobile will dominate.

This objective, then, has to do with not closing out long-term major options like rail and water, while improving opportunities for smaller items like bicycles and walking.

- E. Establish a regular liaison staff level relationship between the Town and RI Department of Transportation (RIDOT) so that the Town can actively participate in State transportation decision-making.

The State's governance over so many of the vital roads means that they will always have dominance in transportation planning, and so on the future of the Town. Secure a role for the Town in RIDOT's planning of major roads early on.

While the State perspective is regional and inter city, that is, moving people between major destinations, the Town's perspective is intra city, moving people from their homes to and from local shopping and employment. The State cannot be expected to know or appreciate the local perspective from afar.

The municipality and the State must work together to ensure that both goals are met. The best long-term method of establishing a good working relationship that produces the desired results is regular contact at the staff level. A staff level relationship is often more productive than official high-level dialog. With RIDOT or any large organization, staff is given policy to implement. Staff people take it from there in planning the and details, then refer it back to the top for clearance.

- F. Provide reliable ferry service to and from Prudence Island on a 12 month a year basis and to and from Hog Island during the summer season.
 - 1. Coordinate with RIDOT on water transportation study.

V. IMPLEMENTATION

A. REGULATORY INITIATIVES

- 1. The most immediate thing the Town can do to offset the safety and congestion impacts future developments will bring is through its land use regulations. These are fairly simple, low-cost items whose cumulative affects can be substantial.
- 2. REDUCED FUTURE ROAD INTERSECTIONS ON EAST AND WEST MAIN ROADS
 - a) The increased usage of the major arterial roads for direct access slows down traffic, and increases both congestion and the likelihood of accidents.
 - b) Build into subdivision and zoning regulations a provision that all new residential developments and buildings, including single lots fronting East Main Road, not be accessed directly by East or West Main Roads. Create variance standards to allow for situations where this is not possible or would result in a hardship.

- c) Where any access is needed for multiple buildings (such as an office or industrial park) or multiple lots, a single access drive to East or West Main should be required.
- d) Where additional subdivisions may be created in the future from the original lot fronting the main road a public street or street system should be created to serve subsequent lots.

3. TRAFFIC SENSITIVE DISTRICT

- a) Where traffic congestion is already a serious problem, more stringent measures are needed. A Traffic Sensitive District functions much like a zoning overlay district. Within specified geographic areas, additional regulations apply which are intended to reduce traffic impact. (A traffic sensitive district was adopted in 1994.)
- b) The following special regulations should be considered for traffic sensitive district:
 - (1) Specify minimum distances between curb cuts.
 - (2) For non-residential developments over a threshold size, require access ways physically separated from parking areas (often called “throats”) to allow fast moving vehicles an area to slow down before parking.
 - (3) For non-residential developments over a threshold size, require a deceleration lane for right turn traffic and a left turn lane on the other side.
 - (4) Require paved access to each side of commercial developments so that vehicles may pass between them without having to use the Main Road.
 - (5) Common driveways, rights-of-way or other common means of access to adjacent streets to be approved by the Planning Board.

4. REQUIRED TRAFFIC CONTROL DEVICES

- a) Establish regulatory thresholds over which traffic control devices must be installed by developers. Such devices include:
 - (1) Traffic lights.
 - (2) Stop Signs.
 - (3) Design criteria that slow down traffic within developments and within parking lots.

5. CLEAR VIEW INTERSECTION REGULATIONS

- a) Strengthen requirements in zoning, subdivision and building code regulations to require specific numerical setbacks at intersections and other vehicular access points.
- b) New subdivision regulations adopted in 1995 provide for clear views, flat topography approaching intersections, and sufficiently wide radii at intersections.

Other street design standards, however, are from highway standards, meant to provide safety at high speeds. Local residential streets would be safer if designed for slower speeds. Additional traffic calming measures, such as sharper curves, less straight segments and narrower roads would contribute to greater traffic safety.

- c) There are a many intersections where buildings, signs, trees and shrubs, fences, or just land grades substantially higher than the road grade seriously impair vision.
- d) Arrange a standard procedure with RIDOT for the Town to clear such visual impediments along State-owned rights-of-way.

6. SUBDIVISIONS OFF OF PRIVATE RIGHTS OF WAY

- a) For public safety reasons development and subdivisions using existing substandard rights-of-way cannot be allowed. Inadequacies in the current regulations have created situations where this has been allowed. Such regulations must be revised for safety and emergency vehicles access.

7. SUBDIVISION EMERGENCY ACCESS

- a) For safety and accessibility of emergency and maintenance vehicles, dead-end roads should be eliminated wherever possible, and all developments should have dual access,
- b) New subdivisions to be required to extend existing dead-end streets through to a street that will accomplish this purpose, or, if infeasible, provide a clear right-of-way easement to the Town for emergency access.
- c) Provisions should also be made for emergency access (rescue and fires) to the railroad and shoreline where they are not now accessible.

8. EAST SHORE CONNECTOR ROAD

- a) The need for reducing traffic congestion on East Main Road and to reduce the number of intersections at which residential traffic enters and exits that road is compelling. A major percentage of Portsmouth's population lives between East Main Road and the Sakonnet River.
- b) The Planning Board has planned where the various residential subdivisions in this area could be interconnected to create a series of interconnecting roads from Park Avenue to Wapping Road. They have worked with developers to try to accomplish this objective, with varying degrees of success. The Board must have the power to make this happen.

9. SOIL EROSION AND SEDIMENT CONTROL ORDINANCE

- a) A Soil Erosion and Sedimentation Ordinance will help protect roads from drainage and erosion problems on surrounding areas of new development and construction reducing road maintenance and repair required. (Ordinance adopted 1993.)

10. PAVEMENT RESTORATION

- a) The installation of underground utilities often requires digging up the road and demolishing trees. Pavement restoration is often sloppy, resulting in poor road conditions.
- b) Strengthen if necessary and enforce regulations concerning proper restoration of Town roads and vegetation after utility and water line excavation.

11. CONSIDER ADOPTION OF A MAPPED STREET ORDINANCE.

- a) Such an ordinance would have the effect of establishing exactly which roads are accepted Town roads.

B. CHANNELING THRU-TRAFFIC

A major source of traffic hazard and congestion is traffic going through Portsmouth to get elsewhere. The geographic nature and location of the Island means this will always be a problem.

1. Basic Guiding Principles - Adhering to a simple principle in all thru-traffic transportation planning will go a long way in keeping the problem manageable:

- a) Direct thru-traffic away from local population concentrations, especially East Main Road in general, and from Hedly Street north in particular.

2. EAST MAIN ROAD RECONSTRUCTION PROJECT

- a) Years in the making, needed for years, this project must go forward soon. Work with the State to plan the remaining details of the project and help push it forward.
- b) In consideration of the principles in B.1. above, the following is necessary:
- c) Channel a Minimum Amount of Thru-traffic via East Main Road via signage.
 - (1) Direct through traffic to West Main Road. It will not only help ease traffic congestion in Portsmouth, but also give RIDOT a better picture of local traffic levels versus thru-traffic levels.
 - (2) At Two Mile Corner in Middletown, confusing signs direct traffic bound for Fall River and the Cape by either East or West Main Roads. Signage should direct toward West Main only as this is the shortest and most direct route to Route 24.
- d) Recommended Safety Improvements
 - (1) Traffic light at Union Street, the major East-West Cross Road in the middle section of the Island. (Completed 1999.)
 - (2) Clearer and wider intersections without obstructions to visibility at numerous intersections, particularly Union Street, but also most of the residential streets. Preliminary plans for the East Main Road reconstruction project calls for these improvements.
 - (3) Avoidance of stonewalls and major trees.

- (4) Turning Lanes: From Turnpike Ave. to Boyd's Lane, the East Main Road project will reduce East Main from four very narrow lanes to two generous lanes and shoulders. If this is to be, traffic jams will result if cars making left turns have to wait for a break in opposite direction traffic. Special left turn lanes in the middle of that road segment should be provided so that each residential cluster has at least one such lane serving it.
 - (i) Locations include but are not limited to the intersections with: Sprague Street, Park Ave. Boyd's Lane, Child Street, Church Lane, Patriots Drive, East Dexter Street, Village Lane and Freeborn Street.

D. CHANNELING LOCAL TRAFFIC

1. As East and West Main Roads become increasingly crowded, there will be a need to accommodate low-level residential traffic on other streets. Motorists will use alternate North-South routes anyway, so it is important to ensure that roads can handle the load, and to encourage access with the main roads at certain intersections best designed to handle them.
2. EAST SHORE CONNECTOR ROAD
 - a) Connecting all developments on the East Shore has long been a goal of the Planning Board and should be implemented. The road network would connect Park Avenue to Wapping Road to the Middletown line. This offers a number of advantages:
 - (1) An alternate route for local traffic to transit within the Town for short distances without having to access East Main Road, particularly at peak hours.
 - (2) A reduction of traffic congestion.
 - (3) A reduction of traffic accidents.
 - (4) Ease of access to East Main Road by directing local access to specific intersections designed to accommodate heavier local traffic (wider intersections and/or traffic lights).
 - (5) School bus routes could be altered to reduce usage of East Main Road, eliminating some of the dangers faced today.
 - b) Because of its winding nature and use of many relatively short streets, it will not be attractive as a thruway or even recognized as a thruway by non-residents. Appropriate posting and enforcement of speed limits and stop signs should ameliorate impact on the neighborhoods involved.
 - c) Currently only five parcels of land prevent this from becoming a reality. The Town should formally adopt this Planning Board goal into its Subdivision Regulations. The traffic on our major roads is not going to decrease.
3. IMPROVING LOCAL COLLECTOR ROADS
 - a) NORTH-SOUTH ROADS

- (1) Due to congestion on East and West Main Roads plus the large parcels of undeveloped land that could see significant residential development, Middle Road, Jepson Lane, and Wapping Road will see increased traffic over the years. They are also the only practical alternatives to East and West Main Roads for local traffic in the southern part of Town.
 - (i) The State recently repaved Middle Road from Union Street to Schoolhouse Lane. The remainder of the road is under local control. Middle Road in particular, will need upgrading soon to insure its capability of handling the increase in volume during reconstruction of East Main Road.
 - (ii) Traffic on Jepson Lane and Wapping Road to be monitored to determine when widening and upgrading should be planned as part of the Capital Improvement Program.

b) EAST-WEST ROADS

- (1) Although the State RIDOT lists only Sprague Street, Union Street, and the northern section of East Main Road as minor arterial (RI RIDOT 1995-2005 Classification System 12/89), Mill Lane and Hedly Street have received heavier volumes of traffic over the past few years.
 - (i) The proximity of Route 24 along with the location of the Compactor Station and virtually all the Town Departments at or near the intersection of Hedly and East Main Road make Hedly Street a highly used road..
 1. A traffic light should be installed at Hedly and East Main Road as part of the East Main Road Improvement Project.
 - (ii) With the installation of a light at Stubtoe Lane and East Main Road and increased residential development in the area, Mill Lane has approached the status of a primary crossover road between East and West Main Road.
 1. At West Main Road a motorist exiting Mill Lane has limited southerly vision. Northbound motorists turning onto this important collector road face a sharp narrow intersection. It is truly a life-threatening situation that must be corrected immediately. The land must be cut back, the intersection widened and a retaining wall installed.
- (2) Union Street is on the RI RIDOT list for resurfacing in 1992, but its intersection with East Main Road remains extremely dangerous. Sight lines must be improved and a traffic device control should be installed. This may become part of the East Main Road Reconstruction Project. The Town should encourage same.
- (3) Sprague Street is in need of widening and resurfacing in certain areas. The intersection of Sprague and East Main Road is a high accident area, despite the presence of a caution light. Better traffic control should be installed as part of the East Main Road Reconstruction Project.

E. ALTERNATE MODES OF TRANSPORTATION

1. Alternate modes of transportation are not presently viable as major solutions. The spread-out nature of Portsmouth means that the car will be the dominant mode of transportation for the 20-year planning horizon.

Implementation in Portsmouth involves:

- a) Making sure that our land use and transportation planning does not close out major options.
- b) Gradually implementing relatively minor, low-cost alternates.

2. COMMUTER LOTS

- a) Identify and work with the State to create and advertise selected commuter lots.
 - (1) Develop a relatively small number, leaving room for more and/or expanded lots.
 - (2) Establish each as a RI Public Transit Authority (RIPTA) bus stop.
 - (i) including the installation of bus shelters.
 - (3) Add these to the list of spots regularly patrolled by the police several times a day.
 - (4) Potential commuter parking lots include:
 - (i) Corner of Bristol Ferry Road and West Main Road.
 - (ii) Near Mount Hope Bridge.
 - (iii) Along Route 24 near Sakonnet Bridge.
 - (iv) Corner of Union Street and West Main Road (State Police Barracks).
 - (v) Near Raytheon.
 - (vi) Founders Grove at East Main Road and Boyd's Lane.
 - (vii) Melville Park.

3. RIPTA BUS SERVICE

- a) As traffic conditions worsen, public transit will be seen as an alternative mode of transportation.
- b) A regular RIPTA bus loop route between East and West Main Road from the Mount Hope Bridge to Anthony Road to Two Mile Corner in Middletown, the bus station in Newport and/or other sites on an hourly basis may be a viable solution to some of the traffic problems. Service could accommodate commuters, shoppers and students.
 - (1) Installation of RIPTA bus shelters where feasible, especially at park-and-ride facilities and the more frequently used bus stops.

4. PEDESTRIAN AND BICYCLE PATHS

- a) As the traffic situation becomes more intolerable people will seek alternatives and bicycle and pedestrian traffic may increase. Pedestrian traffic is extremely hazardous along much of East Main Road. It is highly recommended to the State that sidewalks be placed along East Main Road from Union Street to Boyd's Lane.
 - b) Sidewalks are needed along one side of Sprague Street, Boyd's Lane, Freeborn Street, Union Street, Middle Road, and all streets on which schools are located. Sidewalks should be on both sides of the road and could be used by bicyclists and joggers as well. Four foot wide sidewalks with a landscaped strip between the sidewalk and the street would satisfy the need yet maintain the aesthetics.
 - c) A bicycle path should be studied and constructed.
 - (1) A bicycle path can only be considered for State and Federal funding if it is a transportation (as opposed to recreational) facility.
 - d) Areas of consideration for bicycle paths are:
 - (1) Along the Sakonnet River over existing rights-of-way from Glen Farm to Island Park.
 - (2) Along Burma Road:
 - (3) Down the center of the Island along the abandoned trolley tracks and electric lines.
 - (4) Along Railroad tracks from the Sakonnet River to Newport.
5. RAIL
- a) Reviving the railroad may seem unlikely, but the location of industrial land along a railroad line is still an attraction to industry. Mass transit commuter linkage from outer areas to major employment centers is becoming increasingly important. Workers could be brought from off the Island to major employers like Raytheon and NUWC. Compared with the major land acquisition and construction costs involved with building a new highway, reconstruction of the rail lines and the bridge over the Sakonnet River are probably advantageous.
 - b) The major point to be made now is not to allow the rail line to be lost to any other use. Short-term opportunities for alternate uses will come and go, but once the only existing rail line on the Island is permanently interrupted, what could easily become a major mode of freight and passenger transportation in the future will be lost forever.
 - c) The current focus should be on planning for the revival of the railroad by: identifying and acquiring well located commuter lots adjacent to rail lines, plus cost and feasibility studies for restoration of the rail line and bridge construction. These would, of course, be the responsibility of the State Department of Transportation.
 - d) RIDOT has started a "Rail Corridor Feasibility Study" to investigate commuter rail, light rail or express bus way use. (The West Side Master Plan Task Force

recently completed a “West Side Transportation Guide Plan”, which is hopefully being used as a guide for this more detailed study.)

6. Water Transportation

- a) Portsmouth should participate in RIDOT’s Water Transportation Study to identify Portsmouth’s future water transportation alternatives, including the ferry service needs of Prudence and Hog Islands.

7. Public Education

Work to educate the citizens of the Town of Portsmouth concerning financial and other benefits of mass transit.

F. MAINTENANCE

1. Pavement Maintenance Management Program

- a) Portsmouth’s municipally owned roads are basically in good shape. However, the increased number of new subdivision roads, the declining condition of some of the equipment (see the Capital Improvement Program recommendations) and declining funding of the paving budget is a source of concern.
- b) Implement the computerized Pavement Management System, developed in 1989 by the Civil Engineering Department of the University of Rhode Island. To provide a systematic and rational method for the maintenance and management of municipally owned pavements. This system also:
 - (1) Inventories the current condition of all roads according to “Pavement Condition Index” criteria.
 - (2) Helps optimize the benefits and minimize the costs of maintaining pavements in a serviceable condition through planning, prioritizing and scheduling.

G. R.I. TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

- 1. Take an active role in the development of the State’s TIP.
 - a) Historically, the municipalities which have taken a regular, active role in advising the condition of its transportation needs have done best in both the development and implementation of the TIP.
- 2. The TIP is the State’s 6-year Capital Improvement Plan for roads, developed by Statewide Planning. This is an important source for upgrading our most used roads.
- 3. Of 146 road projects in the 1989-1995 TIP only two are in Portsmouth:
 - a) Upgrade East Main Road 1992-95(delayed).
 - b) Repave Union Street 1990-91(delayed).

4. Of 38 State run commuter lots existing or planned, two are "awaiting design" in Portsmouth.
 - a) Sprague Street and Bristol Ferry Road.
 - b) Union Street and West Main Road.

H. FUNCTIONAL HIGHWAY CLASSIFICATION SYSTEM

1. Adopt a functional highway classification system that incorporates and classifies roads according to their ability to handle certain traffic volumes, general minimum design standards and priorities, and ensure that the Town's roadways are properly integrated with those of its adjacent communities. Study all Town Roads and assign them to such classifications. This will:
 - a) Assist the implementation of the Pavement Management System.
 - b) Provide a rationale for directing access to new developments through roads that can accommodate the increased volume.
 - c) Limit development that can feed into these roads depending on their classification and require alternate road systems for new development as appropriate.
2. The Town will periodically review and update roadway design and construction standards for all roads under, or proposed to be under, the Town's jurisdiction to ensure that they are appropriate to the planned use of the land and character of the area they are intended to serve.

AGRICULTURE

I. GOAL

Maintain agriculture as a vital part of the community as a way of life, open space value, land use, and economic activity.

Our farms not only supply highly valued open space and scenic views, they are also an important part of the character of the community. On the Aquidneck Island portion of Portsmouth, farms provide the majority of remaining open space. Keeping these farms active is the best guarantee for maintaining the character of the community as well as open space. Due to the importance of farms and the variety of objectives and implementation items that address the maintenance of working farms, agriculture is the subject of this separate section.

NOTES: Readers of this section are particularly referred to maps #32,33, and 53.

II. DEFINITION

Because of the special protection and programs proposed for farms, a definition is important. The best definition is that recently adopted by the Town Council for the farm property tax assessment program--contiguous areas of five acres or more that are used for farming as a source of income. Small hobby farms, gardens and the like do not fall under this definition. Ownership is not part of this definition, as many farmers lease much of the acreages they farm.

III. THE NEED FOR AGRICULTURAL PLANNING

- A. In 1960 about 3/4 of Portsmouth's land was devoted to farming. Less than two generations later, that figure is less than 1/4. Portsmouth residents want to feel they live in a rural community, a farm Town. That portrayal is fast disappearing.
- B. Farms will not necessarily survive in Portsmouth. In a community with intense development pressure, the temptation to sell for the big quick money is ever-present. Coexisting close to and abutting residential uses presents certain obstacles that did not exist when Portsmouth was primarily a farming community. In many farm families, the children do not wish to inherit and run the farm as they did in the past. Intense competition from much larger farms outside New England, increasing State and Federal regulation, and the inherent hazards of weather cycles make farming in this area difficult.
- C. Farms benefit the Town financially simply because they demand far less in services than they pay, and because their very existence boosts the value of surrounding properties.
- D. Community Support for Farms
 - 1. Despite the decrease in the number of farms and amount of farm acreage over the past 30 years, farmland preservation remains one of the top priorities of the people of

Portsmouth.¹

2. Realizing the benefits of farms to the community, in 1990 the Town Council adopted a farm property tax assessment program, which assesses farmland at its current use value rather than its "highest and best use value." This program trades a significant property tax savings for five years of continued farm use.
3. Virtually every farm property in Portsmouth has enrolled in the Town's special agricultural assessment program. Under this program, farms are assessed at a reduced value, based on their usage for crops, grazing or unused land. (Assessment regardless of whether or not owners have sold their development rights.) As of December 2000, 139 properties comprising 2,459 acres (2,206 on Aquidneck Island plus 253 on Prudence Island), were enrolled as of December 31, 2000, for a total property tax assessment exemption of \$16,331,450.

Table 1 - Farmland Assessment Program 2000 - Parcels by Size:

Sizes: acres				
0	to	1	12 lots	7 acres
1	to	5	31	95
5	to	10	31	227
10	to	20	32	461
20	to	30	9	212
30	to	40	8	283
40	to	50	4	174
50	to	100	10	732
>100	acres		2	269

TOTAL 139LOTS 2,459ACRES

- E. This and the State's "Farm-Forest-Open Space" assessment program are an excellent inducement to keep farmland in farming and should be continued. However, they are ultimately effective only as long as a farmland owner does not receive an offer from a developer, which induces him to sell and pay the assessment program penalty (an amount which could pale in comparison with the sale price). Because the Town's Farm Assessment Program is more advantageous, there are no farms in Portsmouth in the State's program.²
- F. Clearly, if the Townspeople want something of value, they must pay for it. There seems to be a general willingness to do so. Over the long run, a combination of methods is needed to preserve our farmlands.

II. OBJECTIVES

¹ SEE APPENDIX PCAC SURVEY RESULTS, THE 1990 PCAC SURVEY QUESTIONS 24.1, QUESTION 24.2, QUESTION 24.3 A QUESTION 24.4 , QUESTION 24.5 A

² Per David Dolce, Tax Assessor, May 2001.

A. OBJECTIVE 1

Maintain the agricultural industry in Portsmouth at the highest level possible.

1. As of 1990, about 2700 acres or 25% of the Town's land area on Aquidneck Island was actively farmed. Over 65% of the farmland that existed twenty years ago has been developed.
2. Such a rapid decline makes the need to do something obvious.

B. OBJECTIVE 2

Promote financial incentives and programs that assist in the economic viability of active farms.

1. Farms are businesses. The difference between a farm and most other businesses is that their major asset is a large tract of land. Just as programs exist and are proposed for attracting new business, so too does government need to maintain and improve the use and effectiveness of such financial incentive and assistance programs.
2. Keeping farms in active use is the most effective means of maintaining open space.

C. OBJECTIVE 3

Make water availability to farms a priority during critical drought conditions.

1. This is a survival issue for most farms and most kinds of crops. Residents need to accept this fact, as well as actively support it, so that an operating policy can be adopted and be effective.
2. To accomplish this in both the short term and the long run, the Portsmouth Water and Fire District is encouraged to continue to make every reasonable effort to minimize the impact of any water shortages on the agricultural users, whether the shortages are caused by drought or other emergency conditions.

D. OBJECTIVE 4

Consider establishing an agricultural impact advisory board to give advice on proposed local ordinances that might adversely affect farms.

1. Because farms differ in many respects from other types of land uses, it is easy to adopt Town policies and practices that adversely affect farms without even knowing it. A standing advisory board could simply give the farm viewpoint when warranted. It could also help provide education to the general public on farming practices.

E. OBJECTIVE 5

Actively assist farmers and owners of farm acreage to plan for continued utilization of farmlands in the future.

1. Provide referral services in estate planning. All too often, even when planning to will property to heirs, landowners can unwittingly subject themselves or their heirs to crushing estate taxes, forcing them to sell the farm just to pay the taxes. The greatest threat to the continued viability of the farm is at the time the landowner makes these decisions.
2. This low cost item could be most effective in the long run.

V. IMPLEMENTATION

A. A THREE-PRONG APPROACH

The implementation items that follow are presented as a complete package. It is said that implementation of all of them will go a long way toward preserving farmlands. It is also important to emphasize that if the Town has certain priorities, it must be willing to pay for them. It is not fair to ask the remaining farmers, who chose not to sell to bear the brunt of problems created by others.

1. FARM OPERATIONS

- a) Short-term emphasis must be on keeping the farmer farming. The few farms that remain are relatively successful at the current time. The Town and the townspeople can help the farms prosper primarily by not doing things to make it hard to farm, as well as by enacting ordinances and policies that favor the farmer at the appropriate times:
 - (1) "Right to Farm" policy.
 - (2) Agricultural Advisory Committee.
 - (3) Water Availability.

2. REGULATORY

- a) Enact land use regulations which, while managing growth, give farmers who feel they must plan for eventual sale as development the incentives to preserve the maximum amount of farmland.

3. ACQUISITION/DONATION OF DEVELOPMENT RIGHTS AND OTHER FINANCIAL INCENTIVES

- a) The ultimate means of preserving farms is to buy the development rights or have them donated by the landowner to the Town or a land trust. This can only be done over time due to the huge costs and complexities. But it does need to be actively planned with the cooperation of the landowners, the State and land trusts.

B. FARM OPERATIONS

1. AGRICULTURAL IMPACT ADVISORY BOARD

- a) Consider establishing an Agriculture Committee to take an active role in preserving agriculture in Portsmouth and specifically to prepare advisory

statements when required. Sometimes the most well-meaning efforts by non-farmers can cause problems for farmers if they are unfamiliar with agricultural operations.

- (1) For example, the junk vehicle ordinance that outlaws unregistered vehicles, as originally written, took the farmer's source of spare parts. Such ordinances can be written to meet the needs of all parties.
- b) The Board should also take an active role in educating the general public about farm practices, specifically smells, noises, pesticides, hours of operation, and other necessities, which the uneducated might find objectionable.
- c) The Board should also investigate, in coordination with the State, the use of less toxic or less polluting chemicals and fertilizers and applications methods that would be less threatening to the surrounding areas.

2. RIGHT TO FARM ACT

- a) Many States, including Rhode Island have "Right to Farm" acts which allow farms to carry out normal operations without having to fear residential complaints due to odors and the like.
- b) The Acts exempt agricultural operations from prohibition or regulation as a public or private nuisance under local health ordinances, unless such operations were conducted in a negligent or malicious manner or in violation of State and Federal requirements.

3. WATER SUPPLY GUARANTEE PROGRAM

- a) The Portsmouth Water and Fire District is encouraged to continue to implement and expand its water conservation plan, and to continue to cooperate with the agricultural community to the maximum extent practicable.
- b) This is a survival issue for most farms and most kinds of crops.
- c) Residents need to know and accept this fact, as well as actively support it, so that an operating policy can be adopted and be effective. If farms cannot survive such critical drought times, they simply will cease to exist.
- d) Study agricultural water usage per acre versus average usage per acre of residential in different zoning districts to see if maintaining farms is a long-term water conservation technique.

C. REGULATORY METHODS

1. A NOTE OF CAUTION:

- a) Those who wish to manage or maintain slow growth have to be very careful not to cause large landowners to rush to subdivide before the new rules are put in place. Radical methods can be counterproductive, if only because those that would suffer most economic damage from the imposition of such methods will sell or subdivide before the new rules can take effect.

- b) The most effective means is to arrive at mutually agreeable compromises whereby growth is managed and landowners can still realize economic benefit.
- c) For these reasons, the proposed regulatory methods that follow are reasonable frameworks only, with the specifics that will satisfy all major interest groups to be filled in later.

2. METHODS CATEGORICALLY RULED OUT

There are a number of methods that would not work in Portsmouth. They are usually more appropriate in areas where agriculture is the dominant use or where there is a clear delineation within the Town as to where the farms are and where the houses are. Portsmouth's land uses are too interspersed for such methods.

a) EXCLUSIVE AGRICULTURAL ZONES -- NOT RECOMMENDED

- (1) Zone allows only agricultural use, often accompanied by very large lot requirement with residential prohibited.
- (2) Land that is not suitable for agriculture cannot be designated for such use simply to prevent growth. This would deprive the owner of any reasonable use of the land.
- (3) Where land is also valuable for residential development and nearby farmland has been developed, there is a good case against exclusive agricultural zoning.

b) LARGE LOT ZONING -- NOT RECOMMENDED

- (1) At first glance, requiring large lots (say 2+ acres) may seem to preserve open space and discourage development. In actuality, even larger size lots are developed, resulting in even more land being consumed faster with larger costs higher municipal costs. This does not rule out lower densities in some areas, it just rules out the imposition of large lot zoning as an answer to open space and farmland preservation. It simply does not work.

3. THE AGRICULTURAL PRESERVATION PROGRAM (APP)

A purely voluntary overlay Agriculture Preservation Program to be adopted with the goal of protecting farms, while still allowing the property owner the right to realize the fair market value of the land should he/she decide to sell it. The program would apply to parcels meeting a certain scientific, environmental, use and size criteria and would allow the owners, at their option, to develop their land under a different design standard than allowed in the base zoning. This is not agricultural zoning. It is an incentive program in which the farmland owner can realize significant financial benefits in trade for preserving more open space.

- a) The criteria would be based on factors necessary for viable agricultural land use
 - (1) premium soil types.
 - (2) vacant parcels of over a set number of acres in size.
 - (3) location in relation to other land uses.

- b) The design standard would allow a cluster configuration whereby development would happen on, say, thirty (30%) percent of the land and seventy (70%) percent would be dedicated to open space in perpetuity.
 - (1) A large part of the APP is the concept of cluster development. Cluster is not a new concept, but it has not been used extensively in Portsmouth. A legitimate concern of any property owner being mandated to develop following cluster standards is what impact that has on fair market value of the land.
 - (2) The fair market value of a tract of land that can be subdivided into an equal number of dwelling units under either cluster or conventional plan will be approximately equal providing that each house lot is of a size to accommodate an average size house and septic system. The smaller lot size is offset by location on a small development having no through street and surrounded by open space.
 - (3) Typically cluster developments have less development costs than conventional grids because there is less road and utility work. This factor increases market value of a tract of land to a developer.

c) APP Benefits

In consideration for developing under APP principles the property owner receives certain benefits not offered to other property owners.

- (1) Priority under the growth cap -- out of the total building permits issued in any given period, APP entrants would be guaranteed a percentage of the permits, which they could hold or develop. Such priority gives the farmland owner the option of selling/developing a small portion of his property in the short run, if needed, versus having to sell the entire farm.
- (2) Design standards to decrease infrastructure costs of a subdivision (i.e., narrower roads, no curbing, and common driveways) should be studied for such areas.
- (3) If property owner enters into APP agreement and commits to not develop any portion of the land, he/she is awarded priority in the purchase of development rights program.
- (4) If farmland owner wants to sell to a farmer, give the Town the first right of refusal. If incentives do not work and the land is sold, then the developer falls under the normal design standard rules allowed in base zoning.

D. FINANCIAL PROGRAMS

1. FARM PROPERTY TAX ASSESSMENT PROGRAM

- a) Recently adopted by the Town Council for the farm property tax assessment program, this is an excellent means of preserving farmlands over the short-term. The program simply assesses farmland at its value as a farm, rather than at its potential value if subdivided.

- (1) If part or all of the parcel is divided for subdivision, the property owner simply pays the Town back whatever he has saved in property taxes. (In this sense it is a deferred tax program, in which the deferral lasts as long as the land is not subdivided.)
- b) The first round of this program was implemented in the spring of 1991 with good success. Temporarily Preserved: 55 Parcels 1,009 Acres³ or about 35% of active farmland in Town.

2. PURCHASE OF DEVELOPMENT RIGHTS

- a) Rhode Island has a very successful program for purchasing the development rights from farms. Permanently Preserved to date:
4 Parcels 222 Acres(Source: Portsmouth Tax Assessor)
- b) The program first provides a separate appraisal of the value of the farm as a farm and the value as a subdivision development, then pays the farmer the difference. The farmer continues to own the land and can even sell it, but the State owns the right to ever develop it.
- c) The Town should maintain close contact with this program and provide technical assistance and coordination. (In the latest instance, with the volunteer help of a local attorney, it did just that.)
- d) A feature which the Town should adopt and urge the State to adopt is one in which development rights are acquired over a number of years.
 - (1) Less capital gains tax impact on landowners = greater incentive to participate.
 - (2) More leverage with today's tax dollar.
 - (3) Easier to finance because acquisition is done over time.

3. LOCAL SINKING FUND TOWARD PURCHASE OF DEVELOPMENT RIGHTS

With the above, consider the creation of a dedicated municipal sinking fund. (Such a fund was created by the Town in 1999 from Property Transfer Tax revenue. Soon after, an Open Space Committee was established to propose acquisitions to the Town Council.)

E. ESTATE PLANNING ASSISTANCE.

1. Financial incentives generally do much more toward accomplishing public goals than do programs that excessively regulate or purchase land. This is particularly true where tax incentives are involved. (For example, the commercial real estate industry was revived almost single-handedly by the 1981 Tax Act, which increased real estate related deductions).
2. Estate Planning for farmers and large landowners, regardless of their ages, quite often includes donations of and/or conservation easements to the Town or private land trusts. Lack of such planning often leads to the heirs to the property being forced to

³ SOURCE: PORTSMOUTH TAX ASSESSOR, MAY 1991.

sell the land just to pay the estate taxes. (Please see the Appendix excerpt from “Planning Family Lands”.)

3. There are at least seven methods (which may be mixed and matched) included in estate planning and estate taxes:
 - a) Gift of a Conservation Easement.
 - b) Gift of a Remainder Interest.
 - c) Gift by Will.
 - d) Bargain Sale (Sell property for less than market value; difference is a charitable donation).
 - e) Charitable Trusts.
 - f) Lifetime Giving to Other Family Members.
 - g) Limited Phased Development.

Town to provide referral service to help guide larger landowners toward open space preservation by advising them on the long-term disposition of their land.

PRUDENCE ISLAND

The Prudence Island element is arranged a bit differently than the other elements of the Comprehensive Plan. Prudence Island is different from the rest of Portsmouth in many respects. Nonetheless, much of what applies to the “main island” part of Portsmouth applies to Prudence as well. Those sections are not repeated, although they are referenced. This section contains what is planned differently from the rest, and where there are special implementation or unique needs.

NOTES: Readers of this section are particularly referred to maps #34 - 53.

I. GOAL

To maintain the unique nature, natural resources, and character of Prudence Island, while providing a reasonable level of Town services. The Town of Portsmouth assumes that the State will not change ownership and whole-heartedly supports no development of Hope and Patience Island.

Prudence Island is a special place, a unique spot so close to a heavily urbanized area of the world, and yet so far away. In a world rushing to develop, Prudence Island provides a refuge to be protected.

II. DEFINITION

Only Prudence Island is addressed herein. The State owns all of Patience and Hope Islands, and the others are too small and low-lying to develop anyway. It is assumed that all of those will be protected from any development.

III. THE NEED FOR PLANNING FOR PRUDENCE

- A. The danger to Prudence Island lies in a gradual erosion of its unique character. Pressures to develop more residential areas, tourism and even industrial areas abound.
- B. The environment, location, access and other physical factors present major limits on growth and clearly point to preservation and strictly managed growth. Yet, as with the rest of this Plan, without clear direction, the worst, as well as the best, are possible.
- C. Understanding most other matters relates directly to understanding the special considerations associated with an Island that has no bridge connection to the mainland.

IV. OPEN SPACE

A. OBJECTIVES

Ensure that as much of Prudence Island remains open space as possible.

1. Open space is a part of the essential character of Prudence, part of its identity, part of what makes it different. This is in part due to Prudence's location and inaccessibility from the rest of Rhode Island.
2. Prudence people value their open space, value their isolation. For many, that is why they came here. The problem is that the natural beauty and isolation of the Island are its own worst enemy-the person who wants to live there also takes a piece of it. While we cannot stop that process from happening, we can manage it so that as much open space is preserved as possible.
3. The Island's unique status, environment, and cost to Portsmouth for providing services all lead to the conclusion that the maximum amount of open space should be preserved, as opposed to selected areas or corridors.

B. IMPLEMENTATION

1. Much of the Open Space and Natural Resources elements apply particularly well to Prudence. The reader is urged to refer to those elements.
2. Outright Purchase of Development Rights.
 - a) The most permanent way of preserving land is to buy it, or to buy the development rights. Purchasing development rights means the property owner keeps the land, but sells his right to develop it to the Town or a land trust.
 - b) There are a number of competent and experienced people and organizations working on this. It should be Town policy to lend maximum assistance to these private efforts as requested.
 - c) Over the past two decades, Prudence has been fortunate enough to be included in the National Estuarine Reserve Research Sanctuary program (NERRS). Over 700 acres on the northern part of the Island plus some 201 acres between Homestead and Northeast Point are owned by the State as a research reserve under this program. (There are also over 300 acres under the same program that encompasses all of Patience and Hope Islands).
 - d) Some 480 acres are also owned by Preserve Rhode Island.
 - e) Prudence Conservancy, a land trust based on the Island, and Nature Conservancy, a national land trust, are working actively to secure further acreage.
3. State Park
 - a) 647 acres on the southern tip of Prudence belong to the State and is used for walking nature study and hunting. This is the former Navy property. It has a fair amount of paving and a number of World War II vintage buildings in poor condition. It also has a huge pier.
 - b) There has been any number of proposals for this area:
 - (1) Part of the Bay Island Park System, as it is currently, with more recreational facilities.

- (2) Added to the NERRS program.
- (3) An industrial park.
- (4) A state prison complex.
- c) Of these, only the park idea and estuarine reserve program are valid for Prudence. The other intensive uses would destroy the Island's character in short order. The State is urged to preserve this acreage permanently for recreation and as a preservation area. (Deed restrictions imposed when the Federal Government transferred the property to the State stipulate public recreation use only.)
- 4. The farm assessment programs are not applicable as there are no active farms.
- 5. The requirement of each new subdivision, reserving by deed restriction, a major percentage of the parcel for open space is quite applicable here.

V. RECREATION

A. OBJECTIVES

- 1. Create a regular cooperative relationship between the Town Government and volunteer organizations on Prudence for the provision of recreational opportunities for Island residents.
 - a) Being an Island with no bridge to the mainland, people cannot regularly go elsewhere for their recreational opportunities.
 - b) The self-reliant people of Prudence can cooperate with the Town Government to create and maintain a reasonable level of recreational opportunities.
- 2. Repair, create and maintain enough physical recreational facilities for the summer and winter populations.
 - a) Dedicated recreation facilities on Prudence are few and old. There are not enough permanent residents of the Island to warrant major year 'round facilities. But the summer population does have a significant need for recreation.
 - b) Fortunately, most of the developed portion of Prudence is in a compact area on the east coast. So it is possible to provide satisfactory recreational facilities on one large or a few small parcels near the developed area.

B. IMPLEMENTATION

- 1. Five-Year Recreational Facilities, Improvement and Maintenance Program.
 - a) Prioritize and fund the physical improvements listed below.
 - b) Consider entering into an arrangement whereby the Town will construct or renovate facilities, and established citizen organizations on Prudence will maintain them.

- (1) The residents do not have the lump sums of funds to pay for major physical improvements. The Town cannot afford to dedicate staff to regularly go to Prudence to do maintenance and regular repairs.
 - (2) Organizations such as the Prudence Improvement Association can be responsible for maintenance and regular repairs.
2. Playground and Tot-lot
 - a) Select and acquire a site.
3. Tennis Courts
4. Indoor Recreation
 - a) Indoor recreational opportunities are limited on an Island, particularly in inclement weather.
 - b) An indoor recreation program can be created for arts and crafts, ping-pong, etc.
 - c) The Prudence Improvement Association's building may be an ideal spot for both programs and storage, if an arrangement can be made, and if the Town can help cover insurance costs.
5. Hunting
 - a) Deer hunting is a seasonal event on Prudence that causes severe problems for permanent residents. Bow hunting season is November 1 to January 31. It is an effective wildlife management tool on an Island where excess animal population cannot migrate, so it should be continued. As many as 250 hunters in one day (usually opening day weekend) come to Prudence to hunt.
 - b) The State should allow parking for hunters on State-owned land, as that is where the State is allowing them to hunt. It makes little sense for the State to tell hunters where they may hunt but not let them get there.
 - c) The State Division of Fish and Wildlife should develop and distribute maps with all hunting permits that show parking areas and legal hunting areas. (Such maps are available, but if not distributed are useless.)
 - d) DEM should establish a logical and consistent ratio of hunters to conservation officers for effective oversight and limit the number of hunters allowed on Prudence to that ratio.

VI. NATURAL RESOURCES

A. OBJECTIVES

1. Maintain As Much of Prudence In Its Natural State As Possible.
 - a) This is a major objective for Prudence for much more than aesthetic reasons. Prudence is an Island with a delicate ecosystem, so much so, that a major section

of it has been designated a national estuary. (The National Estuarine Research Reserve is one of only a dozen nationwide.)

- b) A significant wetland area runs almost the length of the portion of the Island that is owned and protected by Preserve Rhode Island.
- c) Disturbance of this ecosystem will do much more than harm the plant and wildlife, as detailed below.
- d) Because water seeks its own level and has to go somewhere, serious disturbance of the ecosystem will cause the wetlands to spread into some of the populated areas, ruining the septic systems.

2. Protect Groundwater and Surface Water Resources

- a) This is a paramount concern. Prudence cannot buy its water from another Town and it is too small to develop other water sources. It must use what it has.
- b) Most of Prudence depends on a few wells and springs for drinking water. There are six community wells (wells that serve a number of households) on Prudence Island. These are privately owned, but serve a public purpose.

The wetlands feed these water sources, so pollution of the wetlands will mean pollution of the drinking water.

- c) The public water system is much too small to be able to afford a modern treatment facility.
- d) See the Wellhead Protection Plan Program below.

3. Improve the Public Water Supply and Distribution Capability and Facilities

- a) The public water supply for Prudence is owned and operated by the Prudence Island Utility Corporation and regulated by the State Public Utilities Commission (PUC). Unlike the Portsmouth Water and Fire District, this is a private corporation that is not elected by the public. Therefore, recommendations herein cannot be adopted as public policy. Nonetheless, provision of enough volume and quality of water is a public concern. (Note: The terms “public water supply” or “public wells” as used in this section refer to the distribution of water to a number of households, not to the ownership of the water supply system).

(1) There are today 300+ houses served by the water system, about 60 year-round, with a commitment to 30-50 more.

- b) Therefore, an objective of this plan is for the Town to do what it can to assist the Prudence Island Utility Corporation by planning with them so the system will not be overtaxed.

(1) Reference is made here to the 1989 findings of the Rhode Island Department of Health (DOH) on the condition of this water system.

B. IMPLEMENTATION

1. Adopt the Resource Protection Overlay District regulations recommended in the Natural Resources Element.
 - a) The recommendations in that element are particularly applicable to Prudence due to the Islands ecosystem and water supply.
 - b) A complete study of the water supply was completed in 1993 by an expert from the University of Rhode Island (URI).
2. Adopt Mapped Watershed and Wellhead Protection Areas as Watershed Protection Overlay Districts and implement regulations described in the Water Quality element.
 - a) There is more than one watershed feeding the public water supply. Luckily, the major one is not in a developed area, and is mainly in conservation ownership .
 - (1) These watersheds were delineated in an independent study completed in July 1991, commissioned by the utility company.¹ See maps #39 - 41.
 - b) Development uphill from public supply wells is causing immediate concern. Regulations are not today in place to control this case.
 - c) If public wells downhill of development are found to be important sources of public water, mandatory septic pumpout will be necessary in their watersheds.
3. DEM has a model Wellhead Protection Program designed to prevent contaminants from entering groundwater resources supplying the five public wells owned by the Prudence Island utilities Corporation. This program is designed to be interactive between the State and local governments. The Town will, and the PIUC is urged to, work with DEM on implementing the program.
 - a) The principal elements of the Rhode Island WHP Program are as follows:
 - (1) Delineation of the Wellhead Protection Area, which has been done for the Prudence Island Utility Company by Prof. Daniel Urish in 1992. Though it has reviewed the document, RIDEM has not taken any formal action in approving the delineations.
 - (2) There are two potential sources of groundwater contamination within the WHPA: an underground fuel storage tank upgradient of the DeWitt Well (PIUC #3) and an abandoned auto dump site upgradient of the Goulet Well (PIUC #4). These threats need to be removed.
 - (3) It is unlikely that there will be any new threats to the WHPA. The entire Island is zoned Residential or Open Space.
 - (4) The Wellhead Protection Program will concentrate on education and outreach, so that residents understand the consequences of leaking underground storage tanks and haphazard disposal of hazardous waste and oil to their own health.
 - b) The Watershed Protection District section of the zoning ordinance should be applied to the Prudence Wellhead Protection Area.

¹ "Delineation of Wellhead Protection Areas for Prudence Island", Daniel W. Urish, Ground Water Hydrologist, URI, January 1992 Revision.

4. Enforcement

- a) Enforcement of Town as well as State regulations on Prudence is problematic due to geographic separation.
- b) Assignment of staff to inspect and enforce on Prudence cannot be satisfactorily done from the mainland by either the State or the Town.
- c) Nonetheless, the Town does have staff permanently, and seasonally assigned to Prudence. Selected of these personnel (more than one) are to be educated in the basics of State and local environmental regulations and assigned, as part of their regular duties, to tour the Island and report on activities that may be in violation.
 - (1) They should:
 - (i) Be educated on what to look for.
 - (ii) Know the geographic areas of concern.
 - (iii) Know whom to contact at State and local levels for more detailed inspection and enforcement.
 - (2) Each staff person need not be given enforcement powers. Just knowing what to look for, being assigned to look for it and report should be enough.
 - (3) Should enforcement powers be found necessary, a part-time position should be created for a permanent Prudence resident, if possible, to serve as Building Inspector/Environmental Inspector.
 - (i) Due to the difficult access to the Island, perhaps the Department of Environmental Management or other State agency could financially support such a position.
- d) Follow Through on Enforcement
 - (1) Too often DEM issues a notice of violation but fails to follow through on the notice by taking the violator to court.
 - (2) The Town should consider instituting a record-keeping system in which it will issue reminders to DEM when violations persist and enforcement has lagged.

5. Preserve Rhode Island Property

- 6. The property in the center of the Island that is owned by the Preserve Rhode Island composes most of the main well's watershed.
 - a) Facilities do not exist on Prudence to fight a forest fire. A major fire could destroy much of the watershed vegetation, and hence the watershed itself.
 - b) As Prudence is mainly undeveloped, there are few fire breaks. For instance, for the aforementioned Preserve Rhode Island property the only firebreak is Broadway.
 - c) A program to cut firebreaks around watershed areas should be put in place.
 - d) Consult with DEM natural Heritage Program.

7. Underground Storage Tank Regulation.

- a) Regulate underground storage tanks as detailed in the Soil and Air Element, section V. D. Local Underground Storage Tank (UST) Regulations.

VII. WATERFRONT AND COASTAL

A. OBJECTIVES

The objectives and implementation items in the Waterfront and Coastal Element apply even more so to the pristine coastline of Prudence.

B. IMPLEMENTATION

1. Pollution Sources.

- a) Eliminate discharge of human waste at Potter Cove through the closed-head mooring program, in conjunction with a Special Area Management Plan.
- b) Eliminate overnight mooring at Coggeshall Cove and Sheep Pen Cove.
- c) Establish an Island based test monitoring system of coastal waters and shores.
 - (1) Perhaps through the research facility at the national estuary.
- d) Establish Island based enforcement of the above.

2. Road Drainage and Erosion.

- a) The only major recommendation in addition to the main element is to install and regularly maintain proper storm drainage along Narragansett Avenue at its intersection with all streets going uphill.
 - (1) Today storm drainage is accommodated by cutting into the bank on the bay side of Narragansett Avenue and letting the water flow to the Bay. Not only does this pollute the Bay, it is causing severe erosion that, in some places, could threaten the structural integrity of the road.
 - (2) Make this part of the Capital Improvement Program.

VIII. FACILITIES AND SERVICES

A. OBJECTIVES

- 1. Provide a reasonable level of physical facilities and services to Prudence Island commensurate with its seasonal populations and inherent limitations of serving a remote island.
- 2. Prudence Island residents know that they cannot expect the full level of services provided on the "Main Island". Nonetheless, certain items need to be addressed.

B. IMPLEMENTATION

1. Official Town Roads

- a) The only two roads on Prudence Island that Portsmouth has officially recognized as part of its highway system are Broadway and Narragansett Avenue.
- b) The Town needs to identify and map which, if any, roads on Prudence it wishes to accept and permanently take responsibility for. This would determine:
 - (1) What the Town's maintenance and legal responsibilities are.
 - (2) Determine where new houses and subdivisions are allowed.
 - (3) Determine future growth limits and locations.
- c) Following this effort it will be necessary to evaluate road construction and maintenance standards both for Town roads and new subdivision roads, to develop appropriate standards.
 - (1) Full width paved roads may not be necessary, but any road construction, public or private, must be done to reduce future maintenance and reconstruction needs.
 - (2) Any such standard should be designed to retain the special character of the Island.
 - (3) Experiment with different surfaces on selected road sections to determine the optimum surface.
 - (i) The key objectives are dust control and rut/drainage/erosion control.
 - (ii) Due to the fact that there is very little traffic 8 months a year, it may not be necessary to have asphalt pavement.
- d) Consider the adoption of a mapped street ordinance.

2. Solid Waste Disposal And Recycling

- a) The Town has done an excellent job of converting from a landfill to a Transfer Station.
- b) A recycling depot should be located within the Transfer Station.
- c) A compost site should be established at or near the Transfer Station. The Town-owned chipper could be brought there regularly and the residents allowed to use the product for mulch.

3. Waste Oil Collection Facility

- a) Due to the cost of transporting vehicles to the mainland for an oil change, plus the fact that many cars on Prudence are unregistered, there is a much greater likelihood of waste oil from cars being just dumped somewhere than on the mainland.
- b) A Waste Oil Collection Facility at the Transfer Station is necessary.

4. Education

- a) Address problems associated with educating students grades K-4.
 - (1) Make a commitment to maintain and operate school facilities on Prudence.
 - (2) Annually survey the teacher to determine needs, problems and ideas specific to teaching in a one-room schoolhouse.
 - (3) Survey parents about their concerns on same.
 - (4) Investigate the need for and feasibility of hiring a teacher's aid.
 - (5) Include the Prudence Island community as a school resource.
 - (i) A tiny community like this presents a unique opportunity for volunteer community involvement.
 - (ii) Form a Parent Teacher Association (PTA).
 - (6) Plan to ensure parents' accessibility to their children because of illness, injury or emergency.
 - b) Address problems associated with educating students on the main island.
 - (1) Transportation to the mainland taking into consideration safety and time.
 - (2) Inclusion in extra-curricular activities.
 - (3) Cost.
5. Fire
- a) The Prudence Island Volunteer Fire Department functions very well.
 - b) The present vehicles are judged to be generally adequate for current needs.
 - (1) The 1962 tanker truck should eventually be replaced with a 2000-gallon truck.
 - (2) A new off-road brush truck is needed to enable the Fire Department to effectively fight brush and forest fires, as well as a small brush truck.
 - c) If population is allowed to increase, a full-time staff person may be necessary.
 - d) The current funding of \$5,000 per year may be inadequate for maintenance and operation. Evaluate the financial and capital improvement needs of the Prudence Island Volunteer Fire Department. (The volunteers have funded in the past the fire hall, a \$20,000 addition, and an ambulance with no Town money.)
 - e) As fire hydrants are not possible due to lack of adequate pressure and the fact that the water lines cover so little of the Island, new water storage locations are needed.
 - (1) The State is urged to allow the Fire Department's use of the underground reservoir and pumping station on the State's land in South Park.
6. Police
- a) The single public safety officer is adequate during the off-season, but not during the summer season.

- b) Addition of part-time help is recommended by doubling up officers on weekends and holidays May 15 through Labor Day plus the entire hunting season. As was done 20 years ago, two officers can alternate time coverage, with the off-duty officer on call.
 - c) Off-season the Public Safety Officer may be able to assume some the non-police enforcement duties outlined above,
7. Repair And Maintenance of Sandy Point Dock
- a) This Town-owned dock is used primarily for the Prudence Island Volunteer Fire Department for emergencies. Located almost directly across the water from the main dock at Bend Boat Basin, and away from the ferry landing, this is a key emergency facility.
 - b) It is gradually deteriorating and does not fare well in major storms. Preventive maintenance and repair is to be scheduled.
8. Water Supply and Distribution
- a) The public water supply is actually the privately owned Prudence Island Utility Company. It supplies most of the eastern portion of the Island) has been at or near capacity for many years. It currently has a waiting list for new connections, but it is highly unlikely that any new connections can be accommodated. There are no current plans to expand the system. The PIUC has adopted a policy of no further connections.
 - b) There are no surface water sources for water supply on Prudence Island. All supply is from groundwater, which, in places near one of the water supply pumps, rises to the surface as spring water
 - c) Preliminary indications of the water supply study are that the existing supply drawn from the main watershed is near capacity.
 - d) The secondary wells in developed or developing areas may become more important.
 - (1) The decision as to whether such wells will be used to increase supply is very important to the land use regulations and environmental regulations to be imposed.
 - (2) Those decisions must be made in concert with the Town.
 - e) Liaison should be established between the Prudence Island Utility Corporation and the Portsmouth Water and Fire District, which have the charter to support the Town on water issues.

IX. TRANSPORTATION

A. PRUDENCE ISLAND FERRY

1. The only access other than by boat or small private plane (there is one unpaved private airstrip) is via the Prudence Ferry Inc. Because this lifeline is located in Bristol, it will take an unusual effort to provide for the transportation needs of Prudence.
2. Bristol, in its Comprehensive Plan, has confirmed the importance of water related business and industry in this area, and so does not plan to try to eliminate the ferry.
3. Ferry Parking
 - a) In spring of 1991, the main lot used by weekend passengers, located across the street from the Prudence/Hog Ferry in Bristol became unavailable for daily parking. It is now available for monthly lease only. The problem in the summer has become severe, particularly for the many property owners on Prudence that stay there mainly on the weekends.
 - b) While there are municipal and private lots 1-1/2 and 3 blocks away now, changing conditions in Bristol, including an active effort by Bristol to improve the business climate on its waterfront, make the case unstable.
 - c) Portsmouth will work actively with Bristol to help resolve this problem.

B. FERRY FROM PORTSMOUTH MAIN ISLAND AND OTHER LOCATIONS

- a) Investigate the long-term feasibility of providing direct ferry service from Aquidneck Island to Prudence, particularly via the Town's planned boat launch, if feasible.
 - (1) A ferry service directly from Aquidneck Island would solve many of the current problems that can be attributed to lack of direct control over the situation in Bristol.
- b) Work with RIDOT on its Water Transportation Study.

C. ROADS

1. The major road related problem is the above-mentioned uncertainty as to what the Town is responsible for.
2. The minimal width of roads on Prudence is not a problem as long as population is held to approximately its current levels.

X. LAND USE

A. OBJECTIVE

SUSTAINABLE, SERVICEABLE GROWTH

1. While this may generically be an objective for any community, it is much more so for a small island with limited facilities.

- a) The roads are narrow and are not built to construction standards that can accommodate much traffic.
- b) The public water supply can only accommodate a few more houses.
 - (1) Private wells may appear to be the answer. Much of the Island is in the public supply watershed or in environmental overlays, so not much growth could occur anyway.
- c) The Town is already hard-pressed to provide enough public services due to the high expense of access to the Island.
 - (1) This is particularly true both for heavy Public Works vehicles and main island based staff.

B. REGULATORY

1. Rezoning

- a) In view of the severely limited public water supply and water company infrastructure, make the following changes:
 - (1) Zone the area now serviced by the Prudence Island Water Company as R-20 (20,000 square feet).
 - (2) Zone the entire remainder of the Island a “Conservation Zone” in which there is severely limited development and the majority of land must be set aside as permanent open space.
 - (i) Existing lots remain grandfathered with a recommendation that a merger clause be considered. The Town reserves the right to adopt a merger clause.
 - (ii) Conservation zone land must be reassessed to reflect new lowered value.
 - (iii) At a bare minimum, all State and non-profit owned land should be zoned conservation soon.

2. Commercial Zone

- a) If commercial zoning were to be considered it should be limited to minimal requirements to service current property owners.

3. Adherence To Current Subdivision Regulations

- a) Subdivision regulations must be strenuously enforced. Allowing them to be ignored due to the difficulties of enforcement will lead to serious problems.

4. Merging Of Substandard Size Lots

- a) There are hundreds of very small vacant lots on Prudence Island platted decades ago. Working with the property owners, come up with a method of combining these lots in order to reduce the potential impact on the Island. (See also the Land Use Element.)

5. Conversion Of Summer Houses To Permanent To Require Septic System Evaluation

- a) Prudence Island has hundreds of summer houses that could potentially be converted to year 'round. An obvious threat to the environment, as well as to the people occupying such houses, is that the septic systems that work well for three months a year in the dry season, may be inadequate for year 'round use.
- b) Requiring full Individual Septic Disposal System (ISDS) evaluation by DEM before a conversion building permit is issued will help ameliorate the problem.
 - (1) Adopt a definition of "Conversion" which would trigger this requirement (such as renovating at a cost of over 50% of building value, or enlarging the house by over a certain percentage).

HOG ISLAND

The Hog Island Element is arranged a bit differently than the other elements of the Comprehensive Plan. Being a summer-only vacation area, Hog Island is different from the rest of Portsmouth in many respects. A great deal of what applies to Prudence Island applies to Hog Island as well. Those sections will not be repeated, although they are occasionally referenced. This section will contain what is planned differently from the rest, where there are special implementations or unique needs.

NOTES: There is only one separate map for Hog Island (#52), but most of the maps of Aquidneck Island herein show Hog Island as well.

I. GOAL

To maintain the unique nature, natural resources, and character of Hog Island, while providing an appropriate level of Town services.

- A. Hog Island is a special place, a unique spot so close to a heavily urbanized area of the world and yet so far away. It is a unique summer haven that should be maintained in seasonal use only.

II. DEFINITION

- A. Only Hog Island as a summer community is addressed herein. It is assumed there will be no year 'round housing,, no electricity and no year 'round ferry service.

III. THE NEED FOR PLANNING FOR HOG ISLAND

- A. The danger to Hog Island lies in a gradual erosion of its unique character. Pressures to develop more residential areas, tourism and the like will always be present.
- B. Ultimately, any Comprehensive Plan should adhere to the wishes and needs of the residents. It should also be in concert with the environmental character and limits the environment imposes.
 - 1. The environment and other physical factors present major limits on growth.
 - 2. The lack of electricity and telephone service make other than summer house development unlikely during the 20-year planning period.
- C. These factors clearly point to preservation and strictly managed growth.
- D. Understanding most other matters relates directly to understanding the problems associated with an island which is strictly a summer community, has no paved roads, has no bridge connection to the mainland, and has ferry service only during the summer.

IV. OPEN SPACE

A. OBJECTIVE

Ensure that as much of Hog Island remains open space as possible.

1. Open space is a part of the essential character of Hog Island. Its attractiveness as a summer community, even though most houses are on small lots, is partly because of the open feeling contributed to by the water view and the undeveloped center. Too much growth can considerably reduce this value.
2. The problem is that the natural beauty and isolation of the Island are its own worst enemy-the person who wants to live there also takes a piece of it. While we cannot stop that process from happening, we can manage it so that as much open space as possible is preserved.
3. The Island's unique status, environment, limited water availability, and cost to the Town for providing services all lead to the conclusion that the maximum amount of open space
4. be preserved, as opposed to selected areas or corridors.

B. IMPLEMENTATION

1. Much of the Open Space Element implementation items apply to Hog Island as well. Please refer to that element.
2. Outright Purchase, Purchase of Development Rights, etc.
 - a) The most permanent way of preserving land is to buy it or the development rights.
 - b) The Hog Island Improvement Association on the Island is urged to form a sinking fund for this purpose. The Town can assist in gaining State and Federal matching funds.
 - c) Hog Island Inc. owns most of the vacant land. The Town should consider permanently lowering tax assessment in trade for development rights. (This would be like the Town purchasing development rights over a long number of years.)
3. The farm assessment programs are not quite applicable to Hog Island since there are no active farms, but perhaps could be expanded to include other vacant land.
4. The requirement of each new subdivision, reserving by deed restriction, a major percentage of the parcel for open space is quite applicable here.

V. RECREATION

A. OBJECTIVES

1. Create a regular cooperative relationship between the Town Government and volunteer organizations on Hog Island for the provision of recreational opportunities.
 - a) The summer community can cooperate with the Town Government to create and maintain a reasonable level of outdoor recreation opportunities.
2. Repair, create and maintain enough physical recreational facilities for the summer population.

B. IMPLEMENTATION

1. It is unlikely that the Town can financially justify funds for a recreation facility. However, the Town may wish to assist in design and perhaps some labor.

VI. NATURAL RESOURCES OBJECTIVES

A. OBJECTIVES

1. Maintain as much of Hog Island as possible in its natural state.
 - a) This is a major objective for Hog Island for much more than aesthetic reasons. Hog Island has a delicate ecosystem.
 - b) A significant wetland area is in the central part of the Island.
 - c) Disturbance of this ecosystem will do much more than harm the plant and wildlife.
 - d) Because water seeks its own level and has to go somewhere, serious disturbance of the ecosystem will cause the wetlands to spread into some of the populated areas, ruining the septic systems and wells.
2. Protect Groundwater and Surface Water Resources.
 - a) This is a paramount concern. Hog Island cannot buy its water from another town and it is too small to develop other water sources. It must use what it has. Hog Island Inc. is now studying the capacity of its water supply. The Town should maintain contact with that organization for the results of this study.
 - b) Most of Hog Island depends on two wells for drinking water. The wetlands feed these water sources, so pollution of the wetlands will mean pollution of the drinking water.
 - c) The water system is much too small to be able to afford a modern treatment facility.

B. IMPLEMENTATION

1. Adopt the Resource Protection Overlay District regulations recommended in the Natural Resources Element.

- a) The recommendations in that element are particularly applicable to Hog Island due to the Island's ecosystem and water supply.
2. More definitively Map and Adopt Watershed Protection Overlay Districts and Regulations
 - a) Also utilize the State's Wellhead Protection Program..
3. Enforcement.
 - a) Enforcement of regulations on Hog Island is problematic due to accessibility.
 - b) Assignment of staff to inspect and enforce on Hog Island cannot be satisfactorily done from the mainland by either the State or the Town.
 - c) Nonetheless, the Town does have staff occasionally assigned to Hog Island. Selected personnel (more than one) are to be educated in the basics of State and local environmental regulations and assigned, as part of their regular duties, to tour the Island and report on activities that may be in violation.
4. Underground Storage Tank Regulation.
 - a) Regulate underground storage tanks as detailed in the Soil and Air Element, section V. D. Local Underground Storage Tank (UST) Regulations.

VII. WATERFRONT AND COASTAL

- A. Threats to the waterfront and coastline are not particularly severe, due particularly to the lack of paved roads.
- B. A mobile pumpout facility would help control pollution caused by boat heads.

VIII. FACILITIES AND SERVICES

A. OBJECTIVES

1. Provide for Adequate Solid Waste Disposal.
 - a) This is THE primary current issue for Hog Island.
 - b) The current privately-owned landfill is full. There is not an adequate amount of dry land available to build another landfill.
 - c) The residents have arranged for a private compactor to be stationed on the Island. The compactor is hand loaded onto the ferry on a weekly basis during the summer.
 - d) The Town should watch developments on this issue and provide assistance if needed.

IX. TRANSPORTATION

A. PRUDENCE ISLAND FERRY

1. The only access other than by boat is via the Prudence Ferry Inc. The Town will work with Bristol to investigate and plan for the transportation needs of Hog Island.
2. See Prudence Island--Transportation section for more detail.

B. ROADS

1. The Island has only dirt roads and that is all it needs as long as no more vehicles are allowed on the Island. There are now only five operating motor vehicles on the Island.

X. LAND USE

A. OBJECTIVE

1. Severely Limit Growth Since:
 - a) There are no improved roads or utilities other than water.
 - b) The public water supply can only accommodate a few more houses.
 - (1) While private wells may appear to be the answer, so much of the Island is in the public watershed and environmental overlays, that not much growth could occur anyway.

B. REGULATORY

1. Rezoning
 - a) Hog Island is now zoned R-20 (20,000 square feet). In view of all of the points made elsewhere in this element, make the following changes:
 - (1) Zone the entire Island an Open Space Zone with mandatory clustering and deeded open space set asides.
 - (i) There is essentially one owner (a corporation of family members) of all vacant land (about 50+ acres dry plus 30+ acres wetlands) on Hog Island. The Town can plan directly with them for land use and zoning.
 - (ii) Existing lots remain grandfathered, although merger of substandard vacant lots is urged.
2. Conversion Of Summer Houses To Permanent To Require Septic System Evaluation
 - a) Hog Island has all summer houses that could potentially be converted to year 'round. An obvious threat to the environment, as well as to the people occupying such houses, is that the septic systems that work well for three months a year in the dry season, may be inadequate for year 'round use.

- b) Requiring full Individual Septic Disposal System (ISDS) evaluation before a conversion building permit is issued will help ameliorate the problem.
 - (1) Adopt a definition of “Conversion”, such as installing a central heating system and full bath, and/or renovating at a cost of over 50% of building value.

IMPLEMENTATION ELEMENT

The final element required in the Comprehensive Plan is the Implementation Schedule. This is, in a sense, THE ACTION where commitments are made to carrying out the programs, projects, studies, and ordinances development called for in the various narrative elements. (If a reader wanted as short a capsule as possible of the Comprehensive Plan, he/she would look here.)

The exact timing of and monetary allocations for all planned implementation items will be at the discretion of the then-sitting Town Council. All scheduled expenditures are understood to be subject to budgetary constraints.

The implementation schedule herein is designed to be as simple as possible. It is an element by element listing of actions to be taken. It is set up in tabular form as follows:

1st COLUMN: - CODE

This is a reference to the implementation section of the applicable element. As explained in the Introduction, each element is set up in the same outline fashion, with Roman numeral V. being the Implementation section.

For example, a code “A.1.” means Roman numeral V., paragraph A. subparagraph 1.

2nd COLUMN: - TASK

This is a brief description of the task, done in as few words as possible.

3rd and 4th COLUMNS: - WHO

WHO is the assignment of the task. The Town Council is listed as “Primary” when their function is to adopt an ordinance, while the primary responsibility for developing, monitoring, updating, etc. is the Planning Board, other committee, with the Planner as support. Generally speaking, the Town Planner and/or the appropriate department heads are included, whether or not explicitly listed. Not shown is a good deal of coordination with various State and federal agencies that may have the information and expertise in these areas.

“WHO – PRIMARY” Person or group with primary work responsibility.

“WHO - SUPPORT” Person or group working with 'primary' group as needed.

The following is a list of abbreviations for WHO is to do the work:

AB	Agricultural Impact Advisory Board (to be appointed)
BI	Building Inspector
CC	Conservation Commission (existing)
CWRC	Coastal Waters Review Committee (to be appointed)
DEM	RI Dept. of Environmental Management
DH	Department Heads generally
RIDOT	RI Dept. of Transportation

EDC	Economic Development Committee
FD	Fire Department
HA	Housing Authority
HII	Hog Island Inc.
HOC	Historic Oversight Committee (to be appointed)
OSC	Open Space Committee (to be appointed)
PB	Planning Board
PD	Police Department
PIPC	Prudence Island Planning Commission
PIUC	Prudence Island Utilities Company
PUC	R.I. Public Utilities Commission
PWFD	Portsmouth Water & Fire District
SD	School Department
TA	Town Administrator
TC	Town Council (beyond just passing what is recommended to them)
TE	Town Engineer (to be hired)
TP	Town Planner
TS	Town Solicitor

COLUMNS E through I - IMPLEMENTATION TIME FRAMES

Given the large number of implementation items and the uncertainty as to how long each will take, it was decided to adopt general time frames, dating from the adoption of the Plan by the Town Council. The following time frames are utilized:

1. IMMEDIATE: 0 to 2 YEARS

- a) Procedural items like setting up coordination, committees, etc.
- b) Major and minor regulatory items which have sufficient precedent in Rhode Island to model after and for which adequate information is available to accomplish quickly.
- c) "Planning Items, particularly identification, mapping etc., and studies for more complex regulatory items.

2. SHORT RANGE: 2 to 5 YEARS

- a) More complex regulatory items.
- b) Initial stages of things that cost money.
- c) Planning & engineering studies.
- d) Planning for longer-term things that will cost big money.

3. INTERMEDIATE TERM: 5 to 10 YEARS

- a) "Action on items with large costs, particularly those requiring considerable advance planning.
- b) Action on more complex regulatory items.

4. LONG TERM: 10 to 20 YEARS

- a) Items we can identify that we know will be needed eventually.

5. CIP or ANNUAL

Items that will start during one of the above time frames, and will continue indefinitely.

- a) New committees.
- b) New services.
- c) Continuous planning items.
- d) CIP is the Capital Improvement Program for major equipment and building expenditures. A Capital Improvement Program is not done within the Comprehensive Plan, although the Plan contains a commitment to adopt this form of major cost item programming.

Therefore the CIP is not contained within any time frame. Because they are larger items for which we do not yet know the costs, a "CIP" is shown instead of a cost estimate.

ESTIMATED COSTS

Estimated costs are indicated within the Time Frames. These are very approximate cost estimate ranges.

COST RANGES: K = \$1,000 M = \$1 million.

Items that involve simpler studies or plans are estimated to cost 0-\$5,000. Actual costs depend on who does it and if there is printing or purchase of GIS mapping required.

Items that involve setting up study committees or standing committees are estimated at 0-\$5,000 depending upon need for printing, studies, etc.

Regulatory items are estimated at 0 - \$5,000 depending mostly upon legal costs, printing and advertising costs, etc.

		WHO		ay				
SECTION	TASK	PRIMARY	SUPPORT	0-2 YEARS	2-5 YEARS	5-10 YEARS	10-20 YEARS	CIP or ANNUAL
	LAND USE ELEMENT							
ST. LAW	Update Zoning Ordinance for new Zoning Enabling Act.	TC	PB	Done				
A.1.	Targets acreages for each type of land use.	TC	PB			1-2 K		
B.	Study Rezoning of Industrial & Residential Areas.	TC	PB		1-2 K			
D.	Consider Resource Protection Overlay Districts	TC	PB		1-2 K			
E.	Adopt Watershed Protection District.	TC	PB	done				
F.	Consider Wetlands Overlay District / Work with DEM on Permits	TC	PB		1-2 K			
G.	Consider High Water Table Overlay District.	TC	PB			1-2 K		
H.	Consider Coastal Resources Overlay District.	TC	PB		1-2 K			
I.	Adopt Rolling Growth Cap System.	TC	PB	done				
J.	Incorporate Phased Development/Point System in Subdivisions	TC	PB		1-2 K			
K.	Incorporate Targeted Zoning Concept into Land Use Regulations.	TC	PB	1-2 K				
L.	Incorporate Developable Land Area Concept - minimum lot sizes.	TC	PB	done				
M.1.	Adopt Cluster Zoning for Single Family Developments.	TC	PB	done				
M.2-5	Consider Mandating cluster/low density zones.	TC	PB			1-2K		
N.	Consider Merger of Substandard Lots.	TC	PB		1-2 K			
O.	Consider Interim Regulations.	TC	PB	1-2 K				
P.	Computerized Land Use Record Keeping System.	TA	DH		25-35K			
	HOUSING ELEMENT							
A.2.	Educate public on likely beneficiaries.	HA	STATE					1-2 K
A.3.	Educate public on types of housing.	HA	STATE					1-2 K
B.2.	Work with developers and RIHMFC to provide affordable housing.	TC	TP	0				
C.2.	Target areas for first-time buyers.	PB	HA		1-2 K			
C.5.	Promote RIHMFC’s home buying assistance program.	TP						X
C.6.c)	Assist Housing Authority in obtaining financing.	TP						1-2 K
D.1.a)	Study implementation of housing objectives in zoning.	HA	PB	1-2 K				

SECTION	TASK	WHO		0-2	2-5	5-10	10-20	CIP or
		PRIMARY	SUPPORT	YEARS	YEARS	YEARS	YEARS	ANNUAL
D.1.a)	Study implementation of housing objectives in zoning.	HA	PB	1-2 K				
D.1.b) & c)	Investigate acceptable exceptions to and/or flexibility in current land use regulations to make targeted development more feasible.	TC	PB			1-2 K		X
D.2.a)	Consider “scattered site duplex” program within zoning.				1-2 K			
D.2.b)	Consider Mobile home parks beyond industrial zones.	TC			1-2 K			
D.2.c)	Consider Densities in R-10 & 20 for affordable housing.	PB	TP		1-2 K			
D.2.c)	Consider Density bonus for cluster in R-30 & R-40.	PB	TP		1-2 K			
D.3.b)	Permit cluster for single-family development.	PB	TP		1-2 K			
D.4.a)	Consider increasing tax exemptions for elderly.	TC				25-75 K		
D.4.b)	Modify zoning for "in-law" accessory units.	TC	PB		1-2 K			
D.4.c)	Sites for elderly & special needs housing.	HA	TP		1-2 K			
D.5.	Maintain complaint-based Minimum Housing Program	B.I.						15K
E.1.	Continue CDBG Home Rehab. Loan Program for LMI Homeowners							X
E.2.	Streamline permitting for special needs development.	PB	TC		1-2 K			
E.3.	Grant writing assistance.	TP						1-2 K
E.4.	Investigate Donation of Town Owned Land.	TP	TA			2-3 K		
E.5.	Investigate Donation of Navy Land and Housing.	TP	TA			2-3 K		
E.6.	Investigate Town and/or State bond issues.	TP	TA/FIN			2-3 K		
E.7.	Continue support for housing assistance organization on the Island	TC						X
	ECONOMIC DEVELOPMENT							
A.2.a)	Retail Market Analysis for optimum amount of retail land	PEDC	TP			2-5K		
A.2.b)	Zoning for non-sprawl commercial use	TP	PB		1-2 K			
B.1.	Encourage diverse business development.							X
B.2.	Encourage “Home Occupations”							X
B.3.	Hazardous materials limitations in zoning.	TC	TP	1-2 K				
B.4.	Landscaping requirements & Aesthetic appearance.	TC	PB		1-2 K			
B.5.	Determine optimal amount of land to be zoned industrial and commercial at build-out	PB	TP	1-2 K				
D.2.	Develop program to market the Town.	EDC	TP	1-2 K				

SECTION	TASK	WHO		0-2	2-5	5-10	10-20	CIP or
		PRIMARY	SUPPORT	YEARS	YEARS	YEARS	YEARS	ANNUAL
D.3.	Track Federal grant programs.	TP						1-2 K
D.4.	Work with the State to encourage necessary infrastructure.							X
D.5.a)&b)	Consider Business financial/service incentive package.	EDC	TP					unknown
D.5.c)	Plan for specific Industrial Area opportunities.	TP	EDC		15-25 K			
E.1.	Regional vocational/retraining school.	EDC	SD					unknown
F.1.	Plan utilities and services development.	TP	DH		2-5 K			
F.3.	Plan future water supply improvements.	PWFD	TP	1-2 K				
G.	Investigate financial assistance tools.	EDC	TP					1-2 K
H.	Create Economic Development Committee	TC		DONE				
	WATER QUALITY ELEMENT							
A.1&2.	Map pollution sources & control facilities.	TP	DEM	2-5 K				
A.4.	Study potential pollution control devices.	TP	DEM		2-5 K			
C.	Watershed Protection Overlay District.	TC	PB	adopted				
D.	Help acquire properties or development rights close to water supplies.	TC						X
E.	Study other water quality protection methodologies.	PB	TP			X		
	RESOURCES PROTECTION DISTRICTS							
A.1.	Identify land to be protected.	Done						
C.	Adopt "Resource Protection Overlay Districts"	PB	TP	1-2 K				
D.	Town Engineering Services	TC			50-75 K			50-75 K
E.	Develop public education packages.	TP	DEM		2-3 K			
	SEPTIC ELEMENT							
A.	Consider Town septic requirements in critical areas.	TC	PB		3-5 K			
B.1.	Consider Localized treatment where septic infeasible (WWFP).	TC	PB/TP			100K		
C.	Study "wastewater management district" feasibility.	TC	PB			25K		

SECTION	TASK	WHO		0-2	2-5	5-10	10-20	CIP or
		PRIMARY	SUPPORT	YEARS	YEARS	YEARS	YEARS	ANNUAL
D.	Study Minimum Areas for Septic vs. Required Lot Sizes	TC			Res. Prot. Above			
E.	Develop public educational materials on septic systems and maintenance.	TP				5K		
	SOIL AND AIR QUALITY PROTECTION							
	SOIL							
A.1.	Establish Storm water runoff regulations	PB	TP		1-2 K			
A.2.	Establish Zero Net Runoff Regulations	PB	TP	adopted				
B.	Adopt Erosion and Sedimentation Ordinance	PB	TP	adopted				
C.	Adopt Minimum Tree Removal regulations.	TC	PB		1-2K			
D.	Adopt Underground Fuel Storage Tank regulations	TC	PB		1-2 K			
	AIR QUALITY							
B.	Enact Performance Standards for Industrial Zones.	TC	TP			5-10K		
D.	Encourage development and use of mass transit.							X
	WATERFRONT/COASTAL							
A. & B.	Zoning compatible with coastal water zones.	PB	TP		1-2 K			
A.6	Zone barrier beaches undevelopable; regulate access.	PB	TP	1-2 K				
C.2.	Eliminate direct septic discharges to the coast.	BI	TC			15-25 K		
C.3.	Require properties in coastal zone to pump out septic system.	TP	TA			X		
C.4.	Conversion to year 'round to require ISDS permit.	TS	TC		5-15 K			
C.5.	Adopt stronger storm water runoff regulations for shore.	PB	TP		Soil & Air above 1-2 K			
C.6.	Adopt Boat Head Pump-out Requirements.	TC	TS					
D.	Promote new Harbor Management Plan.	TC						1-2 K
E.	Refine lists of Usable public rights-of-way & maintenance.	CC	DPW			2-5 K		
F.	Consider Coastal Waters Advisory Committee.	TC		X				

SECTION	TASK	WHO		0-2	2-5	5-10	10-20	CIP or
		PRIMARY	SUPPORT	YEARS	YEARS	YEARS	YEARS	ANNUAL
	HISTORICAL ELEMENT							
A.1.	Promote Historic awareness in school curricula.	SD		1-2 K				
A.2.	Issue Town proclamations on historic days.	TC		X				x
B.1.	Consider establishing an Historical Oversight Committee.	TC		x				
B.2.	Study condition of & restore public monuments.	TC						CIP
B.3.	Declare cemeteries undevelopable properties.	TC			1 K			
B.4.	Encourage Local historic neighborhood committees.	TC			1 K			
B.5.	Consider a stone wall protection ordinance.	TC	TS/PB/TP		1 K			
B.6.	Preserve active farms and open space.	TC						X
B.7.	Consult with State on Archeological sites	TC						X
C.1.	Publish non-binding architectural guidelines	TC	PB/TP		10-15 K			
C.2.	Study Zoning Ordinance for inhibitions to historic architecture.	TP			1K			
	FACILITIES AND SERVICES							
A.	Capital Improvement Program & Related Studies	TA	DH	3-5 K		3-5 K	3-5 K	
A.1.	Inventory all facilities & equipment needs.	TA	DH	1-2 K				
A.2. & 3.	Identify and prioritize future capital needs.	TA	DH		2-3 K			
B.2.	Establish a 5-year plan for expanding Police Dept. space	PD	TP					CIP
B.3.	Improve Water patrol/transport capability.	PD	FD					CIP
B.7.	Establish a 5-year plan to accommodate growth on outer islands.	TP	DH			3-5 K		
C.1.	Establish a 10-year plan Fire Dept. for vehicle replacement.	FD	TA					CIP
C.2.	Purchase new communications system.	FD						CIP
C.3.	Upgrade public buildings U/L & NFPA standards.	FD						CIP
C.5.	Identify potential sites for substations.	FD	TP		1-2 K			
D.	Develop regular replacement program - Public Works vehicles & equipment	TC	TA					X
E.	Capital Improvement Program for schools.	SD	TC					CIP
F.1 .& 2.	Establish Full scale recycling program.	TA		10-25 K				
F.6.	Address Solid waste management on Prudence and Hog.	TA			5-10 K			

SECTION	TASK	WHO		0-2	2-5	5-10	10-20	CIP or
		PRIMARY	SUPPORT	YEARS	YEARS	YEARS	YEARS	ANNUAL
F.9.	Study feasibility of Town-operated compactor station.			1-2 K				
	WATER SUPPLY							
A.	Water Supply Management Plan	PWFD	TP		2-5 K			CIP
C.	Update Demand Analysis for changes via Comprehensive Plan.	PWFD	TP	1-2K				
D.1.	Adopt Policy to Review Large Water-User Applications	PWFD	TP		0-1K			
D.6.	Investigate imposition of impact fees.	PWFD	TP		1-2 K			
D.11a)-d)	Negotiations for Future Water Supply	PWFD	TP					X
D.11e)-g)	Study potential new sources.	PWFD	TP					X
E.	Coordinate Land Use Policies with Water Supply Policies	TC	PWFD		X			
	OPEN SPACE ELEMENT							
A. 2.	Target specific areas to be preserved.	TC	PB	2-4 K				
A.3.	Prepare Open Space Plan (SCORP update).	TC	TP		1-2 K			
A.6 & 7.	Link open space with environmental protection.	TC	TP		0-5 K			
B.1	Open Space Zoning	TC	PB/TP			1-2 K		
B.3	Establish Residential Cluster provisions for single family.	TC	PB/TP		1-2 K			
B.4	Study Planned Unit Development provisions.	TC	PB/TP			1-2K		
B.6.	Enforce regulatory provisions for dedication of land for open space in developments.	TC	TP/TP		1-2 K			
C.1	Real Estate Transfer Tax revenue to open space acquisition and development.	TC	OS Comm					50K +
C.1	Pursue State and Federal grants	TP						1-2 K
C.2.	Consider small Town-owned parcels sale for preservation fund.	TC	TP			5-25 K		
D.3.	Provide referral service on tax advantages of open space donation & preservation techniques.	TP						1-2 K
	RECREATION ELEMENT							
A.	Study current facilities, usage, and deficiencies.			DONE				

SECTION	TASK	WHO		0-2	2-5	5-10	10-20	CIP or
		PRIMARY	SUPPORT	YEARS	YEARS	YEARS	YEARS	ANNUAL
B.	Maximize use of and provide regular maintenance schedule for facilities.	DPW	TP					
C.	Project future needs by type.	TP			2 K			
C.3.	Plan bike path with Middletown & State.	RIDOT	TP	2 K	2 K			
C.4.	Capital improvement program for Senior Center.	TC						CIP
C.5.	Develop a municipal boat ramp.	TP	TA	300 K				
D.	Track Funding Sources.							1 K
	CIRCULATION/TRANSPORTATION							
A.2.	Reduce future intersections on East & West Main Roads.	PB	TP	1-2 K				
A.3.	Adopt traffic sensitive districts.	PB	TP		1-2 K			
A.4.	Require traffic control devices by developers.	PB	TP	1-2 K				
A.5.	Enforce clear view regulations in land use regulations.	PB	BI					X
A.6.	Prohibit subdivisions off substandard private rights-of-way.	PB	TP	1-2 K				
A.7.	Make subdivision emergency access mandatory.	PB	TP	1-2 K				
A.11.	Consider Mapped Streets Ordinance.	TC	TS		10-25K			
D.2.	East Shore Connector road in subdivision regulations.	TC	PB/TP	1-2 K				
E.2.	Identify & create commuter lots with State.	RIDOT	TP			15-25 K		
E.4.	Study creation of pedestrian and bike paths.	RIDOT	TP		1-2 K			
E.5.	Preserve existing rail lines for future use.	RIDOT	TC					X
F.	Institute Pavement Management Program.	TP	DPW		25-150 K			
H.1.	Adopt a Functional highway classification system.	TP	DPW		1-2 K			
H.2.	Periodically review road design & construction standards	TP	DPW			1K		
	AGRICULTURE ELEMENT							
B.1.	Establish an Agricultural Impact Advisory Board.	TC		1 K				
B.3.	Establish an Agricultural Water Supply Priority Program.	PWFD			2-5 K			
D.1.	Adopt a Farm Property Tax Assessment Program.	TC						50-75 K
D.2.	Purchase of Development Rights Assistance.	TP						5-10 K

SECTION	TASK	WHO		0-2	2-5	5-10	10-20	CIP or
		PRIMARY	SUPPORT	YEARS	YEARS	YEARS	YEARS	ANNUAL
D.3.	Consider Sinking Fund for Purchase of Development Rights.	TC	TA	150 K				150 K
E.	Help establish an Estate Planning Referral Service.	TP			5-10 K			5-10 K
	PRUDENCE ISLAND ELEMENT							
V. Recreation								
B.1.	Establish a Five-Year Recreation Facilities Plan.	PIPC	TP		1-2 K			
VI. Natural Resources								
B.1.	Adopt Resource Protection districts & regulations.	PB	TP	1-2 K				
B.3.	Adopt Watershed and Wellhead Protection District.	PIUC	TP	DONE				
B.7.	Underground Storage Tank regulations.	TC	TP	1-2 K				
VII. Waterfront & Coastal								
B.1.	Reduce Pollution via mooring programs.	TC			1-2 K			
B.2.	Install Storm Drainage along Narragansett Ave.	DPW			50-150 K			
VIII. Facilities & Services								
B.1.	Consider a Mapped Streets Ordinance.	TC	TA			25-150 K		
B.2. & 3.	Recycling and Waste Oil Collection Facilities.	DPW	TA		2-5 K			
B.5.	Budget study for Volunteer Fire Dept.	FD	PIPC	1-2 K				
B.6.	Study increased summer public safety staff.	PD	PIPC		1-2 K			
X. Land Use								
B.1.	Adopt Conservation Zoning	PB	PIPC		0-5 K			
B.4.	Study merging substandard lots.	TC	TP		0-5K			
B.5.	Require an ISDS permit in conversion of Summer Houses - .	TS	TC		0-5 K			
	HOG ISLAND ELEMENT							

SECTION	TASK	WHO		0-2	2-5	5-10	10-20	CIP or
		PRIMARY	SUPPORT	YEARS	YEARS	YEARS	YEARS	ANNUAL
VI. Natural Resources								
B.1.	Resource Protection districts & regulations.	PB	TP	1-2 K				
B.2.	Watershed and Wellhead Protection Districts.	TP	HII	1-2 K				
B.4.	Underground Storage Tank regulations.	TC		1-2 K				
B.1.	Open Space zoning.	TC	PB		1-2 K			

ATTACHMENT 1

MAPS

LIST OF MAPS

Maps are categorized in the same order as the elements of the Comprehensive Plan, according to where they would be most appropriate. However, most maps are useful references for more than one element.

AQUIDNECK ISLAND PORTION OF PORTSMOUTH

<u>Map #</u>	<u>Map Date</u>	<u>Name</u>
---------------------	------------------------	--------------------

LAND USE

- | | | |
|----|-------|------------------------|
| 1. | 06/02 | Future Land Use Plan |
| 2. | 05/02 | Zoning Map 2002 |
| 3. | 05/01 | Existing Land Use 1995 |
| 4. | 01/91 | Parcel Map 1990 |

HOUSING

- | | | |
|----|-------|---------------------------|
| 5. | 01/02 | Residential Land Use 1995 |
|----|-------|---------------------------|

ECONOMIC DEVELOPMENT

See Land Use Maps and Commuting Pattern Maps in Text

WATER QUALITY

- | | | |
|-----|-------------|---|
| 6. | 05/01 | Community and Non-Community Wellhead Protection Areas & Wells |
| 7. | 05/01 | Known and Potential Sources Of Groundwater Contamination |
| 8. | 04/01 RIGIS | Watershed Sub-Basins |
| 9. | 04/01 RIGIS | Groundwater Resources |
| 10. | 06/01 | Watershed Protection Overlay District |
| 11. | 04/91 | Close-up of Watershed Protection Overlay District |

RESOURCE PROTECTION

- | | | |
|-----|-------------|--------------------------------------|
| 12. | 04/01 RIGIS | Wetlands – Freshwater & Coastal |
| 13. | 05/01 | Forestland |
| 14. | 05/01 | Rare and Endangered Species |
| 15. | 04/01 RIGIS | Biodiversity Resources |
| 16. | 01/02 | Resource Protection Overlay District |

SEPTIC

- | | | |
|-----|-------------|---|
| 17. | 02/91 | ISDS Constraints (formerly Development Constraints) |
| 18. | 04/01 RIGIS | Soil Hydrology |

SOIL & AIR QUALITY

- | | | |
|-----|-------|---------------------------------|
| 19. | 11/90 | Environmentally Sensitive Lands |
| 20. | 02/91 | Slopes |

WATERFRONT & COASTAL

- | | | |
|-----|-------|-----------------------|
| 21. | 07/91 | Coastal Waters Zoning |
|-----|-------|-----------------------|

<u>Map #</u>	<u>Map Date</u>	<u>Name</u>
22.	04/01 RIGIS	CRMC Water Type Classification
<u>HISTORICAL</u>		
23.	04/01 RIGIS	Historical and Archeological Resources
<u>FACILITIES AND SERVICES</u>		
24.	04/01 RIGIS	Facilities Siting
<u>WATER SUPPLY</u>		
25.	04/01 RIGIS	Public Water System
<u>OPEN SPACE</u>		
26.	01/02	Open Space and Active Agriculture
27.	05/01	Scenic Areas
28.	01/02	Greenways Plan
29.	04/01 RIGIS	Land Protected for Conservation and Open Space
<u>RECREATION</u>		
30.	05/01	Recreation Areas
<u>CIRCULATION</u>		
31.	05/01	Highway Classification Map
<u>AGRICULTURE</u>		
32.	05/02	Open Space and Active Agriculture
33.	05/01	Farmland

PRUDENCE ISLAND MAPS

<u>LAND USE</u>		
34.	06/02	Future Land Use Plan
35.	05/02	Zoning Map 2002
36.	05/01	Existing Land Use 1995
37.	02/91	Parcel Map 1990

<u>HOUSING</u>		
38.	01/02	Residential Land Use 1995

ECONOMIC DEVELOPMENT

There is no economic development existing or planned for Prudence Island.

<u>WATER QUALITY</u>		
39.	05/01	Community and Non-Community Wellhead Protection Areas & Wells

<u>Map #</u>	<u>Map Date</u>	<u>Name</u>
40.	05/01	Known and Potential Sources of Groundwater Contamination
41.	02/91	Proposed Wellhead Protection District

RESOURCE PROTECTION

42.	05/01	Forestland
43.	05/01	Rare and Endangered Species
44.	01/02	Resource Protection Overlay District

SEPTIC

45.	12/90	ISDS Development Constraints
-----	-------	------------------------------

OPEN SPACE

46.	05/02	Open Space and Active Agriculture
47.	05/01	Scenic Areas
48.	05/02	Greenways Plan

RECREATION

49.	06/01	Recreation Areas
-----	-------	------------------

SOIL & AIR QUALITY

50.	02/91	Slopes
-----	-------	--------

WATERFRONT & COASTAL

51.	03/91	Coastal Waters Zoning
52.	03/91	Flood Hazard Areas

WATER SUPPLY

See Maps # 39, 40 & 41.

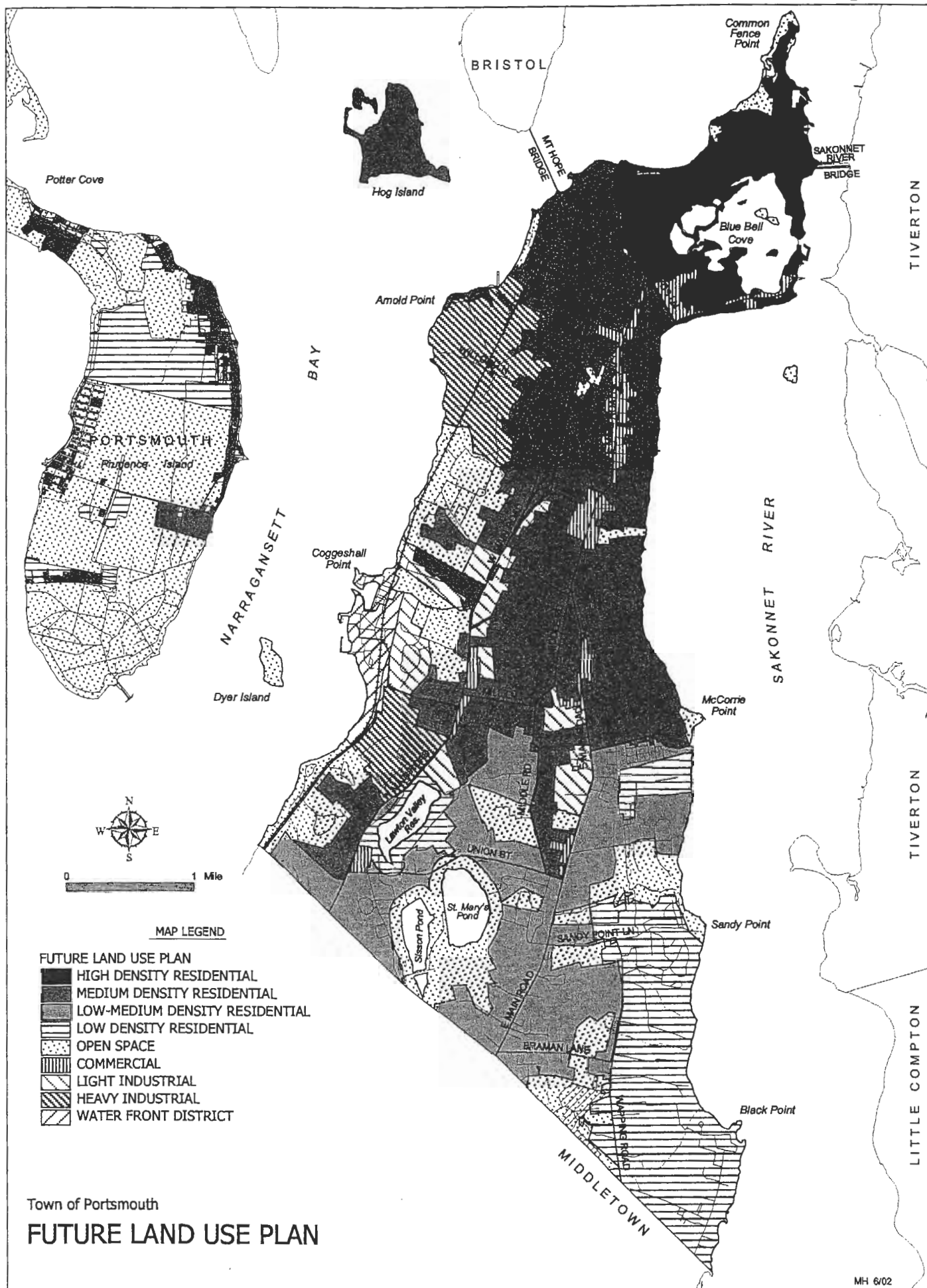
AGRICULTURE

53.	05/01	Farmland
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HOG ISLAND

Hog Island is shown on both Aquidneck Island and Prudence Island Mapping.

54.	01/02	Parcel Map 1997
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LAND USE CATEGORIES

The following categories of land use have been used in developing the Land Use Plan. It should be noted that high-medium-low density is relative to Portsmouth only.

Residential – Residential districts differ according to density, but not permitted uses. All exclude or strictly limit non-residential uses. Uses considered appropriate for residential are agricultural production, single family residential, large estates, essential public/ quasi-public uses and facilities, and open space/recreation.

High Density Residential – Areas intended primarily for single-family housing on lots generally one fourth of an acre or less. While such high-density areas are presently zoned R-10 (minimum lot size 10,000 sq.ft.), most lots are under 5,000 sq.ft. (It should be noted that high-density in Portsmouth does not denote a multi-family housing district.)

Medium Density Residential - Areas intended primarily for single family housing on lots of one-half to three quarters of an acre, or a density of 1 to 2 dwelling units per acre. Medium density areas are zoned R-20 (minimum lot size 20,000 sq.ft.).

Low-Medium Density Residential - Areas intended primarily for single family housing on lots of 3/4 of an acre to one acre, or a density of 3/4 to 1 dwelling unit per acre. Low-Medium density areas are zoned R-30 (minimum lot size 30,000 sq.ft.). The Watershed Protection District is primarily low-medium residential.

Low Density Residential - Areas intended primarily for single family housing on lots of one acre or more, or a density of one dwelling per acre or less. Low Density development is zoned R-40 (40,000 sq.ft. minimum lot) and R-60 (60,000 sq.ft. minimum lot). Much of this land is located near wetlands, and as such is limited in its ability to support higher density development.

Commercial Land Uses

Retail products and services serving the local community, plus regional non-retail services

Industrial Land Uses

Heavy Industry

Typical industrial uses primarily on large parcels, generally isolated from residential areas.

Light Industry

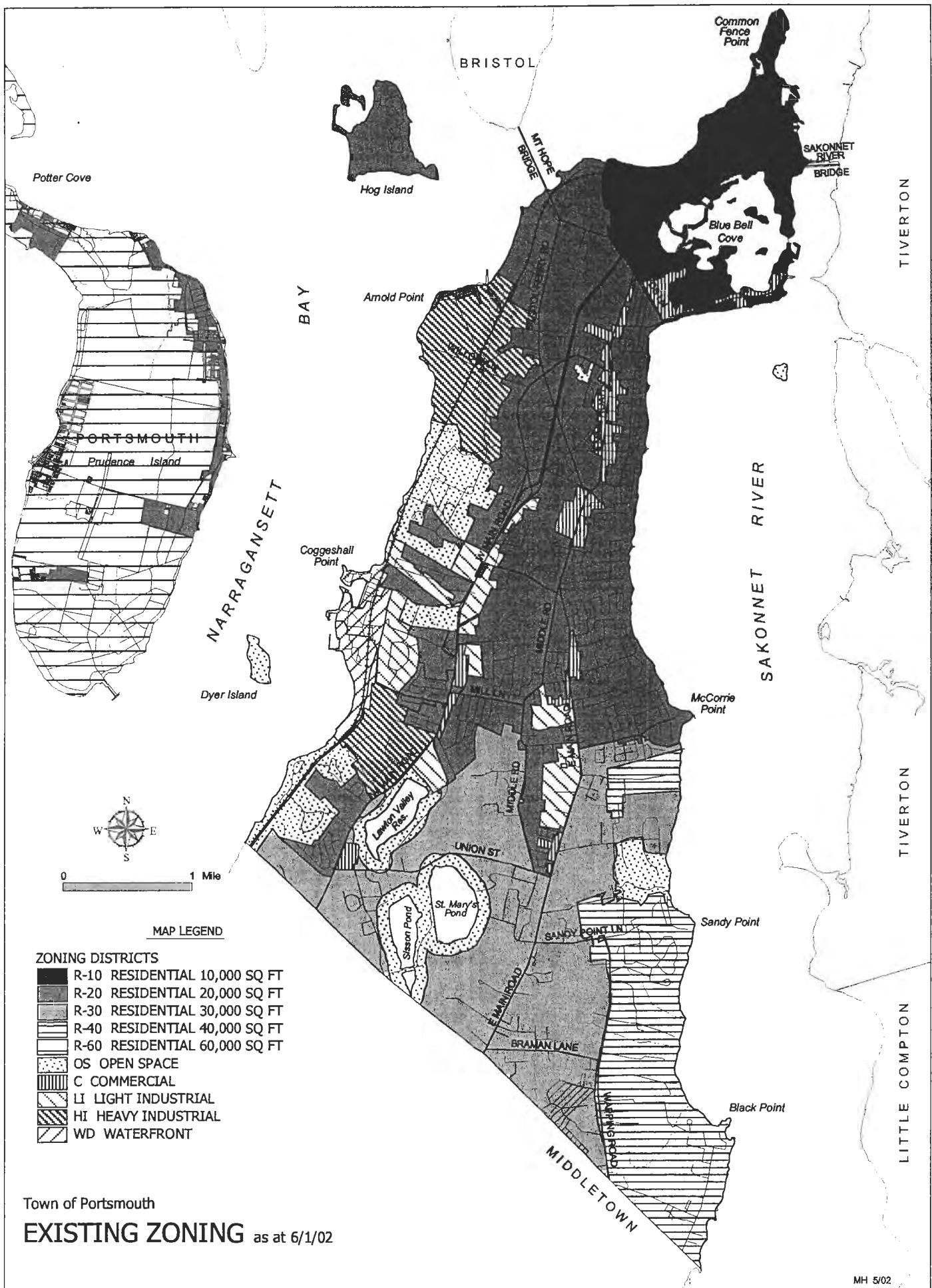
Less intense industrial uses that are more compatible with other types of uses, and may be on medium size parcels.

Waterfront District

Uses related to boat building, servicing, marinas and the marine trades generally.

Open Space

Dedicated open space and recreation controlled by governmental agencies or land trusts. Development severely limited.



ZONING DISTRICTS

RESIDENTIAL DISTRICTS are intended to allow orderly development of residential dwellings designed to complement the natural features of the land, to promote suitable placement of buildings and related facilities in relation to the site and surrounding areas, with adequate living space and open space, to avoid overcrowding of land, to encourage good design, to avoid overburdening municipal facilities, and to insure compatibility with the immediate neighborhood and with the natural environment.

R-10 DISTRICT is a residential zone with minimum lot size 10,000 sq. ft.

R-20 DISTRICT is a residential zone with minimum lot size 20,000 sq. ft.

R-30 DISTRICT is a residential zone with minimum lot size 30,000 sq. ft.

R-40 DISTRICT is a residential zone with minimum lot size 40,000 sq. ft.

R-60 DISTRICT is a residential zone with minimum lot size 60,000 sq. ft. and special restrictions to preserve and protect important natural resources.

C-1 COMMERCIAL DISTRICT is established to provide areas for commercial establishments and serve community and town-wide shopping and service needs. Minimum lot size 20,000 sq. ft.

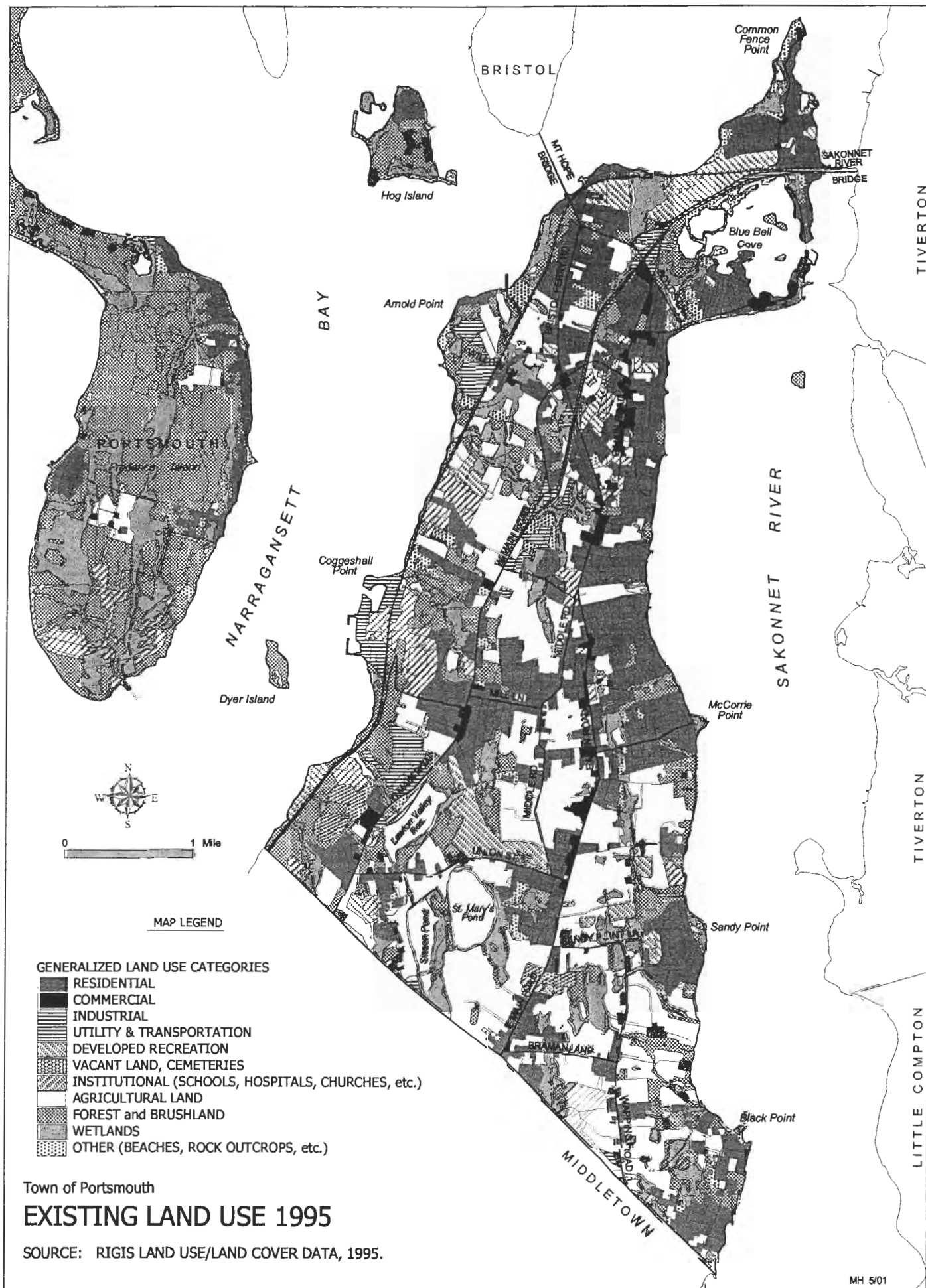
INDUSTRIAL DISTRICTS are established to encourage intensive industrial and business activities, with proper safeguards for protecting nearby residential areas and environmentally sensitive areas.

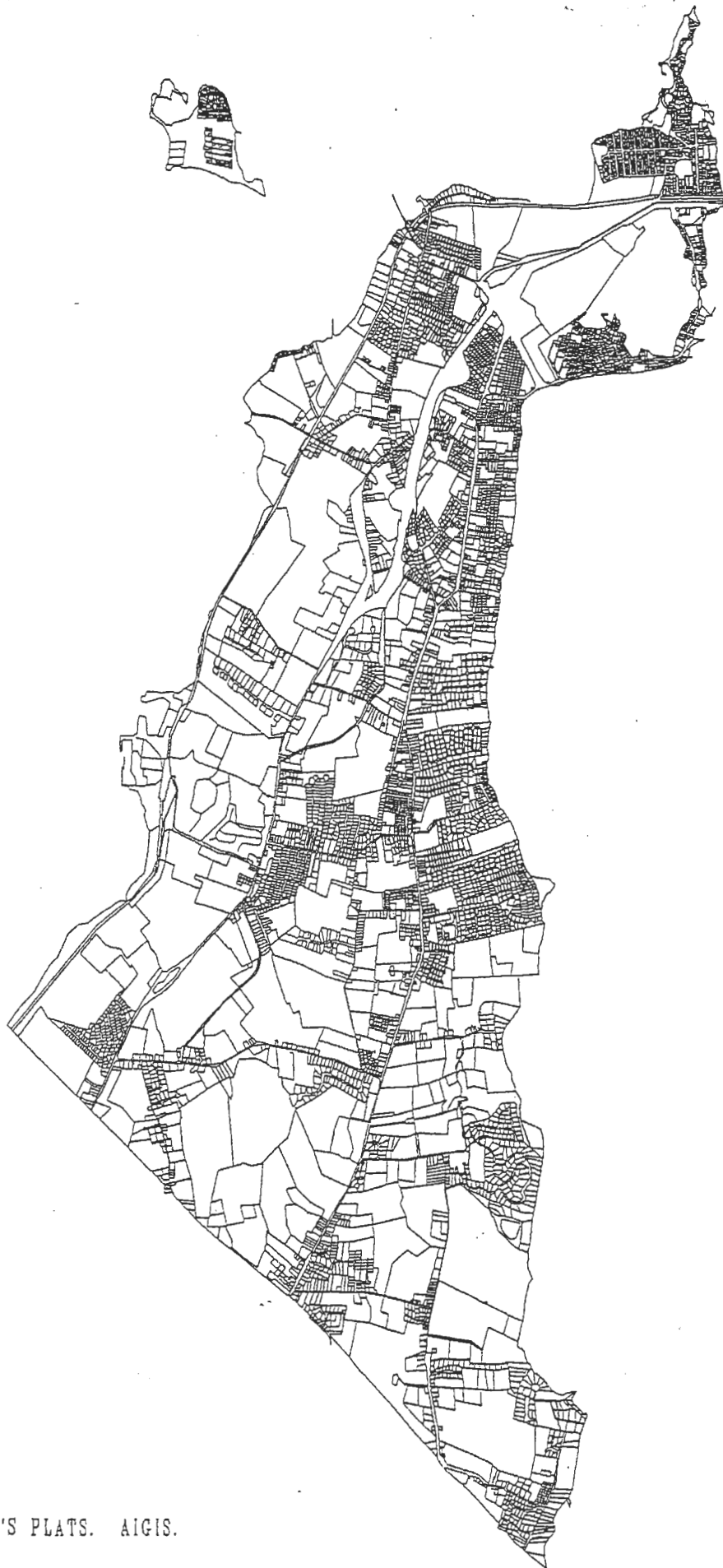
HI - HEAVY INDUSTRIAL is established to provide for levels of noise, vibration, smoke, odor and other evidence of industrial activity commensurate with State and Federal standards and other performance standards that may be set by the Town. Minimum lot size 40,000 sq. ft.

LI - LIGHT INDUSTRIAL is established to provide for a lesser level of noise, vibration, smoke, odor and other evidence of industrial activity commensurate with performance standards that may be set by the Town. Minimum lot size 40,000 sq. ft.

WD - WATERFRONT DISTRICT is established primarily for businesses catering to marine and marine-related activities. Minimum lot size 20,000 sq. ft.

OS - OPEN SPACE AND PUBLIC LANDS is established for all lands that shall be dedicated to open space, recreation, conservation, or public uses.



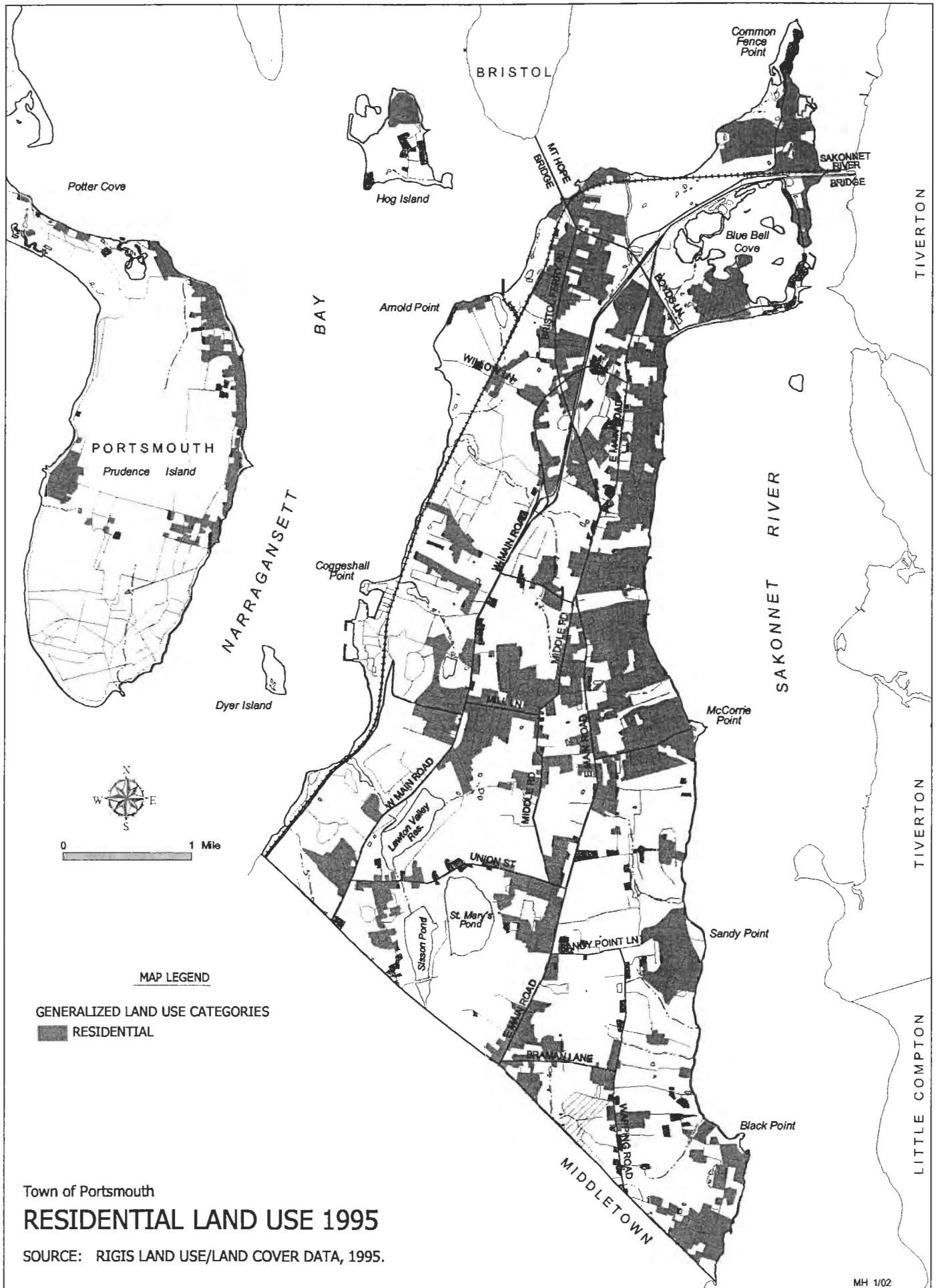


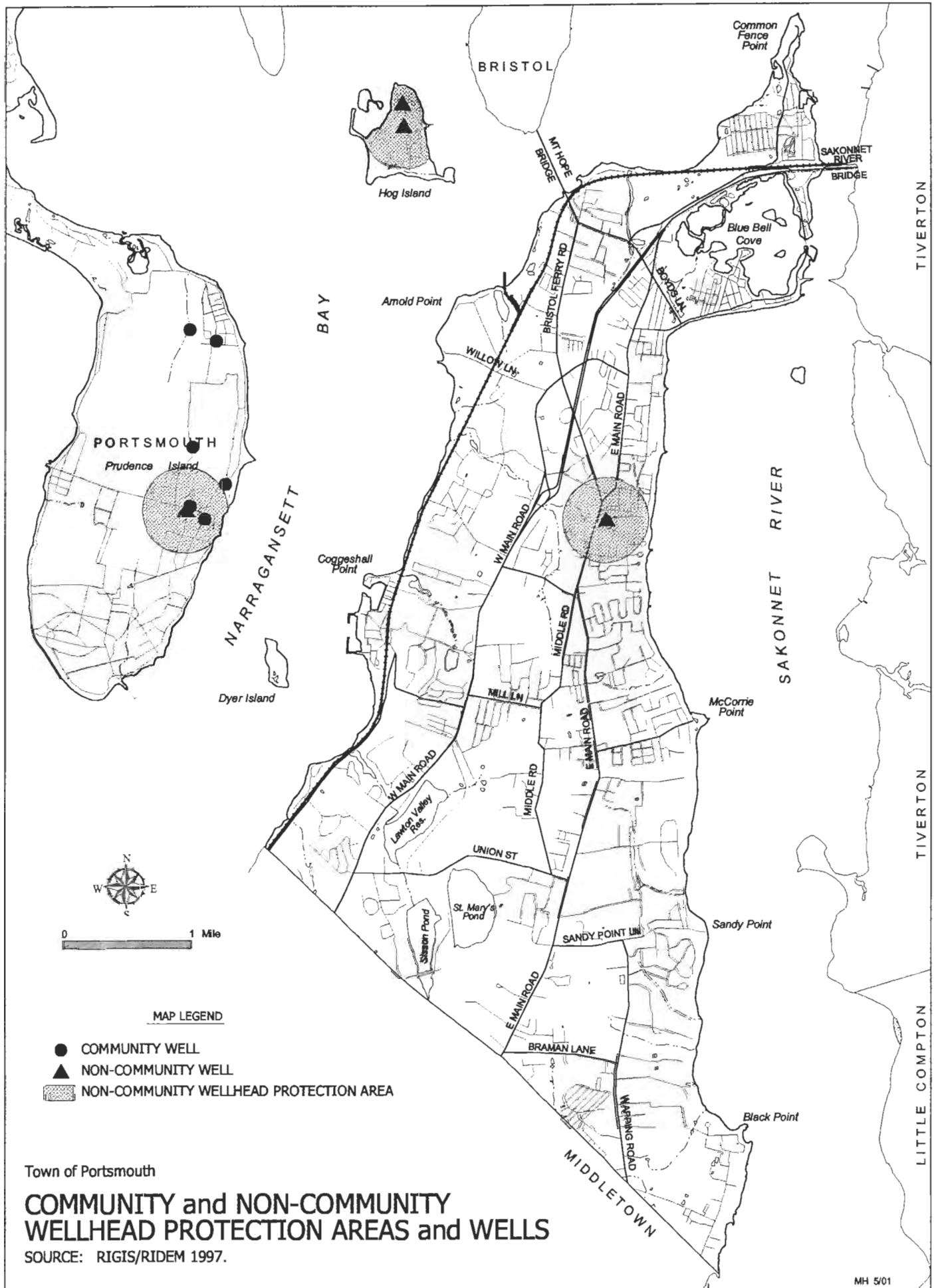
SCALE 1in = 1mile

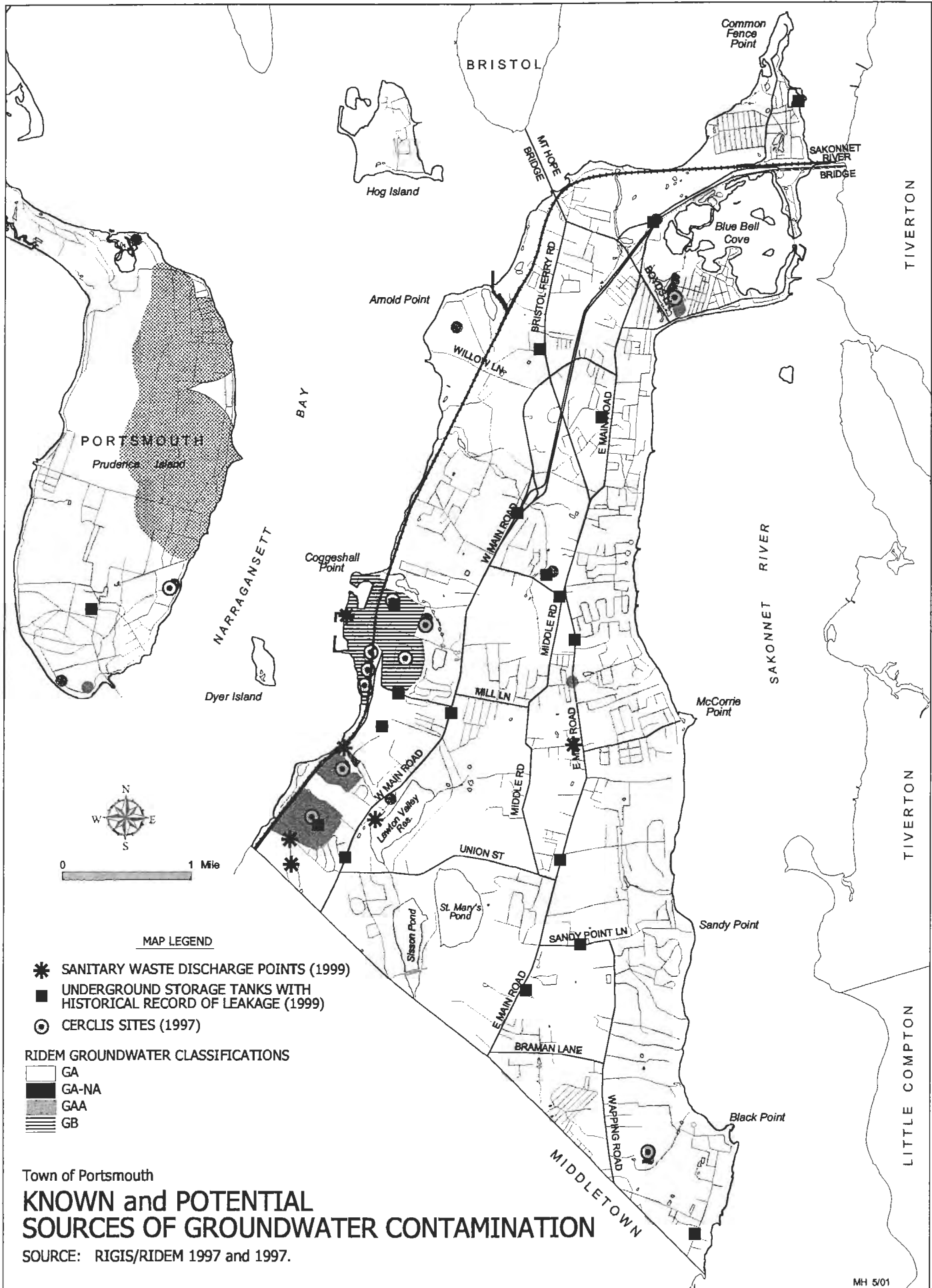
PARCEL MAP

SOURCE: TAX ASSESSOR'S PLATS. AIGIS.

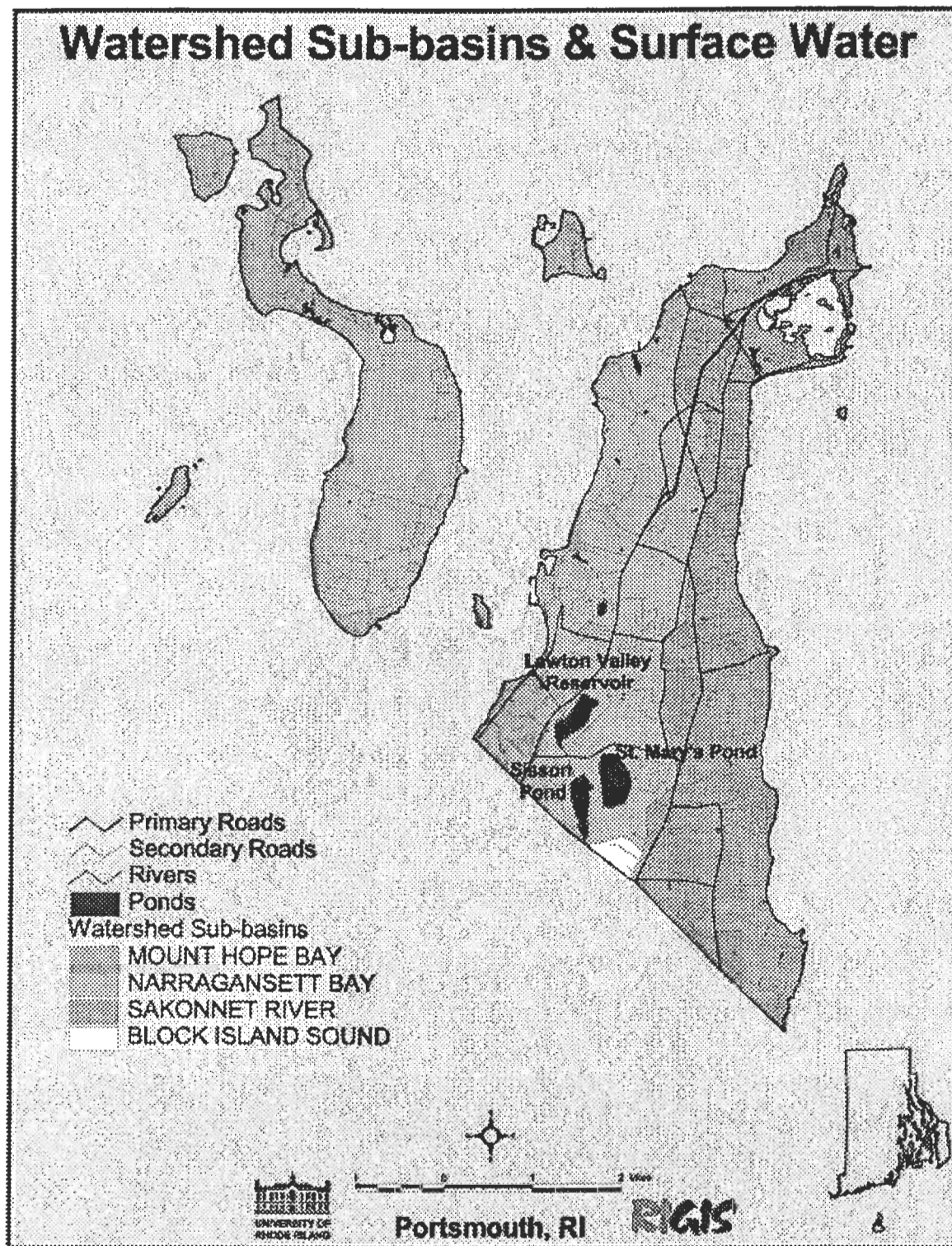
1990



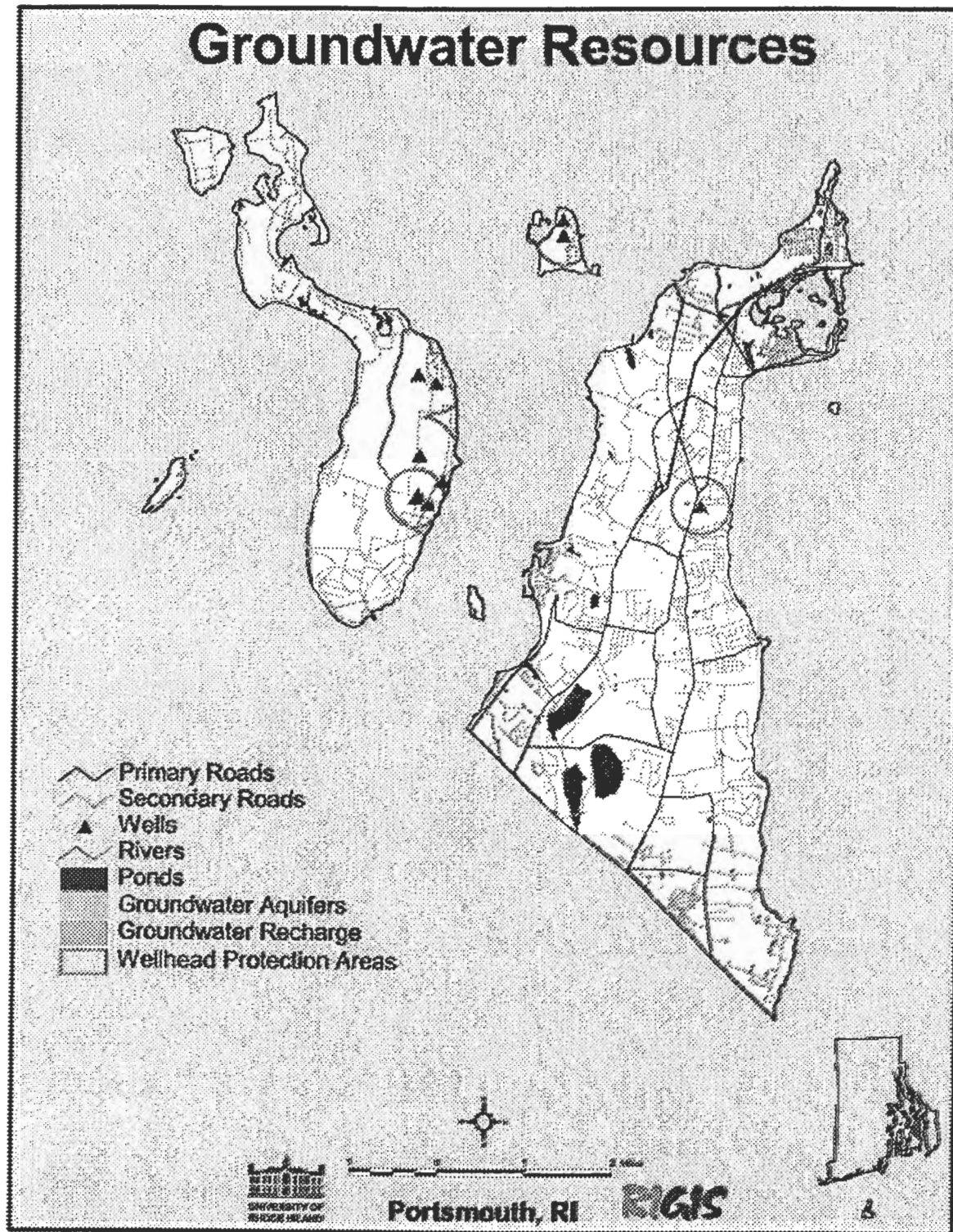


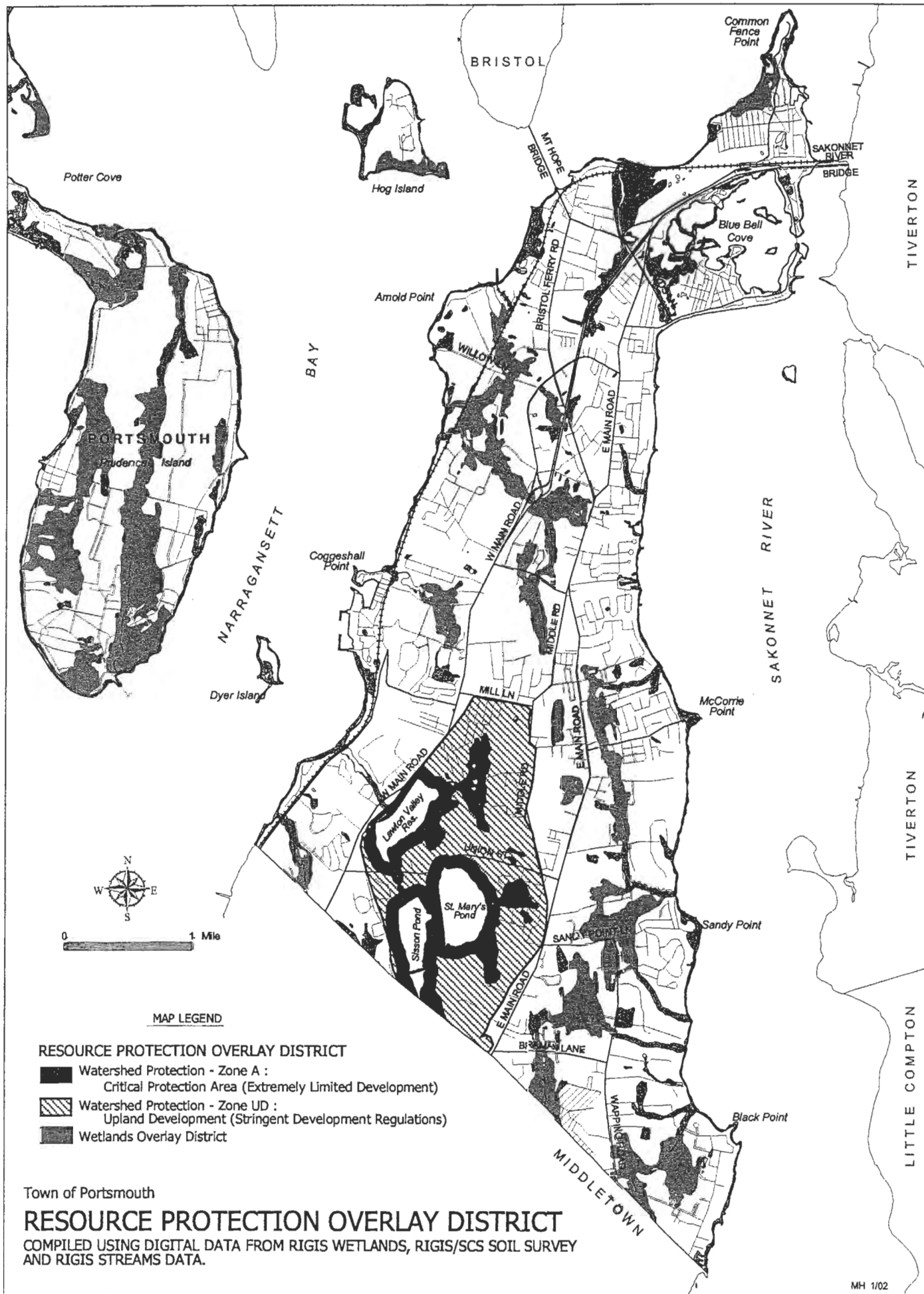


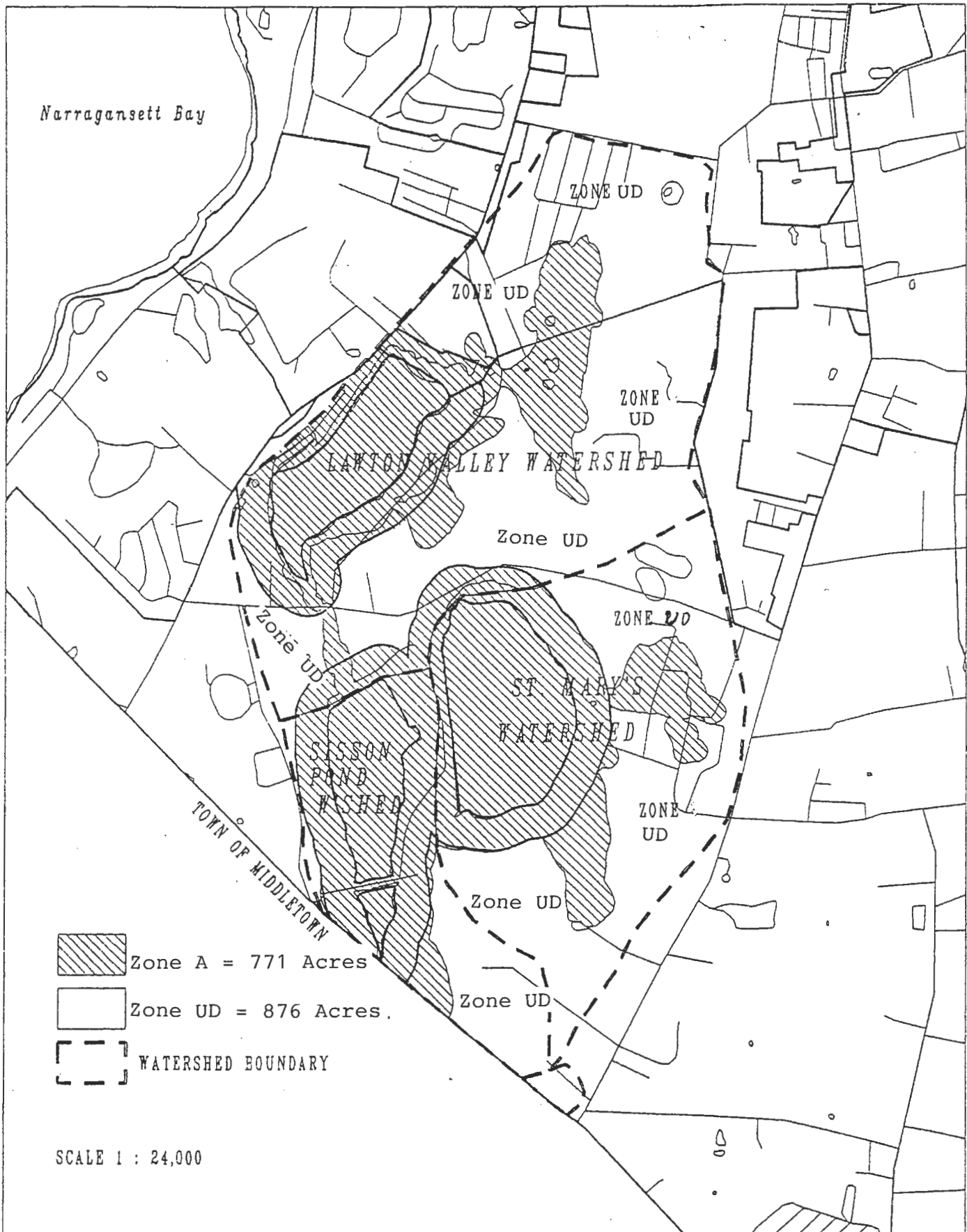
Watershed Sub-basins & Surface Water



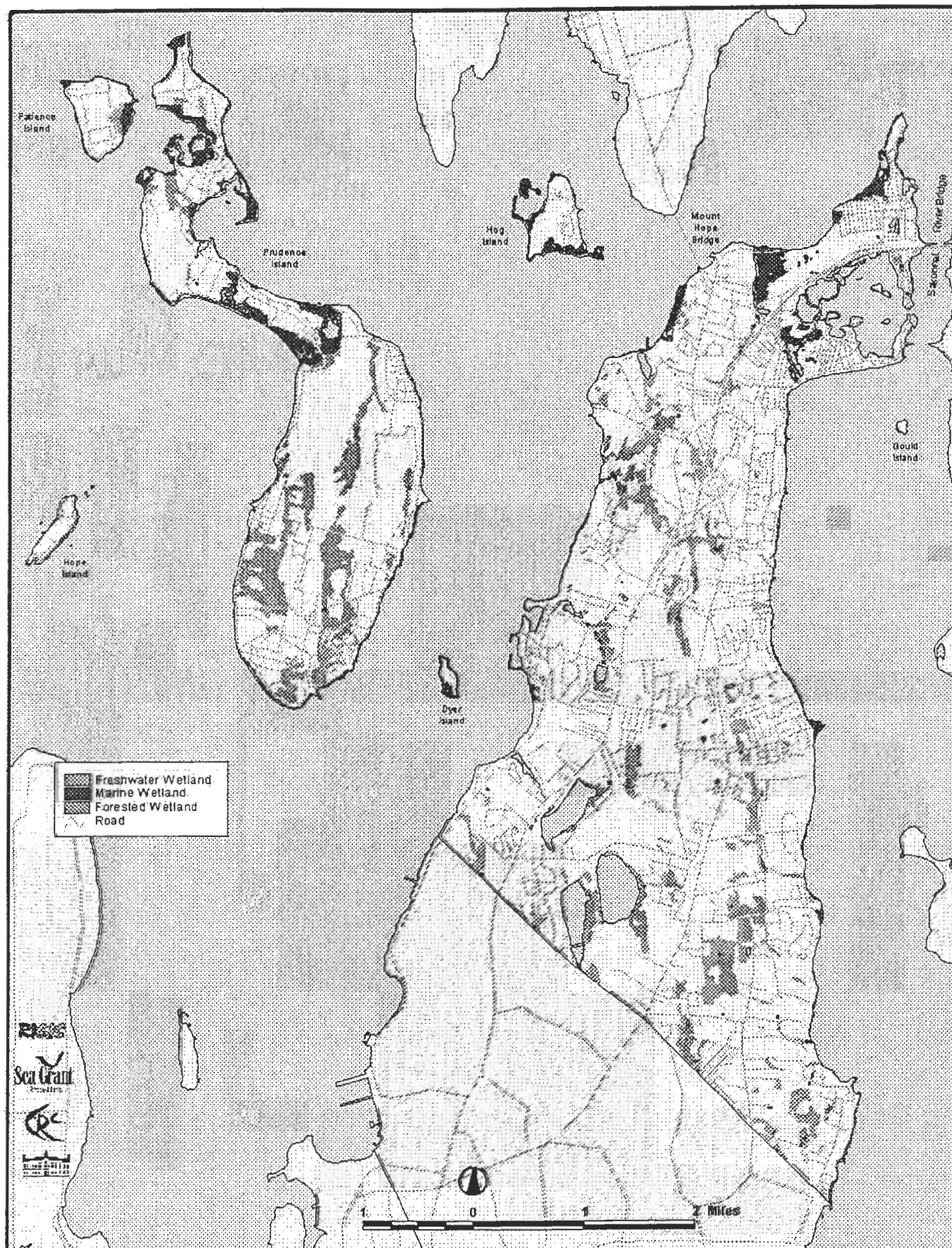
Groundwater Resources



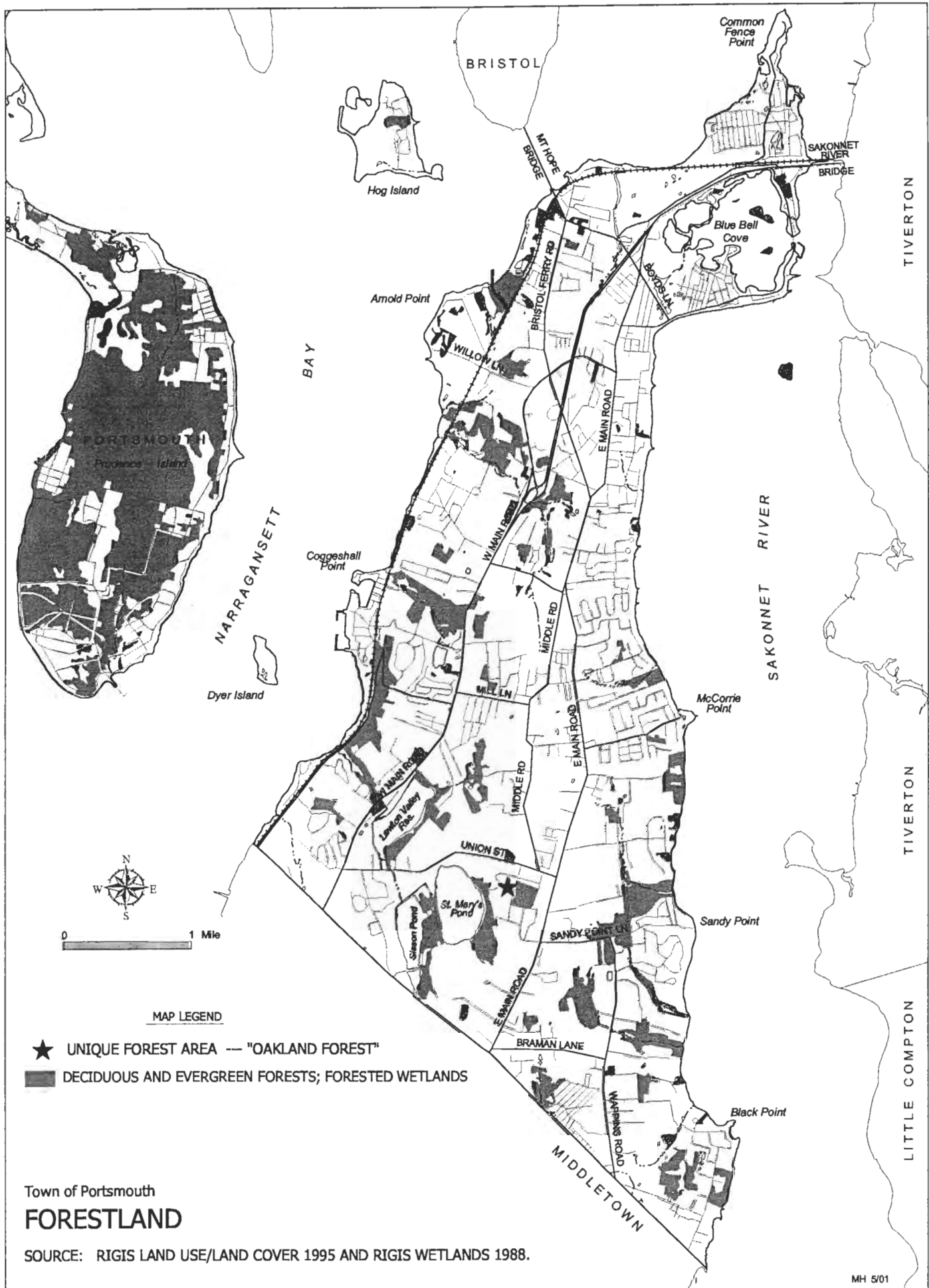


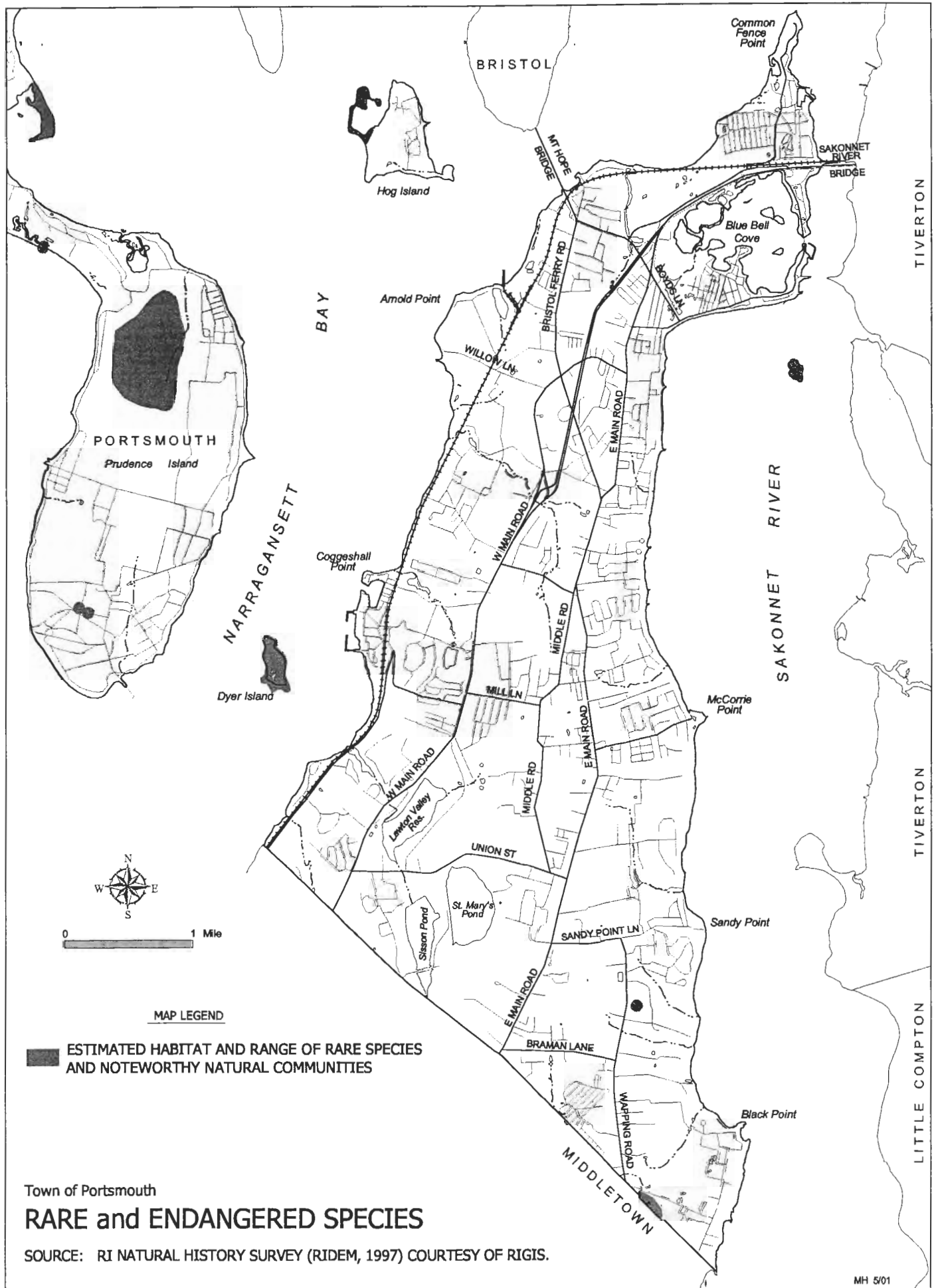


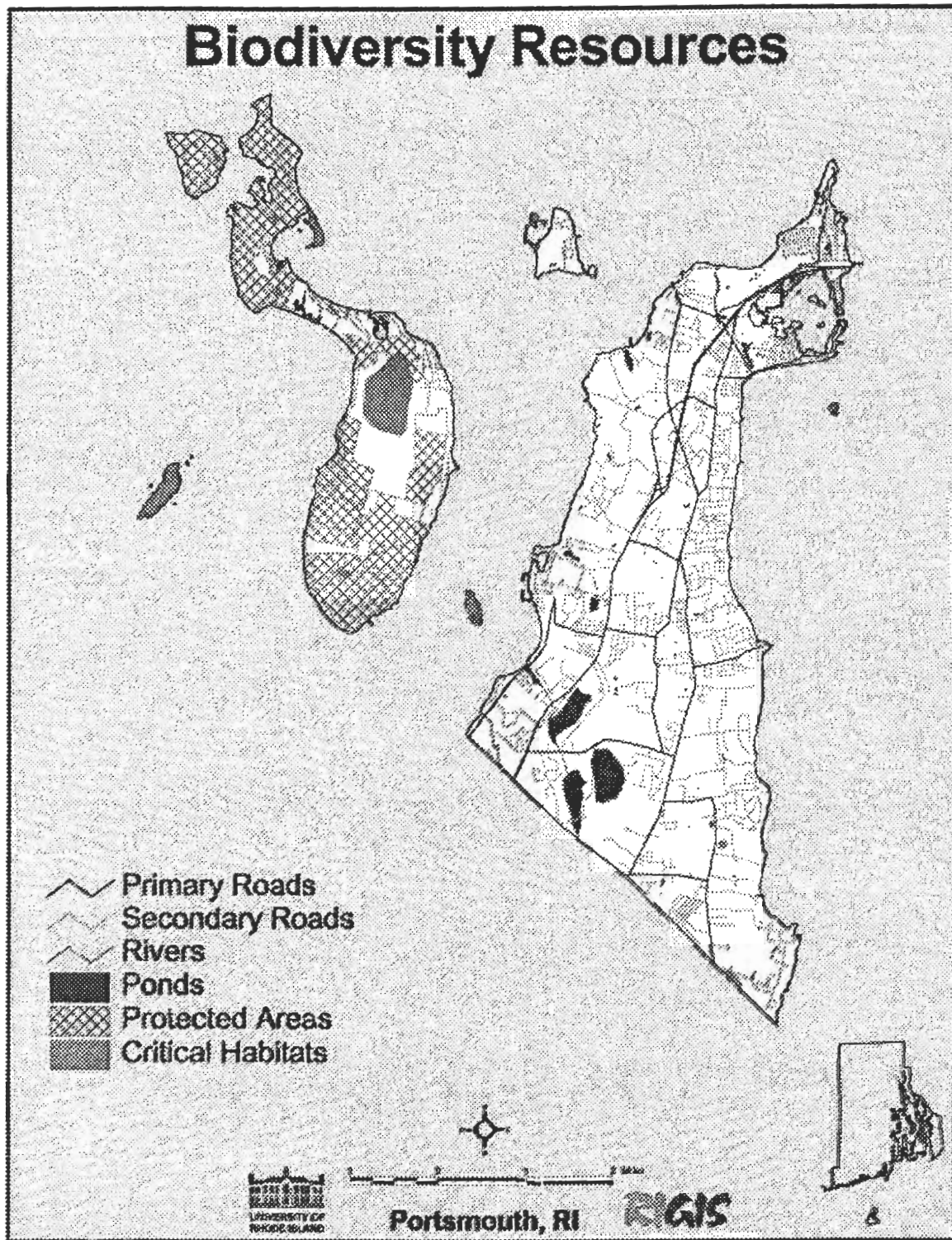
PROPOSED WATERSHED PROTECTION DISTRICT
Town of Portsmouth

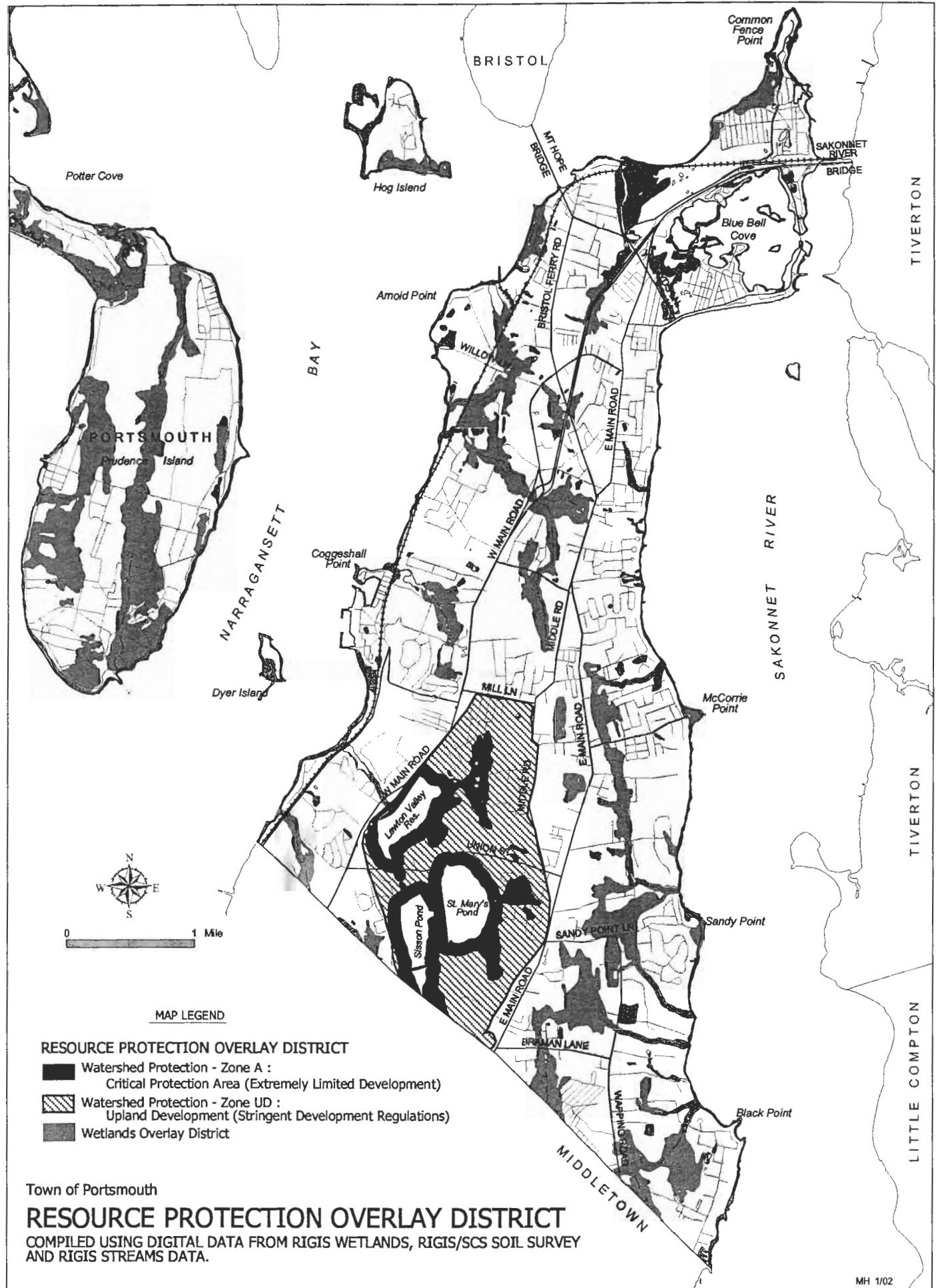


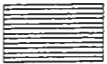
Distribution of wetlands in Portsmouth.





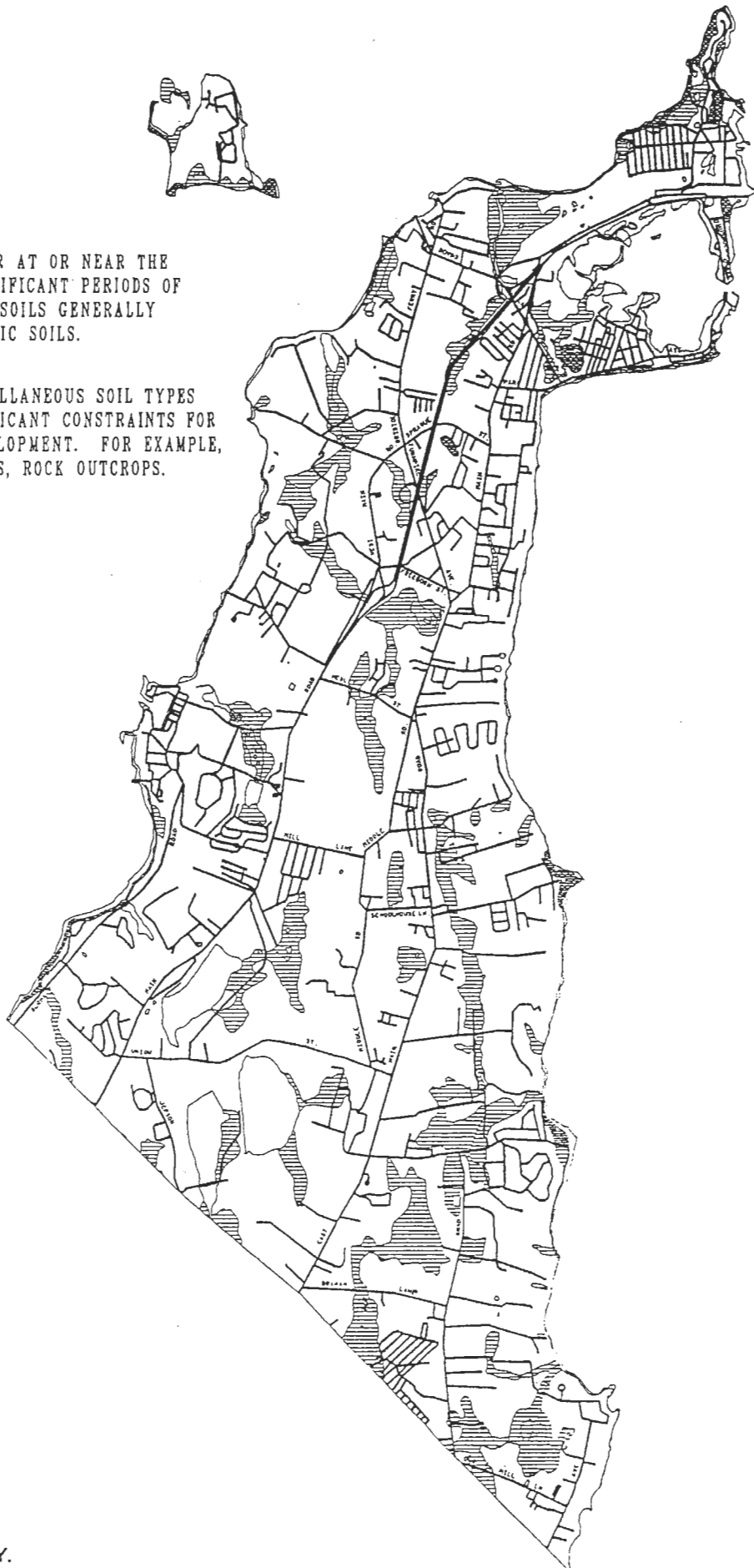




 "D" SOILS - WATER AT OR NEAR THE SURFACE FOR SIGNIFICANT PERIODS OF THE YEAR. THESE SOILS GENERALLY CLASSIFY AS HYDRIC SOILS.

 "E" SOILS - MISCELLANEOUS SOIL TYPES THAT HAVE SIGNIFICANT CONSTRAINTS FOR RESIDENTIAL DEVELOPMENT. FOR EXAMPLE, BEACHES, QUARRIES, ROCK OUTCROPS.

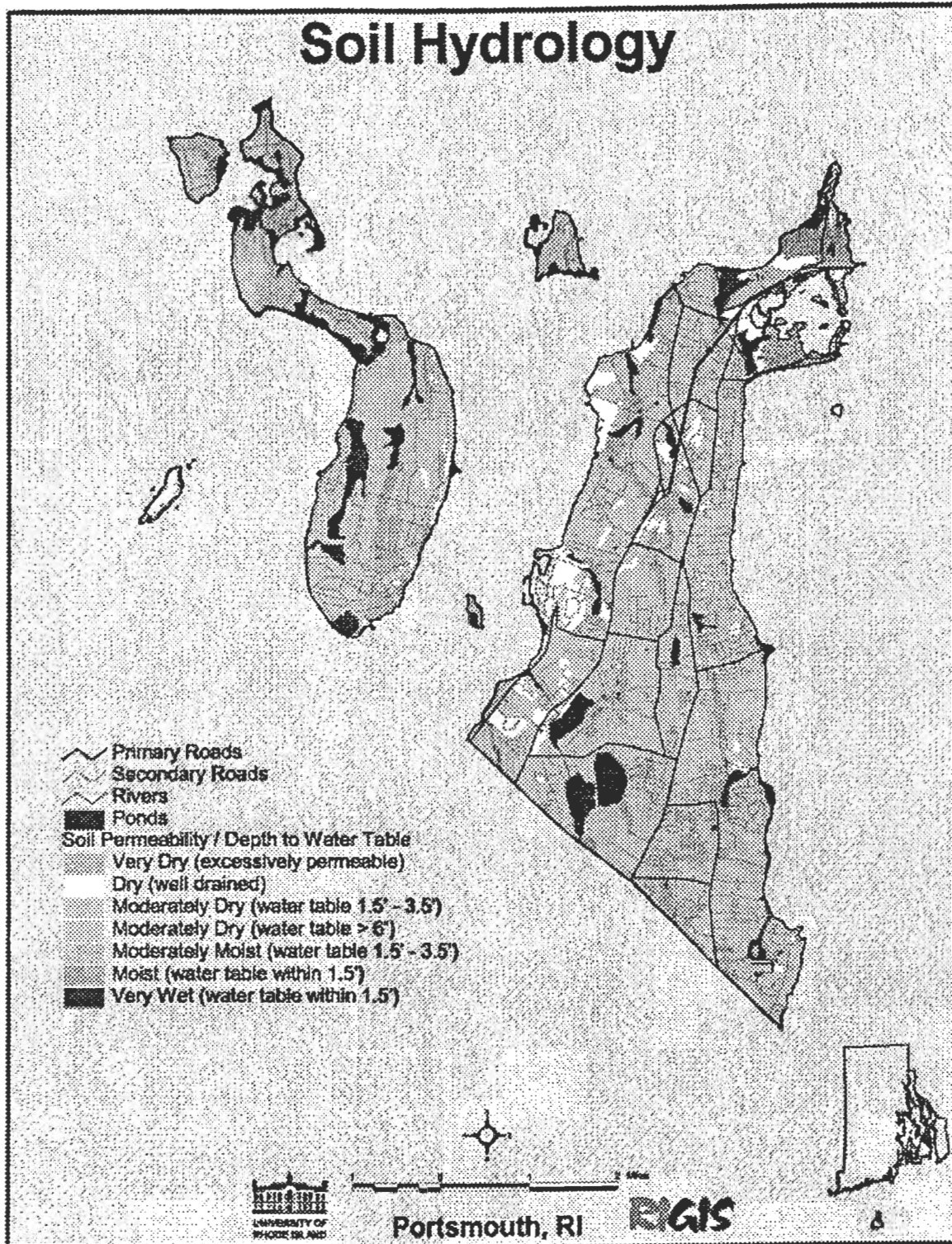
SCALE 1in = 1mile

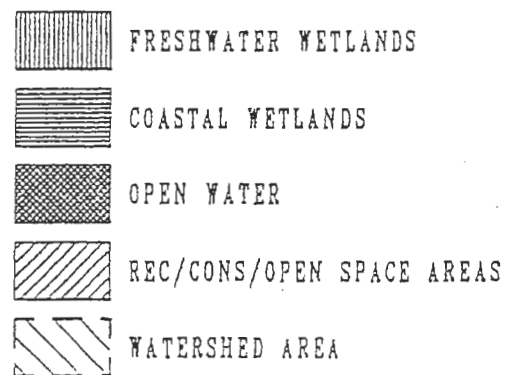


Town of Portsmouth

ISDS CONSTRAINTS

SOURCE: RIGIS / SCS SOILS SURVEY.

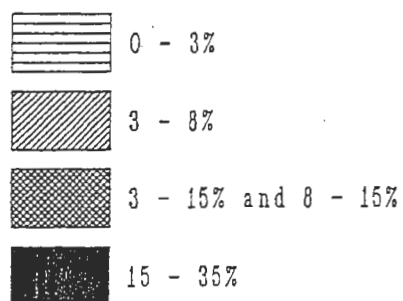




SCALE 1in = 1mile

ENVIRONMENTALLY SENSITIVE LANDS

SOURCE: WETLANDS AND REC/CONS/OPEN SPACE DATA FROM RIGIS



SCALE 1in = 1mile

SLOPES

SOURCE: USDA/SCS SOIL SURVEY DATA FROM RIGIS

Narragansett

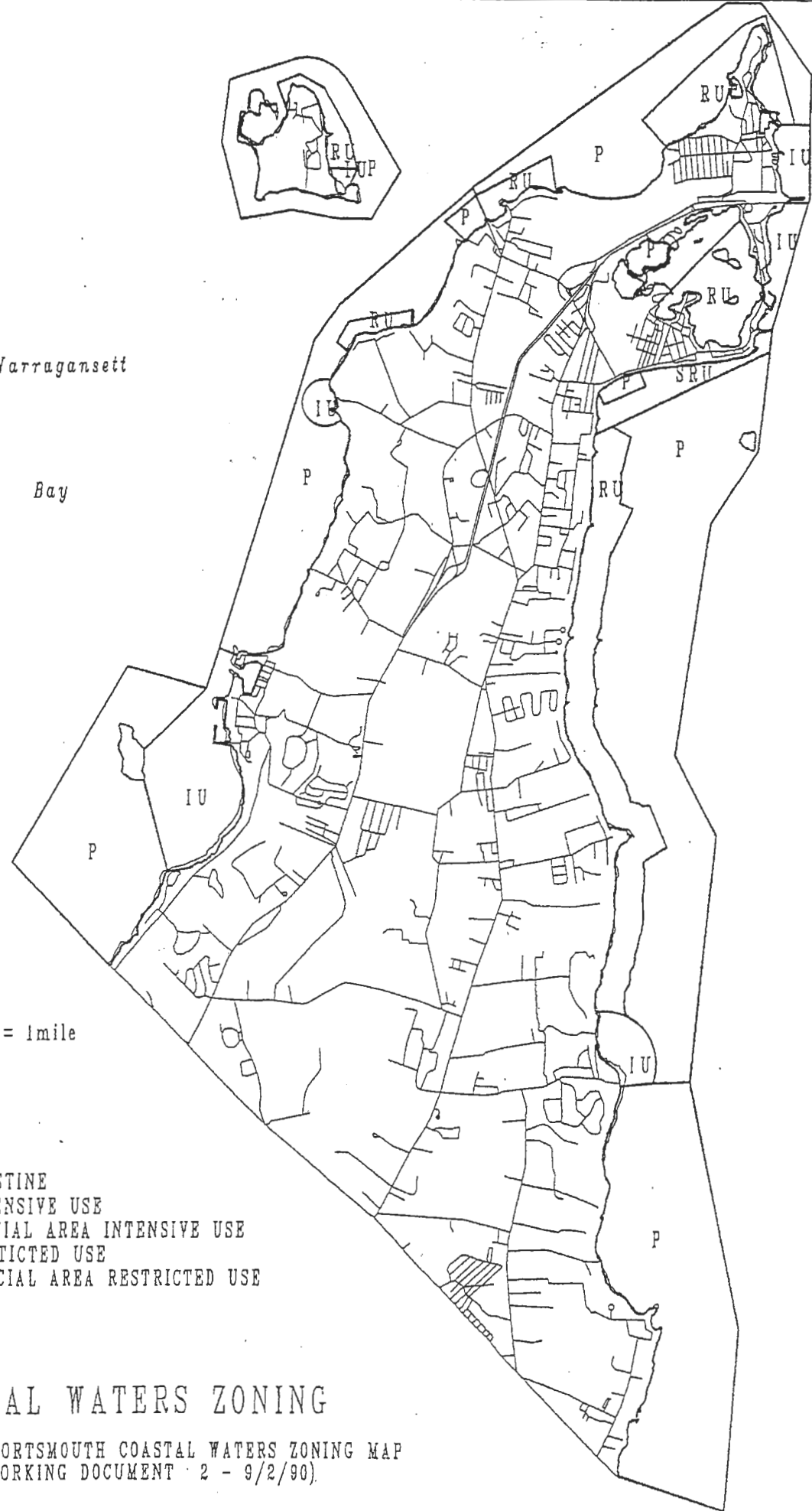
Bay

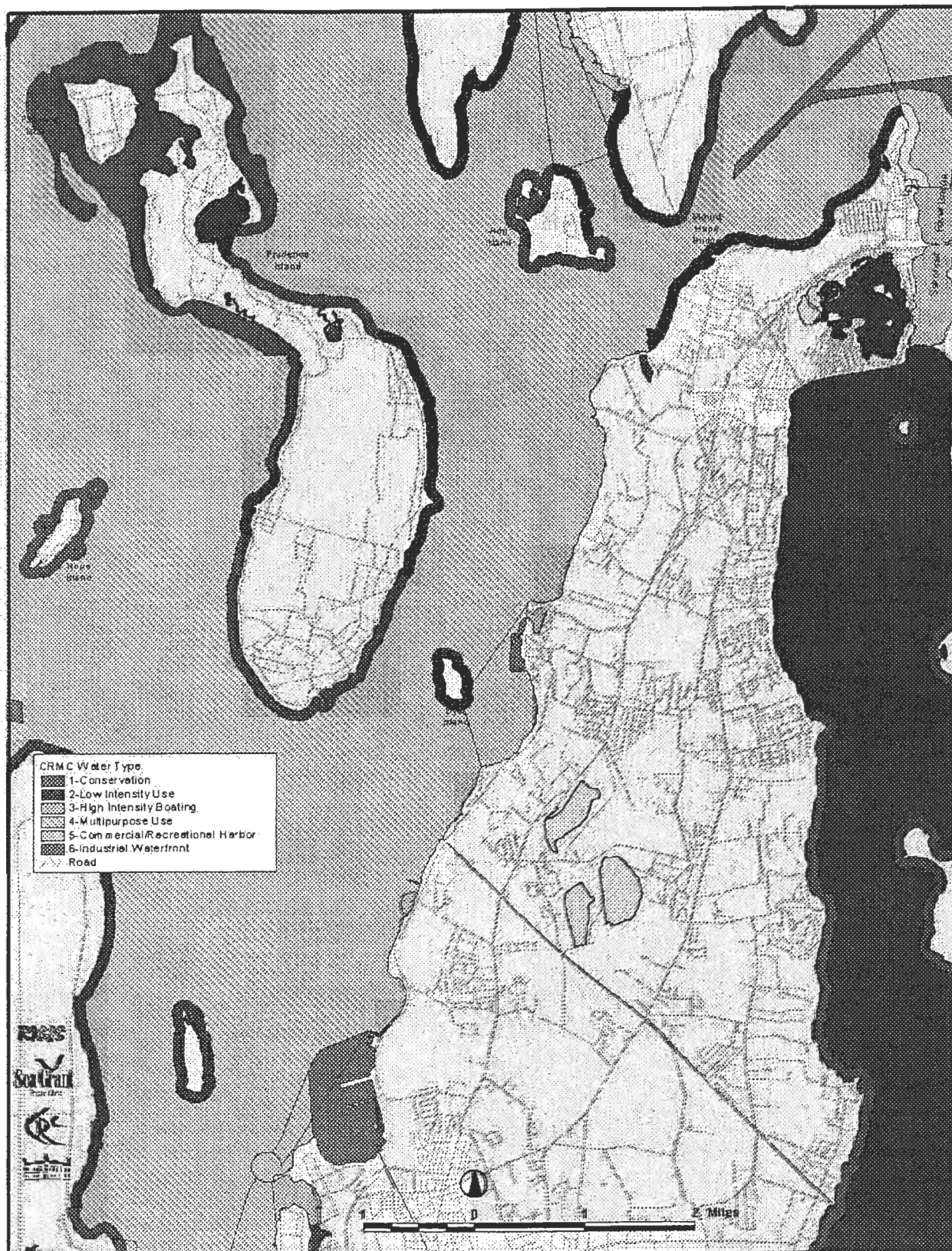
SCALE 1" = 1mile

- P PRISTINE
- IU INTENSIVE USE
- SIU SPECIAL AREA INTENSIVE USE
- RU RESTRICTED USE
- SRU SPECIAL AREA RESTRICTED USE

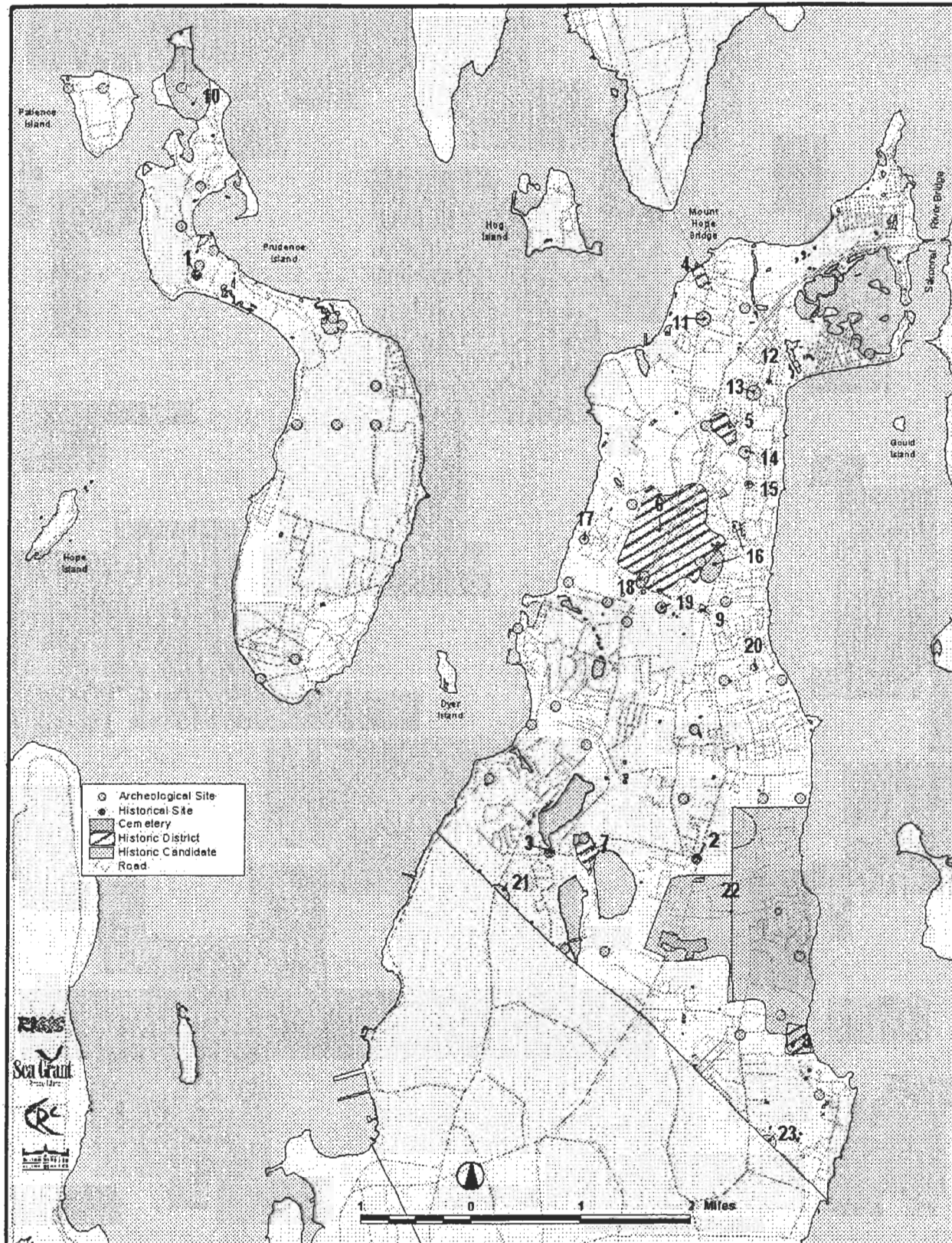
COASTAL WATERS ZONING

SOURCE: PORTSMOUTH COASTAL WATERS ZONING MAP
(TITLED WORKING DOCUMENT 2 - 9/2/90)





RI CRMC Water Type classification scheme in Portsmouth.



Historical and archeological resources in Portsmouth.

Site Name Key to "Historical and archeological resources in Portsmouth" map

HISTORIC SITES

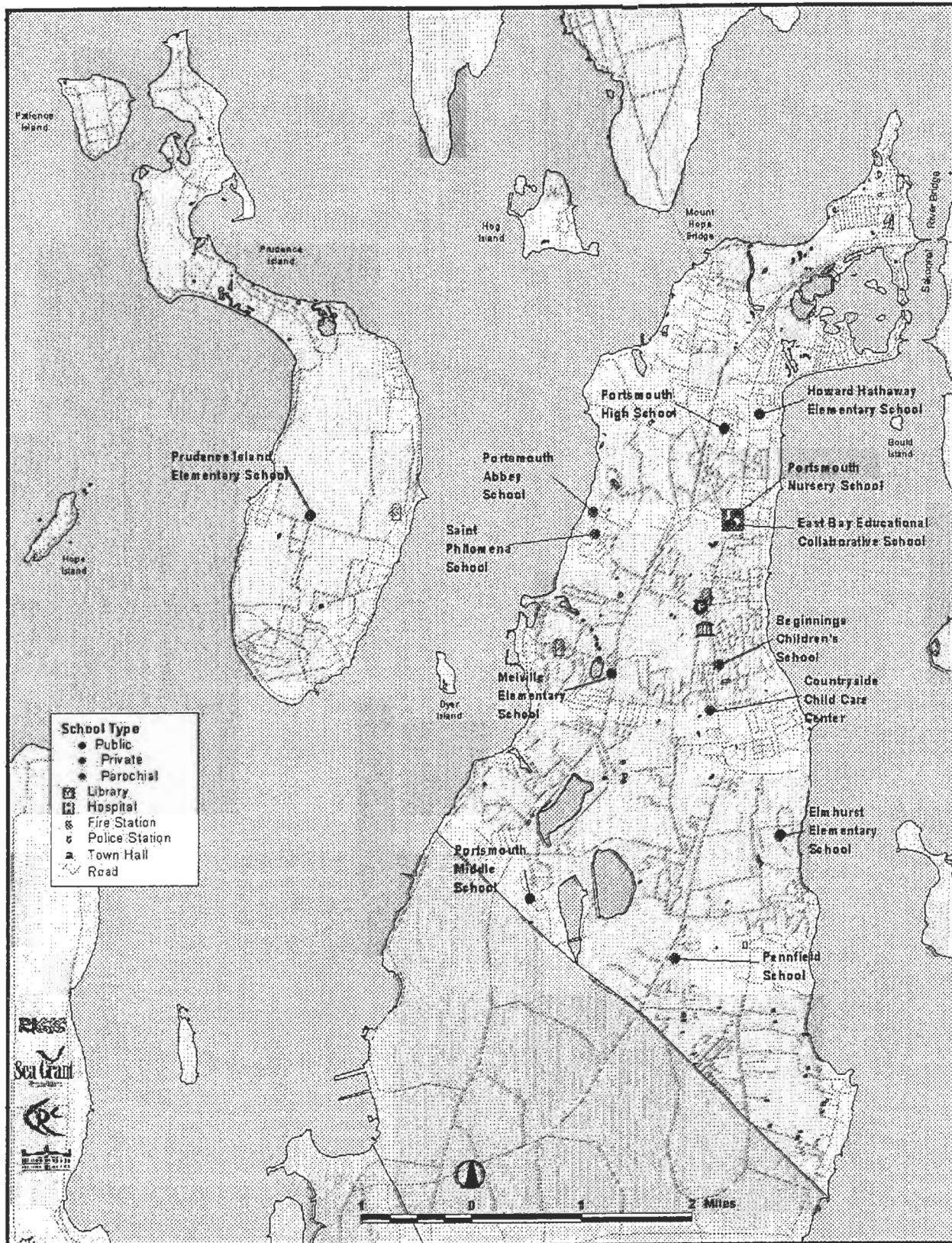
1. Pine Hill Archeological Area
2. Union Church & Southernmost School House
3. Oak Glen / Julia Ward Howe Homestead

HISTORIC DISTRICTS

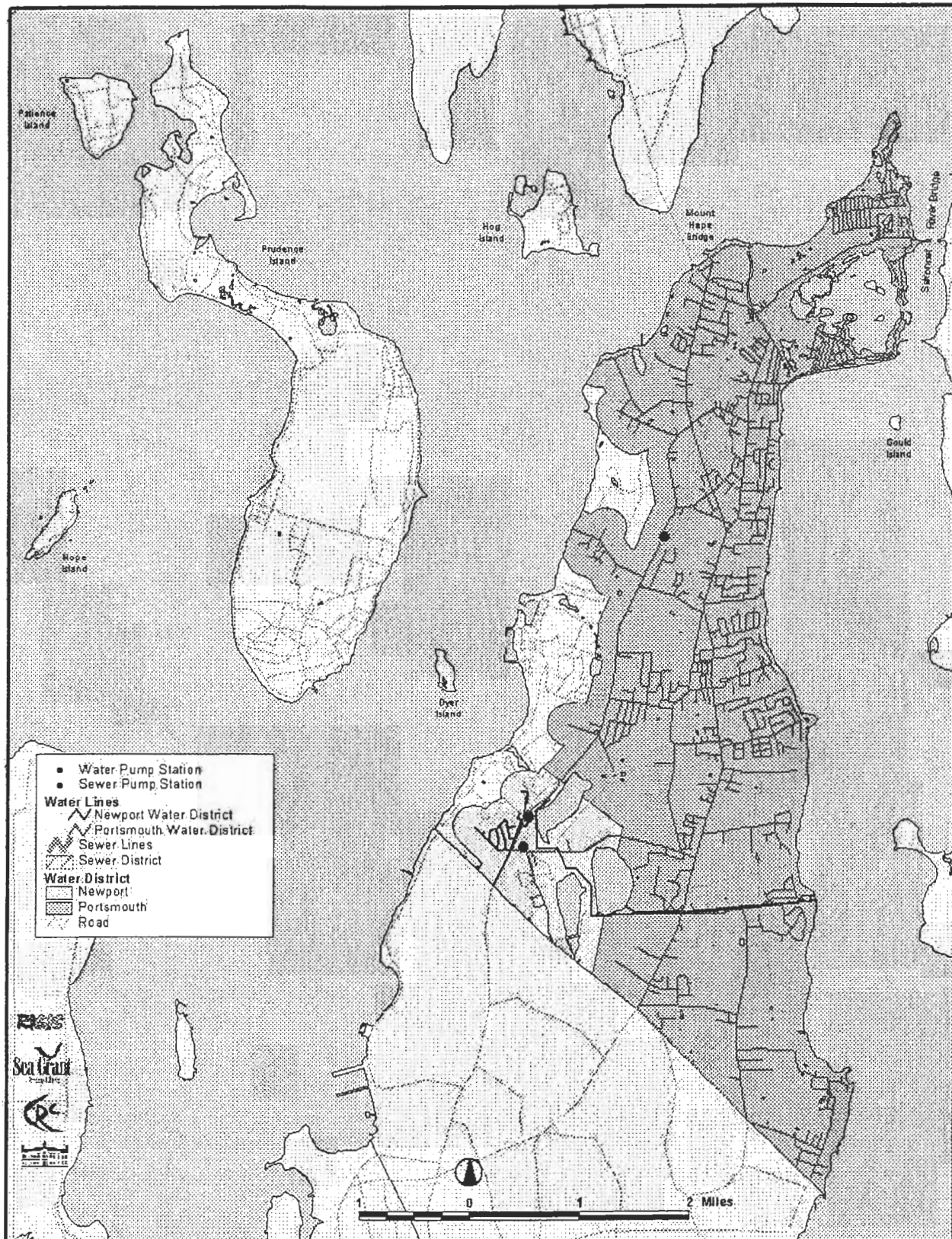
4. Mount Hope Bridge
5. Battle of Rhode Island Fort Butts Site
6. Battle of Rhode Island Main Battlefield Site
7. Lawton-Almy-Hall Farm Site
8. Greenvale Farm
9. Portsmouth Friends Meeting House

HISTORIC CANDIDATE SITES/AREAS

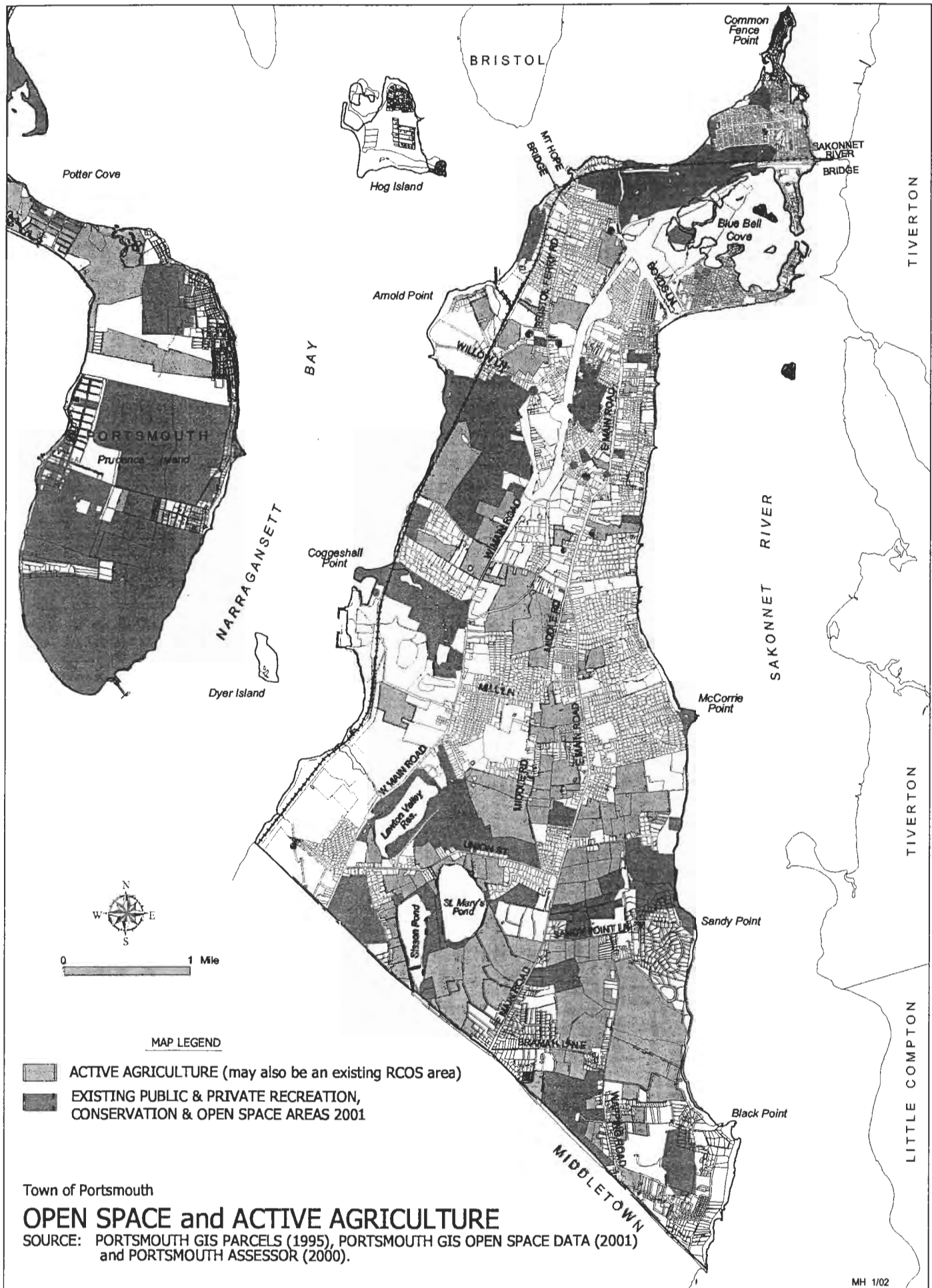
10. Brown & Ives-Russell Farm
11. Gifford House
12. Elm Farm
13. Webb House
14. Cory Farm
15. Dennis House
16. Portsmouth-Newtown Historic District
17. Brayton Estate
18. Cory Farm
19. Hedley Farm
20. Sherman House
21. Prescott Farm Historic District
22. Southeast Portsmouth Rural Estates Historic District
23. Rowland Allen House

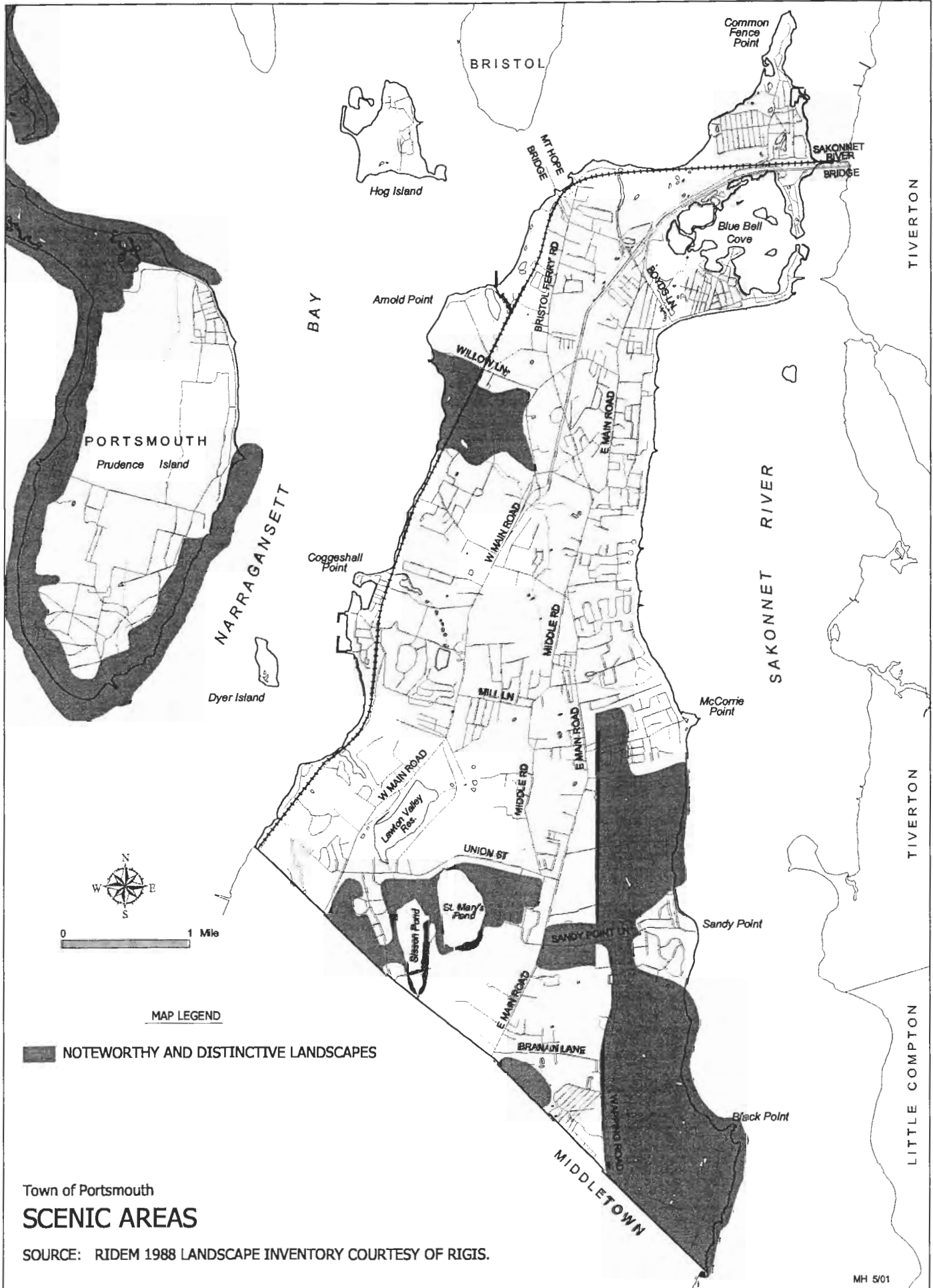


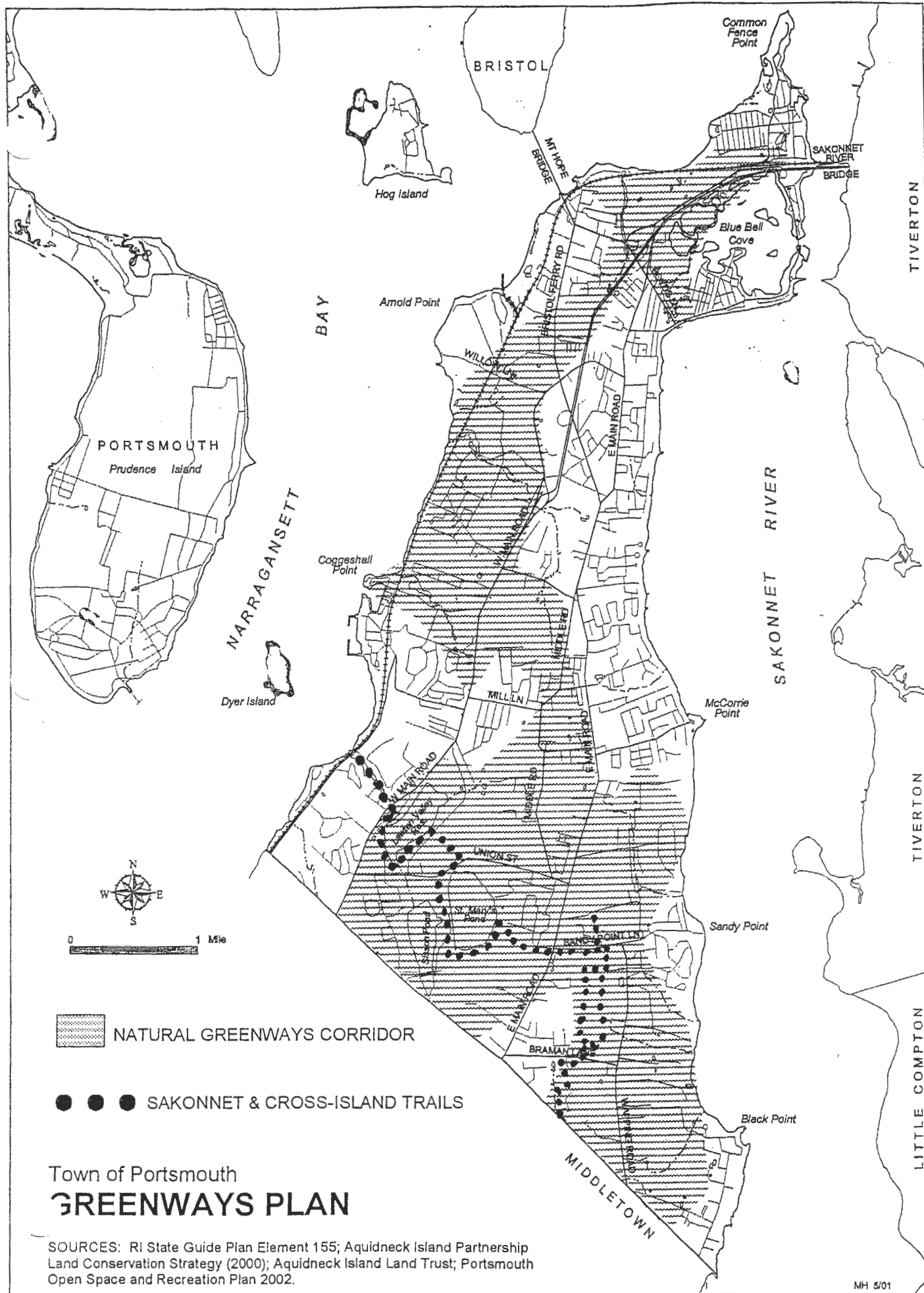
Facilities siting in Portsmouth.

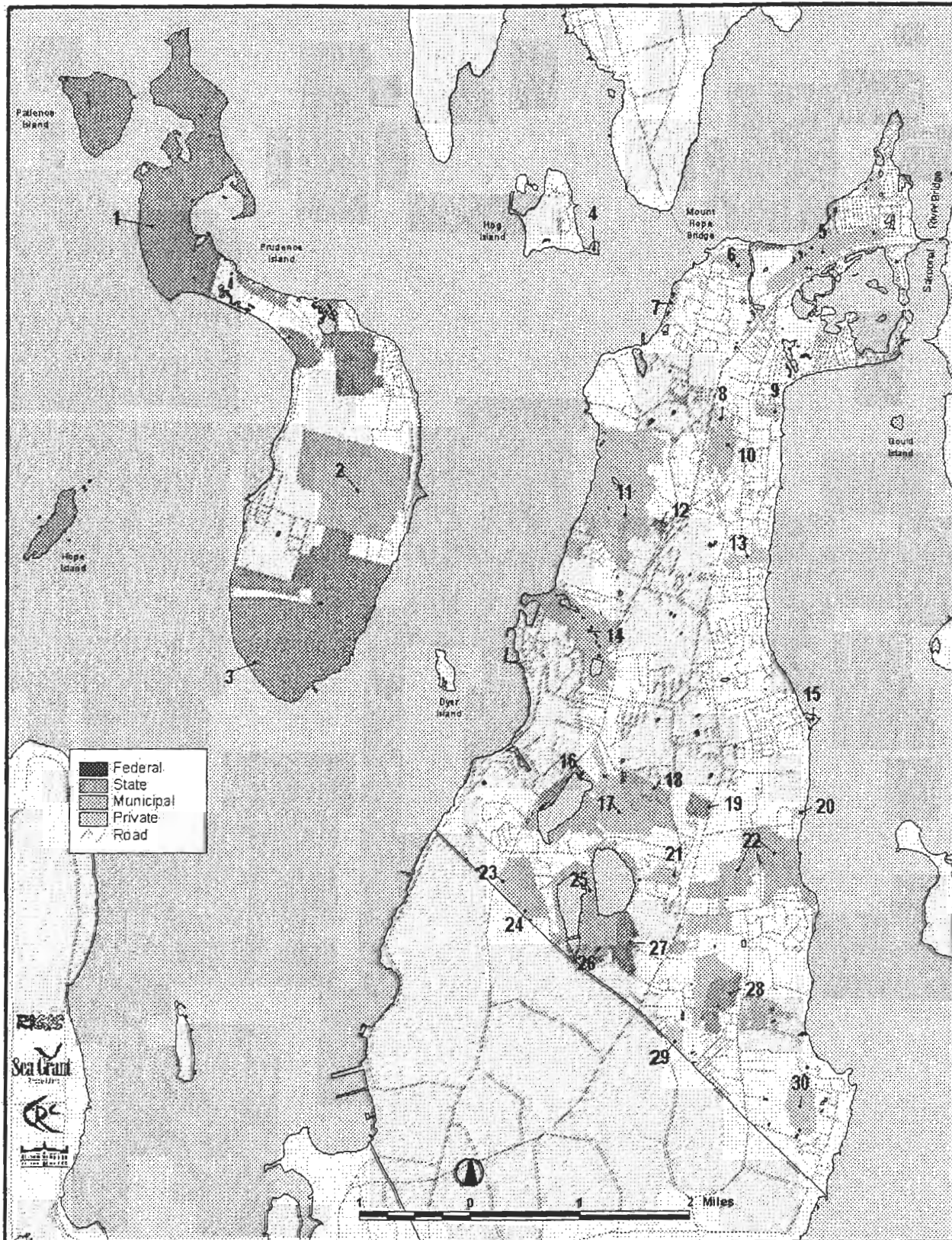


Distribution of sewer and water infrastructure in Portsmouth.





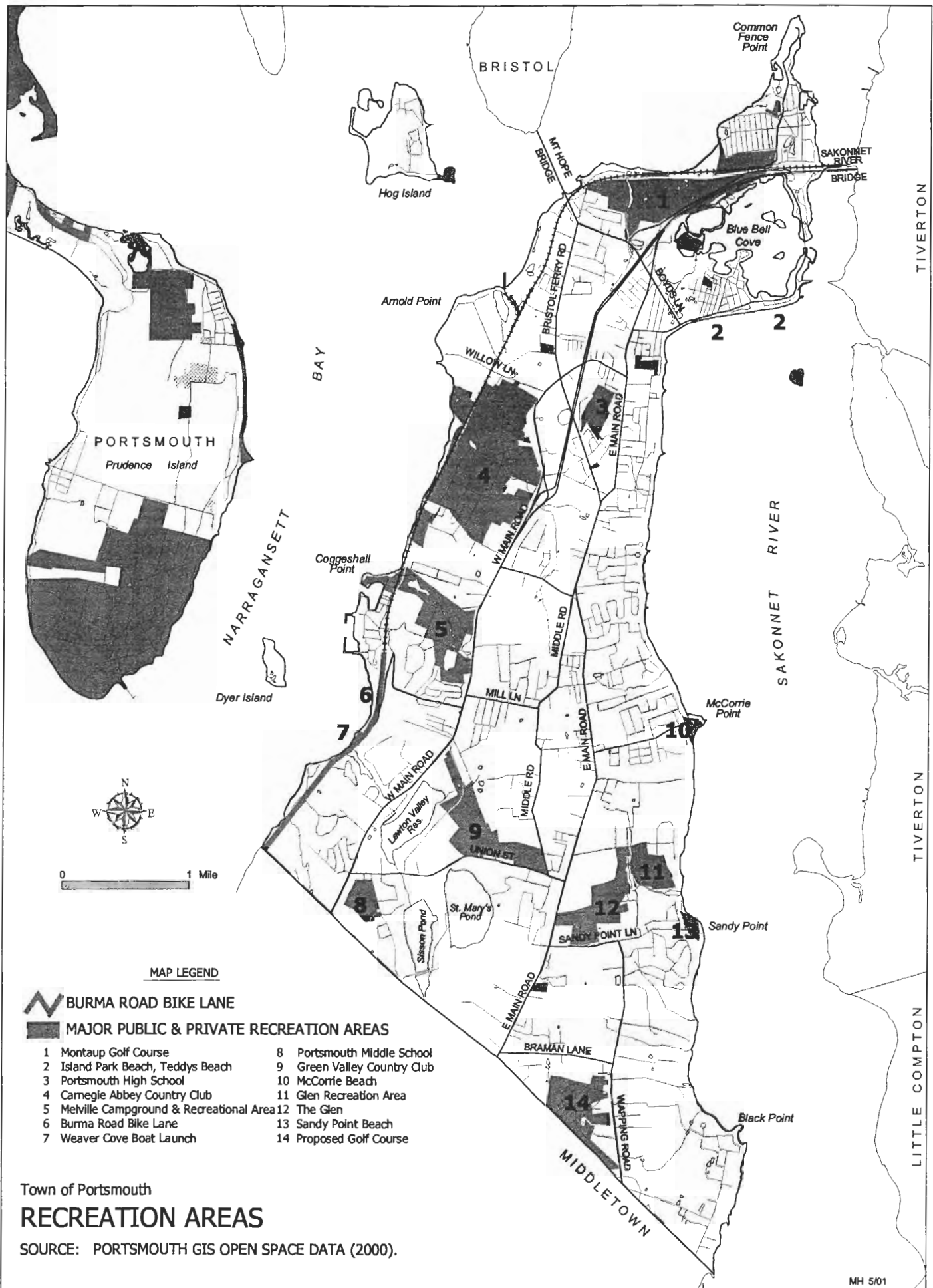


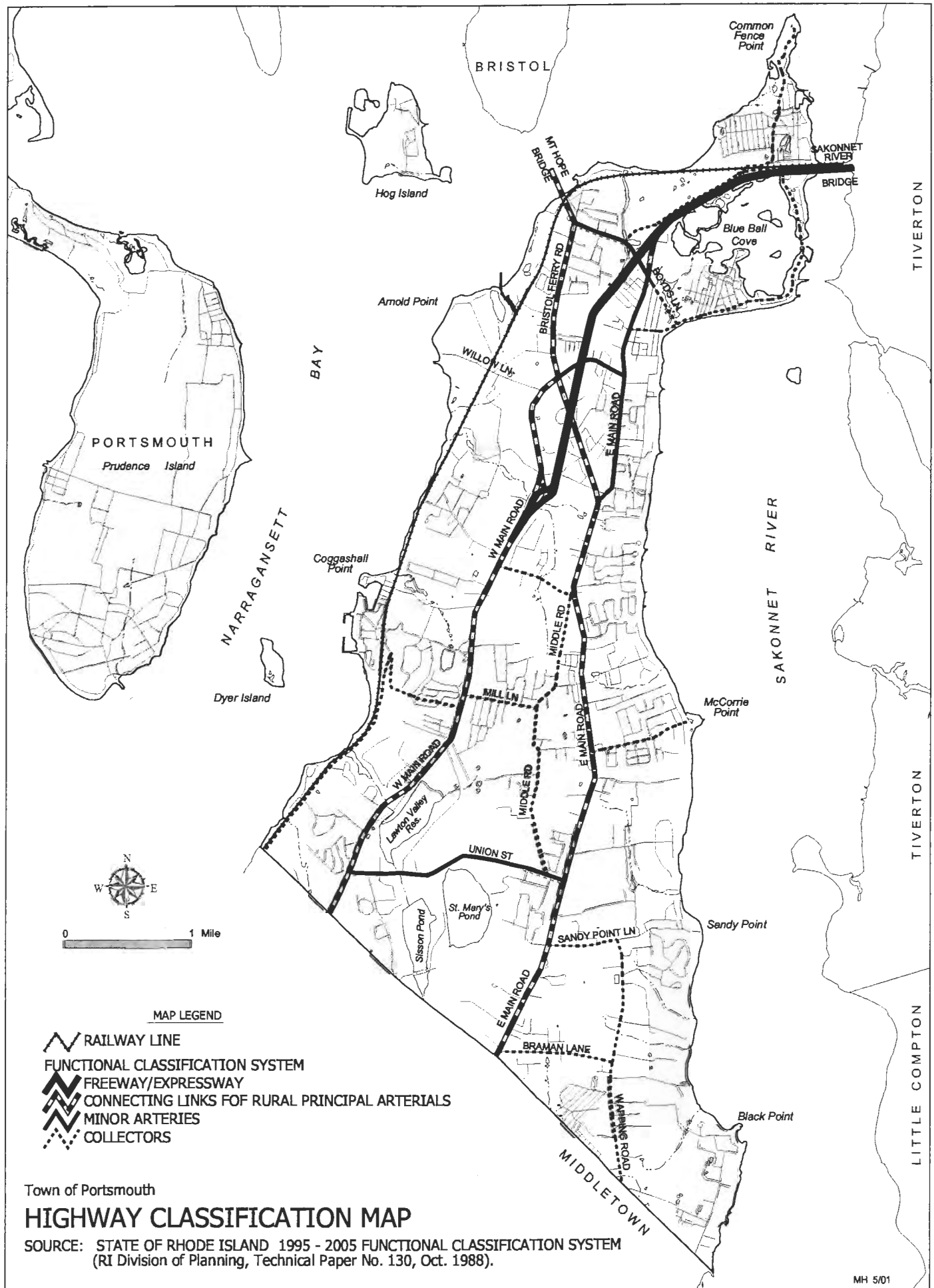


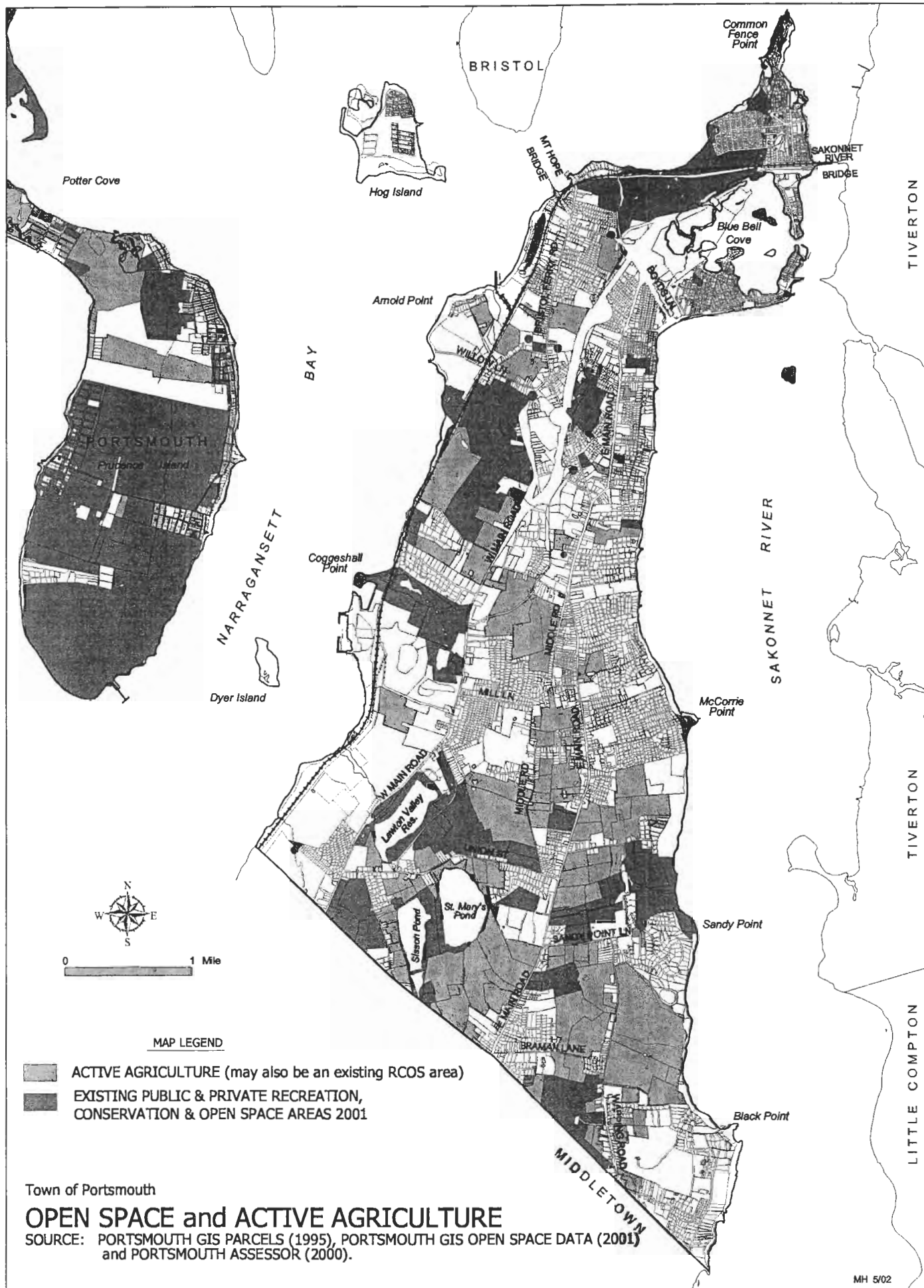
Land protected for conservation and open space in Portsmouth.

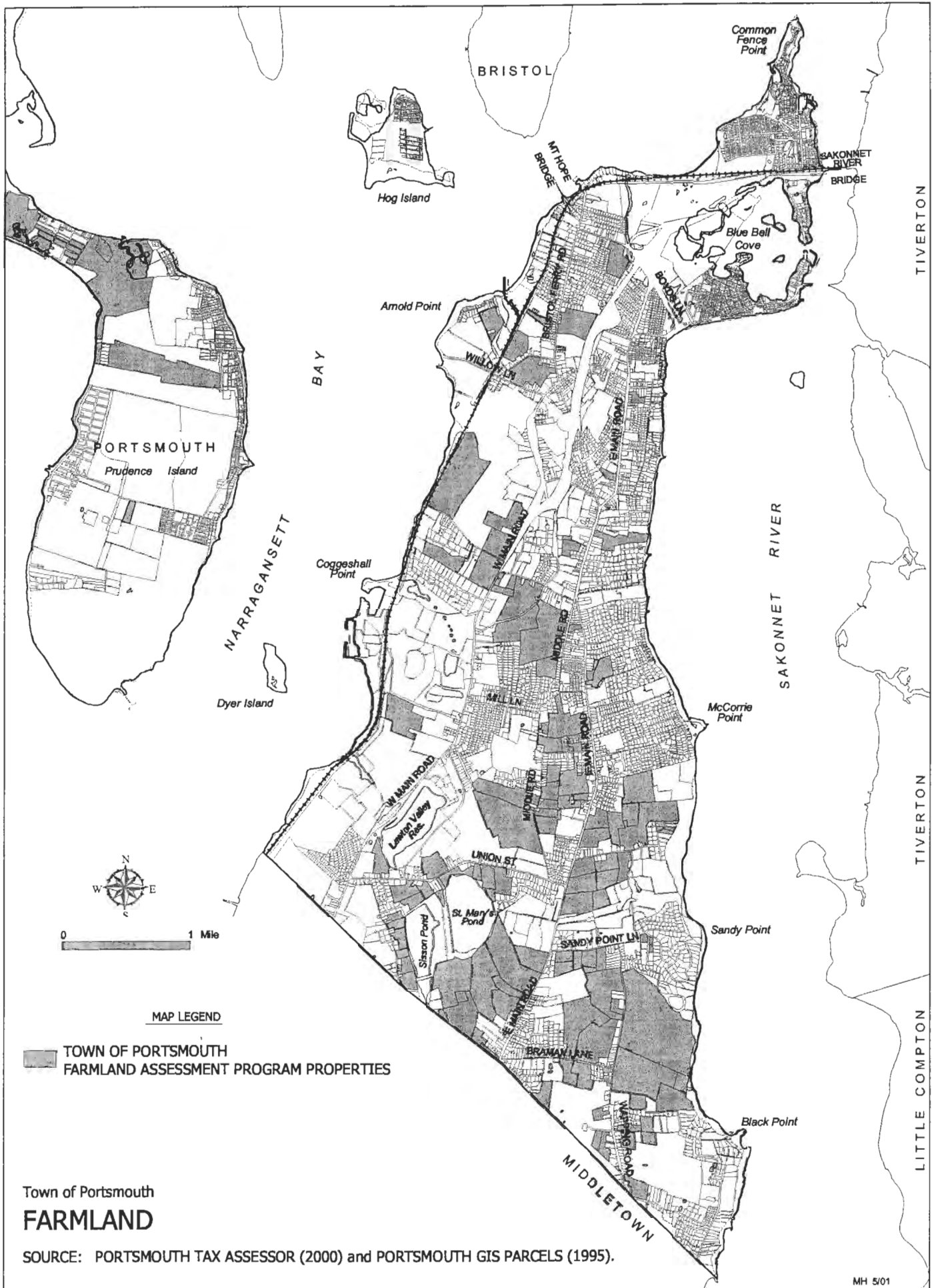
Site Name Key to "Land protected for conservation and open space in Portsmouth" map

1. North Prudence Island Wildlife Management Area
2. Heritage Trust Site
3. South Prudence Island Wildlife Management Area
4. Camp Hess
5. Montaup Country Club
6. Pocasset Country Club
7. Porter's Cove
8. Fort Butts
9. Hathaway School
10. Portsmouth High School
11. Portsmouth Abbey Priory
12. Black Regiment Monument
13. Anthony Farm
14. Melville Pond Campground
15. McCurry Point Beach
16. Lawton Valley Reservoir
17. Green Valley Country Club
18. Phelps Farm
19. Thurston Farm
20. Glen Farm Camp
21. Oakland Farm & Forest
22. Glen Recreational Area
23. Doris Duke Estate
24. Portsmouth Middle School
25. Sisson & Mary's Pond Reservoir
26. Van Hof Farm
27. Silvia Farm
28. Brahman's Lane Farm
29. Bittersweet Farm
30. Black Point Swamp





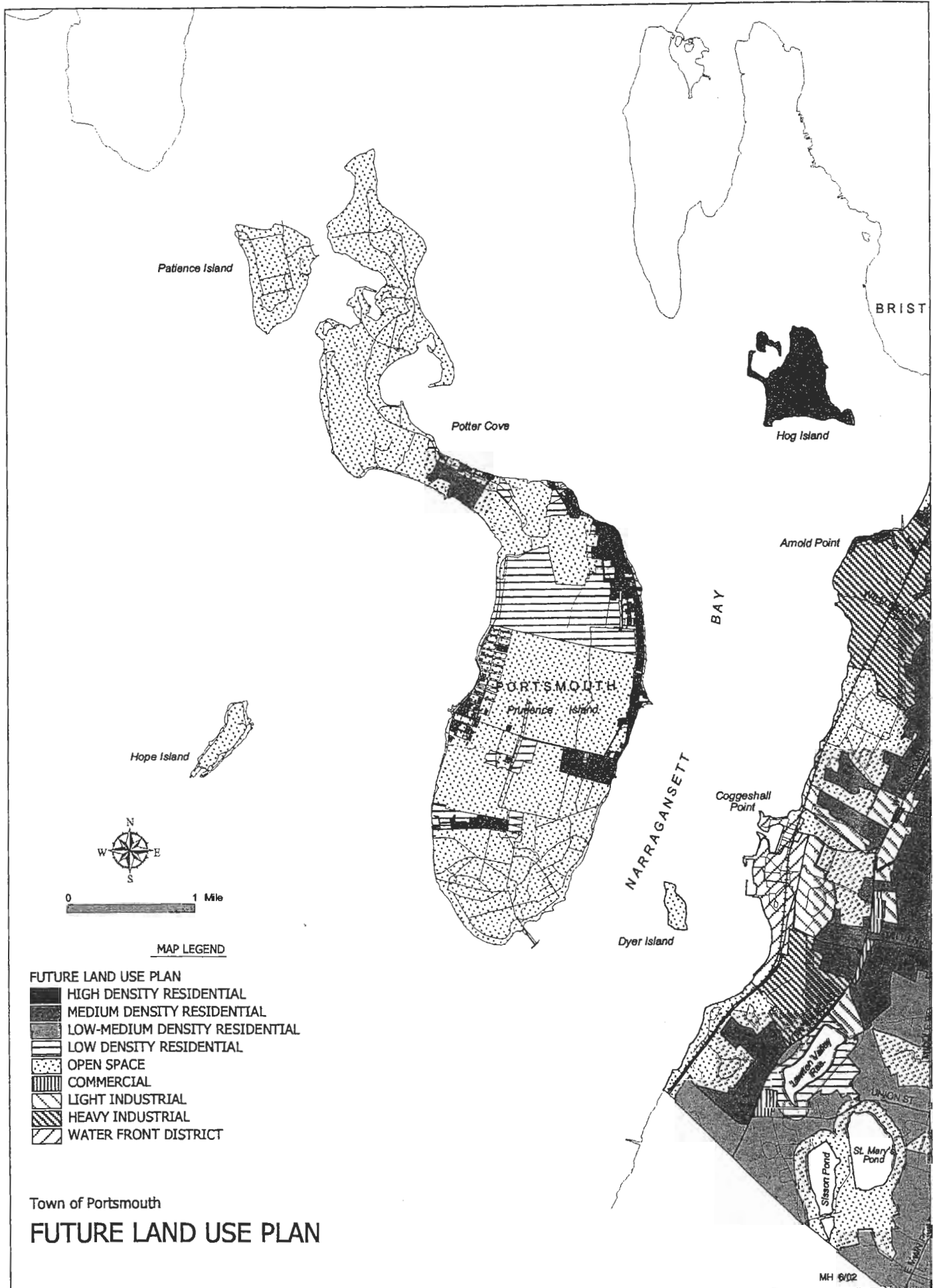


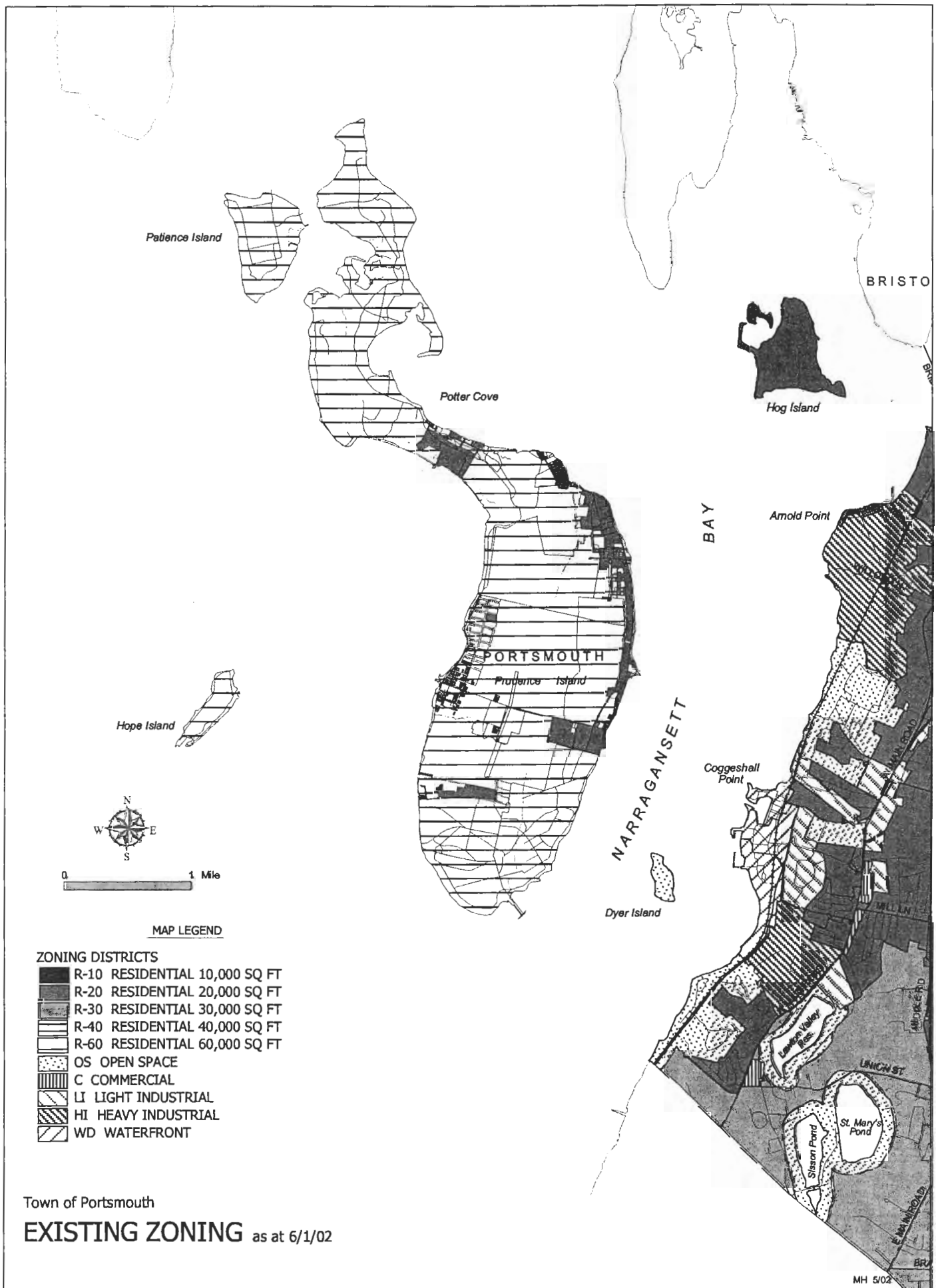


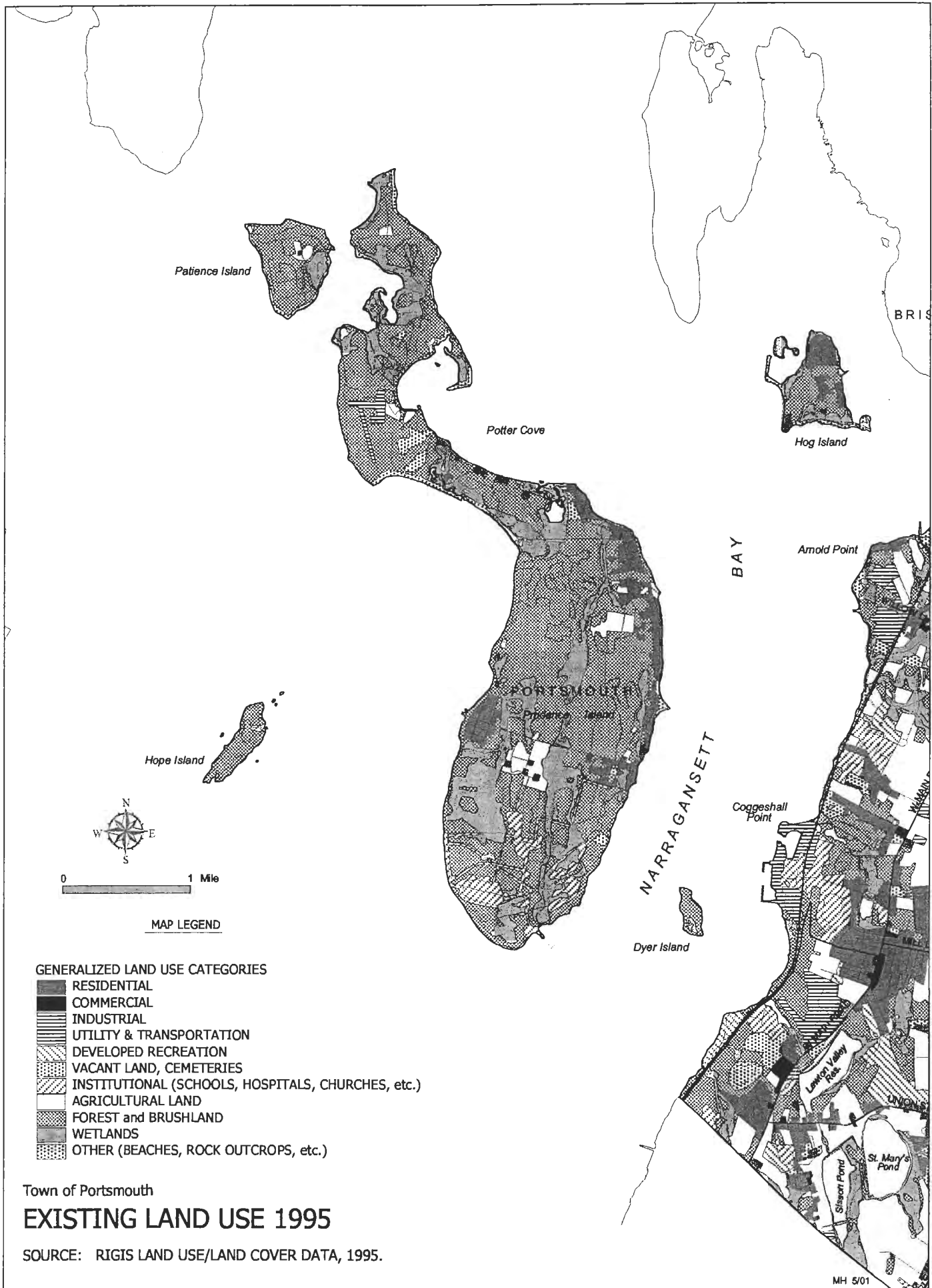
PRUDENCE

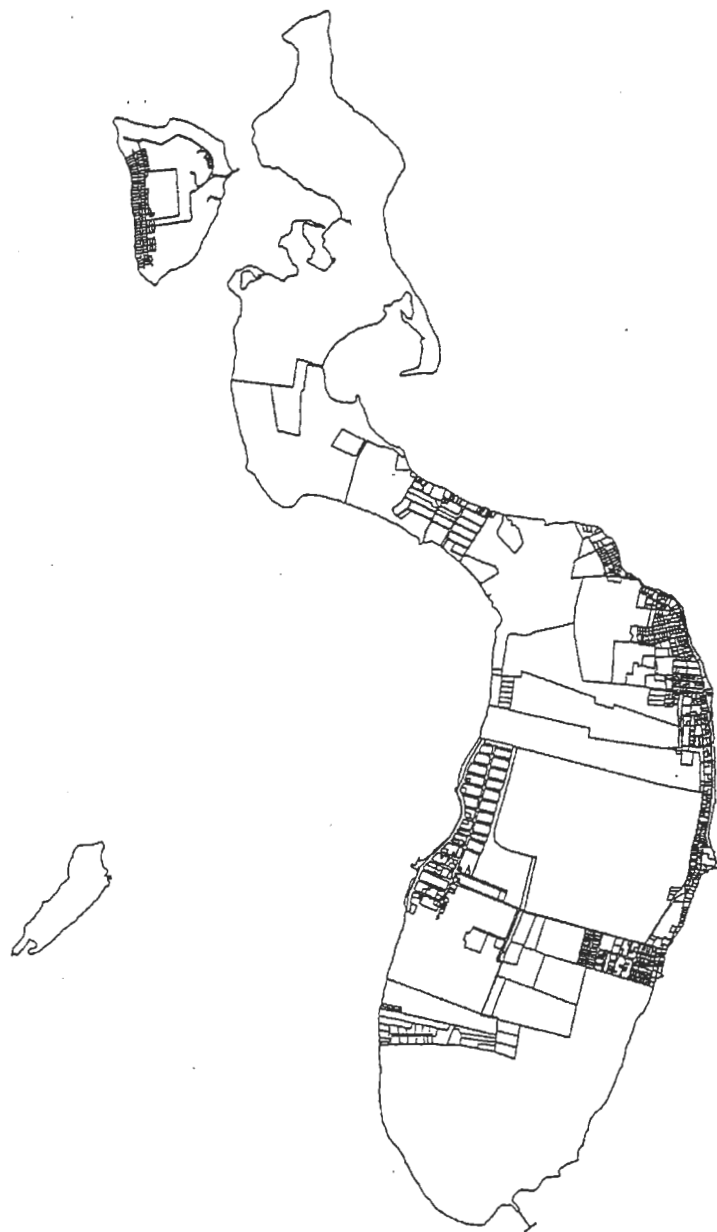
ISLAND

MAPS





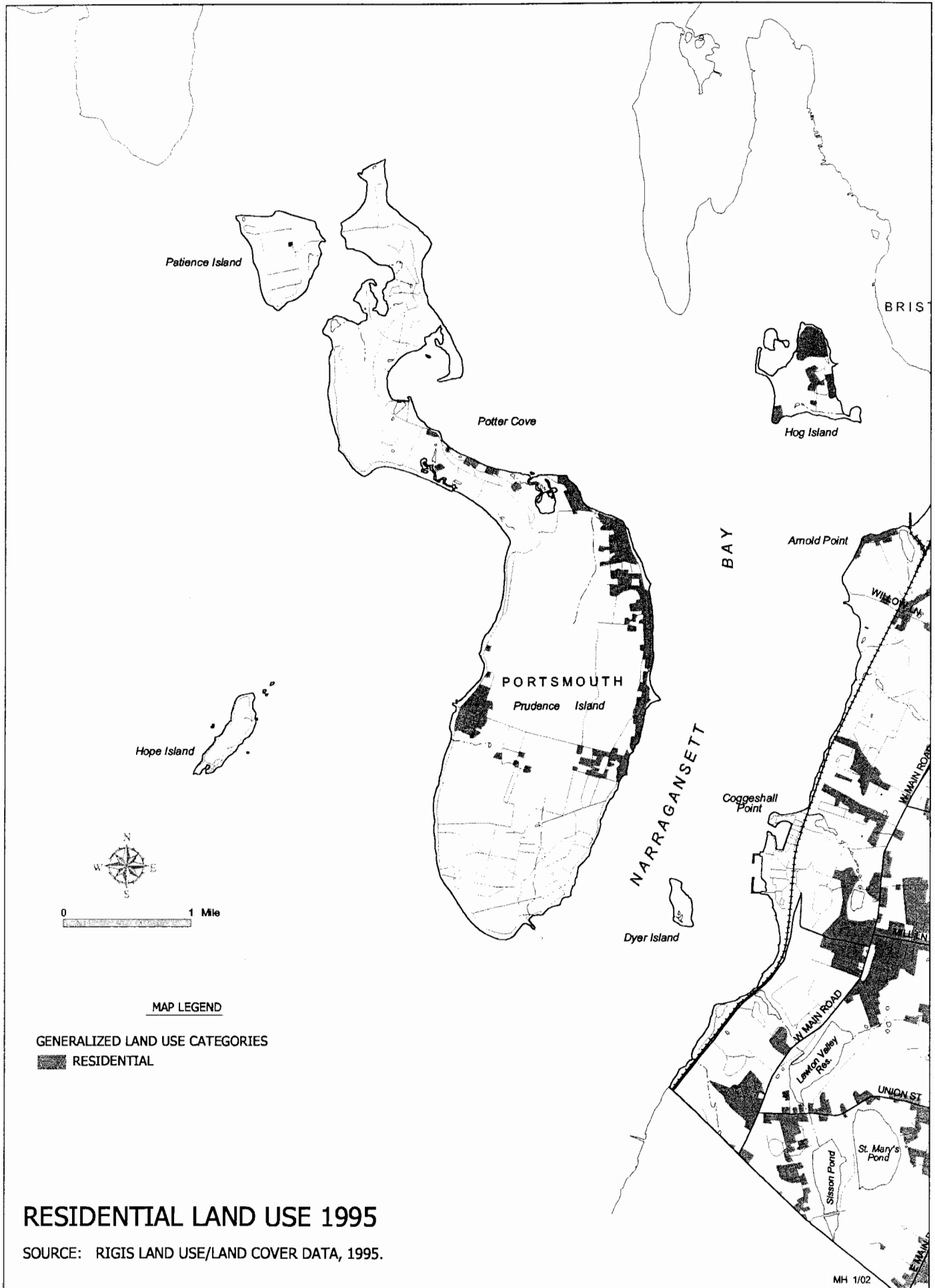




SCALE 1in = 1mile

PARCEL MAP - PRUDENCE ISLAND

SOURCE: TAX ASSESSOR'S PLATS. AIGIS.



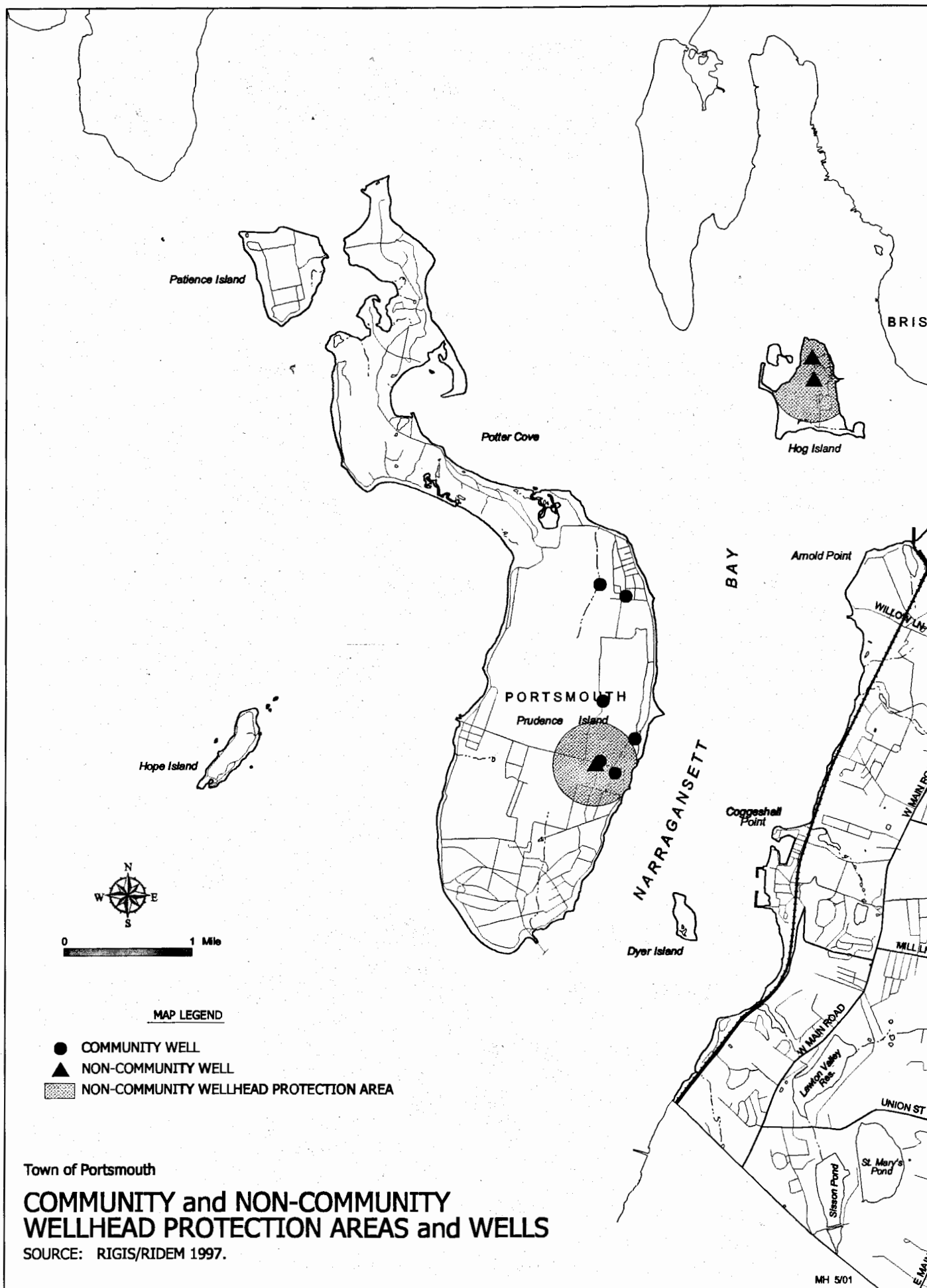
MAP LEGEND

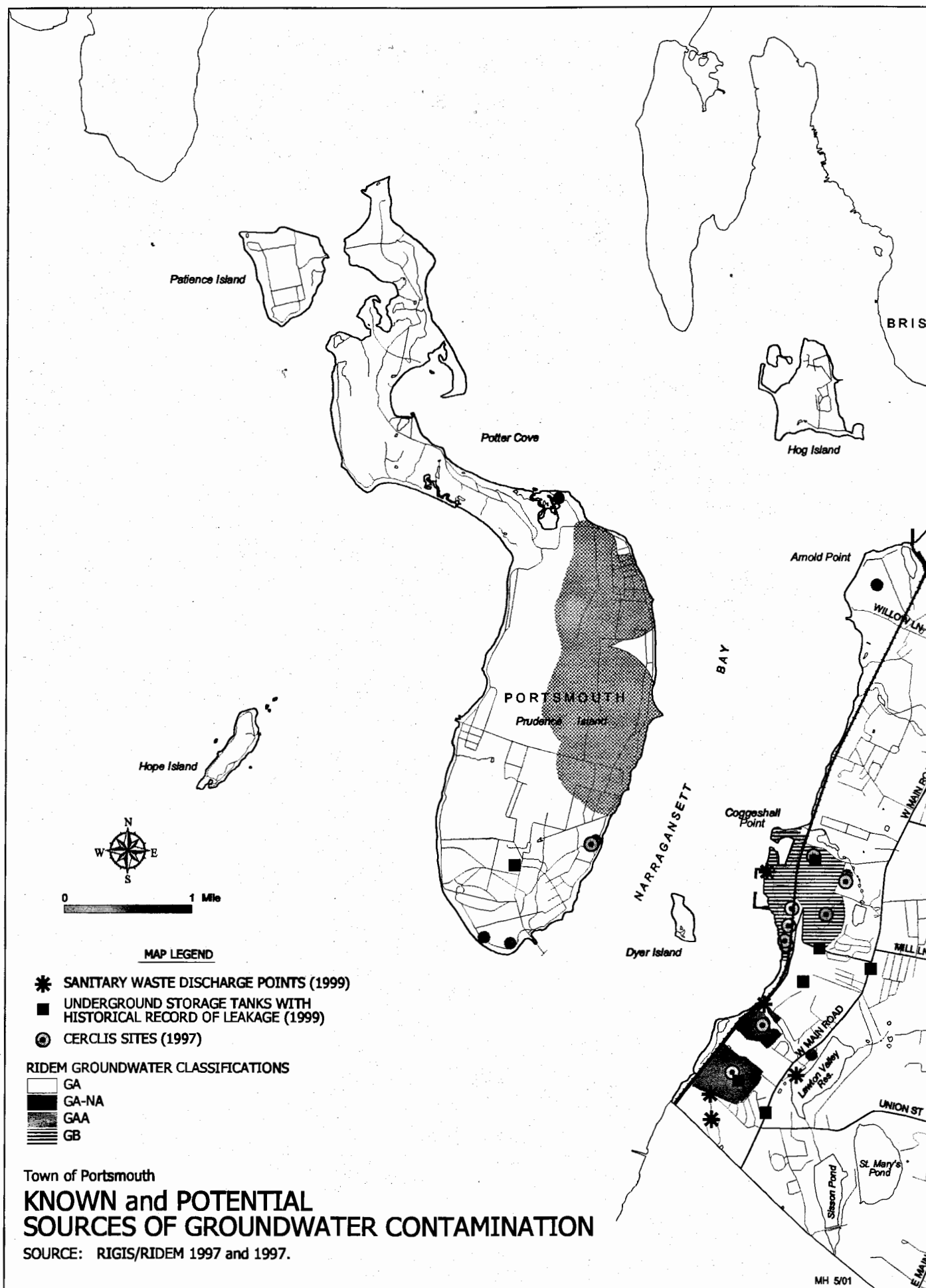
GENERALIZED LAND USE CATEGORIES

RESIDENTIAL

RESIDENTIAL LAND USE 1995

SOURCE: RIGIS LAND USE/LAND COVER DATA, 1995.





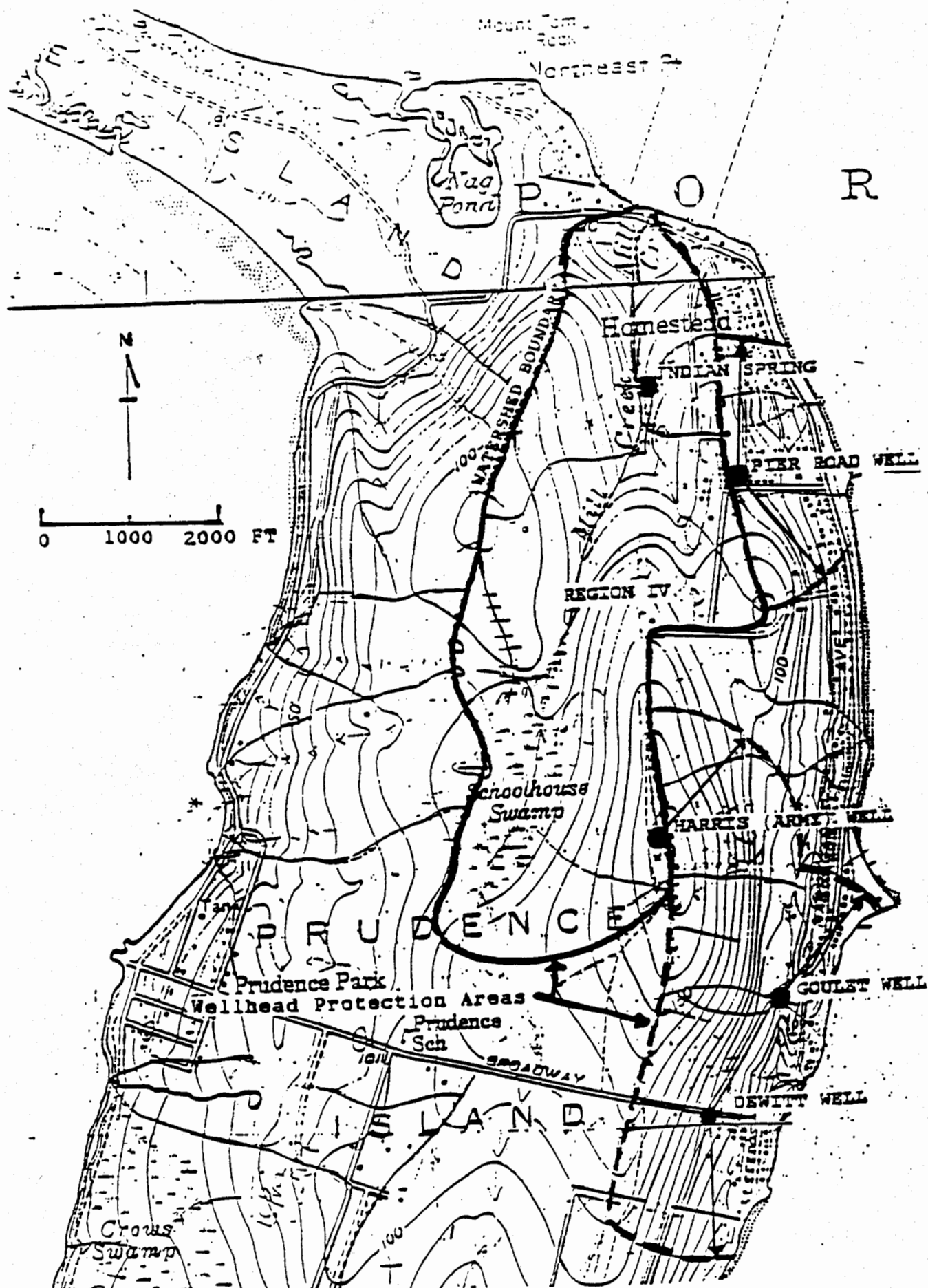
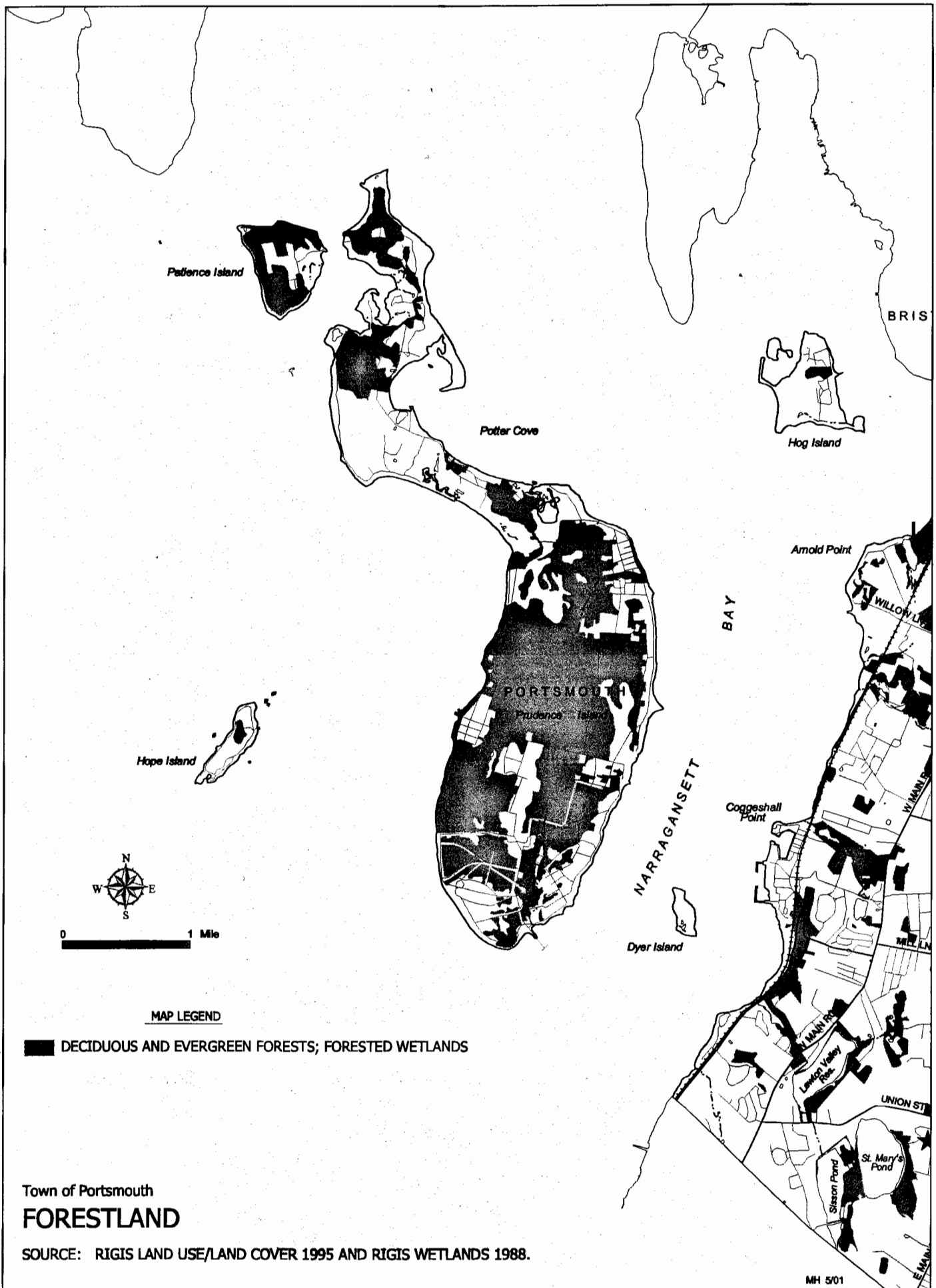
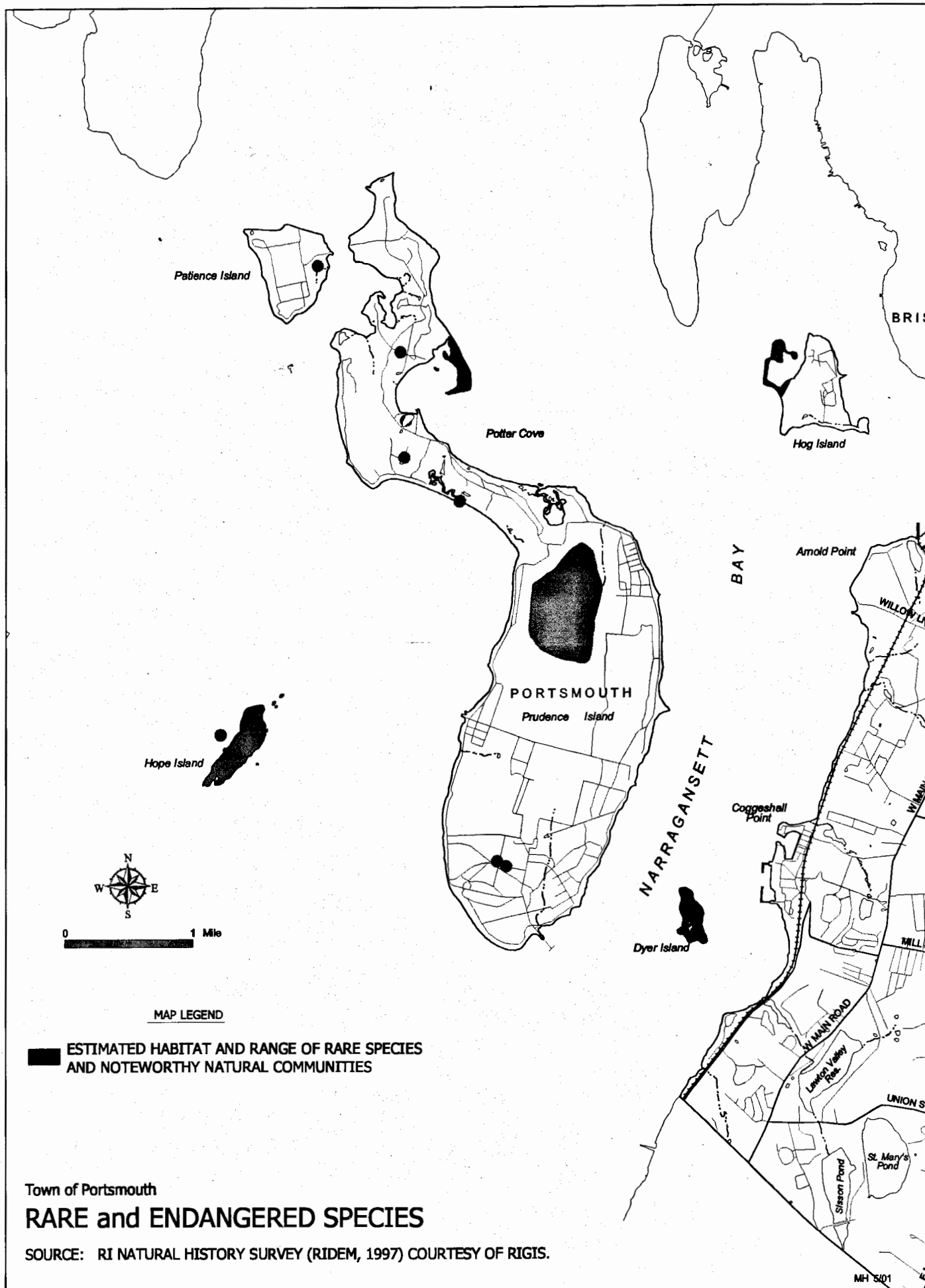
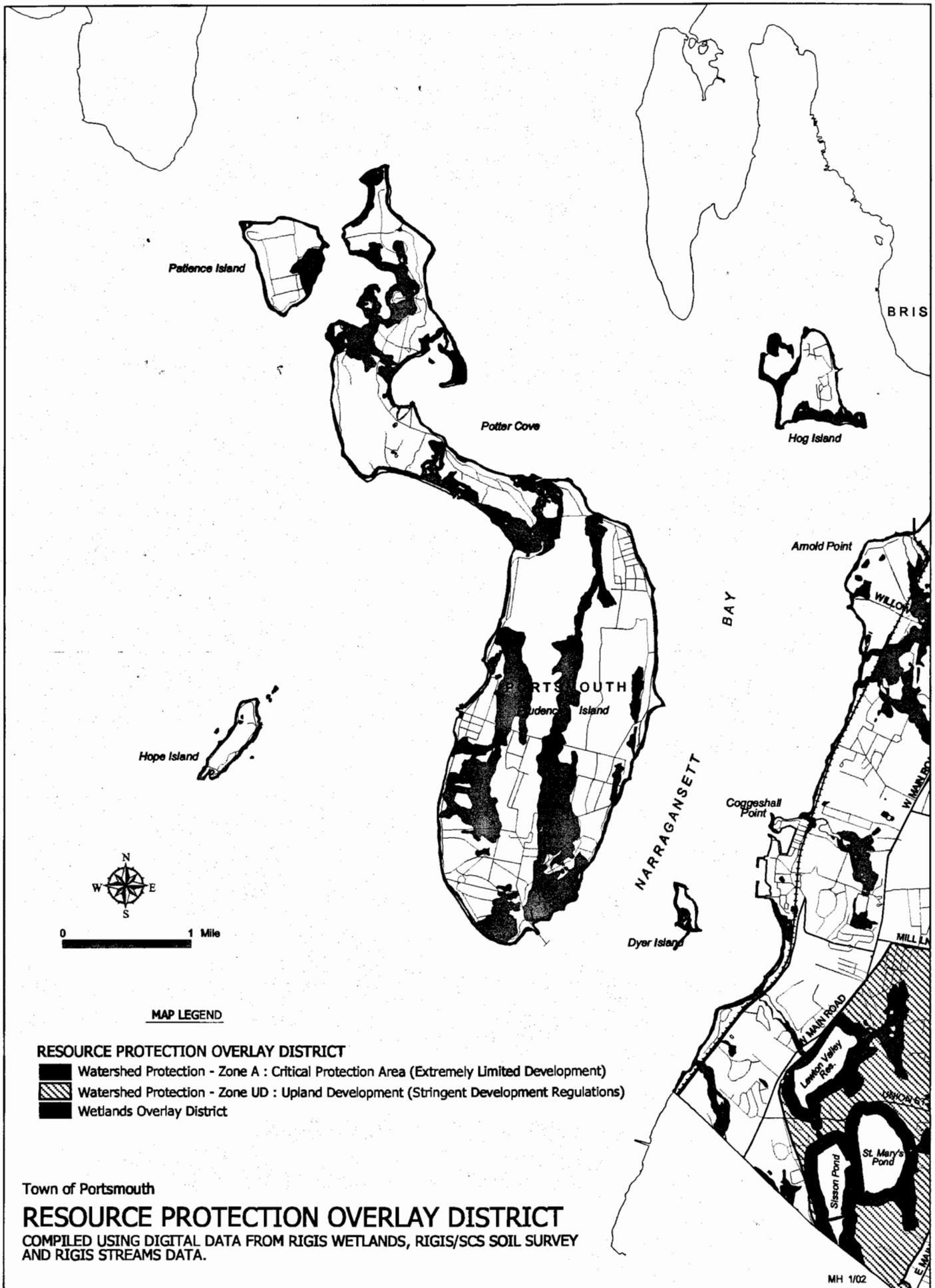
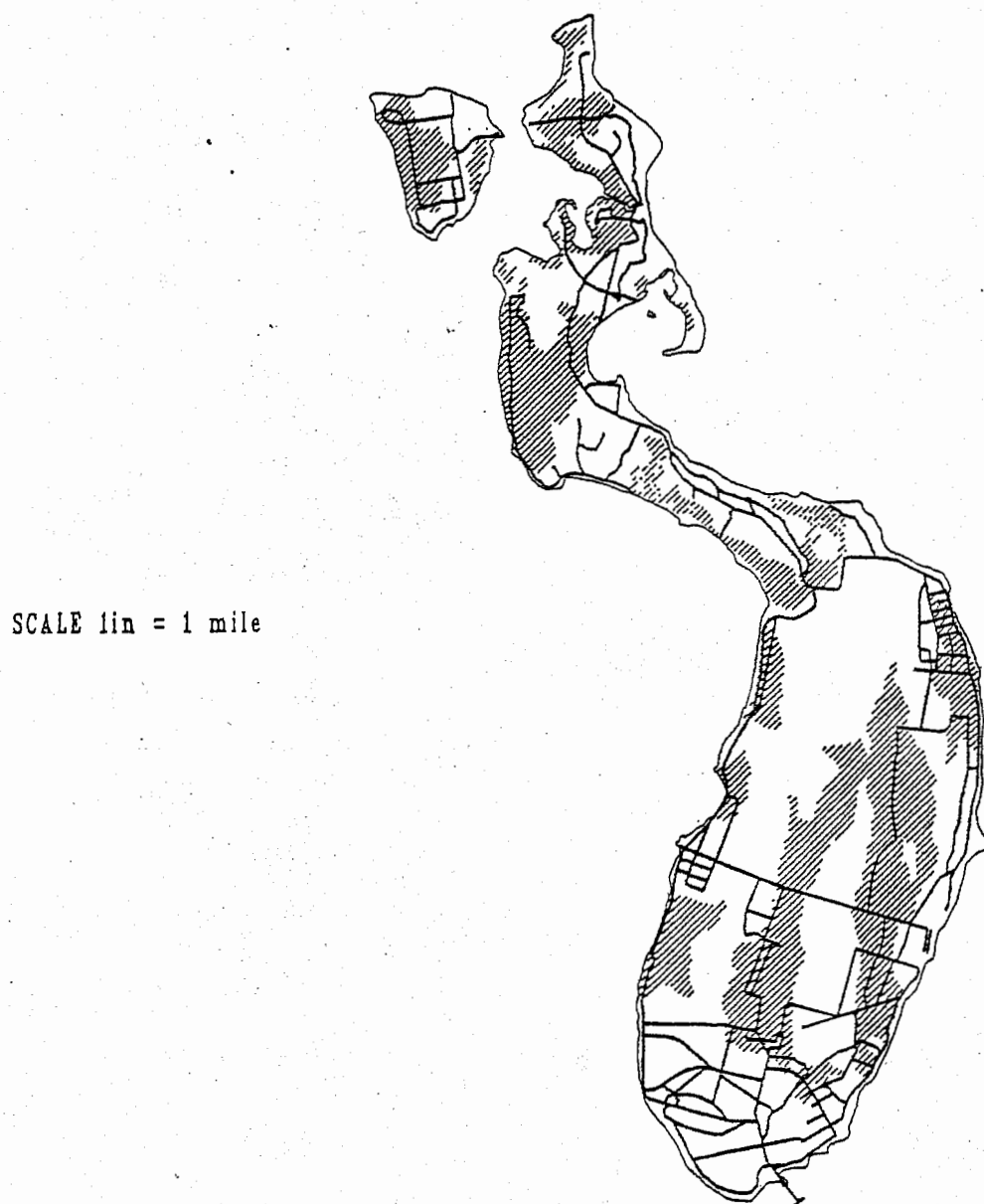


Figure 2. Delineation of PIUC Wells and Proposed 1991 Wellhead Protection Areas.





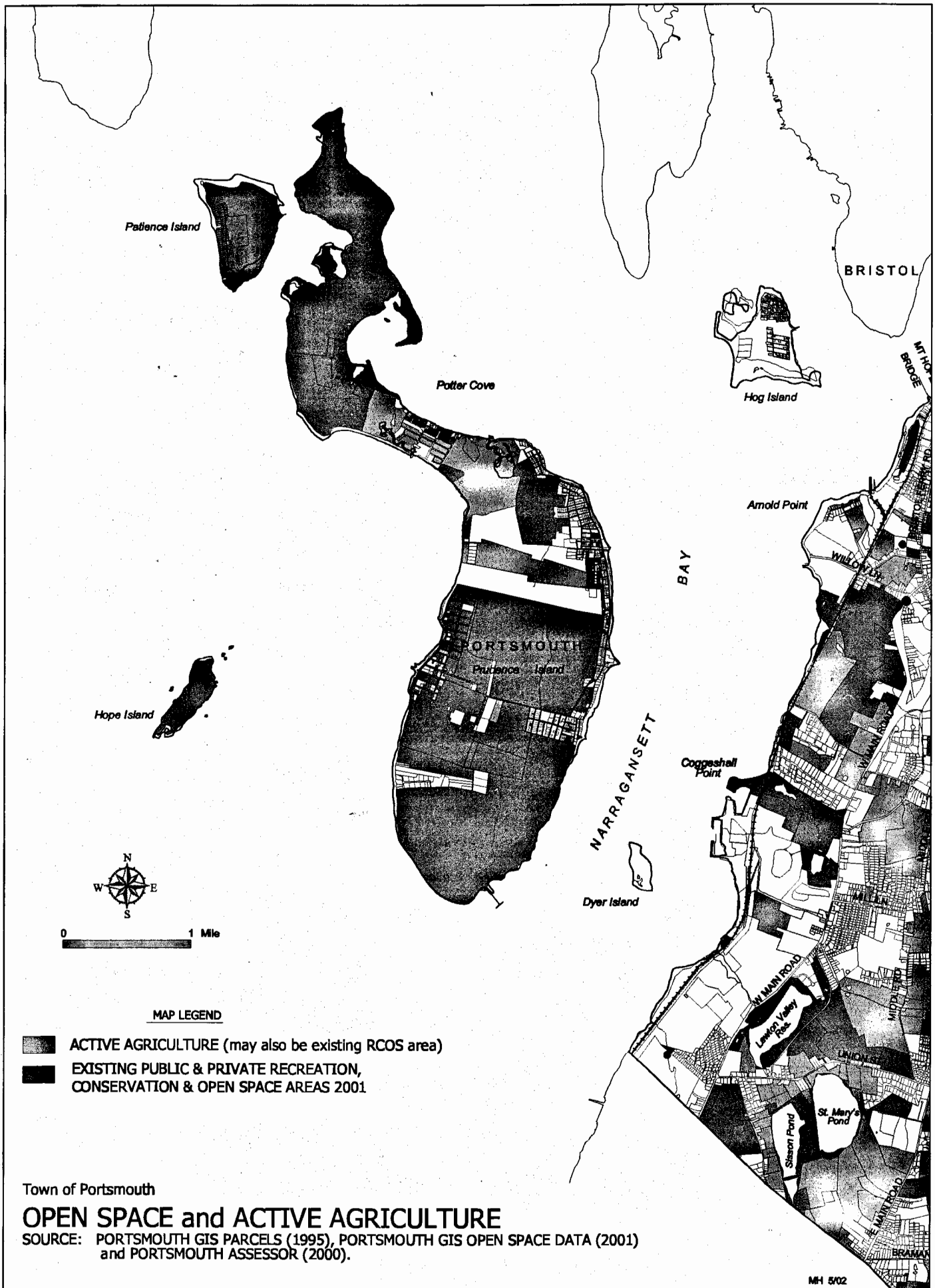


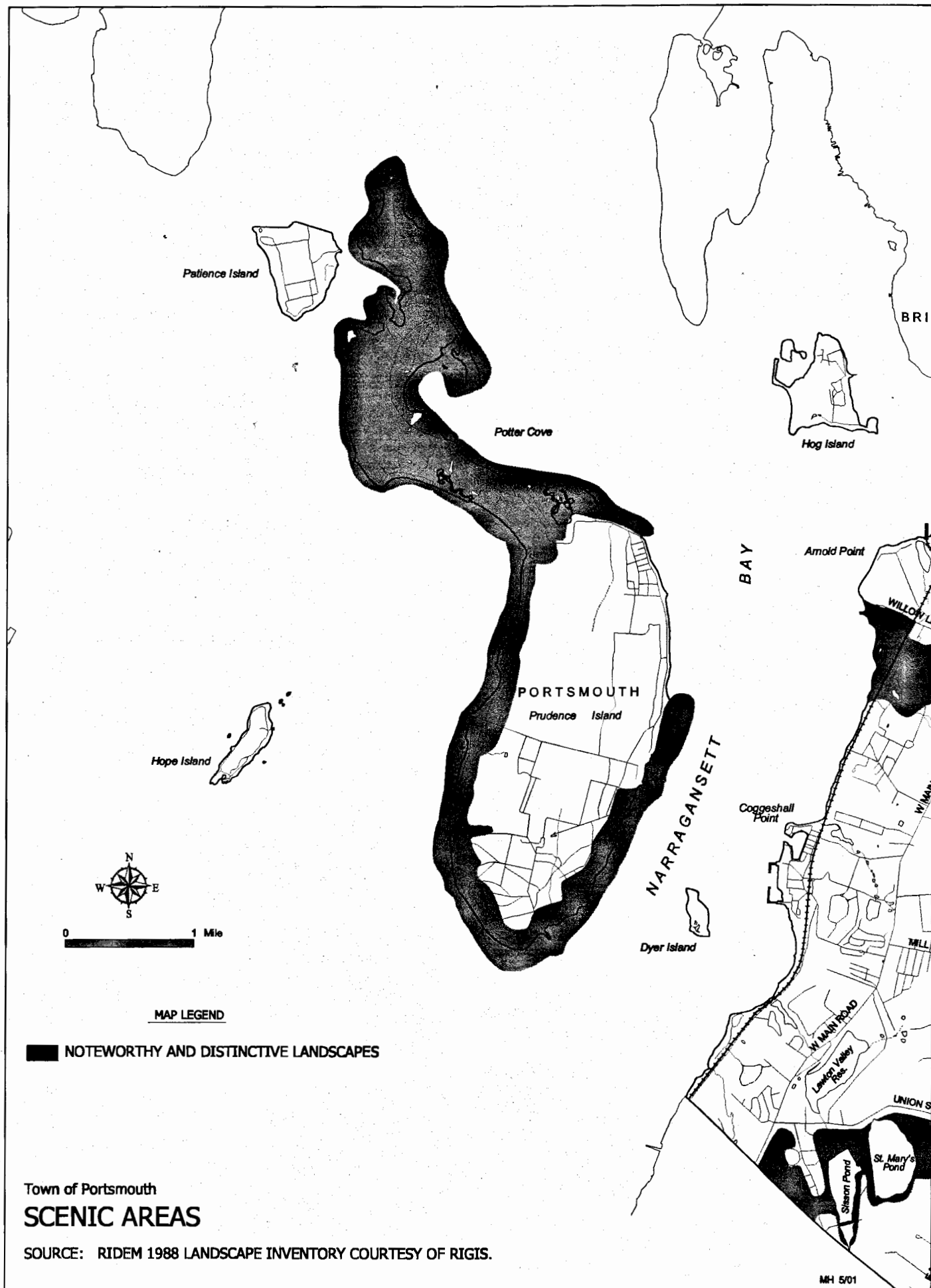


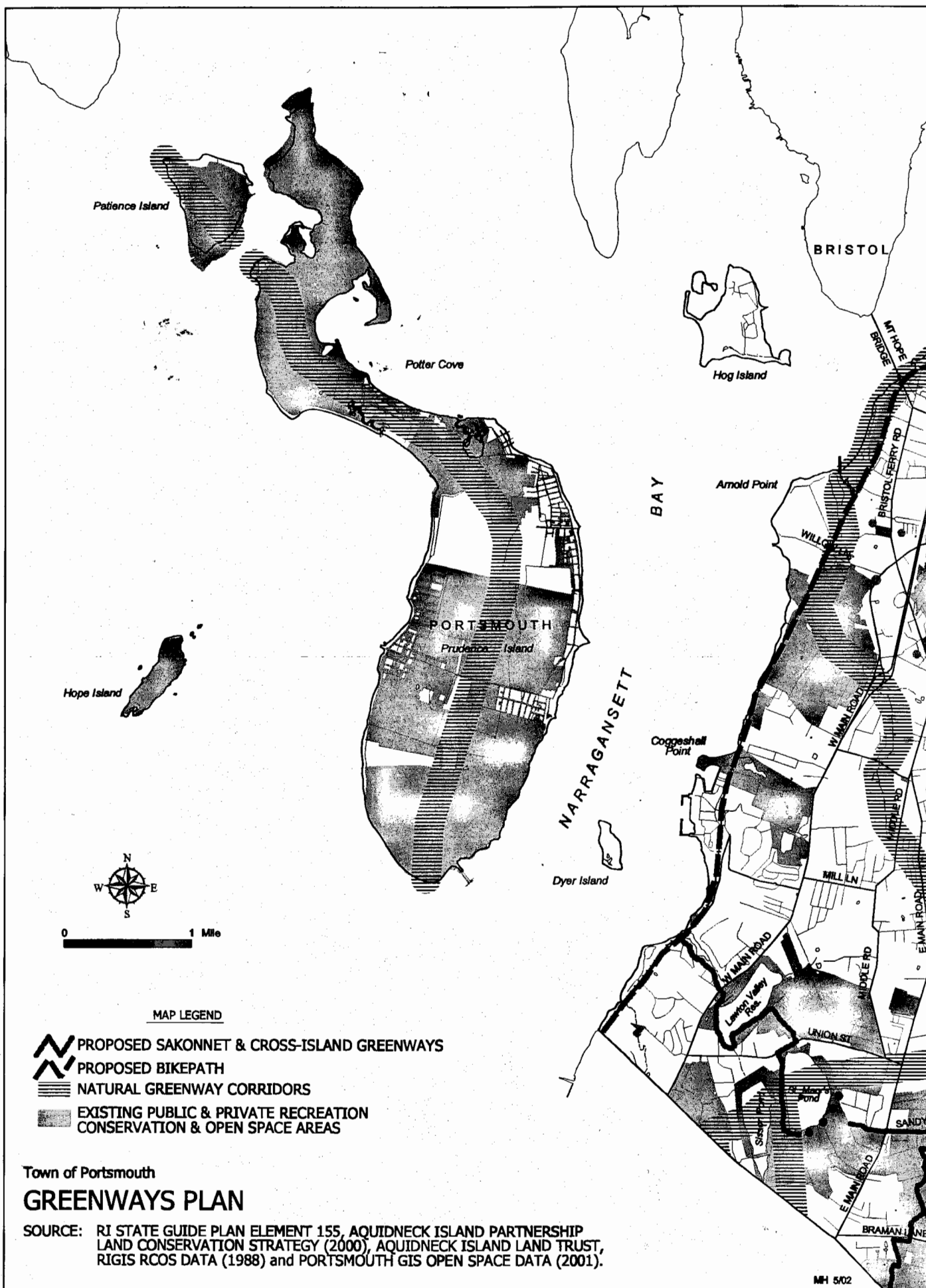
SOILS SEVERELY CONSTRAINED FOR I.S.D.S.
(PERCS SLOWLY AND/OR WET)

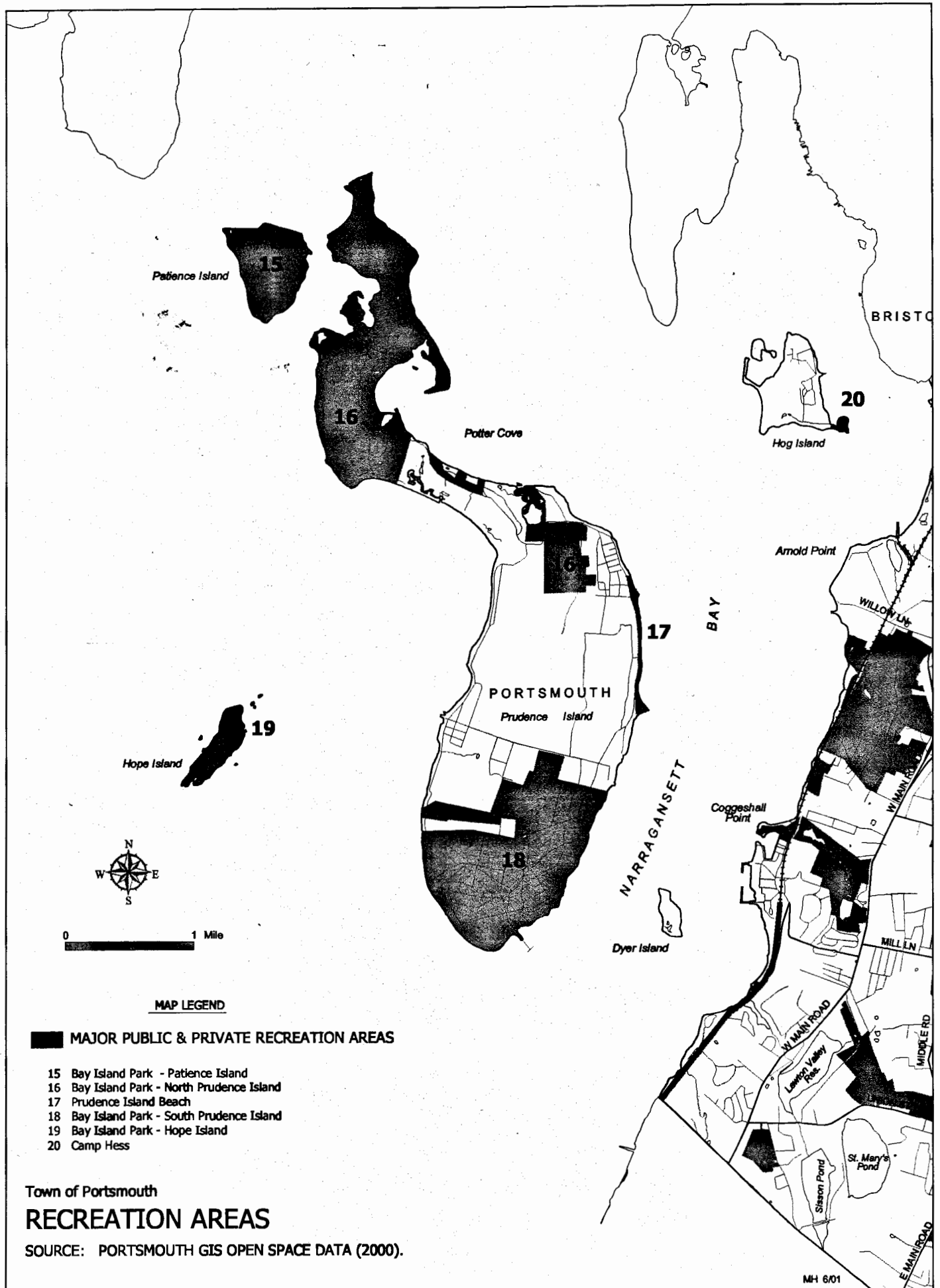
DEVELOPMENT CONSTRAINTS - PRUDENCE ISLAND

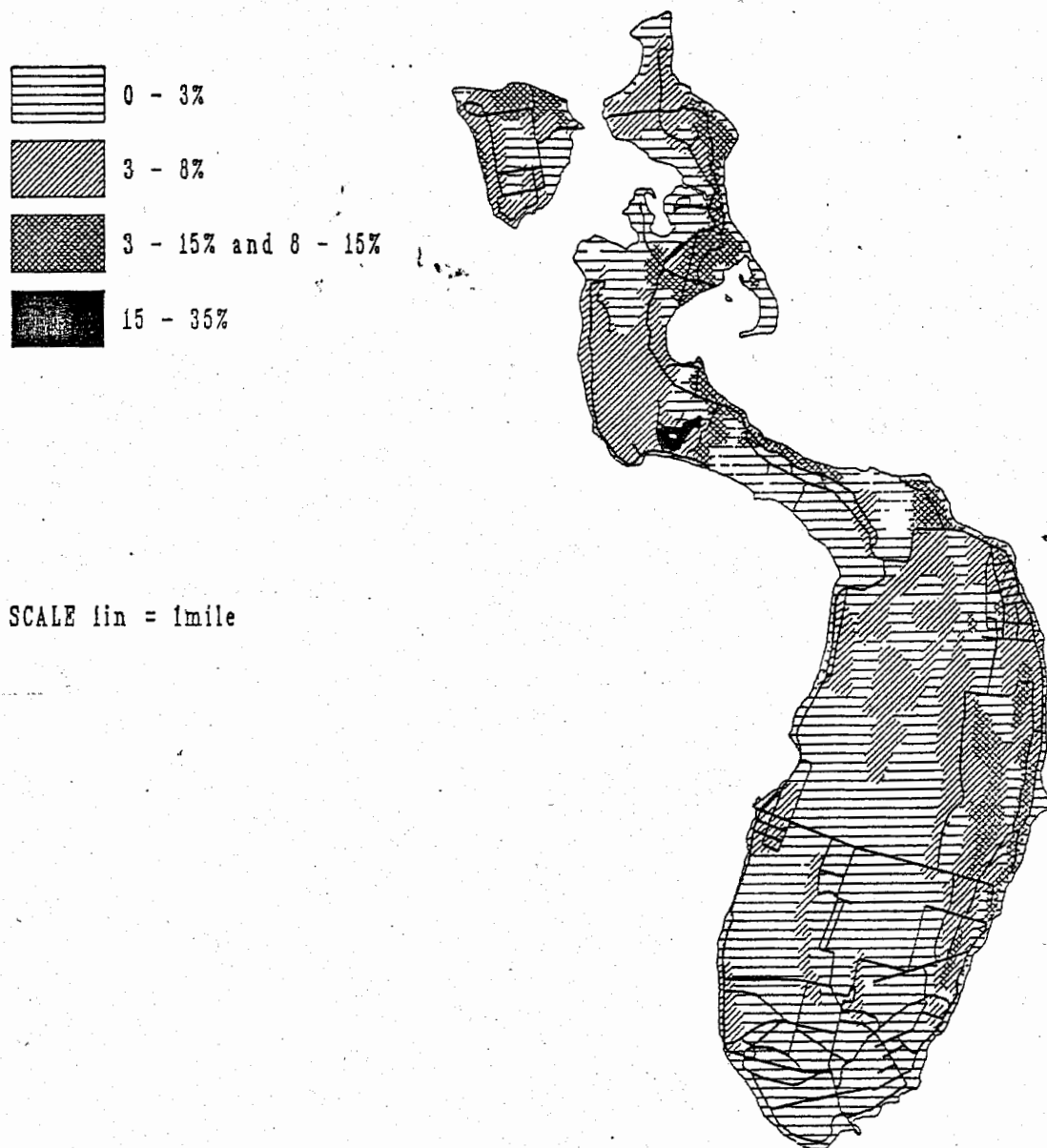
COMPILED USING USDA SCS "SOIL SURVEY OF RHODE ISLAND" 9.9
Table 19, AND RIGIS SOILS DATA





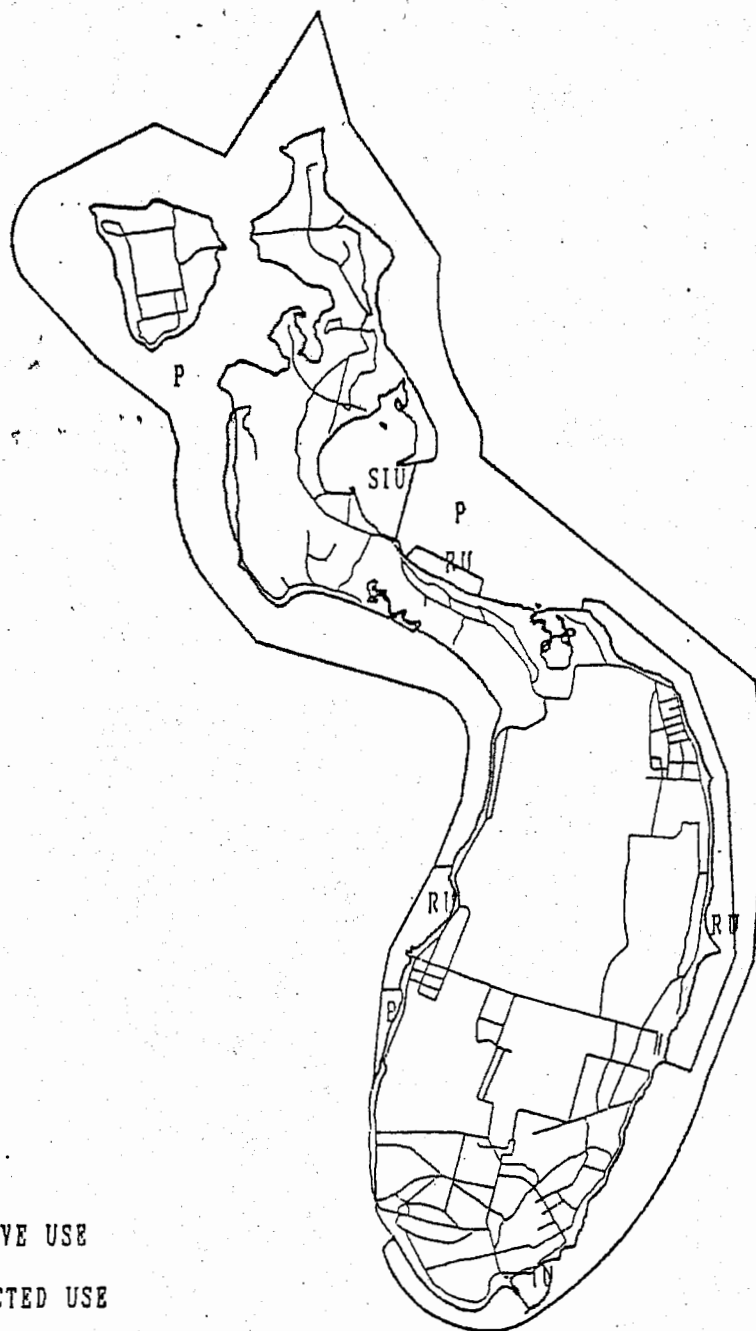






SLOPES - PRUDENCE ISLAND

SOURCE: USDA/SCS SOILS DATA FROM RIGIS.

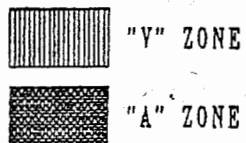


SCALE 1" = 1mile

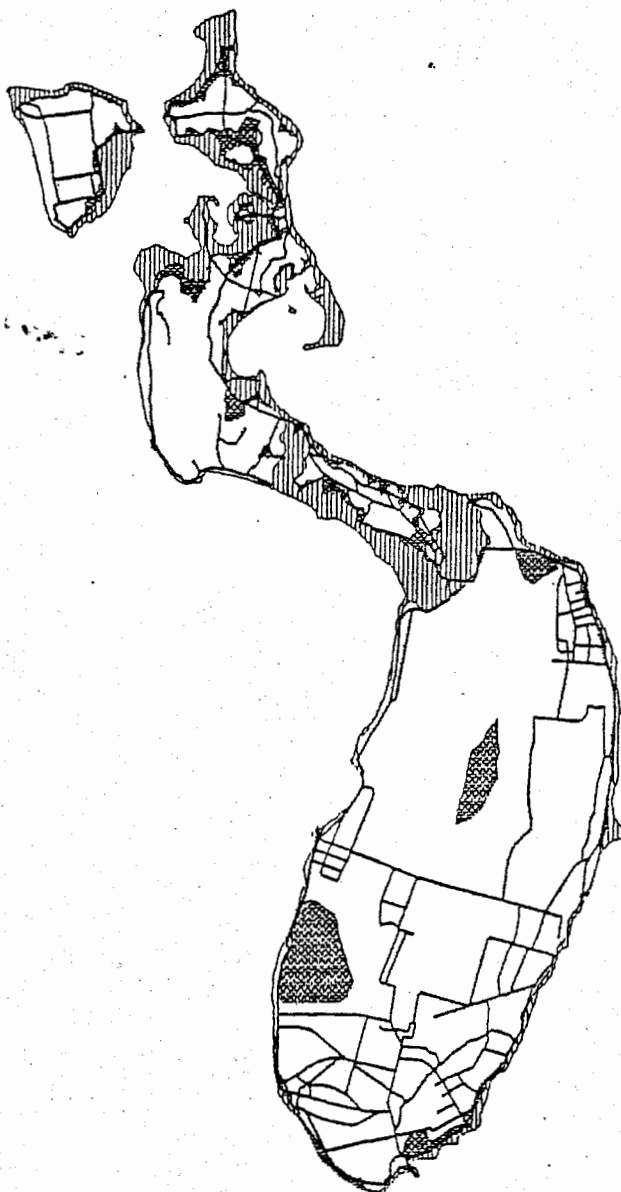
P PRISTINE
IU INTENSIVE USE
SIU SPECIAL AREA INTENSIVE USE
RU RESTRICTED USE
SRU SPECIAL AREA RESTRICTED USE

COASTAL WATERS ZONING - PRUDENCE ISLAND

SOURCE: PORTSMOUTH COASTAL WATERS ZONING MAP
(TITLED WORKING DOCUMENT 2 - 9/2/90)

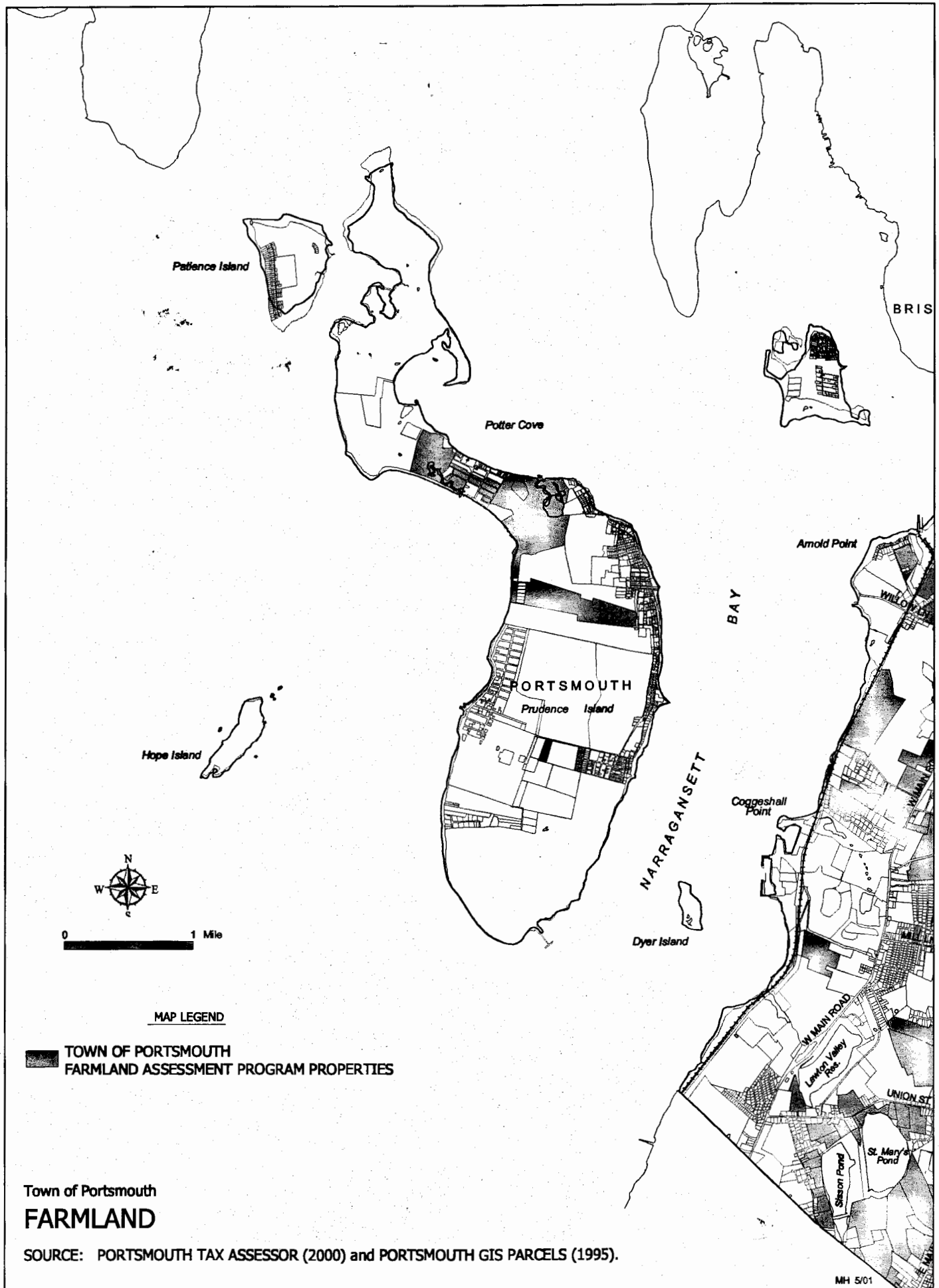


SCALE 1in = 1mile

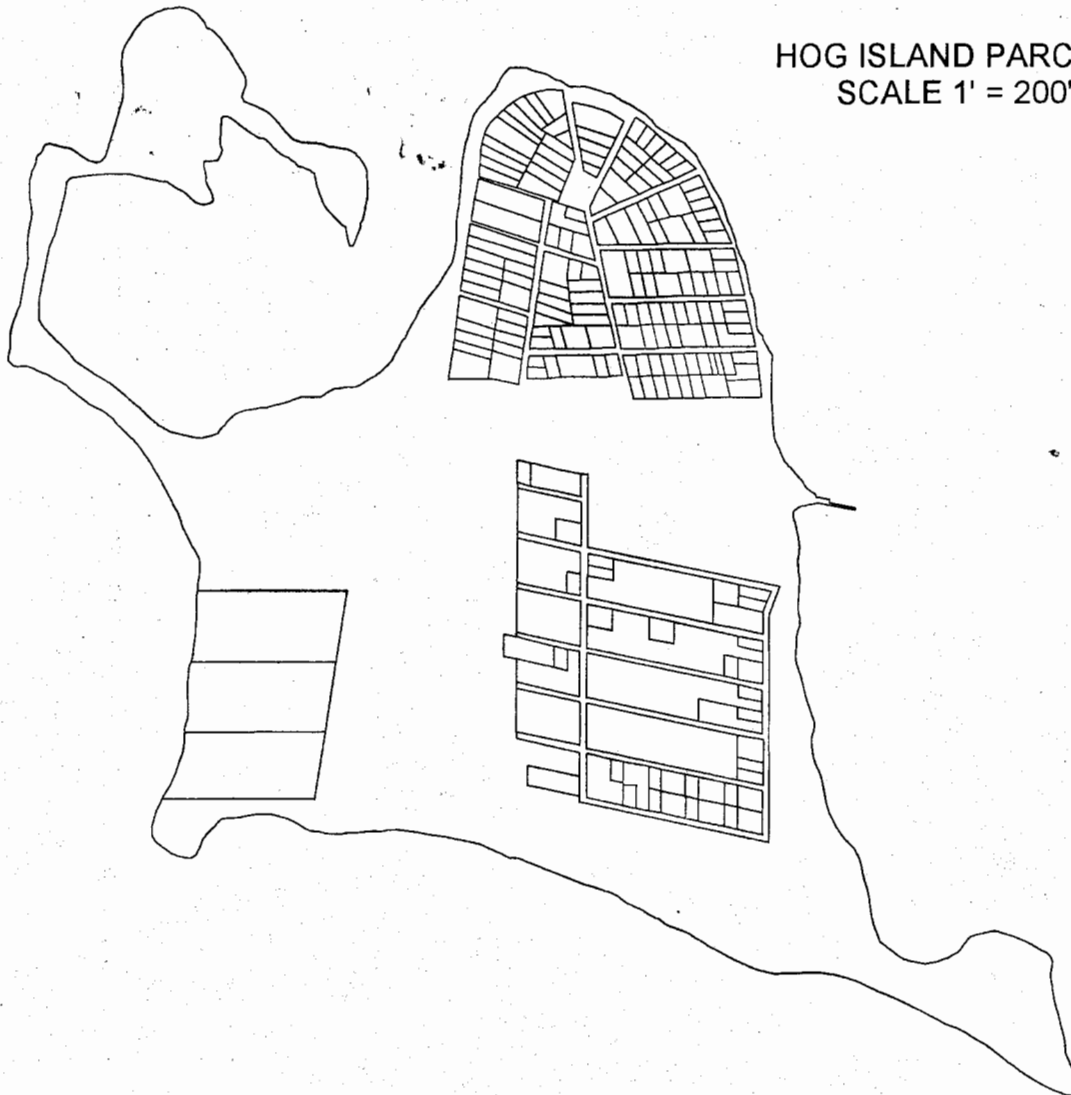


FLOOD HAZARD AREAS - PRUDENCE ISLAND

SOURCE: FEMA DATA FROM RIGIS



HOG ISLAND PARCELS
SCALE 1' = 200'



Attachment II

Population

Introduction

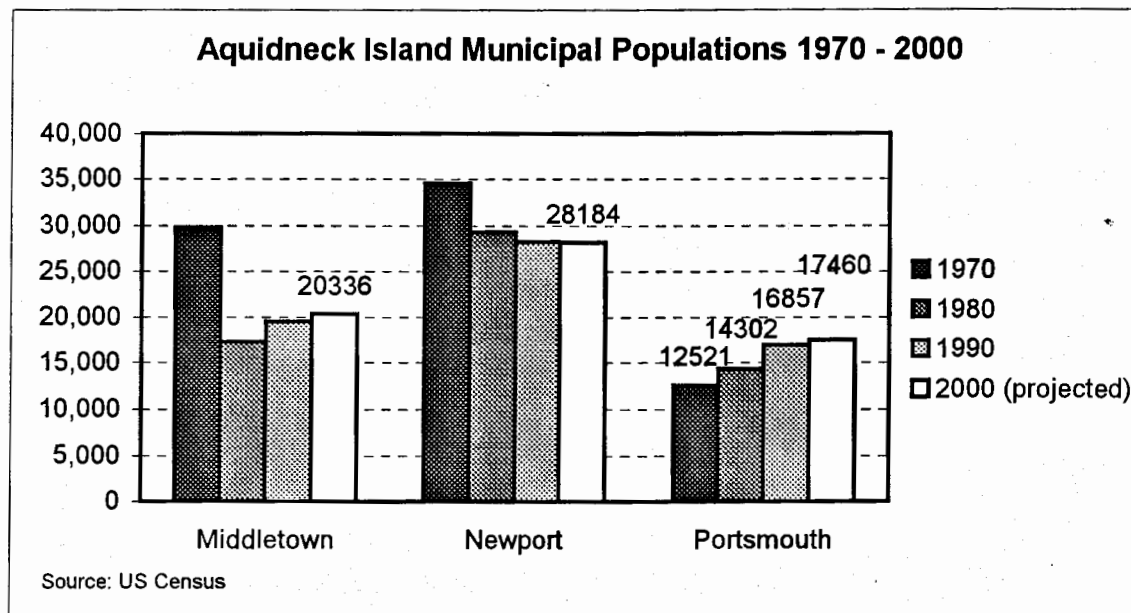
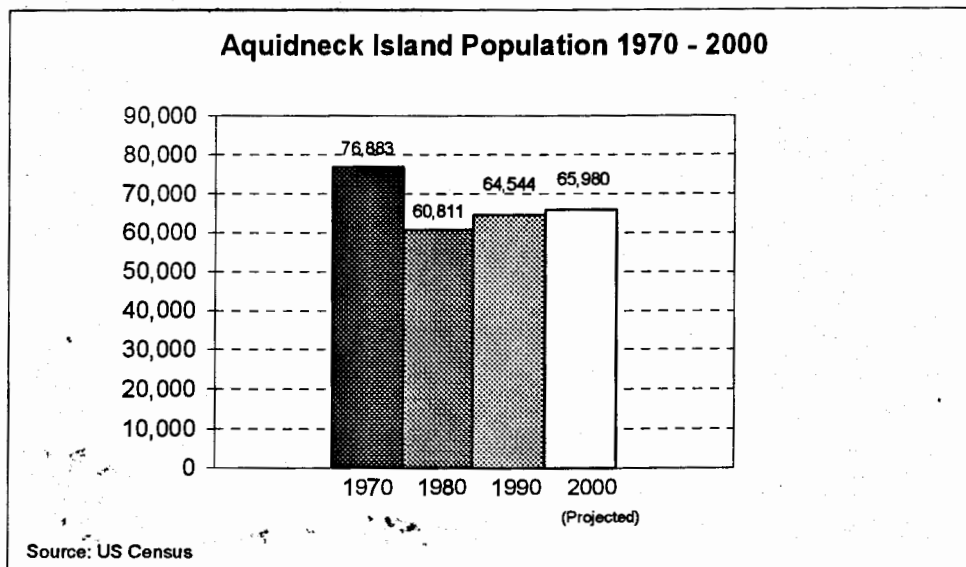
PLEASE NOTE THAT THIS ANALYSIS WAS DONE PRIOR TO THE RELEASE OF THE 2000 CENSUS DATA. ONCE ALL SIGNIFICANT DATA HAS BEEN RELEASED, THIS ATTACHMENT WILL BE UPDATED.

The number of people who live in a community, their age, education attainment, cultural background, skills and income are primary forces that shape the community. The characteristics of a community's population determine housing demands, market demands, business opportunities, health care needs, as well as the community's infrastructure and service needs. A community's population also determines the community's capabilities.

Aquidneck Island Trends

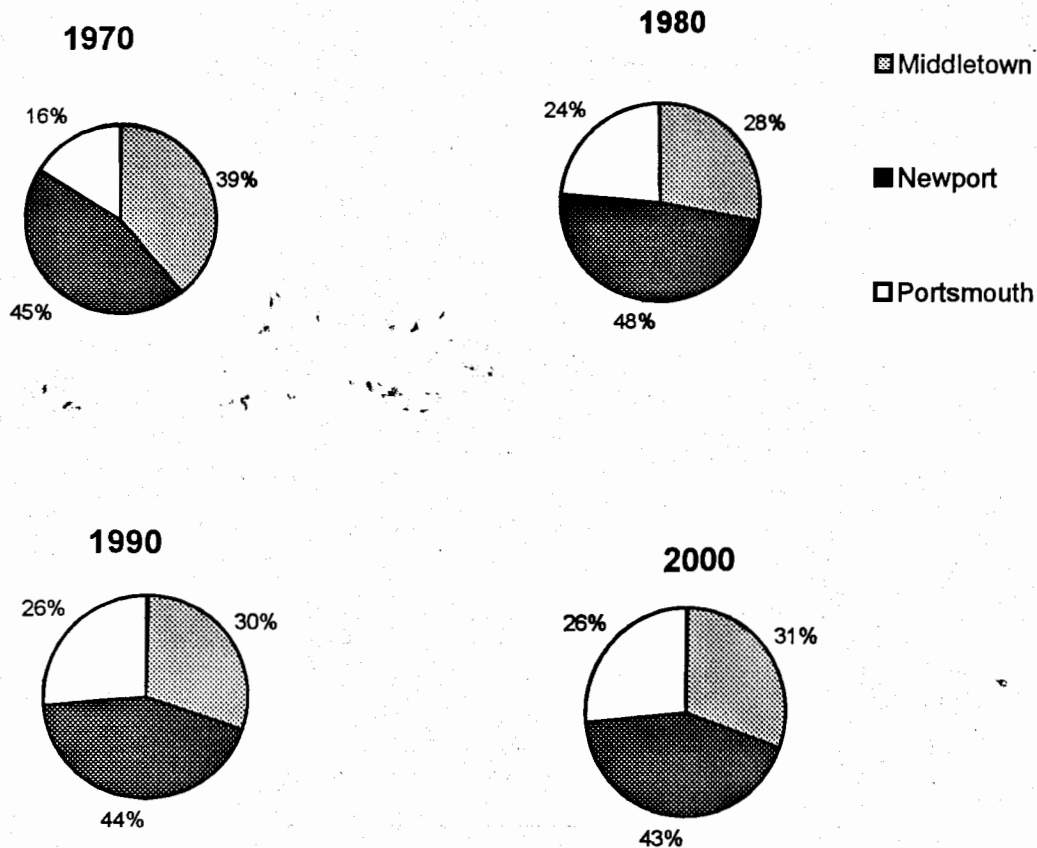
Portsmouth is geographically the largest, but on a population basis the smallest of the three Island municipalities. Nonetheless, being part of an island means that any analysis of a community must take place within the context of the Island overall. The Navy's presence also has a major influence. Therefore, selected Aquidneck Island data and trends are presented here.

- Aquidneck Island's resident population peaked in 1970 with over 76,800 people.
- In 1973, reorganization by the Navy reduced the number of employees at Newport Naval Base by over 14,000. This Navy led to a 21 % decline in the Island's population by 1980 - a loss of over 16,000 people. Aquidneck Island's population loss was 10 times larger than the statewide population loss during the decade.
- Aquidneck Island's population slowly increased during the 1980's by only 6.6 % for the decade, but it was significantly higher than the statewide growth rate of 5.9 %.
- In the early 1990's a recession was accompanied by job and population losses on Aquidneck Island. A slow economic rebound, beginning in 1993, was accompanied by renewed population growth. Overall, there was a 2.2% population increase during the decade - to an estimated population of 65,980 in the year 2000. Although the Island's population growth was slow during the 1990's it was significantly higher than the estimated statewide growth. The year 2000 resident population was still 14 % below the Island's peak resident population thirty years earlier in 1970.



- **Middletown** – Among the three Aquidneck Island municipalities, the 1973 Navy reorganization had the largest impact on Middletown, which lost over 12,500 people between 1970 and 1980 - 42.1 % of their population. The Town's population grew 12.8 % during the 1980s and 4.5 %, in the 1990's. In 2000, Middletown's population was still more than 30 % below its peak population in 1970.
- **Newport** lost 15.3 % of its population during the Navy reorganization in the early 1970's. After 1980, Newport's population continued to decline slowly with a 3.5 % loss during the 1980s and 1990's.
- **Portsmouth** is the only municipality on Aquidneck Island that did not lose population when the Navy reorganized. The Town actually grew by 14.2 % in the 1970's and continued to grow with an increase of 17.9 % in the 1980's and 3.6 % in the 1990's. School enrollment data and building permits suggest that the population may have increased more quickly toward the end of the 1990's, but the official 2000 Census of 17,149 indicates that it did not.

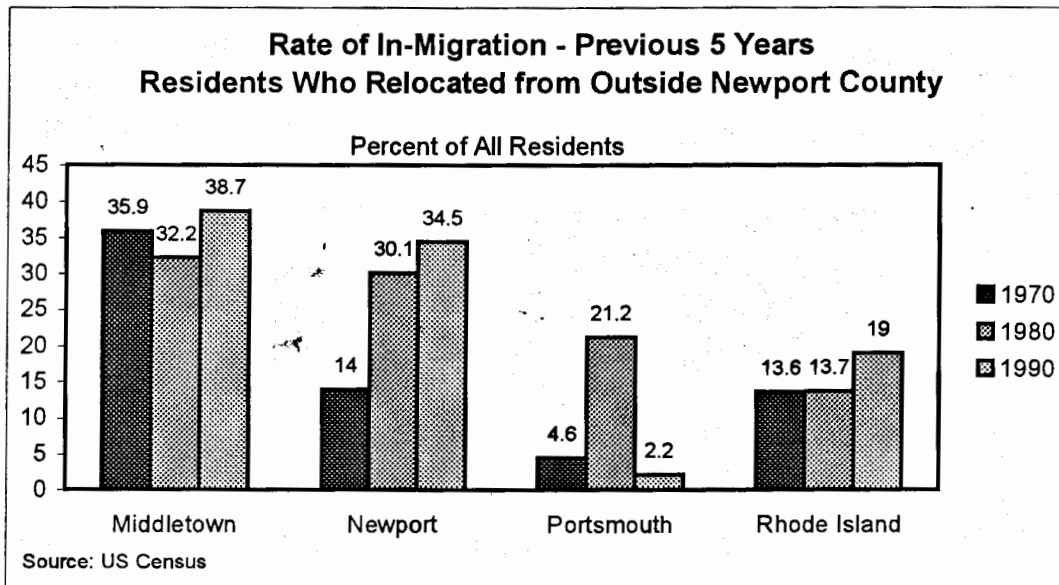
Aquidneck Island Population Distribution 1970 – 2000



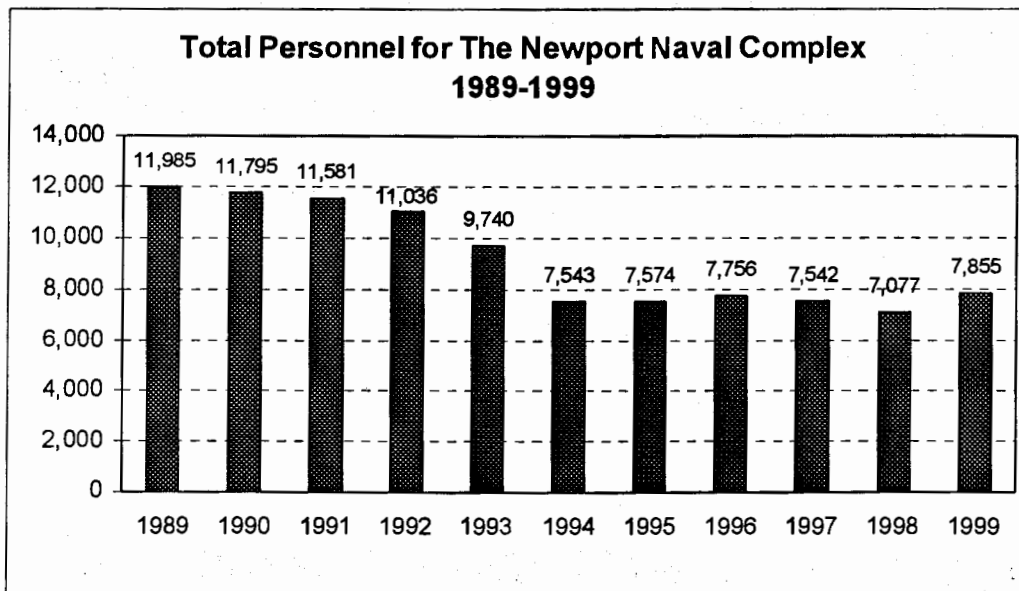
- **Distribution of residents on Aquidneck Island has shifted**

- Newport's relative portion of the Island's population increased between 1970 and 1980 from 45 to 48 % and then decreased after 1980. Newport is estimated to have 43 % of the Island's population in 2000.
- Middletown's relative portion of the Island's population decreased from 39 % in 1970 to 28 % in 1980 and then increased to an estimated 31 % in 2000.
- Portsmouth's portion of the Island's population has increased steadily. It has grown from 16 % in 1970 to 26 % in 1990 and 2000.

- **Aquidneck Island has a high population turnover** - The population on Aquidneck Island is very dynamic and the ratio of new/recent residents to long-term residents is increasing. Presently, there is an annual turnover of approximately 20 % of students in Island's public schools due to moving families. Part of this is due to a large turnover of Navy personnel. Note the comparatively smaller turnover in Portsmouth.



- **Newport Naval Complex personnel influences the Island's population**
 - The Naval Station influence on the Island's population includes a constantly changing population of students who attend various training programs ranging from one to nine months in length. Average daily student population ranges from 1,400 to over 2,000 people with an annual graduation rate of 16,000 to 17,000 students. Students who attend courses longer than two months are frequently accompanied by their family. Thus, within any year, thousands of students live for a short time on Aquidneck Island.
 - Total personnel at the Naval complex decreased 37 % between 1989 and 1994.

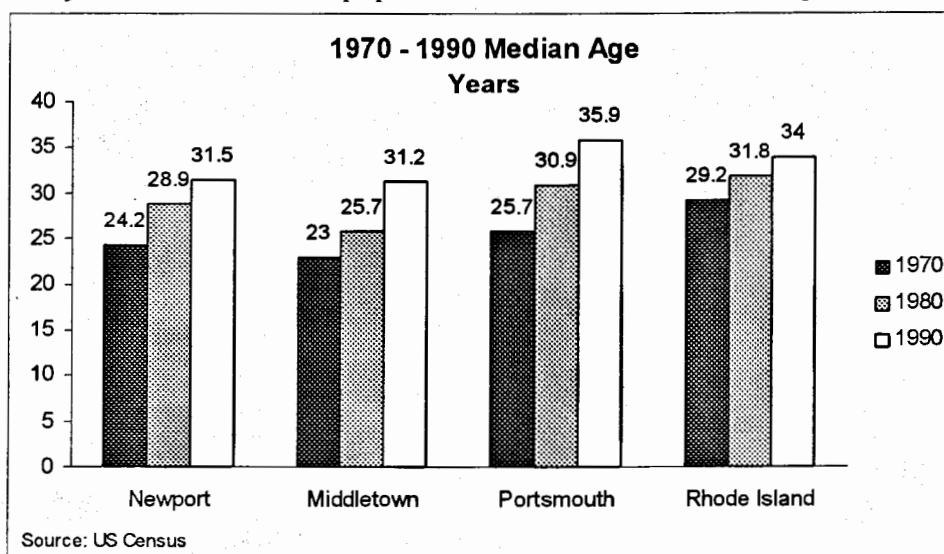


- **Aquidneck Island's population increases seasonally** - Aquidneck Island has a significant transient population consisting of tourists, vacationers, boaters and people on business, particularly during the summer. Accurate data on seasonal population changes does not exist. However, the number of hotel, time-share, bed and breakfasts, and other short term housing rentals on the Island has increased. Portsmouth shares little of this tourism base, but the traffic going through town destined for Newport makes a significant difference in traffic.

Number of Rooms Available - 1998					
Municipality	Total	Hotels	Motels	Timeshare	Inns/B&Bs
Newport	2430	1211	171	374	674
Middletown	846	526	267	0	53
Portsmouth	140	85	32	0	23

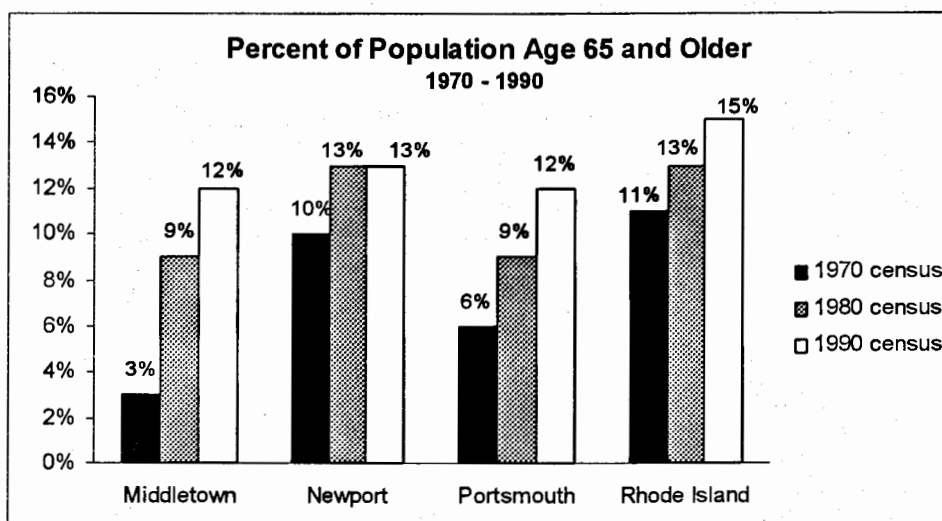
Characteristics

- **Median Age** – Aquidneck Island's population has generally been younger than the state population, but the difference is narrowing. The median age of Portsmouth's population has typically been older than the population in Middletown and Newport.



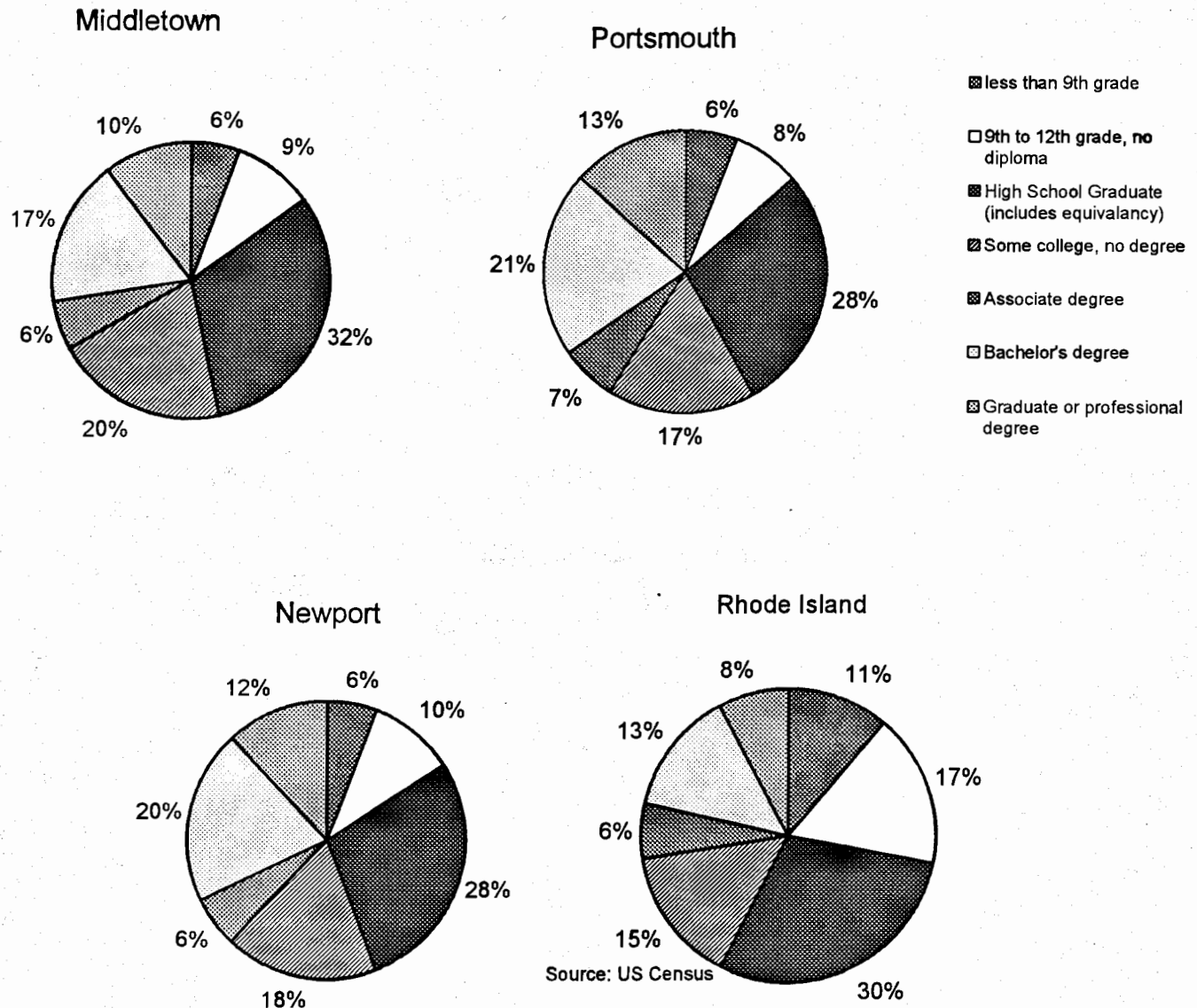
Age Distribution

- Senior citizens comprise a smaller portion of Aquidneck Island's population than the state population. Of Island municipalities, Newport has the highest ratio of senior citizens.



- Children comprise a higher portion of Portsmouth and Middletown's population than the state population. In Newport, the ratio of children in the population mirrored the state until 1990 when the relative number of children in the City dropped below the state ratio.
- The portion of the Island's population in the 25-44 age category is higher than statewide ratios.
- **Education Attainment** – Aquidneck Island residents are generally well educated in comparison to the total state population. In 1990, approximately 85 % of all adults living on the island had completed high school compared to 72 % statewide. In addition, college degrees (bachelor and advanced degrees) were held by 27 % of Middletown, 32 % of Newport, and 34 % of Portsmouth residents in comparison to 23 % of residents statewide.

Education Attainment – Aquidneck Island Municipalities - 1990



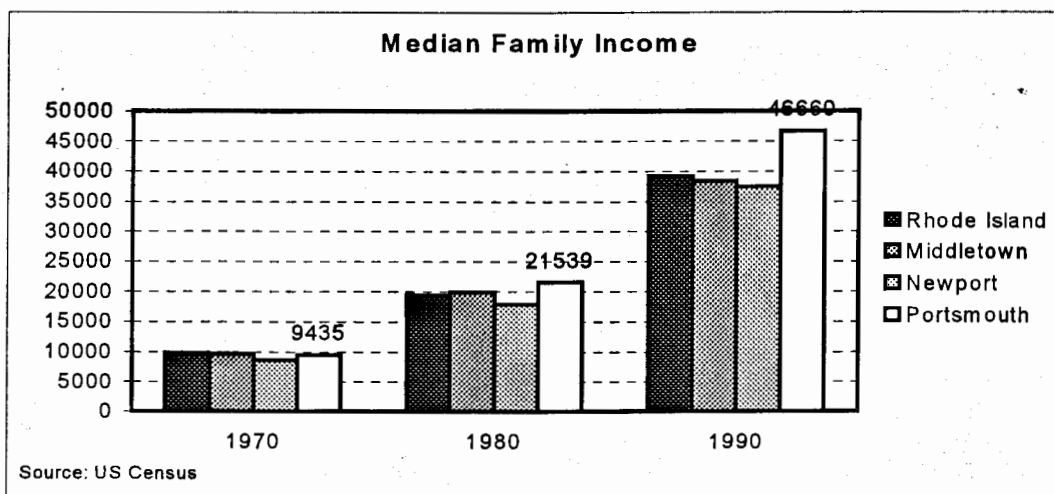
- **Wealth/Income** – Incomes on Aquidneck Island are increasing relative to statewide incomes on a per capita, median family income basis.

- In 1970, the per capita income of residents and the income median family income in all three Aquidneck Island municipalities were below statewide income levels.
- By 1980, the average income of residents in all three municipalities exceeded statewide averages.
- Portsmouth average and median income figures continue to be well above the State and the other island communities.
- Income figures are influenced by the Navy population, which has historically had relatively low salary levels, and by the large number of public housing residents.

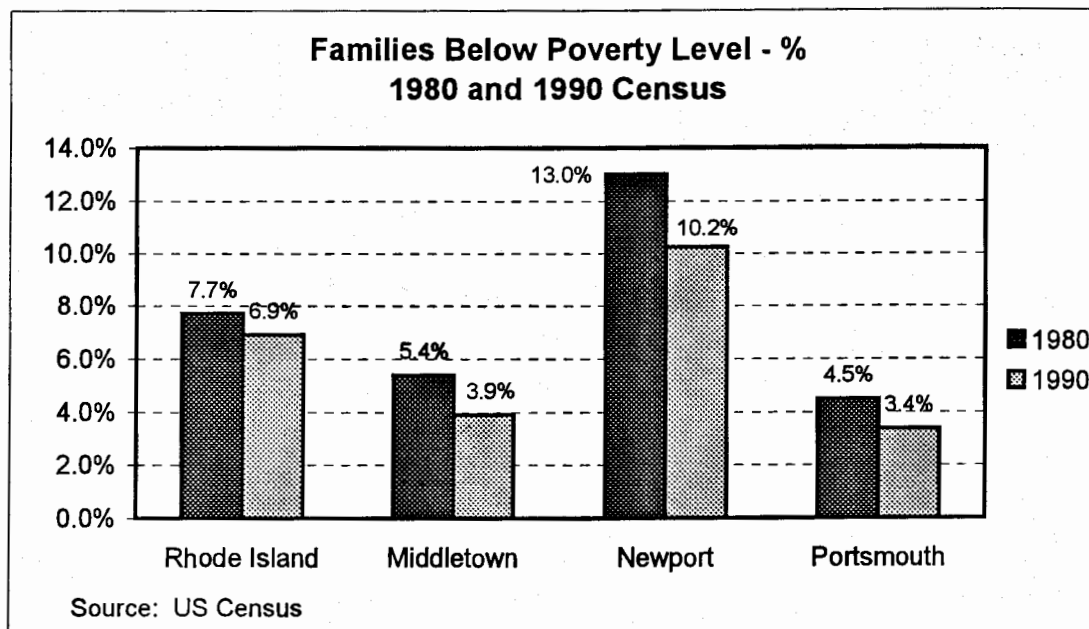
Government Income Subsidies Percent of Total Households				
Income	Middletown	Newport	Portsmouth	Rhode Island
Social Security	22.3 %	25.0 %	23.4 %	29.7 %
Public Assistance	4.3 %	9.1 %	2.1 %	7.84 %

Source: US Census 1990

- A higher percentage of Newport residents receive public assistance than the state average. This contrasts with a lower percentage in Middletown and Portsmouth. The public assistance distribution corresponds to the relatively high percentage of low-income housing units provided in Newport.

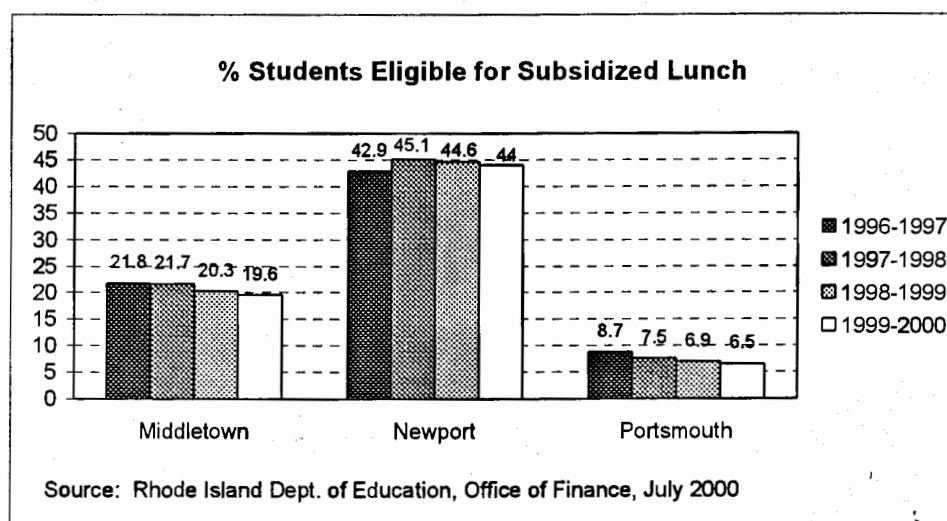


- **Poverty** – The number of families living below poverty level decreased in all three Aquidneck Island municipalities between 1980 and 1990. The percentage of families living in poverty on the Island declined at a faster rate than occurred statewide. In 1990, the percentage of population living below poverty level was below 4 % in both Middletown and Portsmouth and above 10 % in Newport.



- **Subsidized School Lunches** – While family income and poverty data is based on 10-year census information, school lunch programs are a current indicator of low income and poverty trends. Students with family incomes of 185 % of poverty level are eligible for reduced or free school lunches.
 - Newport and Middletown have a much higher percentage of school children that are eligible for free or reduced lunches (45 % of Newport students and 23 % of Middletown students) than the statewide average (11 % of students).
 - Portsmouth has fewer students eligible for the subsidized school lunch program than the state average.
 - The number of students eligible for subsidized school lunches dropped in all three Aquidneck Island municipalities between the 1996-97 school year and the 1999-2000 school year.

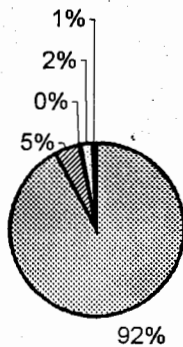
Students Eligibility for Subsidized Lunch Programs



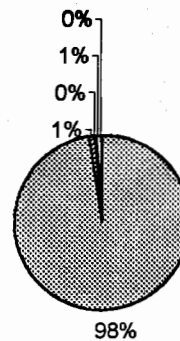
- **Diversity** – Rhode Island's population has a very low level of racial diversity in comparison to the rest of the United States. Aquidneck Island municipalities racial diversity is a bit higher than the state's.

Population Diversity – Aquidneck Island & Rhode Island

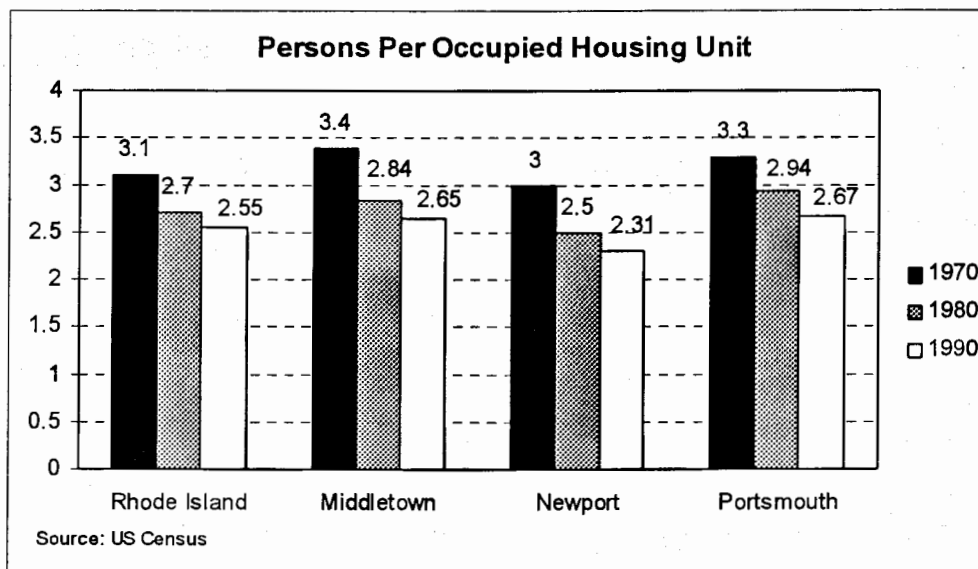
Middletown



Portsmouth

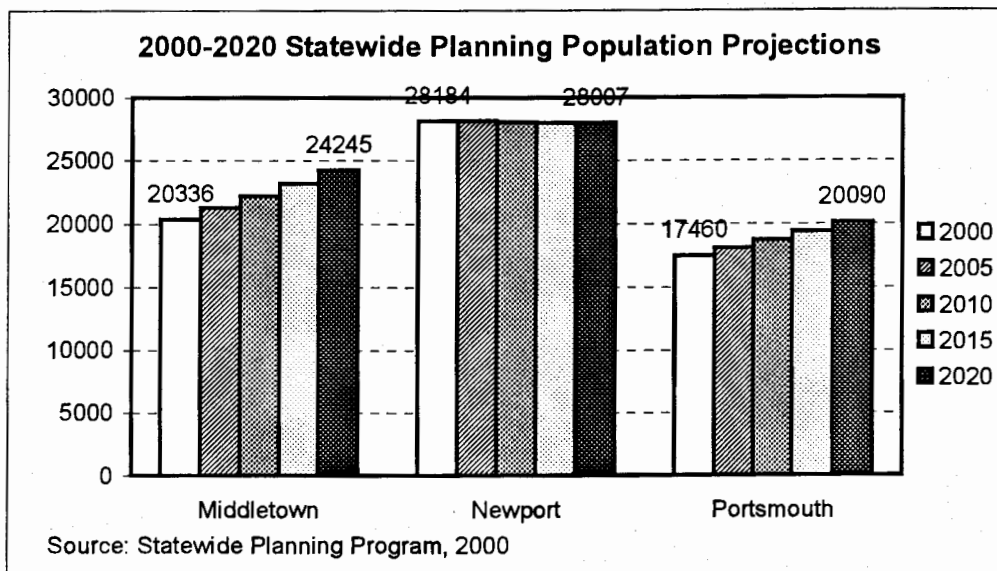


- **Household Size** – From 1970 to 1990, the average number of people per housing unit has decreased in all three Aquidneck Island municipalities: by 23 % in Newport, 22 % in Middletown and 19 % in Portsmouth. Shrinking household size on Aquidneck Island has paralleled similar state –18 % decline – and national trends. Recent projections anticipate that this trend of shrinking household sizes has continued to 2000. Thus, even with a stable population, municipalities must have more housing units to accommodate the same number of residents.



- **Population Projections**

- Statewide Planning Program projects population changes for Aquidneck Island municipalities based on US Census data and trends. Projections are for continued moderate growth in Middletown and Portsmouth over the next 10 years. Newport is projected to continue a very slow population decline.



- Projecting population trends for Aquidneck Island is difficult and highly speculative for several reasons:
 - > Navy staff and contract decisions have a dramatic affect on local populations.
 - > Local land use decisions to change zoning and residential capacity are not predictable.
- Looking forward it is anticipated that:
 - > Navy staff at Naval Station Newport will remain stable.
 - > Employment growth by the Island's Navy contractors and other businesses will continue
 - > Household size – average number of people in each house - will continue to decline in Middletown and Portsmouth. Household size may continue to decline in Newport or may stabilize near 1990 Census level of 2.31 people per house.
 - > Demand for new housing will continue and new housing will continue to be constructed at a rate similar to the 5 –year average from 1994 to 1998.
 - > **Newport** – the City is generally built-out and has limited opportunities for additional housing. Thus, population is constrained. Demand for housing, as indicated by sale prices and rental rates, exceeds capacity. Recent trends of decreasing population are due to decreasing average household size (people per dwelling) and conversion of housing from residential uses to bed and breakfast facilities and other housing for tourists, and to commercial uses.

Newport Population Projections	2000	2010	Ave. Yearly Change
Statewide Planning Program	28,184	28,069	-11 people/year

- > **Middletown & Portsmouth** – population will continue to grow at the rate that can be absorbed by new housing construction. The anticipated commuter rail extension to Fall River will increase demand for housing. Senior citizens moving from homes to housing centers/assisted living centers will open existing housing for new families.

Middletown Population Projections	2000	2010	Ave. Yearly Change
Statewide Planning Program	20,336	22,183	185 people/year

Portsmouth Population Projections	2000	2010	Ave. Yearly Change
Statewide Planning Program	17,460	18,710	125 people/year

Primary Forces Affecting Population

- Navy employment and base assignments including education programs
- Construction, renovation and use of Navy housing stock
- Employment trends of large employers, especially defense related firms.
- Hospitality industry growth and recruitment of employees – especially seasonal.
- Aquidneck Island's attractiveness for retirement.
- Aquidneck Island's attractiveness for seasonal residents.
- Transportation access to Boston, Providence and other metropolitan areas and employment centers. Highway and bridge improvements, commuter rail extensions, and access to a good airport make Aquidneck Island attractive for residents and businesses.
- Aquidneck Island is an attractive place to live and work, attracting new residents who have may telecommute. Many high-tech start up businesses and other organizations are free to locate anywhere and are attracted to the Island where the quality of life attracts corporate leaders and helps these businesses compete for the brightest and best employees.
- Growth in telecommuting – provides people more flexibility in location decisions because they aren't constrained by travel times and distances for a daily commute to their jobs.
- Quality of education, safety, and other factors that contribute to the quality of life and attract residents.
- Baby boom generation is aging.
- Aquidneck Island housing stock:
 - There are a large number of public housing units.
 - The availability of affordable rental units limits the number of hospitality employees who can find an affordable place to live.
 - Demand for and conversion of housing stock to provide hotel, motel, time-share, and bed & breakfast facilities. Occupancy rates of these facilities affects the Island's seasonal population.
 - Limited space for construction of new housing. This is especially true now in Newport and will be in the near future for Middletown and Portsmouth.
- Decreasing household size – the same number of houses accommodates fewer people over time.
- Municipal capacities for sewer and water infrastructure enables or restricts development of higher density housing and resulting population.
- Limited availability of land itself on the Island limits the development potential for new housing units.