

AQUINNAH

COMMUNITY DEVELOPMENT PLAN



Prepared in conjunction with the Aquinnah Community Development Plan Steering Committee

Camille Rose, Chair, Aquinnah Planning Board
Sarah Thulin, Aquinnah Conservation Commission

Prepared by the Martha's Vineyard Commission

Bill Venio, Coordinator
Christine Seidel, GIS
Christine Flynn, Affordable Housing and Economic Development
Bill Wilcox, Water Resources
Jo-Ann Taylor, Coastal Planner
Paul Foley, Scenic Values
Mark London, Executive Director
Jackie Campbell and Tanya Jilek, publishing assistance

With the cooperation of:

Aquinnah Resident Homesite Committee
Aquinnah Board of Selectmen
Philippe Jordi, Executive Director, Dukes County Regional Housing Authority
Vineyard Conservation Society
Sheriff's Meadow Foundation
The Nature Conservancy

The Community Development Planning Program was funded by:

The Department of Housing and Community Development
The Executive Office of Environmental Affairs
The Department of Economic Development
The Massachusetts Highway Department
The Martha's Vineyard Commission

Parts of this document are quoted from the Town's Open Space and Recreation Plan with updates from the MVC staff and/or the Community Development Plan Committee.

Note that statistics come from various sources and sometimes give slightly different figures for similar or even the same data (e.g. areas of towns, population, income).

Aquinnah Community Development Plan

TABLE OF CONTENTS

1. Introduction

- 1.1 Community Profile
- 1.2 Constraints on Development
- 1.3 Planning Context
- 1.4 Community Development Planning Process
- 1.5 Methodology for Determining Suitability
- 1.6 Maps of Existing Conditions

2. Vision

3. Open Space and Natural Resources

- 3.1 Profile
- 3.2 Suitability Analysis
- 3.3 Orientations

4 Housing

- 4.1 Profile
- 4.2 Suitability Analysis
- 4.3 Orientations

5 Economic Development

- 5.1 Profile
- 5.2 Suitability Analysis
- 5.3 Orientations

6 Synthesis - Putting it All Together

1. INTRODUCTION

1.1 COMMUNITY PROFILE

1.1.1 Martha's Vineyard

Aquinnah is one of six towns forming the Island of Martha's Vineyard, a 100-square-mile island located about three miles off the coast of Cape Cod. The Island is a terminal moraine, marking the southern progression of the last Ice Age. Home to the Wampanoag Native Americans, it was settled by Europeans in the mid 17th century.

Today, year-round residents, seasonal residents – many of whom own second homes – and hundreds of thousands of short-term visitors live on or come to the Island, attracted by the unique natural, historical, and cultural values that define the beauty and character of Martha's Vineyard.

As a coastal island, Martha's Vineyard's climate is influenced by warm Gulf Stream waters that moderate the Island's seasons. Summers are a bit cooler than the mainland, providing refuge from nearby hot and humid metropolitan areas such as Boston and New York. Winters are milder and autumn generally lasts longer than on the mainland, providing a more favorable climate for vacationers year-round.

Each of the Island's towns reflects its origins: Edgartown as the historical home of master seamen during the whaling era and still the seat of County government; Tisbury as the Island's year round gateway and market town, Oak Bluffs as the Island's first summer resort and continued concentration of summer activity, West Tisbury and Chilmark as agricultural villages, Aquinnah (formerly called Gay Head) as the Island's remaining Wampanoag Indian settlement and the site of perhaps the Island's most recognizable feature and only National Natural Landmark – Gay Head Cliffs. Three-quarters of the Island's population is distributed equally among the three "Down-Island" towns: Tisbury, Oak Bluffs and Edgartown, each with a busy commercial town center. Vineyard Haven in Tisbury serves as the Island's main port, seconded by Oak Bluffs in the summertime. The three "Up-Island" towns, West Tisbury, Chilmark and Aquinnah are more rural in character.

From 1900 to 1960, the year-round population of the Vineyard increased a bit more than 30%. The population doubled in the last quarter of the 20th Century, increasing 30% each decade. By comparison, in the 1990s, the year-round population increased only 6% in all of Massachusetts.

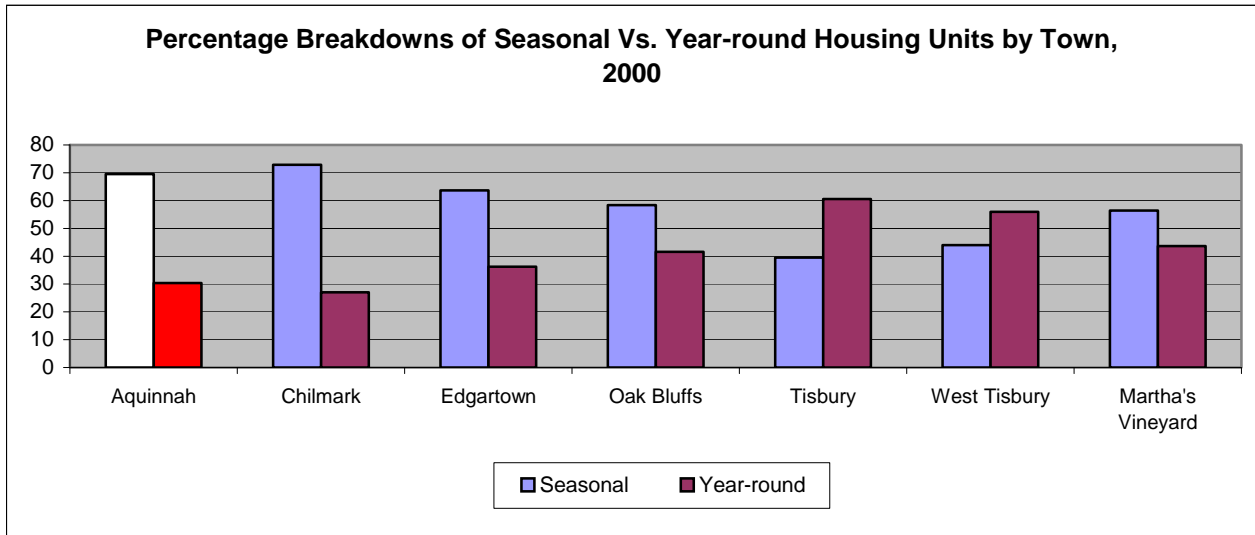
As a seasonal vacation area, the number of people on the Island changes dramatically from one season to the next. The Martha's Vineyard Commission estimates that the nearly 15,000 year-round Vineyard population in 2000 swelled to about 75,000 during the peak summer months of July and August. This summer population is made up of several distinct groups, each with its own influences and needs.

Estimated Average Summer Population - 2000

	Aquinnah	Chilmark	Edgartown	Oak Bluffs	Tisbury	West Tisbury	Total
Year 'round	344	843	3,779	3,713	3,755	2,467	14,901
Guests of Year 'round	141	382	1,582	1,590	1,646	1,034	6,375
Seasonal / Vacationers	1,536	4,894	13,251	10,637	5,123	3,888	39,329
Transients							
lodging rooms	42	158	1,944	1,192	860	190	4,386
on boats			408	504	600		1,512
camping					432		432
Day Trippers			500	5,000	2,500		8,000
Cruise Passengers				1,000			1,000
Total	2,063	6,277	21,464	23,636	14,916	7,579	75,035

- Year-round population as reported by 2000 US Census. Some people have estimated that there are as many as 1,000 additional year-round residents and a total of 3,000 additional summer residents who are undocumented aliens. In the absence of clear data, they are not included.
- Guests of Year-round residents estimated as an average of 1 person for each of the 6,375 year-round households
- Seasonal Residents / Vacationers include second-home owners and renters who visit for a week or more. They are estimated as an average of 4.77 people for each of the 8,246 seasonal housing units, based on the results of a survey carried out by the Oak Bluffs Planning Board. It is estimated that about two-thirds of these are seasonal residents.
- Transients stay on-island for less than a week. Estimations assume two people per room and 100% occupancy for July and August in the Island's 2,200 lodging rooms, hotels, inns and B&Bs. The Edgartown, Oak Bluffs and Tisbury Harbor Masters estimated 3 or 4 people per boat and occupancy rates between 80% and 100% for the 468 boats that can be accommodated on slips and moorings in these three harbors. Camping is based on an average of 3 people per tent and 80% summer occupancy for the Island's 180 campsites in the MV Family Campground.
- Day Trippers arrive and leave the Vineyard on the same day. Estimates assume two-thirds of the peak passenger ferry ridership of 12,000 on peak summer days are day-trippers and the others stay for a longer period. Allocation among towns is based upon port of entry and is not the total visiting each town (estimated at 3500 for Aquinnah)
- Cruise Passengers are day trippers. Assumes one cruise ship with a capacity of 1,000 people in harbor on a peak day; in 2002, most cruise ships came in the spring and fall. Allocation among towns is based upon port of entry.

Source: MVC, 2003



Source: U.S. Census

It is easy to understand why the cornerstone of the Island's economy is providing services to seasonal residents and visitors. Island-wide, there are more seasonal homes – houses not occupied in the winter – than year-round homes. Only Tisbury and West Tisbury have more year-round homes than seasonal ones. The tourism and service industry is highly image-conscious, seasonal and labor intensive. Nevertheless, a large majority of the businesses on the Island employ four or fewer workers each. As the year-round population continues to expand, more businesses are needed and supported throughout the year.

Martha's Vineyard is marked by relative seclusion from the mainland, by its highly variable seasonal populations, by its lifestyles and landscapes dominated by the ocean and salt ponds, and by economic constraints unique to island communities.

1.1.2 Aquinnah

Aquinnah, which was incorporated as a the town of Gay Head in 1870, is located at the westernmost end of Martha's Vineyard Island and comprises approximately 3,400 acres. The predominantly residential community has 344 year-round residents and is known for its Native American heritage, the Gay Head Cliffs, and its beautiful beaches. The town changed its name to Aquinnah in 1998.

Aquinnah is essentially "an island within an island;" it is separated from Chilmark, its only neighboring town, by a boundary that runs largely through water bodies (Menemsha Bight, Basin, and Pond and Squibnocket Pond). The two towns share a common land boundary for a distance of just 3,000 feet: 1,791 feet on Long Beach, and 1,209 feet between the ponds. This small stretch between the ponds is the location of the single road providing access from Aquinnah to all other points on Martha's Vineyard. In addition, a small triangular-shaped piece of land,

approximately 8,620 square feet in size, lying on the "Chilmark side" of the Menemsha Basin Boundary is legally incorporated within the town of Aquinnah.

Aquinnah's landscape is defined by soft rolling hills, low heathlands, magnificent ocean vistas, and the famous Gay Head Cliffs, a recognized National Landmark. Regionally, Aquinnah shares certain characteristics with the other towns on Martha's Vineyard: overall seclusion from the mainland, highly variable seasonal populations, lifestyles and landscapes dominated by the ocean, and unique economic constraints.

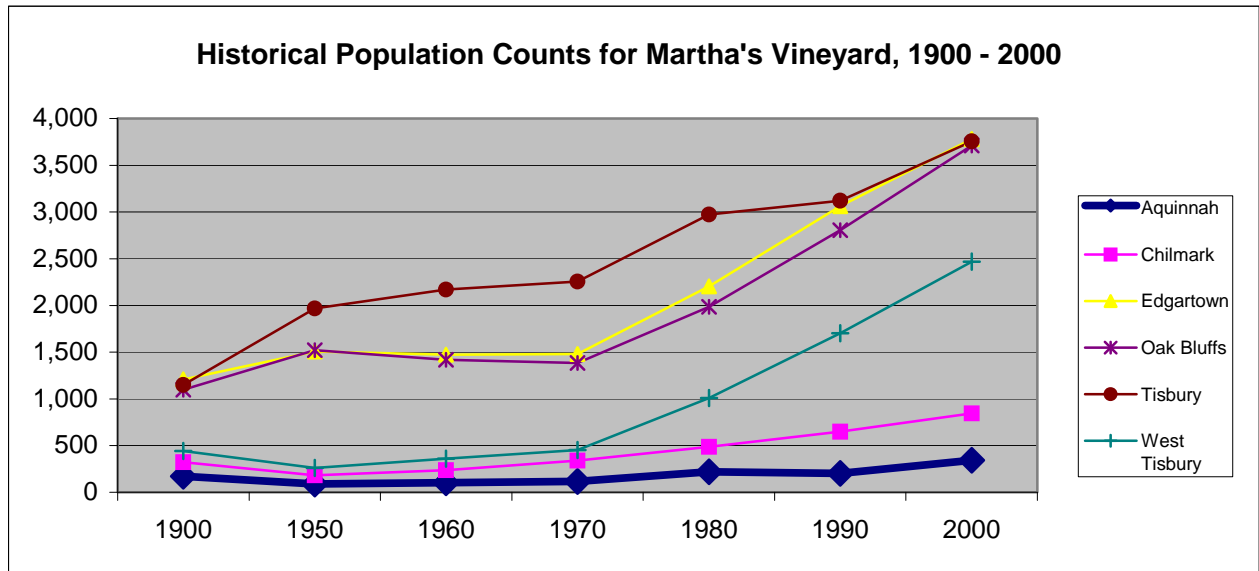
Within this greater Island context, Aquinnah retains a unique character as well. The furthest point from any of the ferries or points of entry, Aquinnah retains the most purely rural qualities to be found on Martha's Vineyard. It's 2000 population of 344 represents just over two (2%) percent of the total population of Martha's Vineyard. This small community, however, is also the most ethnically diverse on the island, as 43% of its residents are ethnic minorities. The vast majority of these are descendants of the Island's original settlers, the Wampanoags. The federal recognition in 1987 – and subsequent development – of the "Wampanoag Tribe of Gay Head (Aquinnah)" is the single most significant and defining milestone in recent Aquinnah history, and figures largely in any discussion of the town's future. Archaeological sites and Indian cemeteries are important elements in the town's past and future.

1.1.3 Population and Income

Since 1970, the year-round population growth of Aquinnah as well as Martha's Vineyard has been significant. Between 1970 and 1980, the year-round population in Aquinnah went from 118 to 220, which is a population growth of 46%. In 1990 there were 201 year-round residents so between 1980 and 1990 there was a population decrease of 9% and in the year 2000, there were 344, which resulted in a population growth of 42% between 1990 and 2000. In 2000, the town of Aquinnah was the fastest growing town in the Commonwealth.

According to the US Census 2000, the median age for Aquinnah was 37.1. The median age for the state was 36.5 while for Dukes County the median age was 40.7. Forty percent of the population is between the age of 35 and 59. Thirteen percent of Aquinnah's population is 60 or older and nineteen percent of the population is between the ages of 20 and 34. Fifteen percent is between the ages of 5 and 14 and six percent of the population is younger than 5 years old.

The median household income (non-related individuals living in the same household) in Aquinnah was \$45,208 and the median family income (related individuals living in the same household) was \$45,458 ranking Aquinnah in fifth place compared to the other Island towns. The area median income as reported by HUD for a family of four in FY 2000 in Dukes County was \$53,200. Approximately twenty-nine percent of households in Aquinnah pay over 35% of their gross income for housing, while fourteen percent of renters pay more than 35% of gross income for rent. Seven percent of Aquinnah's population were reported to be living below the federal poverty standard in the 2000 US Census.



Source: U.S. Census

Median Incomes For Dukes County, 2000		
	Median Household	Median Family
Aquinnah	\$45,208	\$45,458
Chilmark	\$41,917	\$63,750
Edgartown	\$50,407	\$55,153
Gosnold	\$22,344	\$27,500
Oak Bluffs	\$42,044	\$53,841
Tisbury	\$37,041	\$53,051
West Tisbury	\$54,077	\$59,514
Dukes County	\$45,559	\$55,018

1.1.4 Zoning and Land Use

The Aquinnah Zoning Bylaws are an unusually flexible set of land use regulations that allow a wide diversity of uses within two primary zones: a rural residential zone and a small, more restrictive marine commercial district. Basic density and dimensional requirements (setbacks, lot sizes, etc.) are described in the first five pages of the 25-page Zoning Bylaw. The other twenty pages describe the seven special overlay zones that address the environmental and visual sensitivity of specific areas and the basic administration of the zoning bylaw. The minimum lot size in the rural residential district is 2 acres.

In the Aquinnah Zoning Bylaw, any uses not specifically prohibited are allowed either by right or by special permit from the Planning Board. This differs from many communities where any uses not specifically permitted are prohibited. In Aquinnah, special permits are granted conditionally by a set of performance requirements that are designed to allow the Bylaw's broadly permissive standards to work. In theory, nearly any land use is possible in Aquinnah so long as traffic increases, erosion, vehicle storage, noise, fumes, light, water quality, wildlife conservation and visual intrusions are within acceptable limits. The Planning Board and the Planning Board Plan Development Review Committee have broad latitude to consider development plans and decide according to their best judgment whether these standards will be upheld. As with most types of permitting, the burden of proof is on the prospective developer and the reviewing board is under no pressure to approve a development permit unless board members are fully satisfied that the town's resources will be protected according to the Bylaw's standards.

In 1999, The Town of Aquinnah District of Critical Planning Concern was designated to protect the scenic character of the District from undue visual intrusion and to maintain and promote its rural character and culture. This town-wide DCPC uses the special powers of the Martha's Vineyard Commission to allow the town to adopt regulations that are specially tailored to Aquinnah's distinct features. Regulations adopted under the DCPC include requirement for site plan review of most construction as well as controls of tree-cutting and stone walls.

Aquinnah Land Cover/Use (Acres)	1971	1986	1999
Agriculture	0	0	0
Open Undeveloped Land	1,188	1,176	1,137
Natural Land/Undisturbed Vegetation	1,764	1,719	1,562
Commercial	2	2	2
Industrial/Transportation/Mining	6	6	6
Urban Open/Institutional/Recreation	102	112	127
High Density Residential	0	0	0
Medium Density Residential	0	0	25
Low Density Residential	359	405	583

Using the interpretation of aerial photography, the University of Massachusetts has tracked land cover or land use data (MacConnell Land Use). The data show that low-density residential acreage in Aquinnah was nearly doubled between 1971 and 1999, with concomitant decline in open land. Large areas of land remain undeveloped and with undisturbed vegetative cover. Overall, the data show developed land to have been increased by 12% Island-wide during the twenty-eight year period shown. During that time, developed land in Aquinnah was increased by 7.4%, with most of that development having occurred between 1985 and 1999.

Development Island-wide 1971-1999

Town	Change from Undeveloped to Developed Land (acres)			Change as Percent of Total Area		
	1971 - 1985	1985 - 1999	1971 - 1999	1971-1985	1985-1999	1971-1999
Aquinnah	56	218	274	1.5%	5.9%	7.4%
Chilmark	371	502	873	2.8%	3.8%	6.7%
Edgartown	1,133	979	2,111	6.2%	5.3%	11.5%
Oak Bluffs	525	555	1,080	11.0%	11.7%	22.7%
Tisbury	465	314	780	11.1%	7.5%	18.5%
West Tisbury	820	1,431	2,251	4.9%	8.5%	13.4%
Vineyard	3,371	3,998	7,369	5.5%	6.6%	12.1%

The Massachusetts' Executive Office of Environmental Affairs published its Buildout and Land Use Study in 2001. The total land acreage of Aquinnah is 3,690 acres. From the state's buildout analysis, just over 551 acres, or 17% of land in Aquinnah is permanently protected as open space and not available for development. The study also reported that 53% of Aquinnah is already developed and the remaining 32% of the town – 1,177 acres – is potentially available for development or conservation in the future.

2000 Estimated Protected, Developed and "Available" Land (Buildout Study)

Town	AQ	CH	ED	OB	TI	WT	Island
Total (acres)	3,690	13,553	18,184	4,680	4,142	16,878	61,127
Protected Open Space* (%)	15%	29%	39%	30%	20%	42%	34%
Developed/Built** (%)	53%	36%	35%	48%	51%	30%	37%
"Available" *** (%)	32%	35%	26%	22%	29%	27%	29%
"Available" (acres)	1,177	4,792	4,664	1,014	1,214	4,609	17,470

*Protected Open Space includes municipally owned land not necessarily used for open space.

**Developed/Built includes lands that are prevented from being developed, such as wetland buffers.

***Available is defined as land that is neither Protected Open Space nor Developed/Built.

Source: EOEI Buildout Study, 2002

Within the context of the preparation of this Community Development Plan, the Martha's Vineyard Commission revised and updated the analysis of protected, developed and available land. The following table gives the resulting figures.

- 'Protected' areas are lands that, according to the Island's conservation groups, are either under fee ownership or indicated as having a CR or APR. The wetlands displayed are only those that are not currently 'protected'.
- 'Developed' areas were determined by MAPC during the Buildout Study in 2000 and only those 'developed' areas that do not coincide with 'protected' or 'wetland' areas are displayed.
- 'Available' land is any remaining land.

2003 Estimated Protected, Developed and Available Land (MVC)							
Town	AQ	<i>CH</i>	<i>ED</i>	<i>OB</i>	<i>TI</i>	<i>WT</i>	Island
Total (acres)	3,510	12,442	17,762	4,735	4,300	16,195	58,963
Protected Open Space (%)	22%	20%	40%	30%	20%	40%	32%
Developed/Built (%)	33%	40%	32%	40%	47%	35%	36%
Wetland (%)	13%	6%	7%	3%	5%	2%	5%
"Available" (%)	31%	33%	22%	33%	29%	22%	26%
"Available" (acres)	1,094	4,079	3,827	1,557	1,245	3,632	15,435

Source: Martha's Vineyard Commission and Conservation Partnership, 2004

1.2 CONSTRAINTS ON DEVELOPMENT

1.2.1 Availability of Land

Many factors contribute to determine the supply of land available to be developed and the demand for land. The combination of these two produces a market price for land. The rising cost of land has been primarily due to the tourist and seasonal nature of the Vineyard. Second-home buyers are able to outbid many year-round residents causing a sharp increase in real estate values. The potential supply of home lots is also constrained by the minimum 2-acre lot size requirement. Successful land conservation during the 1980's and 1990's – while helping to preserve natural and cultural community character and values – has also reduced the supply of land that might be developed.

1.2.2 Drinking Water and Wastewater

Currently the Aquinnah does not have a Town water system or a sewer system. Development within the town has consistently been at a low density and the probability of the Town installing a water or sewer system is highly unlikely, due to the high cost of installing these systems and the lack of a development density that requires these services.

Unlike most of Martha's Vineyard, Aquinnah does not have a high quality or ample supply of groundwater due to the complex marginal geology and the absence of an outwash plain. The aquifers generally range from very poor to variable. In those areas where groundwater is found, there is considerable uncertainty as to its quantity and quality. The depth to water varies from 10 to 300 feet and is often high in dissolved minerals and fine sediments. Some areas located along the coast are characterized by limited amounts of fresh water and a high vulnerability to salt water intrusion.

Potential Development in Watersheds of Nitrogen-Sensitive Great Ponds

Pond	Percentage of Entire Watershed "Available" for Development	Percentage of Watershed's "Available" Land Within Town	Percentage of Town's "Available" Land Within Watershed	Proportion of Town's Potential Additional Lots Within Watershed	
				Number	%
Squibnocket Pond	32.7	84.6	30.5	45	17.0

Source: 2002 EOE A Buildout Study; MVC

Future development of land within Aquinnah may be limited to some extent by the lack of access to town sewers. All new homes, and all existing homes when they are sold to a new owner, have to adhere to the State's Title 5 regulations, which for individual septic systems are enforced by the Town Board of Health. If developable lots are located within wetlands or nitrogen sensitive areas, there are further limits to the development's size and density. In addition to stricter regulations that could require advanced de-nitrification systems, the installation cost and maintenance of these systems can be a financial constraint to the development of affordable housing. Should the Town consider allowing increased density of development – for the purposes of affordable housing, for example – nitrogen loading will be a development constraint.

1.3 PLANNING CONTEXT

1.3.1 The Island Plan - Martha's Vineyard Regional Plan

In 1991, the MVC published the Regional Island Plan, the result of several years of concerted community effort. It sets out a series of policies for growth management. Following the publication of the Island Plan, the MVC published a series of action plans outlining specific policies and a series of actions for implementing them. These plans are:

- Open Space Action Plan – 1991
- Economic Base Study – 1994
- Martha's Vineyard Housing Report – 1994
- Island Transportation Plan – 2003

The goals and strategies of the Island Plan have continued to guide the MVC, both in pursuing planning activities and in deciding on development proposals.

1.3.2 The Aquinnah Master Plan

Aquinnah does not have an official Master Plan, although most of the components of a Master Plan are included in the Open Space and Recreation Plan.

1.3.3 The Aquinnah Open Space and Recreation Plan

The Aquinnah Open Space and Recreation Plan 1995 Update was prepared and adopted by the Aquinnah Conservation Commission. A draft revision to the plan was commenced in 2001 but has not been completed.

1.3.4 The Buildout Study

In 2002, the Commonwealth's Executive Office of Environmental Affairs released its studies of each town's potential capacity to accommodate additional growth and development. The 'Buildout' study categorized all of the town's land as developed, permanently protected open space, or developable – potentially available for development. EOEА relied on the MacConnell Land Use identification of land cover from aerial photography to determine developed areas and used the Division of Conservation Services records of permanently conserved lands. Land neither developed nor conserved was considered potentially 'developable.' From the Town's existing land use zoning codes underlying the developable lands, and considering the lot density of properties subdivided over the 1990s, EOEА calculated the number of additional homes that could theoretically be built on the remaining developable land in the town. The Town's zoning bylaws were also used to identify areas that had partial constraints on the development of lands, such as buffers to wetlands. Once the number of new residential units was estimated, projections of the increases in year round and seasonal populations – and their impacts upon schools, roads and solid waste – were also calculated.

Buildout Study Projections

Town	AQ	CH	ED	OB	TI	WT	Island
Households (seasonal & year-round)							
1990	82	953	3,053	3,172	2,387	1,320	10,967
2000	141	1,409	4,360	3,820	2,720	1,849	14,299
Additional Projected	265	1,341	2,316	820	1,001	1,289	7,032
Buildout Total	406	2,750	6,676	4,640	3,721	3,138	21,331
Population (year-round)							
1990	201	650	3,062	2,804	3,120	1,704	11,541
2000	344	843	3,779	3,713	3,755	2,467	14,901
Additional Projected	194	889	1,937	768	1,370	1,692	6,850
Buildout Total	538	1,732	5,716	4,481	5,125	4,159	21,751
Students							
1990	37	53	473	422	440	432	1,857
2000	48	120	569	664	571	483	2,455
Additional Projected	27	126	292	172	475	331	1,423
Buildout Total	75	246	861	836	1,046	814	3,878
Water Use (thousands of gallons/day)							
2000	25,800	63,225	789,000	857,000	609,000	185,025	2,529,050
Additional Projected	25,835	117,846	821,960	86,137	780,805	385,759	2,218,342
Buildout Total	51,635	181,071	1,610,960	943,137	780,805	570,784	4,138,392

Source: EOEa Buildout Studies, 2002, adjusted for corrected calculations by MVC, 2004

The purpose of the Buildout study was to prompt each of the Commonwealth's municipalities into re-evaluating whether its current zoning controls give the kind of direction to its pattern of development that is appropriate and to assess whether the town wishes to take steps to better direct future development and conservation of open space. While there may be questions about some of the specific assumptions and methodology of the Buildout studies, the premise is sound of the community taking stock of the lands that remain open to either development or conservation and determining what are the best uses of those lands from a community standpoint. This was the impetus to conduct this Community Development Plan

1.4 COMMUNITY DEVELOPMENT PLANNING PROCESS

In April 2003, the Commonwealth of Massachusetts awarded grants – under Executive Order 418, the Community Development Planning Program – to each of the six towns of Martha's Vineyard. The grants allowed the towns to prepare Geographic Information Systems (GIS) mapping to aid in the evaluation of land suitability that will help to plan for appropriate growth management within each town. The Martha's Vineyard Commission worked with the towns to obtain these grants and was selected by each town as its consultant to conduct the planning work and assist in completing its Community Development Plan. Working with all six Island towns

simultaneously, the MVC staff was able to develop a single methodology for determining land suitability, thereby facilitating comparable analysis on lands adjacent to another town's boundaries as well as coordination of future Island-wide planning efforts.

In evaluating the best or most appropriate uses of the town's remaining land that is not yet either developed or protected as open space, the Community Development Plan was required to address three areas:

1. Open Space and Natural Resource Protection,
2. Housing, and
3. Economic Development.

The housing and economic development elements were required to address specifically improving the conditions and opportunities of low, moderate and middle-income families and individuals. A fourth required area, transportation, was waived for all Island towns due to the MVC's 2003 updating of the Regional Transportation Plan for Martha's Vineyard.

The breadth of issues addressed in developing a Community Development Plan also provides materials a town can apply to other planning efforts such as the town's Affordable Housing Strategy, the update of a town's Open Space & Recreation Plan, and the possible preparation or updating of a town's Master Plan, as well as updating the Martha's Vineyard Commission's Regional Island Plan. Towns with approved CD plans receive bonus points for competitive state grant programs, including the popular self-help grants. Also, the process allows the updating of town records and the provision of digital maps and a database available to all town departments.

In the early Fall of 2003, a Steering Committee of Aquinnah officials and residents was established to work with the MVC staff on the Community Development Plan. At the initial meeting the Committee reviewed land use/development goals and policies from existing town plans, affirming the majority of them to still be appropriate enough to proceed with the CD planning effort. The Steering Committee identified project goals, assumptions and suitability criteria.

In addition, the planning effort benefited from a series of meetings of All-Island Planning Boards at which various aspects of the plans were discussed. On May 17, 2004, a public meeting was held at which the preliminary results of the Community Development Planning effort were outlined and feedback was given. The results of these efforts have been incorporated in the final version of this plan.

1.5 METHODOLOGY FOR DETERMINING SUITABILITY

The basis of the Community Development Planning effort is organizing and, in some cases, updating pre-existing information for the town in Geographic Information Systems (GIS) format, that is, as computerized maps reflecting information that is easily manipulated and updated. Existing maps were compiled and reformatted. They were also checked for accuracy as much as possible. In addition, a limited amount of data gathering was carried out, notably the preparation of a Scenic Value layer for the town.

A major focus of the effort was a series of suitability analyses, i.e. the preparation of a series of maps that indicate the suitability of various areas for each of the three functions – open space and natural resource conservation, housing, and economic development – based on a number of criteria chosen by the steering committees and at several joint meetings of the Island’s planning boards. All the steering committees agreed to use the same set of criteria for all Island towns in order to facilitate getting an Island-wide analysis and perspective. Thus, some criteria do not apply or are of less importance to some towns (e.g. “served by Town sewer” in Aquinnah or “working farm” in Oak Bluffs) but are retained for all towns to maintain consistency.

Each of the criteria was given a point value between 2 and 20, based on how significant it was in determining the suitability of a given piece of land for the land use function under consideration. For example, a working farm was given a value of 20 for open space preservation whereas being within 1000’ from year-round shopping was given a value of 8 for housing development.

The next step was to prepare a map for each land use function that compiled the overall rating, combining all the criteria that applied to that function. The result was the overall suitability of using land for that function, based on those criteria and weightings. The specific criteria and weightings are described in their respective chapters.

Subsequently, the housing and economic development maps were combined to give an overall “development” map and then this map was combined with the open space preservation map to indicate which parts of the Island are most suitable for preservation, for development, or for both. This synthesis is described in more detail in section 6.

It is important to note that each of the suitability maps does not take into consideration the present zoning, the present ownership, or how the land rates for other types of suitability. For example, an area may be indicated as “suitable for economic development” merely because it is close to an existing commercial area, even though it is not presently zoned for business and it might also be very highly suitable for open space preservation. This does not suggest that the Town should change its policy to allow for commercial development in this area.

Note that the suitability maps and the plan itself are not zoning maps, nor do they impose any restriction on either landowners or Town decision makers. The plan and maps are one assessment of the suitability of land for different uses based upon certain assumptions and goals. As any of these assumptions or goals change, likely so would the conclusions. Indeed, as the Island communities continue to work with the mapped data and increase their understanding of the implications and potential limitations of the information, the weighting of individual data layers is expected to change. It is even likely that, over time, whole data layers may be dropped from or added to the suitability analysis.

With that said, it is also important to underline the limits of this kind of planning effort.

- On Martha's Vineyard, available land is so scarce and property values are so high that decisions on acquisition, say for open space preservation or the creation of affordable housing, will probably depend more on opportunity than on suitability. That is, if a piece of land is available, it might well make sense for a town or another entity to use it for open space or for affordable housing, even if it does not rate in the highest category in the suitability analysis.
- This large-scale analysis is very useful to give an overview for the town and the Island for planning purposes; however, it is not accurate enough to provide specific information about a particular parcel of land.

Notwithstanding the limitations of the methodology for evaluating the suitability of land on Martha's Vineyard for different land activities, the suitability maps provide an additional tool available to citizens and decision makers when evaluating existing circumstances and potential development in their communities.

1.6 MAPS OF EXISTING CONDITIONS

This section is completed with a series of maps of existing conditions in Aquinnah, namely:

- Existing Settlement,
- Land Use Cover,
- Water Resources,
- Wetlands
- Habitat
- Soils,
- Slopes,
- Cultural Resources
- Developed, Protected and Available Land

2. VISION

In 1997, the Gay Head Citizen's Advisory Committee held a series of workshops aimed at "Shaping a Vision For Gay Head". Its conclusions remain valid today. The following are the key statements articulating this vision that resulted from this process (changing the name of the town to its current name).

Aquinnah is a very special place, a place inhabited by a number of communities – Wampanoag, summer resident, other year-rounders – and a place with powerful visual identity drawn from the famous cliffs and less famous but equally important moorlands, hills, and ponds. This is not a place where one casually happens to live; it is a place of choice.

Residents value Aquinnah for exactly the qualities that it now has, importantly:

- A place inhabited by multiple communities, with all the mutual benefits and synergies that that can provide;
- A place where the natural environment is still dominant visually and functionally, a fragile relationship in the face of huge growth nearby; and
- A place with population small and stable enough that, despite all the tensions which being small, stable, and complex inevitably produces, there really is a shared Aquinnah community, along with the multiple communities which inhabit the place.

At these visioning workshops, a short agenda for action emerged, identifying the four priority areas:

- Creating a Community Master Plan,
- Helping Saltwater Management and Aquaculture,
- Planning for Community Facilities,
- Coordination.

3. OPEN SPACE AND NATURAL RESOURCES

3.1 PROFILE

Despite the distinct physical characteristics and different patterns of land use, the people of the six towns of Martha's Vineyard share a deep appreciation for the natural beauty of their surroundings and the connection between the Island's open, undeveloped spaces and water quality, habitat protection, scenic vistas, recreational opportunities and access, and overall enjoyment of a unique quality of life. In addition to notable efforts by the six towns, the Vineyard is graced with private conservation organizations, both local (Sheriff's Meadow Foundation, Vineyard Conservation Society, Vineyard Open Land Foundation) and Mainland-based (Trustees of Reservations and The Nature Conservancy). Over the decades, the vision and dedication of these organizations have resulted in the successful protection of especially choice parts of the Island.

The creation and implementation of the Martha's Vineyard Land Bank Commission illustrates the breadth of this appreciation among Islander's and citizens of each town. Established by the Commonwealth in 1986, the Land Bank uses a surcharge on each transfer of real estate for the purpose of acquiring, holding and managing land and interests in land such as (a) land to protect existing and future well fields, aquifers and recharge areas; (b) agricultural land; (c) forest land; (d) fresh and salt water marshes and other wetlands; (e) ocean and pond frontage; beaches, dunes, and adjoining backlands, to protect their natural and scenic resources; (f) land to protect scenic vistas; (g) land for nature or wildlife preserves; (h) easements for trails and for publicly owned lands; and (i) land for passive recreational use. Through 2003, the Land Bank had preserved 2,275 acres, complementing the efforts of the other conservation groups. The Land Bank is an effective tool for towns to target and realize their open space objectives.

The visual character of each of the six towns of Martha's Vineyard is distinct. On a small scale, the down-Island towns are the "cities and their suburbs", while the less populous, less commercial up-island towns are the "countryside". The Island's geography and history created the contrasts between its more settled seaport towns and its farming communities. While open space is necessary for all six towns, it is especially important up-Island, in order to maintain the visual diversity of Martha's Vineyard.

The following are the main publicly owned open spaces in Aquinnah:

- Lobsterville Beach – 18 acres (two linear miles) of beachfront owned by the town and open to the general public.
- West Basin Town Landings – Moorings for about two-dozen boats with direct access to Menemsha Pond and its prime shellfish beds. A smaller access point is available at the end of Lobsterville Road.
- Philbin Beach – A six-acre south shore beach.

- Aquinnah Library Playground.
- Aquinnah Recreation Area – A small recreation site with one basketball court behind the fire station.
- The Martha’s Vineyard Land Bank – This public land trust holds four properties in Aquinnah:
 - Moshup Beach (4.7 acres),
 - Moshup Beach overlook (6.1 acres),
 - Gay Head Cliffs Preserve (16.3 acres),
 - parcel off Lobsterville Road (44.4 acres).
- Sheriff’s Meadow Foundation – This private conservation organization owns almost 88 acres in Aquinnah, none of which are open to the public:
 - Leonard Estate, Lighthouse Road (13.3 acres),
 - Eastman property, Menemsha Pond (7.2 acres),
 - Various other smaller and unconnected parcels.
- Tribal Lands – The following are held by the town as common lands and deeded to the Wampanoag Tribe as open space and conservation lands (excludes 190 acres of Tribal land used for community development):
 - Cranberry Lands, Menemsha Neck (228 acres),
 - Clay Cliffs (32.8 acres),
 - Herring Creek, between Squibnocket and Menemsha Ponds.
- Aquinnah Lighthouse, United States of America – (1.1 acre)
- Aquinnah former Town Landfill – (4 acres)

The following are the main privately held properties:

- Agricultural Lands – two parcels totaling 12 acres under Chapter 61 protection in Aquinnah. There is no significant farming activity in the town.
- Kennedy Estate – approximately 300 acres, the largest singly owned piece of land in Aquinnah other than Wampanoag Tribal lands; it is completely private but its location and quality make it geographically and ecologically an important open space resource to the town.

3.2 SUITABILITY ANALYSIS

The following are the criteria used in the Open Space and Natural Resources suitability analysis using the methodology described in section 1.3.



1. **Agricultural Land:** Working Farm, Prime Agricultural Soil
2. **Water Resources – Coastal and Surface Water:** Proximity to Wetlands and Flood Hazard Area; Coastal District; Surface Water Bodies
3. **Water Resources – Groundwater:** Zones of Protection Around Public Wells; Nitrogen-Sensitive Watersheds
4. **Habitat and Woodlands:** Core and Supporting Habitat; Other Large, Unfragmented Woodlands;
5. **Scenic and Cultural:** Viewsheds and Vistas from Island Roads; Cultural Landscapes
6. **Recreation and Access:** Beaches

On the following pages, each of these criteria is mapped for the town as well as the entire island, accompanied by an explanation of the criteria and how they were used in the suitability analysis.

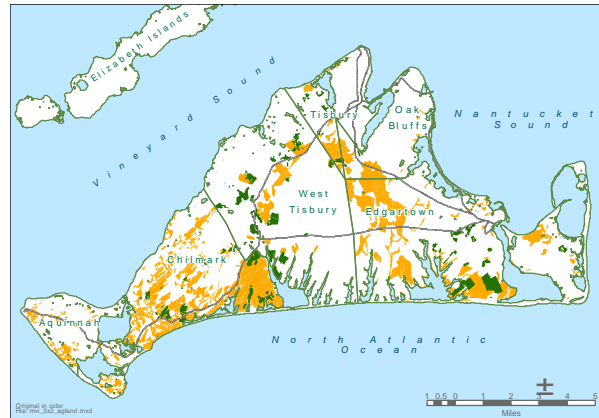
The results of the analysis are in section 3.2.7.

3.2.1. Agricultural Land

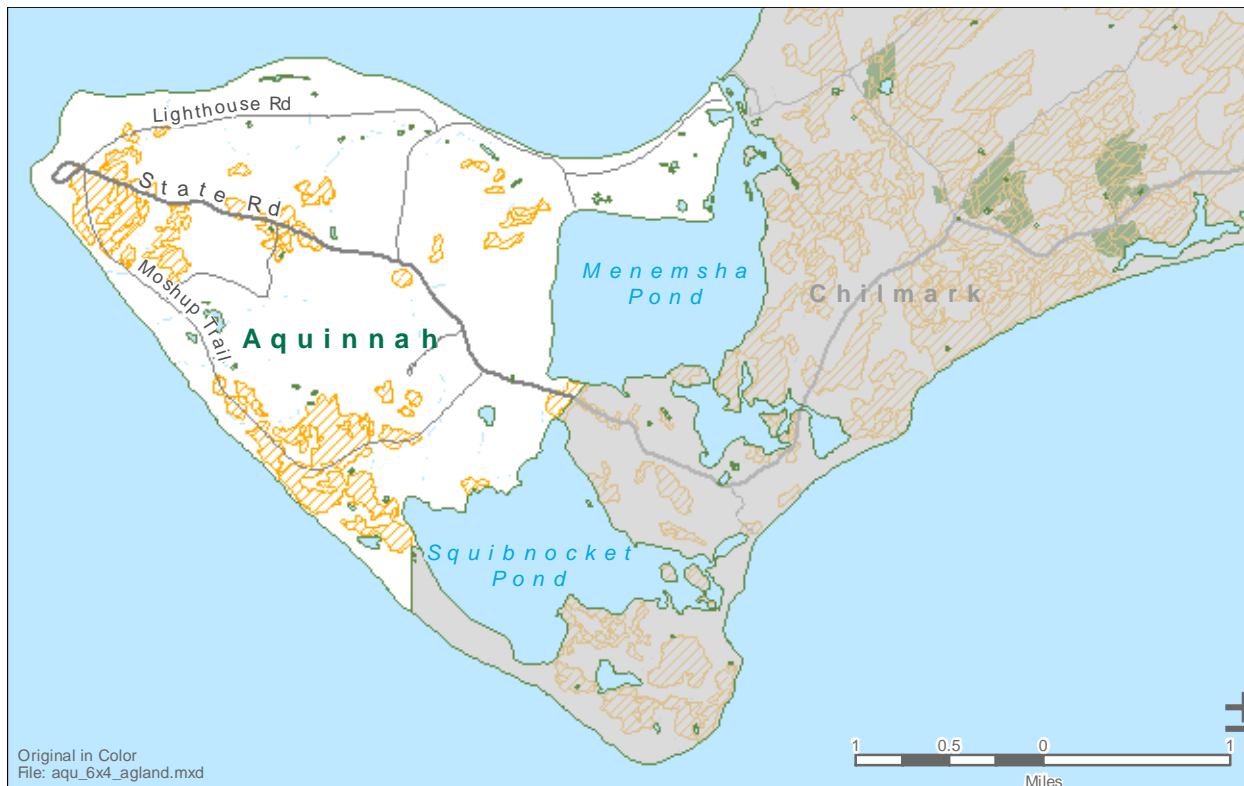
Although representing just a fraction of the land from previous generations, many areas of the Vineyard are still strongly associated with farming. Farming represents scenic, economic, and cultural sensibilities. The selection of these criteria reflects the desire to preserve the remaining working farms and to provide for the possibility for prime agricultural land to be returned to farming. (Note: These criteria are applied on an Island-wide basis but, as will be seen in section 3.3, in Aquinnah, this objective is balanced with the need to protect critical groundwater resources.)

Criteria for Open Space Suitability Agricultural Land in Aquinnah		
Criterion	Points	Area (acres)
 Working Farm	20	0
 Prime Agricultural Soils	6	395

Source: Farms - MassGIS (1999 ground cover] and MVC 2004;



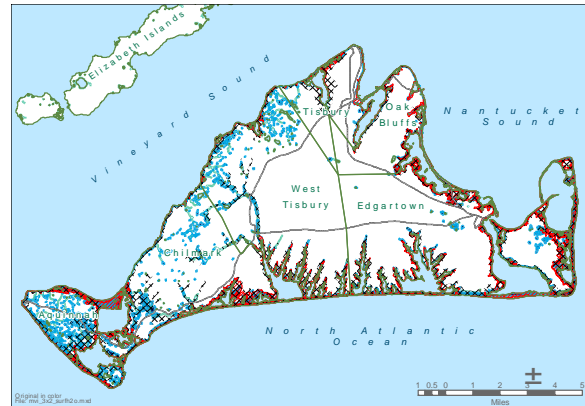
Natural Resources Conservation Service / Mass-GIS 2003 and West Tisbury Steering Committee



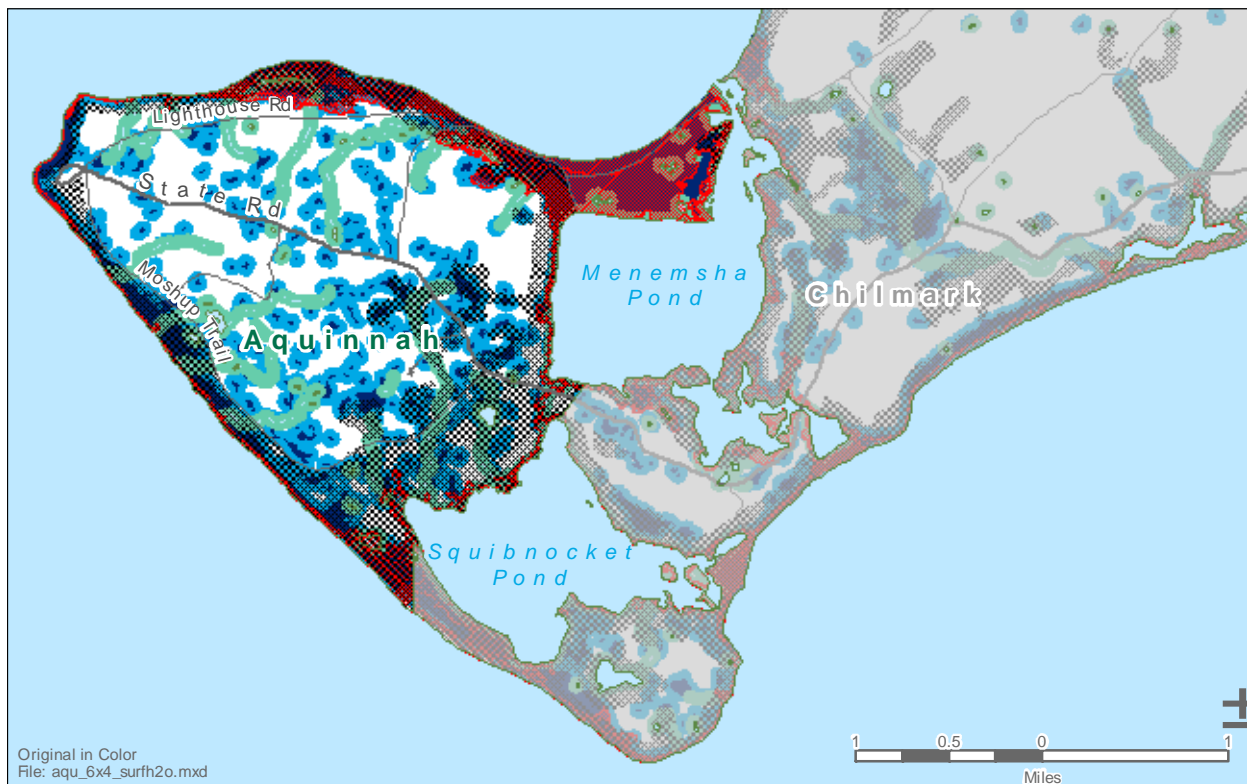
3.2.2. Water Resources – Coastal and Surface Water

The presence of the ocean, ponds or streams makes land more desirable for preservation as open space, both from ecological (water quality, habitat) and cultural (scenic, recreational) perspectives. Wetlands may not be built on, but they and the adjacent areas also offer resources of interest for preservation of open space or natural resources. Similar considerations apply to ponds and streams and their adjacent areas. The Coastal District of Critical Planning Concern identifies the natural areas along the sea’s edge, great ponds and their tributaries. Higher weighting was given to the criteria that were most restrictive to development.

Criteria for Open Space Suitability Coastal and Surface Water Resources		
Criterion	Points	Area (acres)
Wetlands	20	751
Within 200' of wetlands	6	3,134
Flood Hazard Area	10	558
Coastal DCPC	8	1,225
Surface water	20	636
Within 200' of surface water	6	905








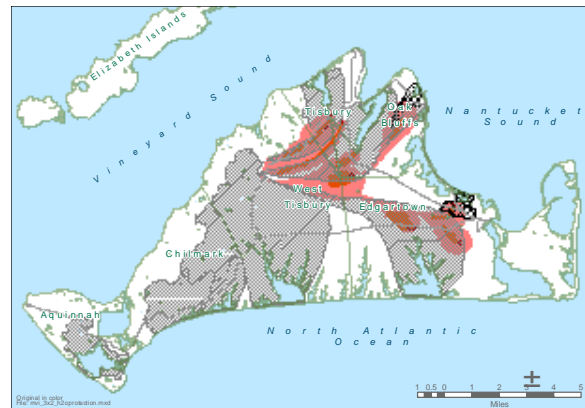
Source: DEP/MassGIS 2003; FEMA/MassGIS 1997; MAPC 2000; MassGIS 2003



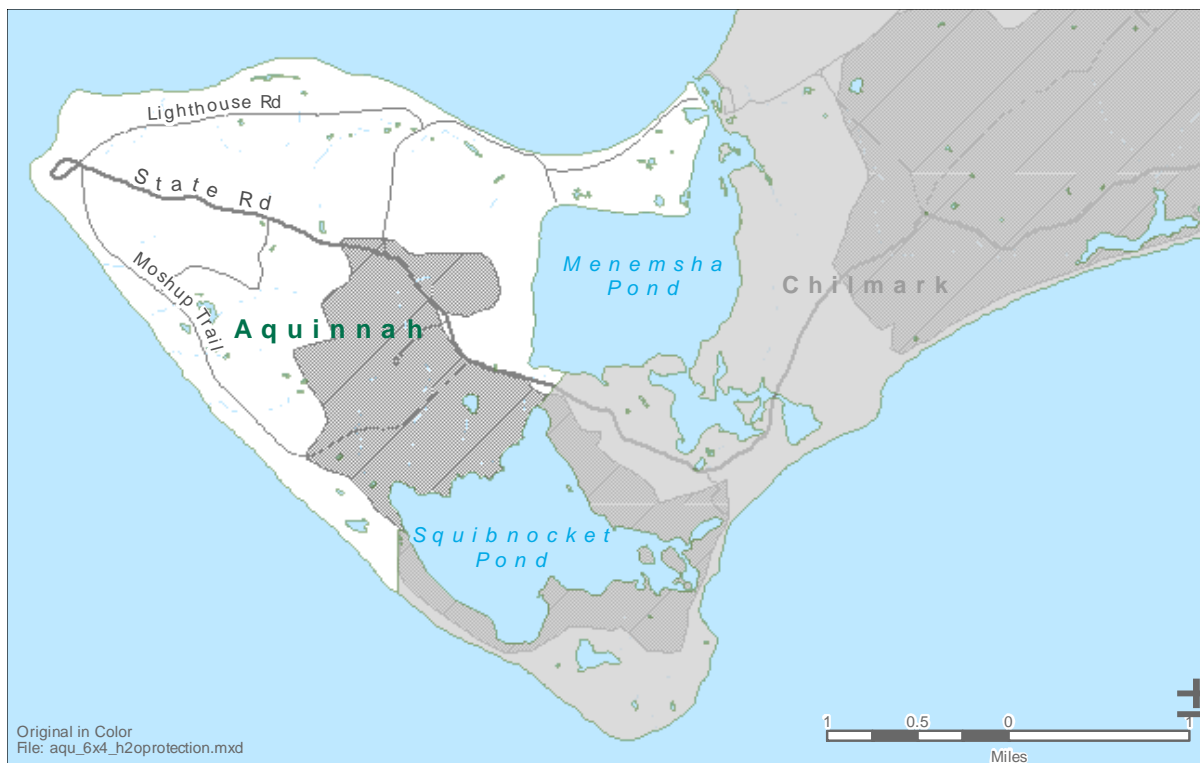
3.2.3. Water Resources – Areas of Protection

Development places stress on groundwater resources and, ideally, would be located outside areas highly sensitive to ground water contamination. Preserving lands within the areas of protection of public wells – Zone I, operational zone of influence, and Zone II – protects public health as well as public investment in infrastructure. The operational zones of influence were determined by the MVC as areas more likely to infiltrate to groundwater than the rest of Zone II. The vitality of the Island’s great ponds also affects human health, but also involves habitat, cultural, scenic and recreational values. Identified are the pond watersheds that are already at or beyond nitrogen limits, or are projected to reach those limits.

Criteria for Open Space Suitability		
Groundwater Resource Protection		
Criterion	Points	Area (acres)
 Public well – Zone I	20	0
 Public well – operational zone of influence	6	0
 Public well – Zone II	4	0
 Pond watershed at or beyond nitrogen limit	6	811
 Pond watershed projected to reach nitrogen limit	4	0



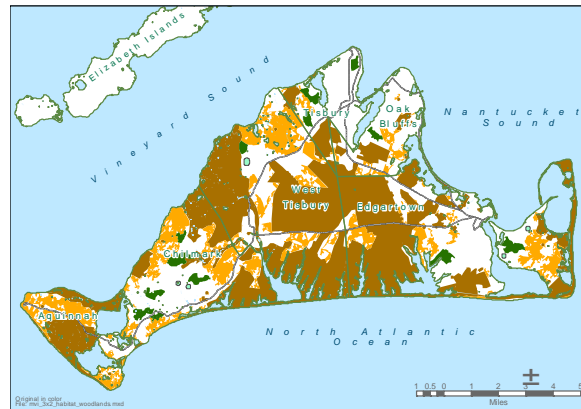
Source: DEP/MassGIS 2003; MVC 2003



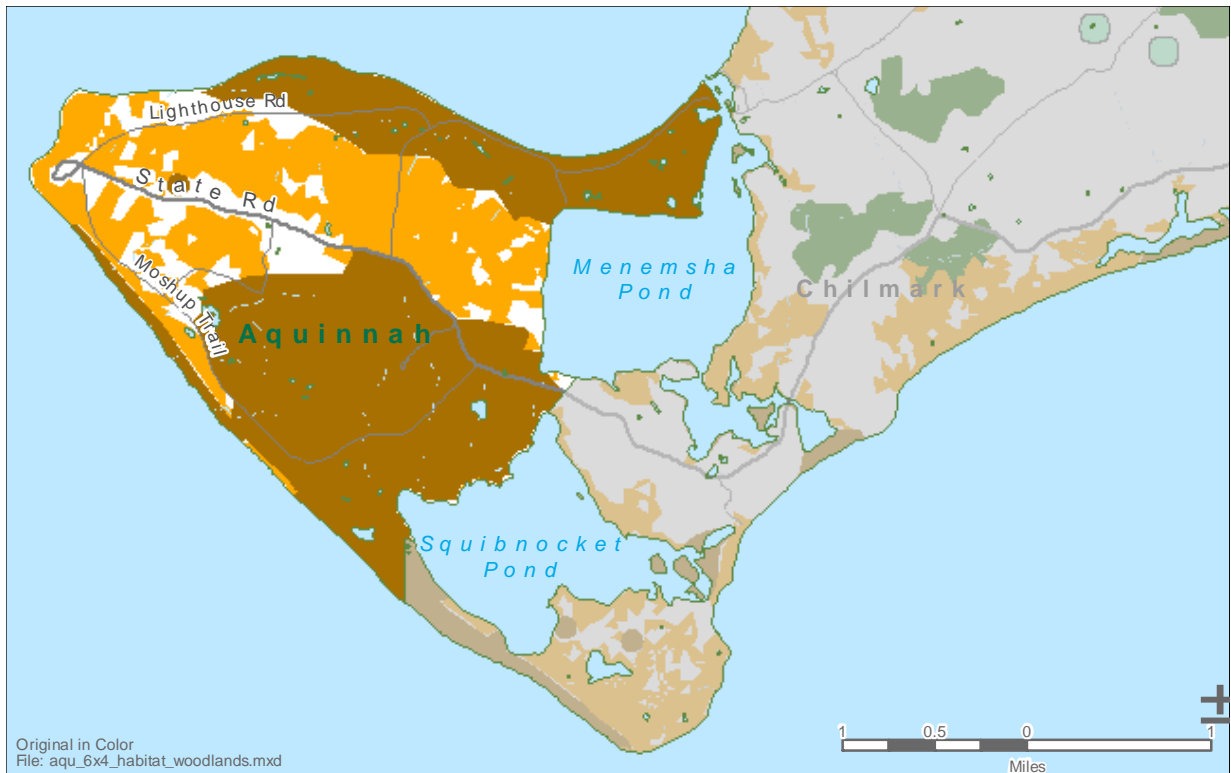
3.2.4. Habitat and Woodlands

Martha's Vineyard is the site of some globally important habitats such as the distinctive sandplains. This is evident from the extent of significant "core" and supporting habitat. In addition, large unfragmented woodlands not already included in the habitat criteria are identified because they may still be potentially important open spaces from a scenic or recreational standpoint. Core and Supporting Habitat are areas identified by the Commonwealth that provide habitat for several species that are Endangered, Threatened, or are of Special Concern, including the Harrier Hawk and various types of moths.

Criteria for Open Space Suitability Habitat and Woodlands in Aquinnah		
Criterion	Points	Area (acres)
Core Habitat	10	1,958
Supporting Habitat	6	1,031
Additional Unfragmented Woodland (50+ acres)	8	0
Additional Unfragmented Woodland (10-50 acres)	4	0



Sources: Habitat - Natural Heritage/MassGIS 2002
Woodland - MacConnell 1999 ground cover







3.2.5. Scenic/Cultural

The character of the Island is derived to a great extent by how it looks from public spaces, including major roads and the water. A preliminary identification of views from the main Island roads includes:

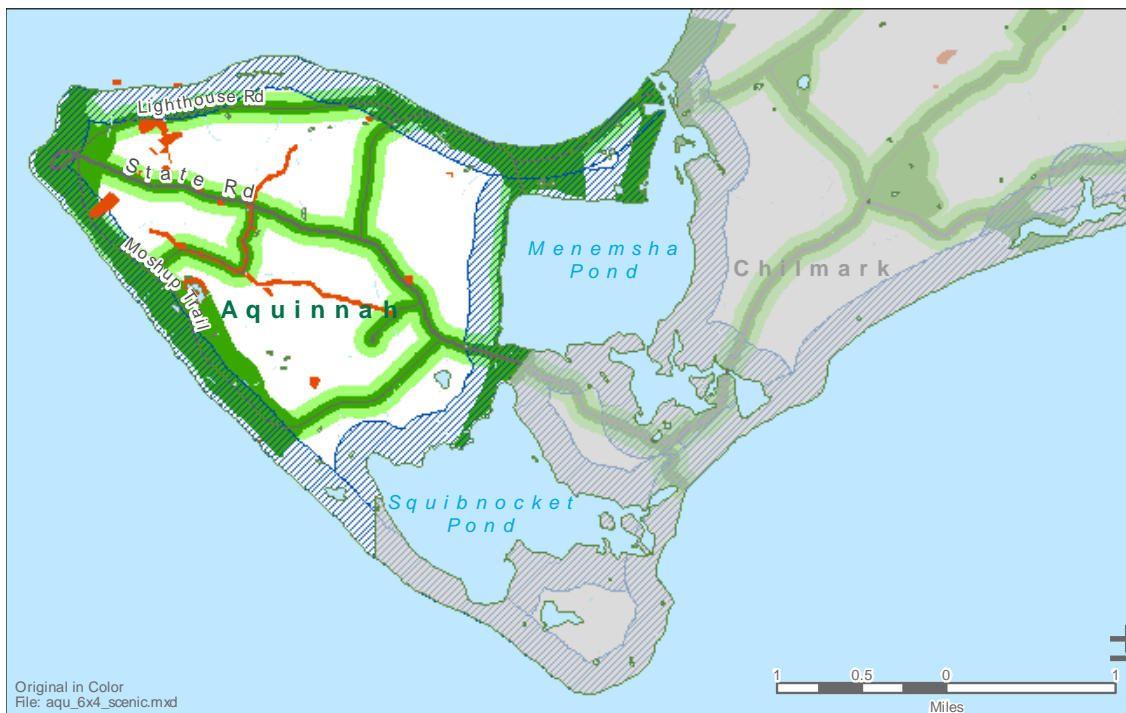
- wooded areas within 200' from roads as well as adjacent fields and ponds;
- larger vistas from public overlooks and particularly scenic roads and,
- the axis of view corridors at the ends of certain roads.

A secondary buffer area, generally an additional 300' from roads, was also identified as was the coastal viewshed made up of land within 1000' from the coast and of other navigable waters. Also included are cultural landscapes that towns have previously designated as Special Places. This analysis in particular will likely be subject to future refinement by the towns and MVC.

Criteria for Open Space Suitability Scenic/Cultural in Aquinnah			
Criterion	Points	Area (acres)	
 Primary Vista/Viewshed	20	1,098	
 Secondary Vista/Viewshed	4	585	
 Cultural Landscape	20	88	
 1000' from Coast/Great Pond	6	1,287	



Sources: Viewsheds - MVC/Steering Committees 2004
 Cultural landscapes - Town DCPCs/MVC 2004
 Note: The Committee and MVC will work to revise this analysis. This will include extending the primary vista/viewshed farther southeast on State Road.

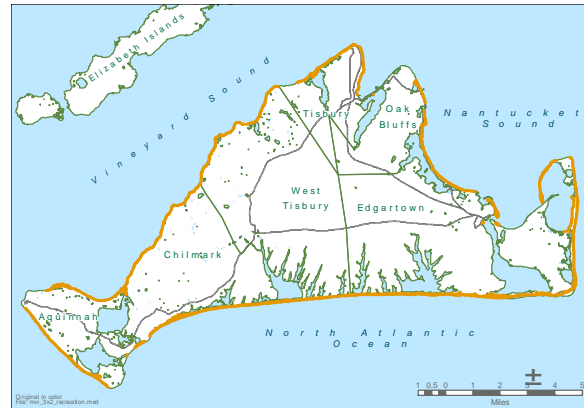


3.2.6. Recreation and Access

In addition to their indispensable role of buffering the Island (and Great Ponds) from the sea, beaches are, understandably, the most used recreational spaces on the Vineyard. Public access to beaches varies greatly among towns but is generally less available to the public Up-Island (where there are also fewer people). Other existing recreational areas such as golf courses and ball fields should be mapped in the future. Mapping the bike paths and walking trails would help identify gaps in the town and Island-wide network of trails and paths.

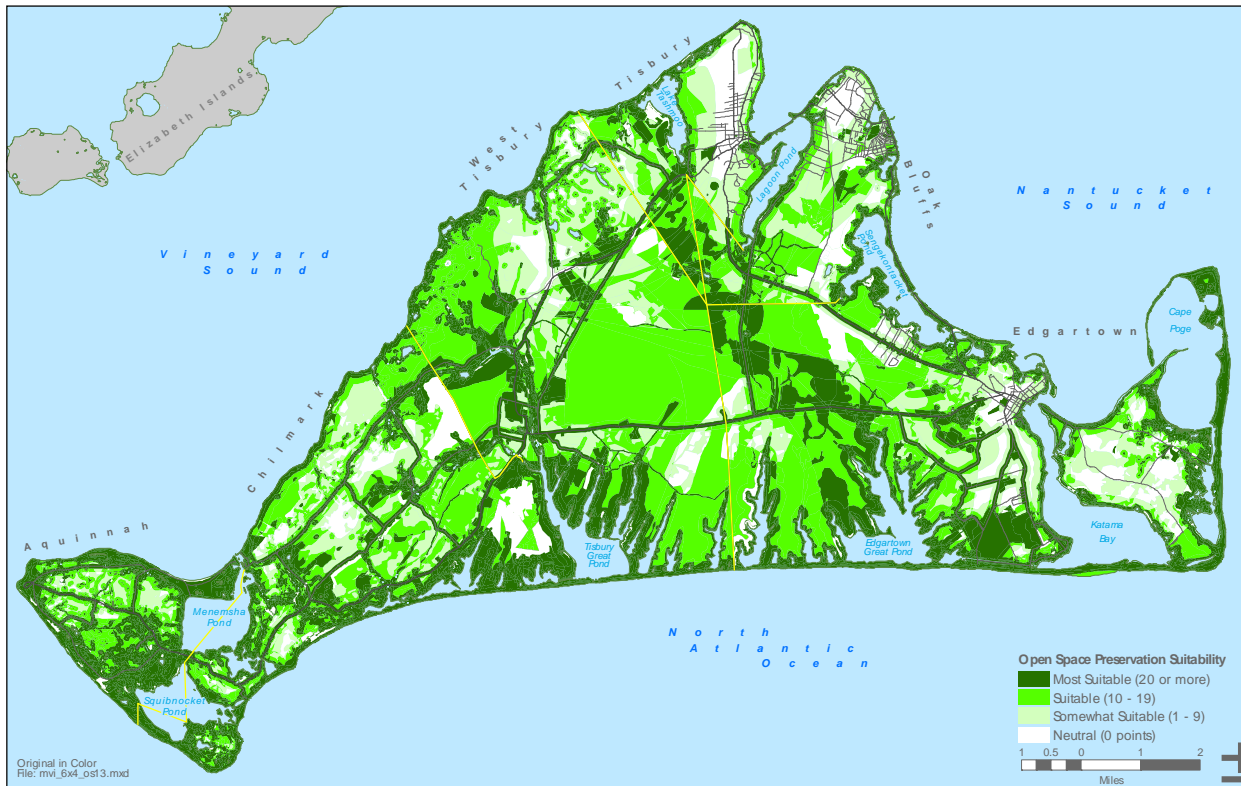
Criteria for Open Space Suitability Recreation and Access in Aquinnah		
Criterion	Points	Area (acres)
Beach	20	107

Sources: MacConnell 1999 ground cover



3.2.7 Open Space and Natural Resources Suitability Map

The maps below and on the following page show the overall suitability of land for preservation of open space and natural resources based on a combination of the criteria described in this section. Land across the Island was divided into four categories based on the total 'points' accumulated from all the mapped features. The higher intensity of color or shading reflects a higher degree of suitability, according to the criteria measured and the weighting of values. Lands on the town map that are already preserved or developed are overlaid with a diagonal crosshatch.



On Martha's Vineyard as a whole, the map indicates that lands close to the ocean are particularly important to preserve as open space. In general, there is a narrow beach or bluff that serves as storm damage prevention for the interior wetlands and built areas, as recreation, scenic vistas, and in some cases, habitat. Serving a variety of functions, these areas tend to score highly when points are summed. On the map below, these areas tend to appear as colored the darkest green, the equivalent of a high score. These shore areas form a relatively narrow fringe, extensive in total area only because they surround the entire Island. The scenic vistas afforded by the rural roads constitute another narrowly focused resource, extensive in total area only because of the extensive length of this grid network. Working farms and prime agricultural soils constitute very little of the total area of the Island. Much more extensive in area are the habitat and water resource areas. Core habitat, primarily in the form of the globally rare sandplain grassland,

covers much of the total area of the Island. The watersheds of the great ponds cover large land areas. Many of the great ponds are at or near their nitrogen loading limits, and lands within those watersheds are targeted for open space protection. Zones of contribution for public water supplies cover large areas of lands in the down-Island towns and also in West Tisbury, although that town does not pump for its own municipal water service.

Within Aquinnah, the lands that emerge as having the highest suitability for open space preservation appear as thin ribbons of beach; for scenic values, recreation and flood protection; and as thin ribbons of road, for the scenic vistas afforded by those rural ways. One larger area is the watershed of Squibnocket Pond, a restricted waterway with limited flushing. There is no public water supply for Aquinnah, and therefore no accommodation for zones of influence.

Open Space and Natural Resource Protection Suitability		
	<i>Martha's Vineyard (% of Island)</i>	Aquinnah (% of town)
Most Suitable	23,722 acres (40.4%)	2359 acres (67.4%)
Suitable	20,267 acres (34.5%)	732 acres (20.9%)
Somewhat Suitable	9,500 acres (16.2%)	302 acres (8.7%)
Neutral	5,205 acres (8.9%)	102 acres (2.9%)

It bears repeating that in Aquinnah, as on all of Martha's Vineyard, virtually all land has some degree of suitability for open space preservation – whether for environmental, health, economic or cultural reasons. Due to the scarcity and extraordinary cost of land on the Vineyard, the decision to preserve a particular piece of land will likely be based far more on opportunity than on suitability; in other words, if a parcel of land becomes available, it might well be worth preserving as open space, even if it has not rated highly in this suitability analysis.

3.3 ORIENTATIONS

3.3.1 General Goals

The goals and objectives in this section are derived from the Town's current Open Space and Recreation Plan and the Master Plan, with some refinements from the Community Development Planning process.

- Provide adequate passive and active recreational resources for permanent and seasonal residents without overburdening the resource.
- Protect the extensive natural resources including water, wetlands and dunes.
- Protect the unique Wampanoag and other historic and cultural sites in the town.
- Protect the fragile Gay Head Cliffs.
- Protect the visual and ecological resources of Moshup Trail.
- Balance agricultural activity by townspeople with the need to protect critical groundwater resources.
- Encourage residents and friends of Aquinnah to contribute directly to its preservation through philanthropy.
- Promote good long range planning by town boards and others, and ongoing cooperation with Tribal Council and other outside agencies concerned with preservation of the resources of Aquinnah.
- Encourage good woodland management.

3.3.2 Specific Goals and Objectives

Goal 1. Provide adequate land permanently dedicated for conservation, recreation & educational use for present and future residents and visitors of Aquinnah. Identify and protect rare wildlife habitats

Objectives

- Promote permanent conservation restrictions, easements or gifts of important ecological resources within the town.
- Where necessary, purchase open space with town appropriations or other funds (Self help, MV Land Bank etc.)

Goal 2. Protect the abundant & pristine ponds, stream, fresh and salt marshes, bogs & other wetlands and water resources within the town that sustain the shellfish industry, provide wildlife habitat and a base for the recreational tourist industry in the town.

Objectives

- Work closely with Tribal Council, island non-profit groups & private landowners to achieve maximum protection of key wetland resource areas and habitats through acquisition and appropriate regulations.

- Provide vigorous enforcement of the Wetland Protection Act (Ch. 131:40) & the Coastal Wetland Restriction Act (Ch. 130:105) and the local wetlands bylaw.
-

Goal 3: Preserve existing known historic sites. Locate & preserve additional sites whenever possible, working closely with Tribal Council.

Objective

- Increase protection for designated historic sites through zoning.

Goal 4: Protect the Cliffs & beach for public use where appropriate and from public misuse wherever this occurs.

Objective

- The Town will work closely with the Tribal Council to assert stringent protection of the priceless resource from creation of "clay baths", climbing and other inappropriate use.

Goal 5: Protect the magnificent vistas and extraordinary ecological diversity of the Moshup Trail area.

Objective

- Town boards will work cooperatively among themselves and with Tribal Council, Island non-profit conservation groups, State agencies, Martha's Vineyard Land Bank, and the Martha's Vineyard Commission to assure maximum protection of this vital economic, recreational and ecological resource.

Goal 6: Balance the use of land especially suited for agriculture and forestry with the objectives of protecting groundwater and scenic values.

Objective

- Identify appropriate land for agriculture in consideration of the objective of protecting groundwater quality. Where appropriate, promote the use of incentives such as Chapter 61A tax abatement.
- Promote selective cutting for woodland management.

Goal 7: Encourage landowners and visitors to assist Town in its preservation efforts through philanthropy.

Objective

- Establish a mechanism whereby monetary donations can be collected for the express purpose of land purchase.

Goal 8: Encourage creative planning in town that will preserve the extraordinary visual and ecological resources that sustain the town economically.

Objectives

- Planning Board, in cooperation with other town boards, Tribal Council, MVC, non-profit conservation groups and other appropriate agencies will take a pro-active approach to planning.
- Creative planning tools will be sought such as transfer of development rights.

Goal 9: Enhance the productivity, health, wildlife habitat and natural beauty of the town's woodland resources through proper management.

Objectives

- Encourage, through good forestry practices such as firewood thinning and harvesting of mature trees for lumber, the positive exploitation of the town's forest resources.
- Through good forest management, ecological diversity and wildlife populations can be greatly enhanced. Private landowners will be encouraged to consider such activity in their woodlands

Goal 10: Support active recreational pursuits for Aquinnah residents.

Objective

- Locate and work to purchase additional land for active recreation in the town.

4. HOUSING

The seasonal and tourist-based economy of the Vineyard has greatly affected the home rental and ownership market in Aquinnah. Rapidly escalating property values have made affordable housing a critical issue for all of Martha's Vineyard and housing costs in Aquinnah have traditionally been among the highest of the Island. This section of the Aquinnah Community Development Plan deals with the issue of housing development and especially the provision of affordable housing.

4.1. HOUSING PROFILE

4.1.1 Existing Housing Stock

Housing Characteristics - Aquinnah			
	1980	1990	2000
Total Households	na	82	141
Total Housing Units	306	329	463
Owner Occupied	43	54	83
Renter Occupied	43	28	58
Seasonal Units	157	239	308
Vacant Year-Round	63	8	14
Vacancy Rate for Year-Round Housing Units: Ownership	na	1.8%	3.5%
Vacancy Rate for Year-Round Housing Units: Rental	na	6.7%	6.5%
Total Units	306	329	463

Housing Characteristics - Martha's Vineyard			
	1980	1990	2000
Total Households	3,963	4,955	6,375
Total Housing Units	8,700	11,439	14,621
Owner Occupied	2,708	3,541	4,560
Renter Occupied	1,135	1,414	1,815
Seasonal Units	4,084	5,278	7,829
Vacant Year-Round	773	1,206	417
Vacancy Rate for Year-Round Housing Units: Ownership*	na	3.6%	1.3%
Vacancy Rate for Year-Round Housing Units: Rental*	na	8.7%	3.6%
Total Units	8,700	11,439	14,621

* For all of Dukes County

According to the 2000 US Census, the town of Aquinnah has a total of 463 housing units, of which 438 (95%) were single-family homes. The make-up of the remaining five percent of Aquinnah’s housing stock includes homes with a detached dwelling. Statistically the town does not have a diverse housing stock. In 1980, there was a total of 306 housing units in Aquinnah, and in 1990, there were 329 housing units. Between 1980 and 2000, there was a 34% increase in housing units for the town of Aquinnah.

Seasonality: There is the same number of homes in Aquinnah as there are year-round residents, but less than a third of the housing stock is occupied year-round. According to the 2000 US Census, there has been some about a 5% fluctuation between the year-round to seasonal housing occupancy ratio for the past three decades: 28% year-round occupancy in 1980, 25% in 1990 and 30% in 2000. For seasonal and touristbased communities such as Aquinnah, housing occupancy is an important factor to consider when projecting future growth scenarios – particularly population projections – should the year-round occupancy ratio shift sizably in either direction.

Building Permits: The Town granted 38 residential building permits from 1998 to 2002. In 1999, the town enacted a three-year residential building permit cap that was intended to slow down the rate of development. Despite the building cap for new homes and an economic recession in 2000, the construction industry continues to be a strong element of the economy, due in large part to the remodeling and renovation of existing homes.

Residential Building Permits Issued for New Construction							
	Aquinnah	Chilmark	Edgartown	Oak Bluffs	Tisbury	West Tisbury	Total
1999	13	43	139	66	60	59	380
2000	5	20	95	30	33	53	236
2001	7	19	74	31	23	31	185
2002	4	16	93	29	26	33	201
2003	9	16	88	46	27	48	234
Total	38	114	489	202	169	224	1236

Rental Registration: The Town of Aquinnah does not regulate the rental of housing units. There is growing concern Island-wide for the health and safety of tenants, particularly in overcrowded housing situations. The Town has not created a bylaw that would require homeowners who rent their properties to register with the Town Clerk. Should they do so, the Board of Health would then determine the maximum occupancy of the property, to ensure that overcrowding of a home is prevented.

4.1.2 Impact of the Real Estate Market on Housing

From 1997 to 2003, the real estate market in Aquinnah has seen the median price for a home increase from \$380,000 to \$1,200,000. Between 1997 and 2003, there was a total of 58 homes sold in Aquinnah. In 2002, there were 6 homes sold, but the lowest asking price was \$725,000. In 2003, there was a total of 3 home sales, none of which sold below \$1,100,000 in Aquinnah. According to a 2001 housing needs assessment study for Martha's Vineyard, between 2000 and 2001 the number of homes across the Island selling for less than \$200,000 dropped from 35 sales to just 9 sales. The number of homes selling for under \$250,000 dropped from 82 to 39 within the same time period.

The current market indicates that there is a serious gap between what the market rate home costs and what families can afford. The median household income for Aquinnah was \$45,208, as reported by the US Census. According to Housing and Urban Development's income limits, the median family income for a family of four was \$61,100 in FY 2003. Individuals or families earning \$61,100 could not afford a home that cost more than \$230,000 or should not pay more than \$1,530 per month on rent. According to HUD guidelines, individuals or families who either own a home or rent should not pay more than 30% of their gross income for housing costs, which include taxes, principal, interest, insurance, and/or utilities if renting. The 2003 median sales price of a home in Aquinnah is \$1,200,000, which amounts to an affordability gap of \$970,000 for a family earning \$61,100.

Median Home Sale Prices, 1997 - 2003							
Year	Aquinnah	Chilmark	Edgartown	Oak Bluffs	Tisbury	West Tisbury	Martha's Vineyard
1997	\$380,000	\$505,000	\$192,372	\$170,000	\$220,000	\$282,250	\$205,000
1998	\$457,500	\$764,250	\$225,000	\$186,170	\$220,000	\$279,000	\$231,750
1999	\$520,000	\$955,000	\$275,000	\$200,000	\$236,750	\$339,000	\$260,000
2000	\$900,000	\$1,300,000	\$379,000	\$275,000	\$292,500	\$425,000	\$369,500
2001	\$962,500	\$885,000	\$467,500	\$279,000	\$350,000	\$549,000	\$395,000
2002	\$1,027,000	\$1,237,500	\$517,500	\$325,000	\$357,100	\$500,000	\$400,000
2003	\$1,200,000	\$1,487,500	\$547,500	\$419,125	\$432,000	\$670,000	\$506,013

Source: Martha's Vineyard LINK

One aspect of the housing dynamic on the Vineyard is that year-round residents, especially first time homebuyers, are competing with second-home buyers who, due to higher incomes, are often in the position to outbid them. The same also holds true for those renting a housing unit. As a seasonal community, year-round residents renting oftentimes do not have stable year-round housing. The seasonal rental market on the Vineyard provides a lucrative opportunity for landlords to rent their homes on a weekly or monthly basis during the summer months. As a result, year-round residents renting that housing unit are given a short-term lease and are then forced to compete with vacationers and seasonal workers for summer housing at sharply higher

rents. This results in the all too common “island shuffle” of having to move two or more times each year, which has physical and sociological impacts in addition to economic effects.

Another aspect of the strong seasonal demand for rental housing is that year-round owners can also benefit from renting out space for vacationers or summer workers. In fact, the prospect of this income stream from rentals is such that lending institutions will take it into account in determining a mortgage limit. Island towns, Aquinnah included, provide for guest-houses or detached bedrooms that can not only be used to accommodate guests, but can help Islanders to supplement their incomes. One downside to this practice with respect to housing affordability, however, is that the income-generating potential of this housing is one more factor pushing up the value of property.

4.1.3 Affordable Housing Needs

The rising cost of housing on a statewide level has posed serious challenges to State and local governments to address the issue of affordable housing more aggressively, particularly as it threatens the stability of local and state economies to retain an adequate workforce. Since 1999, there has been a grassroots effort on the part of town governments, non-profit, religious / ecumenical organizations, private businesses and residents to address the issue of affordable housing on the Vineyard.

In 2001, the Island Affordable Housing Fund hired consultant John Ryan to conduct a housing needs assessment. *“Preserving Community: An Island-wide Housing Needs Assessment”*, highlighted options for the towns when addressing the issue of affordable housing. One of the prominent conclusions of the study was the need for additional rental housing. Other aspects of the study included the rising affordability gap between what an individual can afford and the actual cost of a home on the Vineyard. The decline of homes sales below \$250,000 was also a key element of the study. The report recommended the number of housing units each town would need to produce within the next five years to have a solid affordable housing base.

Recommended Affordable Housing Targets – Ryan Study				
	Below-Market Rental	Market Rental	Ownership (for Qualified 10- Year Residents)	Total
Aquinnah	6	0	24	30
Chilmark	12	2	45	59
Edgartown	48	14	47	109
Oak Bluffs	48	12	40	100
Tisbury	56	10	61	127
West Tisbury	20	2	20	42
Total	190	40	237	467

Source: Preserving Community: An Island-wide Needs Assessments by John Ryan, 2001

The Town of Aquinnah has worked toward addressing its affordable housing needs primarily through its Resident Homesite Program. The Town has designated 4 Town-owned lots to the Resident Homesite Program, which does not qualify for the State's Chapter 40B subsidized affordable housing inventory, since the early 1980's. The Town has worked on various zoning initiatives to create housing units that may not be part of a subsidized affordable housing program but does provides rental housing options for town residents. Currently, Aquinnah has 21.94% of its year-round housing stock that qualifies for the State's Chapter 40B Subsidized Housing Inventory. It is important to note that the town is one of 34 communities to meet the State's goal of designating 10% of its year-round housing stock for low and moderate income housing; however, these 34 housing units are restricted to members of the native American Wampanoag Tribe. In 2001, Aquinnah was one of two Island towns to adopt the Community Preservation Act.

Projecting the number of units created over the next five years that meet the Executive Order 418 Housing Certification criteria is difficult. Despite development constraints, the Town of Aquinnah does not regulate free market units; therefore, the target for newly created units for the next five years was set at the number four.

4.2 HOUSING SUITABILITY ANALYSIS

The preparation of this Community Development Plan has allowed for the preparation of a Housing Suitability Analysis, identifying which parts of the Town are most suitable for the development of housing and especially affordable housing. The criteria are based largely on Smart Growth principles of favoring development that uses existing infrastructure and consolidates existing neighborhoods rather than sprawling into environmentally sensitive and other rural areas. As much of Martha's Vineyard is rural – indeed, much of the Island has a minimum lot size of two or three acres – the identification of suitability criteria was difficult. Some of the Smart Growth principals, such as proximity to public transit, when applied as a suitability criterion on the Vineyard, produced distinctly un-Smart Growth results. A half dozen potential suitability criteria in addition to those listed below were tried in more than a dozen trial models of the analysis and were ultimately discarded as being inappropriate for evaluating housing suitability on Martha's Vineyard.

The following are the criteria used in the housing suitability analysis.

1. **Existing Neighborhoods:** In or Near Existing Neighborhoods
2. **Access to Services:** In or Near Village Center; Close to a Grocery
3. **Municipal Services:** Served by Town Water; Served by Town Sewer; Close to School
4. **Water Resources:** Not in Nitrogen-Sensitive Watershed

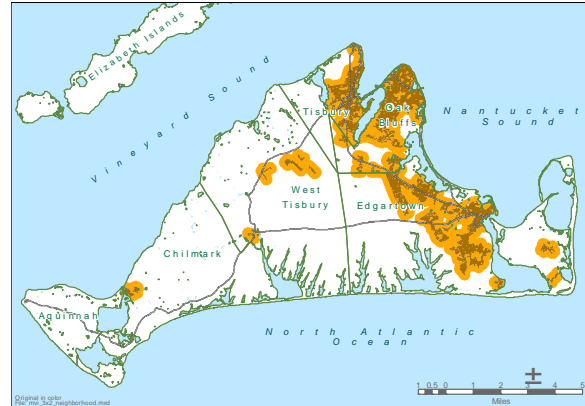
These are explained in more detail in the following tables, followed by the resulting housing suitability map.

4.2.1. Existing Neighborhoods

The principles of smart growth suggest the desirability of building new housing in or near already existing neighborhoods where the physical and social infrastructure already exist, rather than sprawling into rural areas. An existing 'neighborhood' for this analysis is defined as an area of ten or more adjoining properties (with houses) of less than 1.5-acre parcel size. The effect of this definition removed most residences Up-Island, where minimum lots sizes generally start at 1.5 acres, from being classified as 'neighborhoods.'

Criteria for Housing Suitability		
Existing Neighborhoods in Aquinnah		
Criterion	Points	Area (acres)
Infill within Existing Neighborhood	20	0
Within 1000' of Existing Neighborhood	10	0

Source: Towns' Assessors/Cartographic Assoc. 2003; MV Conservation Partnership 1999



[in the final version, the orange in Lobsterville will be removed and a note added saying "Note: none in Aquinnah"]

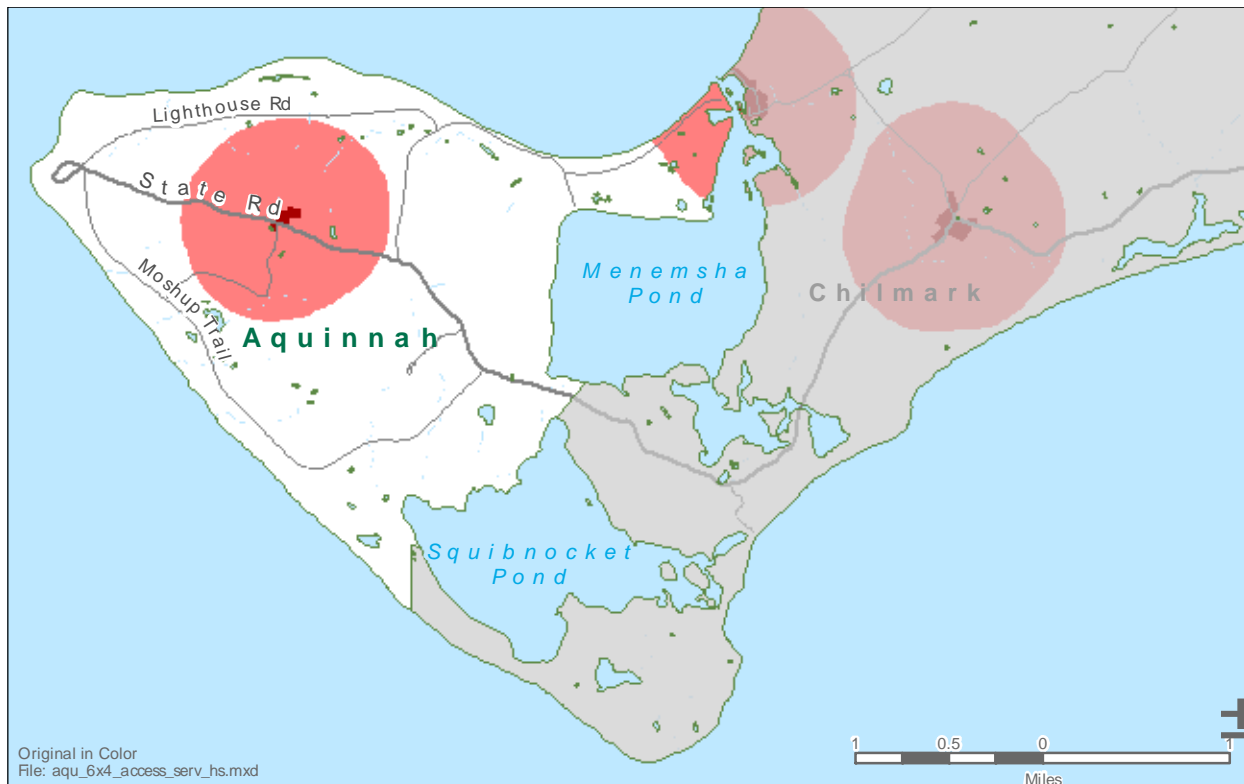
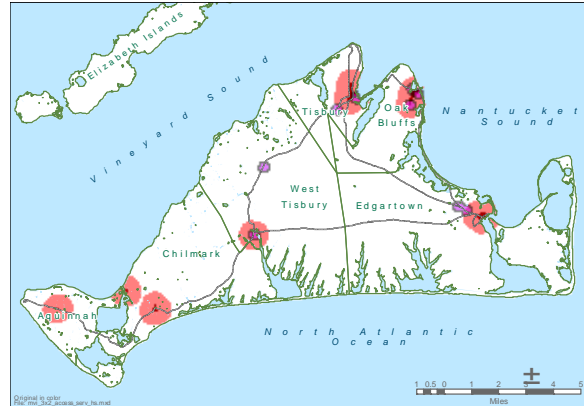


4.2.2. Access to Services

Locating new housing close to village centers – defined here as the areas where Town Hall, libraries and post offices are typically clustered – or close to service shopping – identified here by the existence of a grocery store – means that residents have easy access to services, reducing the amount of driving for errands or employment. This also helps create lively mixed-use neighborhoods.




Criteria for Housing Suitability		
Access to Services in Aquinnah		
Criterion	Points	Area (acres)
Within 2500' of village center	10	732
Within 1000' of grocery	10	0

Source: Towns' Assessors/Cartographic Assoc. 2003; MV Conservation Partnership 1999; MVC 2004

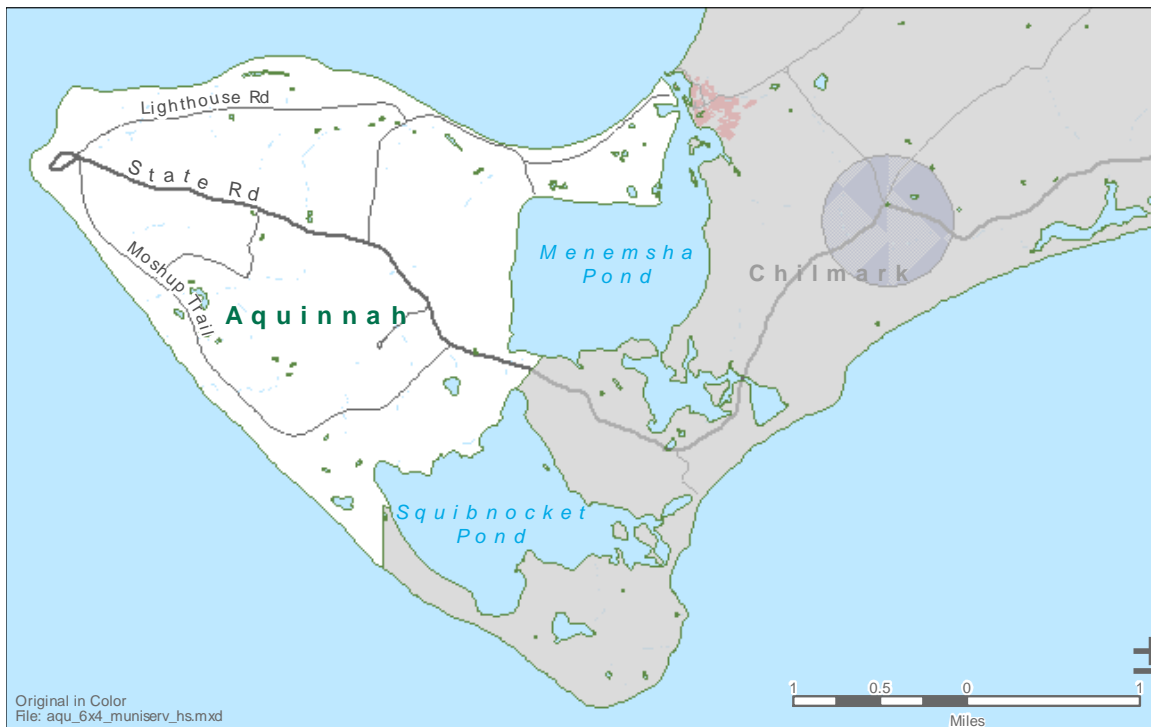
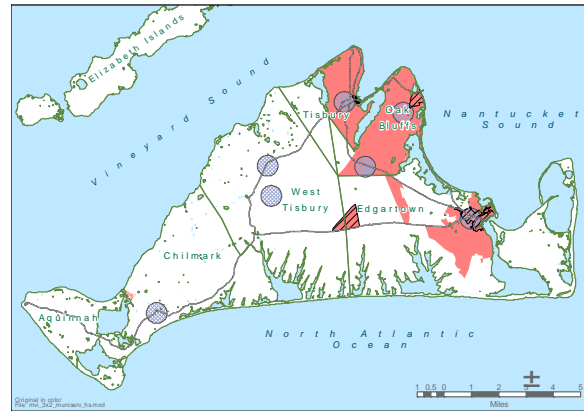


4.2.3. Municipal Services

From a public health perspective as well as from an environmental standpoint, it is preferable to locate housing where it can be served by community water and sewer services. Routine but necessary maintenance of homeowners' individual wells and septic systems frequently goes undone, leading to problems. Putting new housing in areas already close to schools facilitates access without necessarily having to drive. These access issues are especially appropriate in consideration of the needs of low, moderate and middle-income individuals and families who may have less access to private automobiles. (Note that an attempt to use public transit as a criterion resulted in a land use pattern of strip development, contrary to other objectives for directing future development and, thus, was discarded as a criterion for this analysis.) Future refinements of this suitability analysis may reintroduce transit as a criterion, as well as additional criteria such as proximity to recreational open space.

Criteria for Housing Suitability		
Municipal Services in Aquinnah		
Criterion	Points	Area (acres)
 Served by Town Sewer	6	0
 Served by Town Water	6	0
 Within 2000' of school	6	0

Source: Towns' Assessors/Cartographic Assoc. 2003;
MV Conservation Partnership 1999; MVC 2004

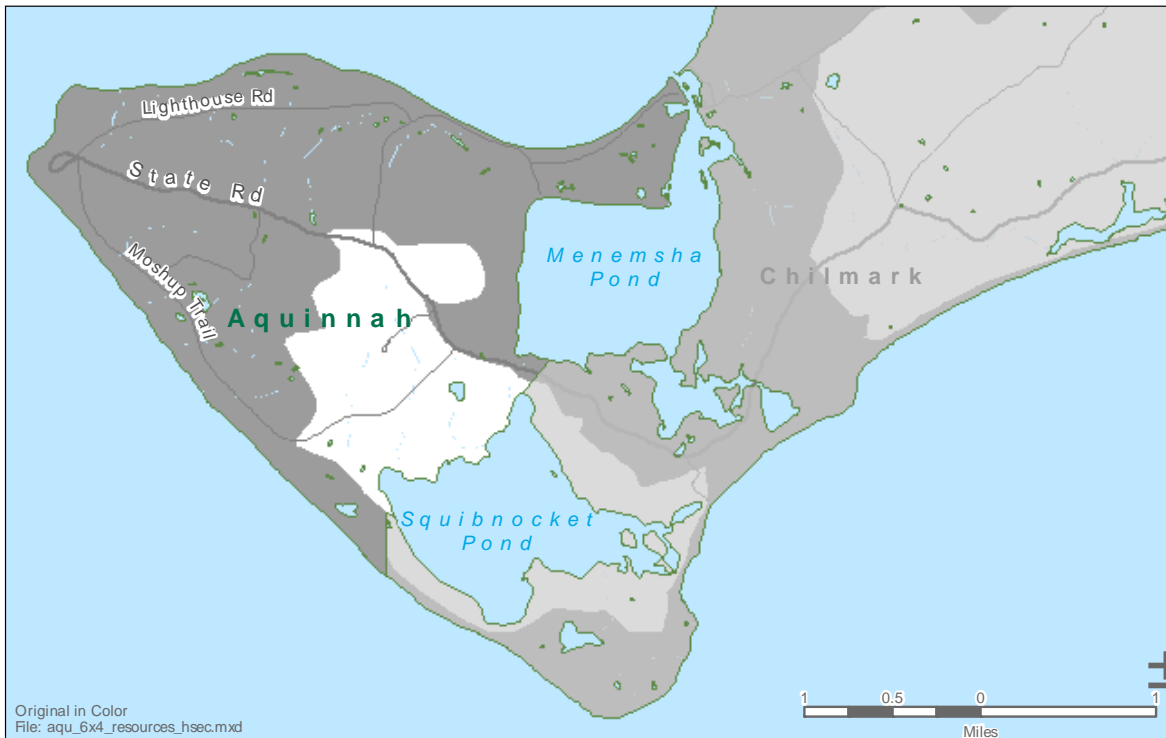
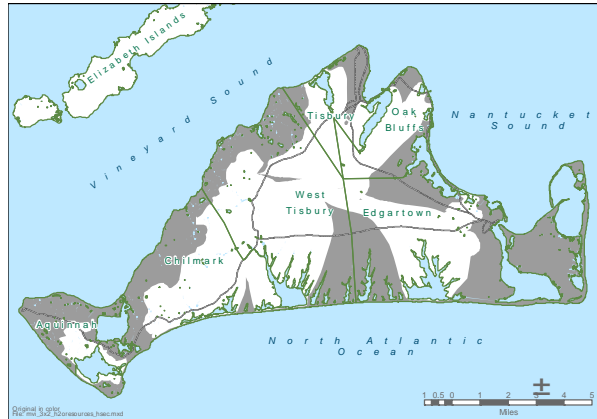


4.2.4. Water Resources

In order to limit the impact of development on precious water resources, it is preferable to limit development in water-sensitive areas. This criterion identifies those locations that are not in the areas of protection of public wellheads (Zone I, Operational Areas of Contribution, and Zone II) as well as outside the watersheds of coastal ponds at or beyond their nitrogen limits. Despite the potential impact to water quality, not a great number of points were given to this criterion, because there are a variety of options to mitigate the potential impacts of development in these areas.

Criteria for Housing Suitability		
Water Resources in Aquinnah		
Criterion	Points	Area (acres)
Lower sensitivity water area	4	2,631

Source: DEP/MassGIS 2003; MVC 2003



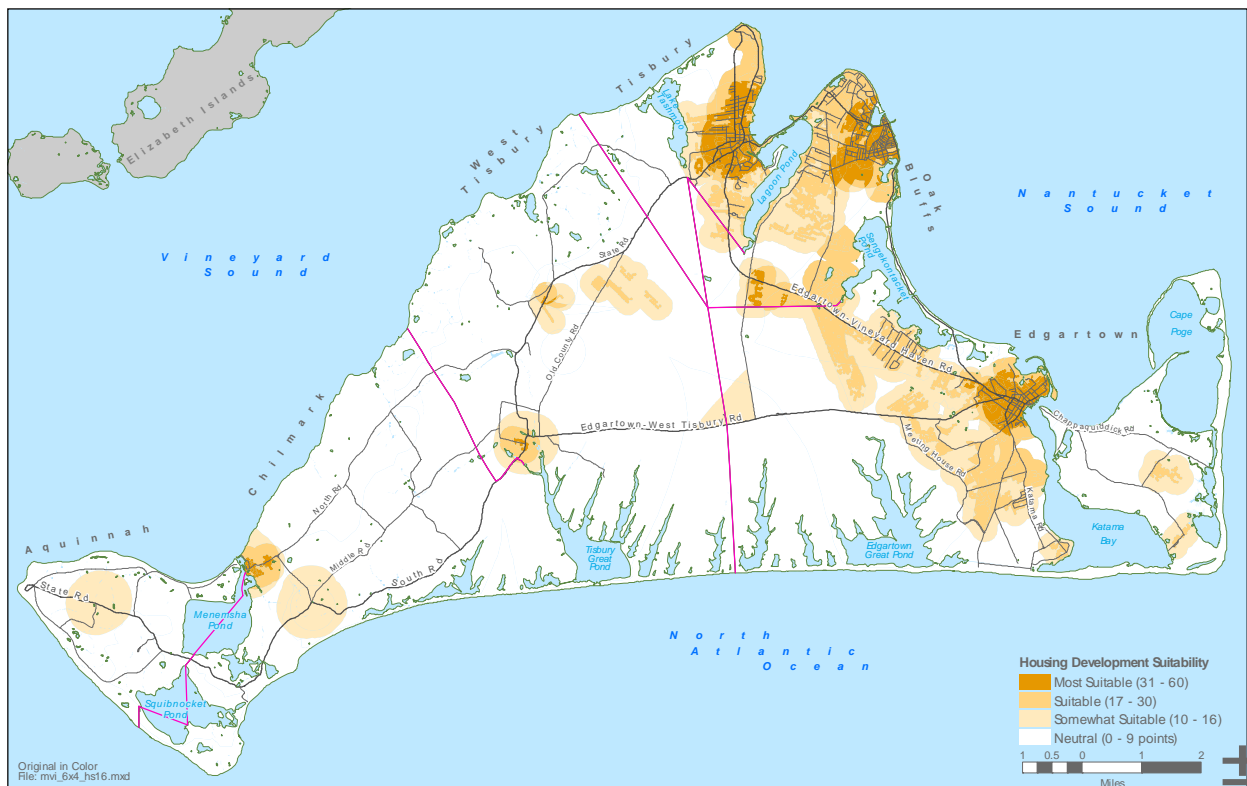
4.2.5 Housing Suitability Map

These maps shows the overall suitability of land for the creation of housing, based on a combination of all the criteria described in this section, with the intensity of the color reflecting the degree of suitability.

On Martha's Vineyard as a whole, the map indicates that the most suitable areas for housing development and particularly for affordable housing that is likely to be higher density are in and close to the centers of the three Down-Island towns as well as infill areas within and near existing subdivisions.

Within Aquinnah, the suitability analysis indicates that there is some housing suitability around the town center, based on the criteria used in this model.

Housing Suitability		
	Martha's Vineyard	Aquinnah
Most Suitable	1,984 acres (3.5%)	0 acres (0%)
Suitable	5,627 acres (9.8%)	0 acres (0%)
Somewhat Suitable	7,374 acres (12.9%)	608 acres (17.7%)
Neutral	42,190 acres (73.8%)	2,383 acres (82.3%)



4.3 HOUSING ORIENTATIONS

4.3.1 Goals

Aquinnah is committed to increasing the supply of affordable housing in the hopes of allowing current residents the opportunity to continue to reside within the community. It further recognizes the need to have a diverse housing stock in order to have a healthy and economically diverse community particularly as the escalating rise in property values will continue to challenge affordable housing initiatives. The Town of Aquinnah hopes to produce at least 4 affordable housing units over the next five years.

Aquinnah has participated in workshops and housing forums regarding innovative ways of addressing affordable housing. The Town will also continue to work with the other Island towns, the Dukes County Regional Housing Authority, the Martha's Vineyard Commission, as well as other affordable housing groups to address the need for affordable housing.

4.3.2 Objectives

- A. Although the Town has achieved the state's goal of designating 10% of its year-round housing stock for affordable housing, as defined by DHCD, it will continue to seek housing opportunities for low and moderate income residents.
- B. The Town will conduct an inventory of developable vacant town owned land. The town will then work to designate a percentage of developable vacant town-owned land for the purposes of addressing the need for homeownership units as a first priority and then rental units for families and individuals earning between 30% and 150% of the area median income.
- C. The Town will continue to process tax-title properties for foreclosure as a means of obtaining land for affordable housing.
- D. The Town will continue to work in partnership with the Martha's Vineyard Land Bank to create opportunities for open space conservation in tandem with affordable housing development.
- E. The Town will continue to seek monetary funding from the State, local, or private resources, including the Small Cities Program, to assist in the development or rehabilitation of homes for the purposes of affordable housing initiatives that include both rental and homeownership for households earning 80% of the area median income.
- F. The Town will continue to refine its zoning bylaws for the purposes of encouraging affordable housing by allowing accessory apartments.
- G. The Town will encourage the creation of small neighborhoods and work within existing ones by modifying its current cluster by-law and will consider the creation of an overlay district that would allow an increased in density that is not currently allowed by zoning within certain areas of the town, i.e., Town center as a way of encouraging affordable housing.
- H. The Town will continue to support its Affordable Housing Committee.
- I. The Town will continue to support its Resident Homesite Program.

4.3.3 Ongoing Affordable Housing Efforts

The Town of Aquinnah continues to be active in promoting affordable housing on several fronts.

1. In, 2000 the Town established an Affordable Housing Committee that will work to create affordable housing opportunities that include both rental and home-ownership for households earning 30% to 140% of the area median income
2. In 2000, the Town adopted a zoning bylaw that allows substandard lots to be developed for the purposes of affordable housing
3. In 2000, the Town adopted a zoning bylaw that allows cluster development
4. In 2001, the Town adopted the Community Preservation Act and has set a goal of maintaining public confidence in the CPA program, as well as encouraging its passage in other Towns on the Island.
5. In 2003, the Town voted to fund administrative costs for the Dukes County Regional Housing Authority.
6. In 2004, the Town voted to fund said costs within its operating budget.
7. The Town is represented on the Dukes County Regional Housing Authority Board of Directors.
8. The Town will continue to support its resident homesite program.

5. ECONOMIC DEVELOPMENT

5.1 ECONOMIC DEVELOPMENT PROFILE

The economies of all the towns of the Island are intimately interconnected. Most of the commercial services – shopping, offices, and services – provided to citizens of Aquinnah are located in other towns. Therefore, this section gives an overview of the Island’s economy as a whole and then calls out the specifics related to Aquinnah within this overall context.

5.1.1 The Seasonal Nature of Martha's Vineyard's Economy

For decades Martha’s Vineyard has been a classic seasonal economy. With the exception of some remaining commercial fishing, which employs only a very small number of people, there are no significant exports of Island goods. People come to the Vineyard for the sun, sand and natural beauty and to get away from the mainland’s hustle and bustle. The Martha’s Vineyard Commission estimates the number of people on the Vineyard in the peak summer months swells to five times the number of year-round residents. Aside from the economic boon these visitors bring by way of purchasing goods and services during their stay, the real estate taxes from second homes across the Island, and the philanthropy of the seasonal residents, allow for a much higher level of services on the Vineyard – both government and private – while also keeping tax levels low.

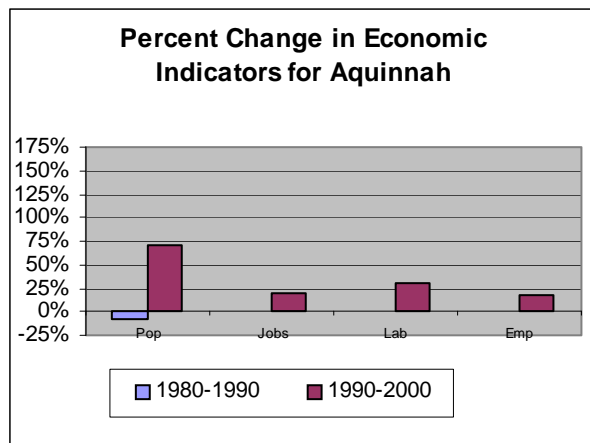
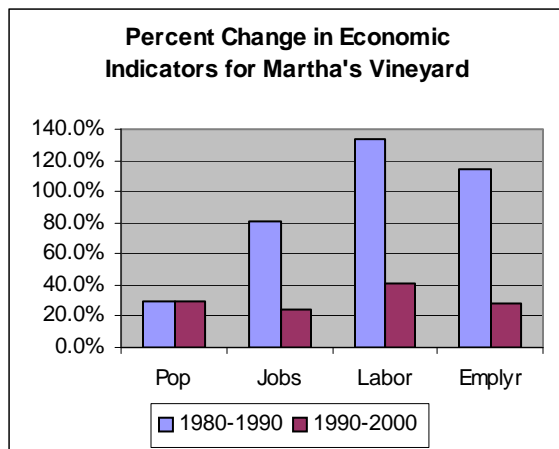
There are many layers to the economic structure of any tourist and seasonal community. Identifying the makeup of the seasonal population is essential to understanding the overall complexities of the Vineyard economy. The ratio between year-round and seasonal housing occupancy is a vital component of the dynamics of the Island economy. The driving force of the island’s economic base is the second homeowner. Vineyard towns are financially dependent on seasonal residents and second-home owners who pay property taxes but do not require the most costly of public services – the education of children. However, visitors do require higher levels of some town services, emergency services in particular. The extreme fluctuations from peak season to the winter season place severe strains on Town infrastructure for water, sewer, solid waste, and especially the Island’s road network. The tourist and seasonal nature of the Vineyard poses significant challenges to the Island towns to be able to balance the needs of a growing year-round population while accommodating the seasonal population.

Population, Jobs (Workforce), Labor Force and Number of Employers by Location													
	1980				1990				2000				
	Pop	Jobs	Labor	Emplry	Pop	Jobs	Labor	Emplry	Pop	Jobs	Labor	Emplry	
AQ	220	85	na	na	201	85	59	12	344	102	77	14	
CH	489	228	na	na	650	359	152	35	843	448	303	59	
ED	2,204	1,011	na	na	3,062	2,039	1,451	226	3,779	2,581	2,004	308	
OB	1,984	764	na	na	2,804	1,700	1,210	173	3,713	2,027	1,849	193	
TI	2,972	1,383	na	na	3,120	1,870	1,971	324	3,755	2,145	2,327	361	
WT	1,010	509	na	na	1,704	1,124	221	48	2,467	1,584	578	109	
MV	8,879	3,980	2,172	382	11,541	7,177	5,064	818	14,901	8,887	7,138	1,044	

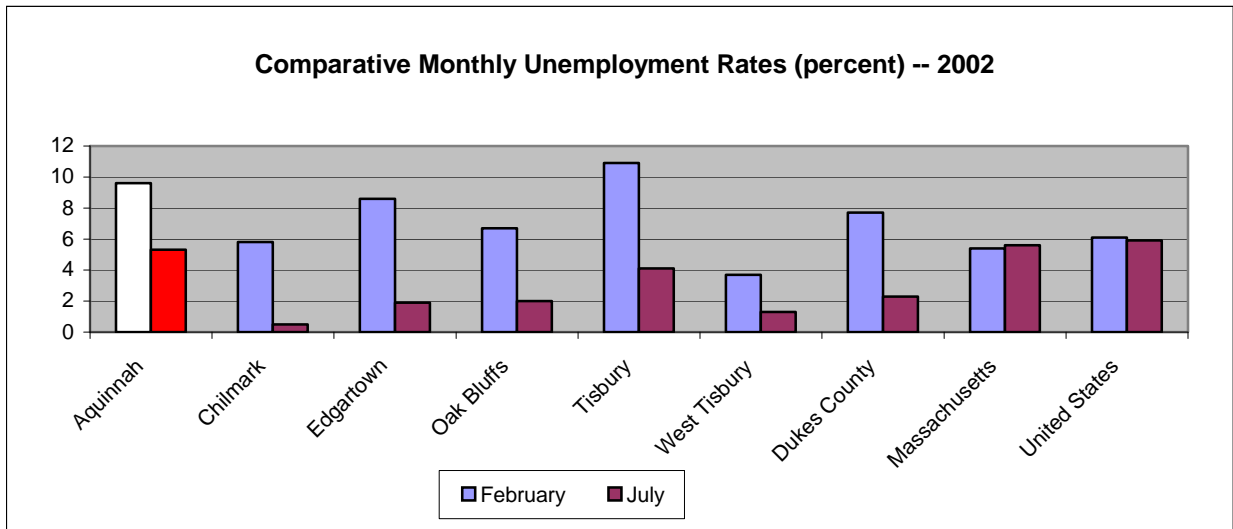
Source: U.S. Census; MA Dept. of Employment and Training

Looking at the changes in a few selected economic indicators over the last two decades of the 20th Century, the large increases in jobs, labor force and employers from 1980 to 1990 reflect the national economy and Island building boom of the mid-80s. In all categories, the Island-wide growth ranged from 30% (population) to 133% (labor force). Between 1990 and 2000, the same categories grew at a markedly slower, and much more uniform, pace.

Source: U.S. Census; MA Dept. of Employment and Training



The consumer spending of the seasonal population, whether by a year-round resident, seasonal resident, vacationer, or day-tripper, is an essential part of the economy and can vary widely among the sub-groups. The popularity of the Vineyard within the past twenty years has allowed seasonal retail and service businesses to extend their operations to broader and broader shoulder seasons.



Source: MA Dept. of Employment and Training

As mentioned in the section on housing, perhaps the most significant challenge posed by the seasonal nature of the Vineyard has been the adverse impact on the housing availability and affordability for both year-round residents and seasonal workers. One key to a stable community is its ability to maintain an adequate workforce by providing housing opportunities, particularly for low and moderate-income residents who perform many of the jobs necessary for businesses, government and organizations to operate. In addition to having a majority of their dwellings occupied seasonally (except for Tisbury and West Tisbury, which have more year-round dwellings than seasonal ones), the additional demand for housing by temporary workers filling the approximately 5,000 additional summer jobs creates a sellers' market and escalates the cost for all housing.

The seasonal effect on year-round residents is evident when looking at unemployment rates on a monthly basis rather than annual. While there is not much difference in the unemployment numbers in July and February for the mainland, on-Island they increase in the off-season from two to more than four times the July rate.

5.1.2 Geographic Structure of Economic Activity

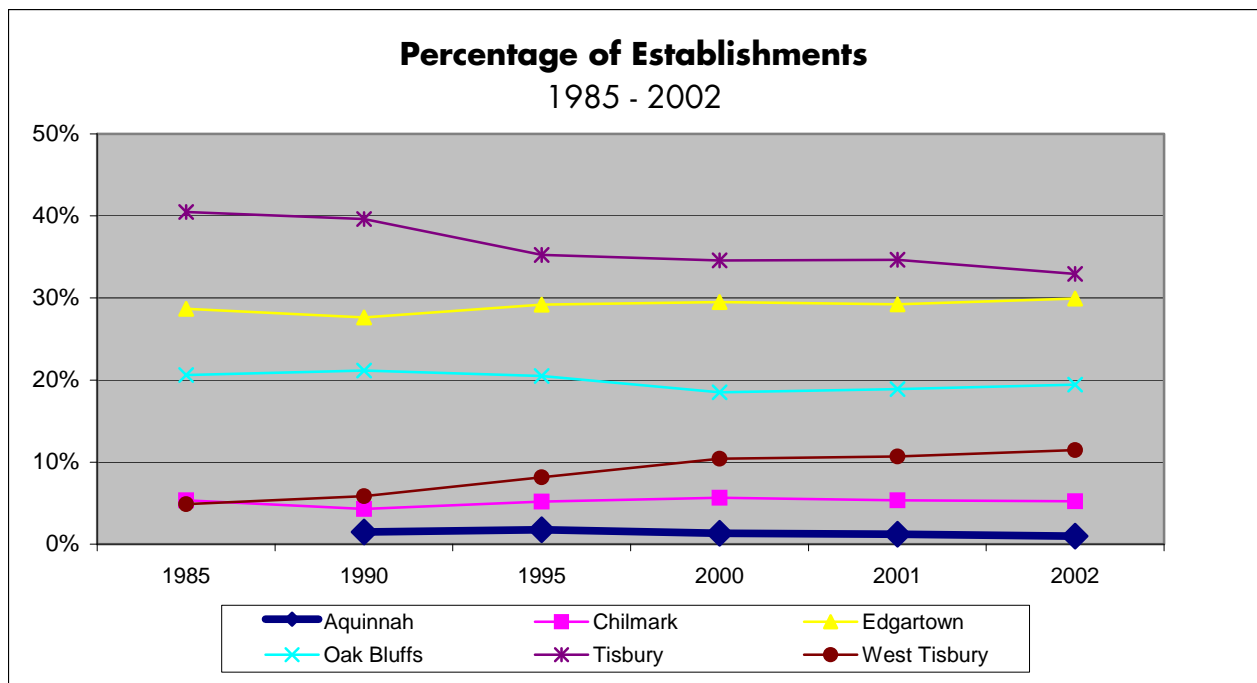
The primary economic activities, both seasonally and year round, on Martha's Vineyard take place predominantly within the Down-Island town centers of Edgartown, Oak Bluffs, and Tisbury. Each town center is located around its own harbor and waterfront areas that are surrounded by dense commercial, mixed-use, and residential development. The waterfronts of Edgartown and Oak Bluffs, and to a lesser extent Tisbury, are comprised of primarily seasonal-oriented establishments that typically close in the off-season. Most year-round retail and office activities are still located in these Down-Island areas but have grown away from the historical commercial centers, most notably Upper Main Street in Edgartown and Upper State Road in Tisbury.

Other retail and office activities are located in smaller centers Up-Island. The newest and largest (and most Down-Island) is in North Tisbury. The West Tisbury village center, and the village centers of Menemsha and around Beetlebung Corner in Chilmark are also small areas of limited commercial activity. Aquinnah's only retail activity is a small grouping of tourist-oriented food stands and novelty shops at the Gay Head Cliffs. These operate on a seasonal basis and depend largely on visitors on Island tours walking past these shops between the parking lot and the overlook above the cliffs.

Industrial activities are found in various in-town and rural locations scattered in different parts of the Island, notably in the Airport Business Park. Traditional industries include farming and fishing. Menemsha is a regionally unique harbor whose character as a genuine fishing port needs strong town commitment to survive. Recreational boating, sports fishing and non-marine commercial uses have come to dominate other island ports, much as they have mainland ports. Menemsha still presents an authentic and scenic panorama of fishermen's sheds and shacks. While commercial fishing has declined in recent years, the village and harbor continue to serve as a living port for working and pleasure boats, to offer memorable images for tourists, and to provide retail and wholesale seafood commerce.

Martha's Vineyard also has a considerable number of home businesses throughout the Island. Also dispersed are the businesses providing construction, renovation, maintenance and landscaping of residential properties.

5.1.3 Business Establishments



Source: MA Dept. of Employment and Training

The island of Martha's Vineyard has seen continued growth in the total number of business establishments (employers reporting payroll withholding taxes) between 1985 and 2002. The percentages of establishments in the Up-Island towns of Aquinnah and Chilmark have remained constant. The number of establishments in West Tisbury has grown at an accelerated rate since 1990 and represents an increasing percentage of the Island's businesses. As for the Down-Island communities of Edgartown, Aquinnah, and Tisbury, the total number of establishments has increased within each town. On the basis of percentage of establishments Island-wide, Tisbury and, to a much lesser extent, Oak Bluffs have lost their proportional share of the Island's business establishments to West Tisbury.

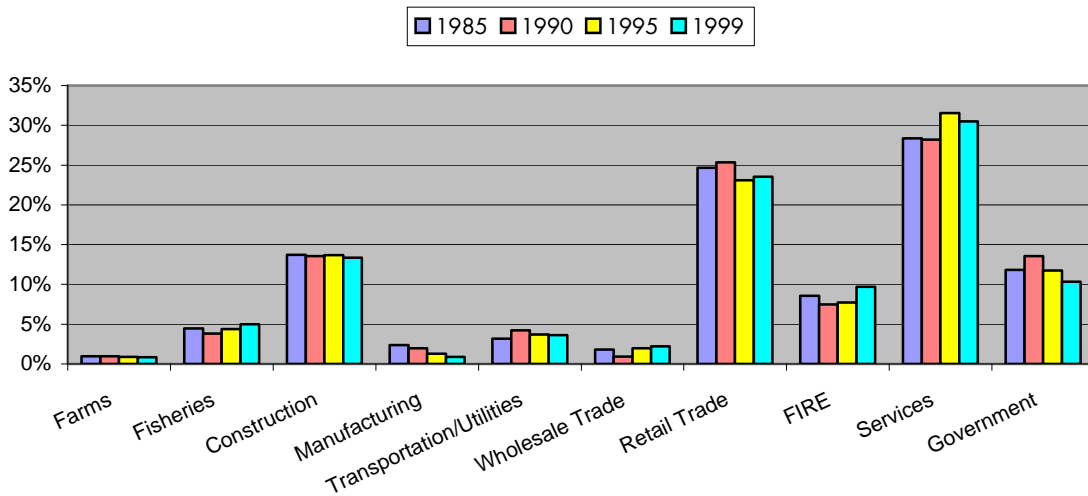
Approximately two-thirds of the establishments on Martha's Vineyard employ between one to four individuals, according to the US Census County-to-County Business Patterns. The 2003 Business Survey conducted jointly by the MVC and the MV Chamber of Commerce indicated a somewhat larger size (possibly because there was an under-representation of home businesses) with an average of five to six full-time employees in retail businesses and eight to ten full-time workers in not retail businesses. The survey figures did not include part-time workers or seasonal workers.

The difference in demand for seasonal workers is evident in the employment fluctuations during the months of July and August. Balancing the needs such as housing for workers, parking, transportation, and the market demands of the year-round and seasonal economies is a challenge to the Island communities.

5.1.4 Types of Jobs and Wages

Island-wide, retail and services (health care, landscapers, lodging, etc.) jobs have, combined, consistently accounted for more than half of all reported employment. (Note: 'Reported' employment is an important distinction to make in evaluating employment figures. Most employment numbers from federal sources come only from employers required to file withholding taxes for their employees. Sole proprietors, of whom there are many on the Island, are not counted in these employment numbers.) Construction and government jobs account for another quarter of total employment. Perhaps most surprisingly, construction jobs have consistently represented between 13 and 14% of total employment for the five-year intervals measured between 1985 and 1999. Although seasonal tourism requires a lot of retail, service, and construction jobs, the magnitude of these numbers also reflects the growing and stabilizing year-round Island economy in response to the continued strong growth in year-round population.

Percent Change in Employment Sectors Dukes County

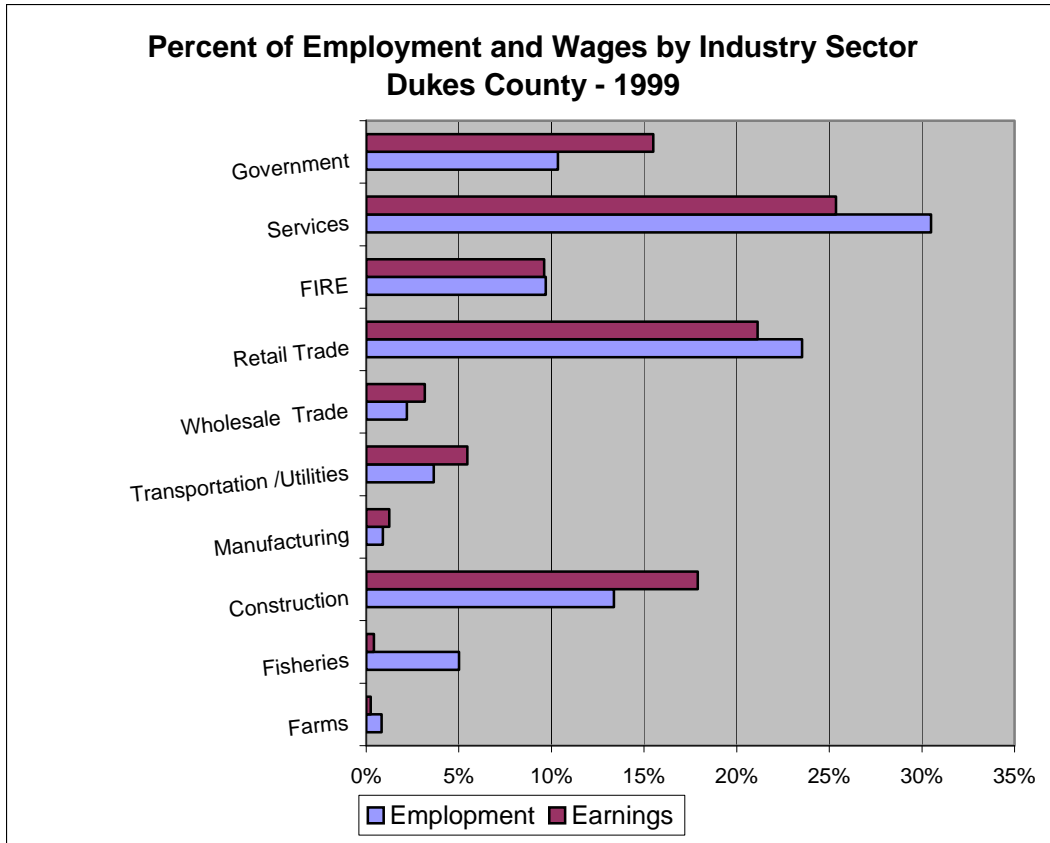


FIRE is Finance, Insurance and Real Estate
Source: U.S. Bureau of Economic Analysis

Because not all jobs pay comparable wages, examination of the total wages represented by each employment sector provides another perspective of the local economy. While retail and service jobs represented 54% of employment in 1999, they accounted for only 47% of the total Island wages. Conversely, the 24% of Island jobs in construction and government actually provided 33% of all wages.

5.1.5 Workforce

Reviewing the comparisons of workforce employment – the number of jobs in a town – for all of the towns on Martha’s Vineyard from 1985 to 2002, the workforce trends varied from the business establishment findings for the Down-Island towns. From 1985 to 2002, there has been an increase in the number of workers working within each town except for Tisbury where there has been a decrease in the number of workers from 2001 to 2002. Nevertheless, Tisbury still had the largest number of workers, followed by Edgartown, Oak Bluffs, West Tisbury, Chilmark, and Aquinnah. The workforce differential among the three Down-Island towns is equalizing – much like their year-round populations. Island-wide percentages of the workforce figures within four of the towns, particularly Tisbury and West Tisbury, were more similar with the percentage trends in the number of business establishments.



FIRE is Finance, Insurance and Real Estate
 Source: U.S. Bureau of Economic Analysis

From 1985 to 2002, the Town of Tisbury had the highest workforce percentage, despite gradual declines in percentages island-wide from 1990, when Tisbury peaked at 39%, to 33% in 2002. It is clear that the Town of West Tisbury has picked up Tisbury's lost percentages. From 1985 to 2002, the Town of West Tisbury has increased from 4% to 10%. In 1985 Edgartown had 32% of the island workforce while Oak Bluffs had 23%. Over the next ten years there was a shift between the two towns; Edgartown experienced a 4% decline while Oak Bluffs experienced a 5% gain. Since 1995, Edgartown has led Oak Bluffs by a margin no greater than two percent. Chilmark and Aquinnah total no more than 5% of the Island's workforce combined.

The average annual unemployment rate for Dukes County has been slightly better than the state and national averages since 1990. However, the average annual unemployment trends mask the monthly unemployment fluctuations due to the seasonal and tourist-based economy of Dukes County. The monthly unemployment rates for February and July throughout the years demonstrate dramatic fluctuations for the County and Island towns but also show that the State and national rates are more consistent.

5.1.6 Issues Related to Economic Activity

Some Island boards are in the process of re-evaluating various transportation, housing, and zoning issues while considering the current and future economic needs of the year-round community. Concerns being raised within this Community Development Planning process as well as in the context of revisions to the Edgartown and Tisbury Master Plans include:

- the application of smart growth principles to encourage mixed-use development for commercial and housing,
- increasing density within already developed areas,
- creation of satellite parking to better serve commercial areas,
- dealing with concerns about un-regulated industries such as home businesses including conflicts with surrounding residential areas,
- the need to accommodate growth in commercial space,
- the possibility of designating areas for other types of service businesses and light industrial uses (the Airport Business Park, which was specifically designed in the 1980's to be used for warehousing and other industrial uses, is currently operating near full capacity).

Within Aquinnah, the key issues are the preservation of the fishing industry in Menemsha and the preservation of the overall scenic and environmental values that are the basis of the Aquinnah's second home market and thus, the economic foundation of the town.

5.2 ECONOMIC DEVELOPMENT SUITABILITY ANALYSIS

The economic development suitability analysis uses the same methodology as previously described for open space and for housing. The criteria are based largely on Smart Growth principles of favoring development that uses existing infrastructure and consolidates development rather than sprawling into environmentally sensitive and other rural areas. As much of Martha's Vineyard is rural, with some towns unreceptive to any additional commercial activity, the identification of suitability criteria was difficult. Some of the Smart Growth principles, such as proximity to public transit, when applied as suitability criteria on the Vineyard, produced distinctly un-Smart Growth results, namely strip roadside development. A half dozen potential suitability criteria in addition to those listed below were tried in more than a dozen trial models of the analysis and were ultimately discarded as being inappropriate for evaluating economic development suitability on Martha's Vineyard.






The following are the criteria used for evaluating the suitability of land for economic development.

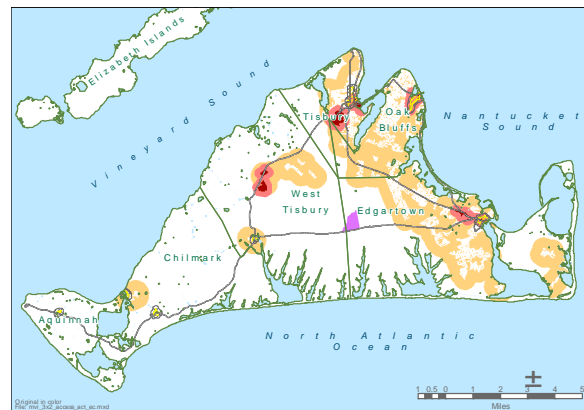
1. **Access to Activities:** In or Near Village Center; In or Near Existing Commercial Areas; In Airport Business Area, Near Existing Neighborhood
2. **Municipal Services:** Close to Major Road; Served by Town Water; Served by Town Sewer
3. **Water Resources:** Not in Nitrogen-Sensitive Watershed

These are explained in more detail in the following tables, followed by the resulting economic development suitability map.

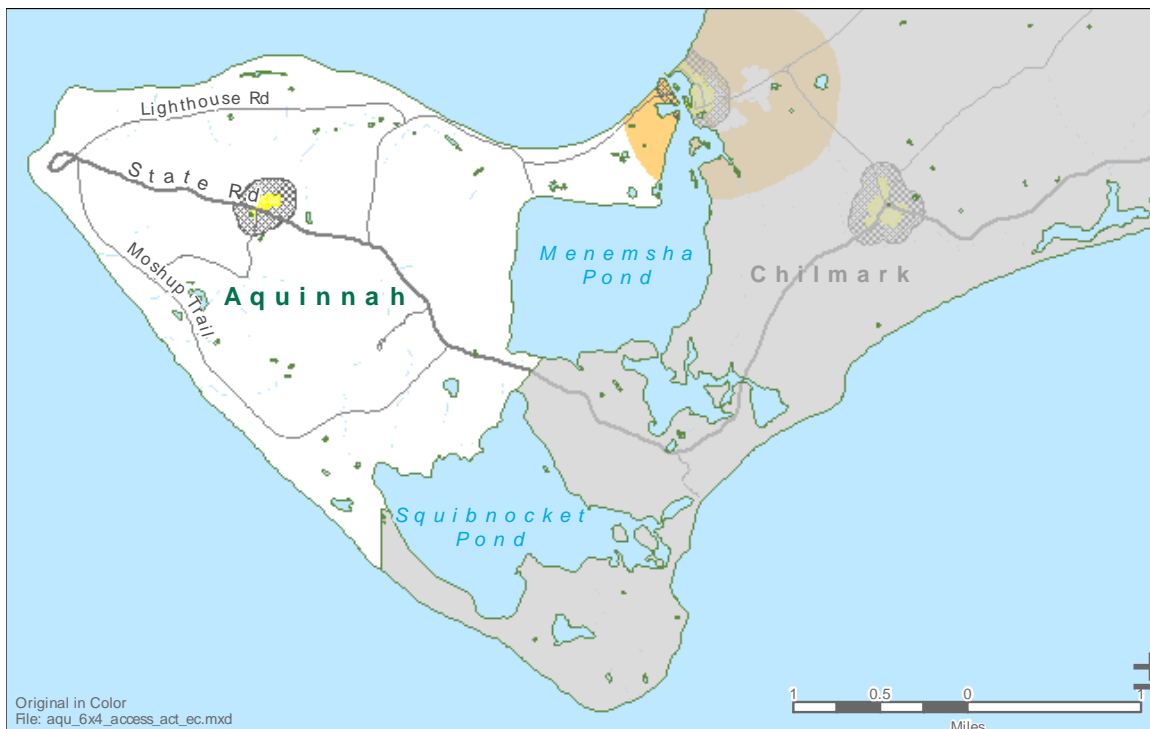
5.2.1. Access to Activities

Consolidating development in or near existing commercial areas allows for creating concentrated and vital commercial areas while limiting the negative impacts of commercial development on residential and rural areas. These are primarily Down-Island. It is also desirable to reinforce existing village centers, which even Down-Island may not be the same area as the principal commercial area, so these centers were given additional points. An additional criterion was given to lands proximate to existing neighborhoods in order to provide access for jobs and use of these services by residents.

Criteria for Economic Development Suitability Access to Activities in Aquinnah		
Criterion	Points	Area (acres)
 Inside commercial area	20	0
 Within 1000' of commercial area	10	0
 Inside village center	8	6
 Within 500' of village center	6	68
 Within 2000' of neighborhood	2	102



Source: Towns' Assessors/Cartographic Assoc. 2003; MV Conservation Partnership 1999; MVC 2004
Note: the Airport Business Park was given 10 points



5.2.2. Municipal Services

These criteria were explained and mapped in section 4.2.2.

Criteria for Economic Development Suitability Municipal Services		
Criterion	Points	Area (acres)
Served by Town Sewer	6	0
Served by Town Water	6	0
Within 200' of major road	6	164

5.2.3 Water Resources

This criterion was also used in the housing suitability analysis and is explained in section 4.2.4.

Criteria for Economic Development Suitability Water Resources		
Criterion	Points	Area (acres)
Lower sensitivity water area	2	2,631

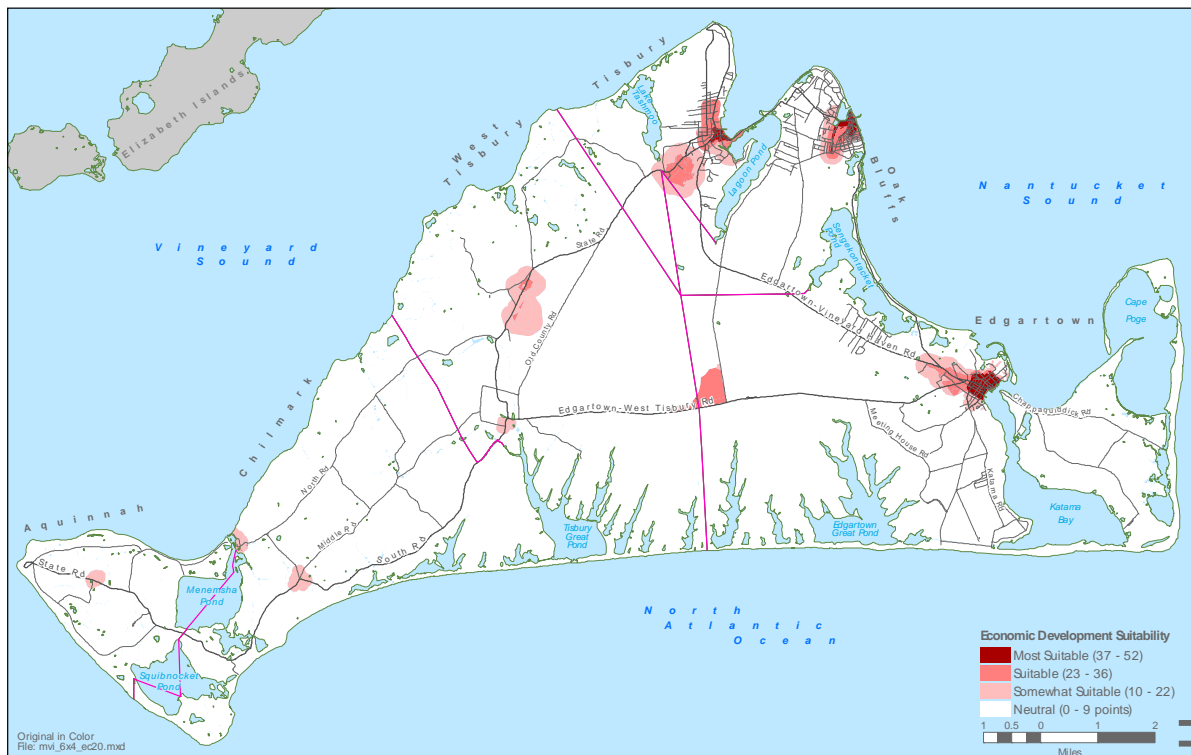
5.2.4 Economic Development Suitability Map

As in the previous sections, this map shows the overall suitability of land for economic development, based on a combination of all the criteria described in this section, with the intensity of the color reflecting the degree of suitability. Lands that are already preserved or developed are overlaid with a diagonal crosshatch.

On Martha's Vineyard as a whole, the map indicates that the most suitable locations for additional commercial development are in and near the existing commercial areas, notably in the Down-Island towns.

Within Aquinnah, the application of the criteria suggests that the town center offers some advantages should the Town ever decide that it wished to have any additional commercial development.

Economic Development Suitability		
	Martha's Vineyard	Aquinnah
Most Suitable	217 acres (0.4%)	0 acres (0%)
Suitable	765 acres (1.3%)	0 acres (0%)
Somewhat Suitable	1,487 acres (2.6%)	57 acres (1.7%)
Neutral	55,203 acres (95.7%)	3,384 acres (98.3%)



5.3 ECONOMIC DEVELOPMENT ORIENTATIONS

Aquinnah has high residential property values based essentially on the remarkable quality of its environment. The community places its greatest priority on the preservation of this environmental quality rather than developing commercial activities. The goals with respect to economic development deal primarily with the preservation of the Menemsha fishing village and the preservation – without any expansion – of the limited area of tourist-oriented retail.

Goal 1: Maintain Menemsha as a small fishing village.

Objectives:

1. Maintain dock space for commercial fishing vessels.
2. Keep all existing fishing shacks in Menemsha; require that before any shack on town property is removed the Town be given the opportunity to purchase it with private or public funds to lease to fishermen.
3. Require any new building or alteration to buildings on Town-leased land to be subject to design approval by the town for continuity of design and proportions of traditional fishing shacks.

Goal 2: Promote aquaculture in a manner compatible with scenic and other community values.

Goal 3: Protect the quality of environment that is the basis for the Island's visitor-based economy.

Goal 4: Deal with the conflicts between existing and potential future home businesses located in residential areas.

Objectives:

1. Register and track home businesses on an annual basis:
2. Establish regulations for home businesses to ensure that the character of the neighborhood is not compromised and neighbors are not unduly burdened.

6. SYNTHESIS – PUTTING IT ALL TOGETHER

The final step in the suitability analysis was to combine the three suitability maps.

6.1 Development

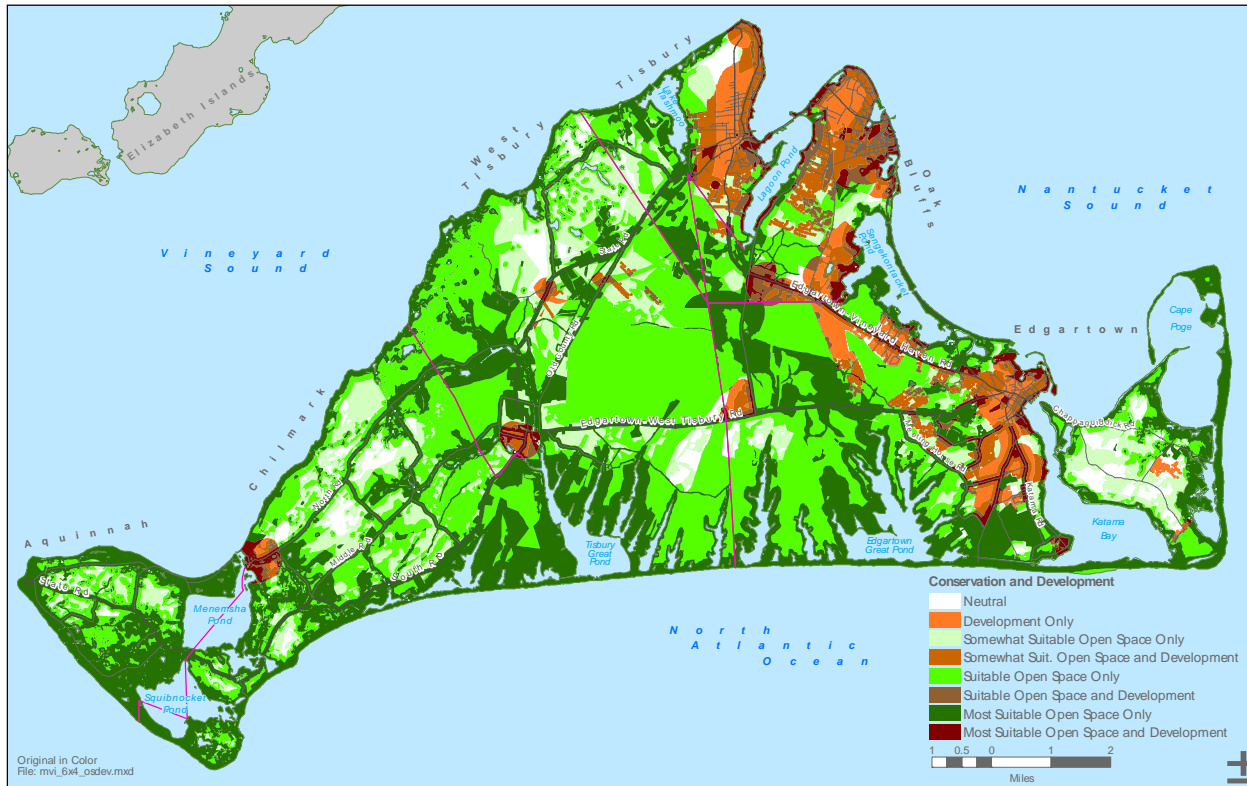
The fold-out map opposite represents the combination of the Housing and the Economic Development Suitability Maps into an overall Development Suitability Map. Those areas that were “suitable” for either housing or economic development were considered “high”; those areas that were neutral or “somewhat suitable” were rated “low”. Remember that this exercise is without considering zoning, ownership, or the suitability of land for open space or natural resource protection that, in many cases, could have a higher priority in determining the ultimate use of the land.

6.2 Development versus Conservation

The following map represents the combination of the Open Space and Natural Resource Preservation Suitability Map with the Development Suitability Map. This map indicates those areas where the suitability for preservation and development are complementary and where they conflict.

Since there was only a very small area that met the suitability criteria for development, namely around the town hall, and this was also most suitable for open space and natural resource conservation. Other than that, the synthesis map is virtually identical to the Open Space and Natural Resource Suitability Map.

Suitability for Development versus Conservation		
	Martha's Vineyard	Aquinnah
Neutral	1,827 acres (3%)	48 acres (1.4%)
Suitable Development Only	1,750 acres (3%)	0 acres (0%)
Somewhat Suitable Open Space Only	6,547 acres (11%)	302 acres (8.8%)
Somewhat Suitable Open Space & Suitable Development	2,952 acres (5%)	0 acres (0%)
Suitable Open Space Only	18,993 acres (33%)	732 acres (21.3%)
Suitable Open Space & Suitable Development	1,273 acres (2%)	0 acres (0%)
Most Suitable Open Space Only	21,808 acres (38%)	2,341 acres (68%)
Most Suitable Open Space & Suitable Development	1,917 acres (3%)	18 acres (0.5%)



6.3 Zoning and Implementation Policies

The results of the suitability analysis were compared to the Town's existing zoning to identify areas where the community might wish to consider changes to make the zoning correspond more appropriately with the suitability of various parts of the town for various uses.

Aquinnah, and in fact all of Martha's Vineyard, is an older, largely developed community that has put considerable effort into thinking about what it wants to be. So, not surprisingly, all of the Island towns have largely reaffirmed their existing policies with respect to land use. No areas were identified for possible changes to the land uses and densities in Aquinnah.

6.4 Next Steps

The results of the suitability analysis suggest that Aquinnah's current zoning is appropriate. The Town might consider acquisition of land for open space and natural resource protection, particularly those most highly rated in the suitability analysis; especially if said lands also rated low in the development suitability analysis.

The Martha's Vineyard Commission might also use the results of the suitability analysis in the following ways:

- Consider a policy to require mandatory clustering in areas of highest open space and natural resource suitability when reviewing proposed Developments of Regional Impact;
- Consider the development and open space preservation suitability when reviewing proposed Developments of Regional Impact;
- Consider enlarging or creating Districts of Critical Planning Concern to protect those areas that rated in the highest categories in the open space and natural resource suitability analysis.

The Island's conservation organizations are also encouraged to use the open space and natural preservation suitability map as a guide to identifying properties for possible preservation.

The Community Development planning process has proven to be extremely valuable in many ways. It has allowed the towns and the MVC to gain a much clearer understanding of the various factors involved in land use decisions through the compilation and validation of GIS mapping and other data related to land use, housing and economic development. The open space and natural resource preservation suitability map can serve as a guide for public agencies and conservation organizations by highlighting the land most important to preserve through acquisition of property and conservation restrictions, or through the permitting process by the MVC and town boards. Affordable housing committees can use the housing suitability criteria and maps to focus in on properties for possible projects.

The process has also led the steering committees of all six towns, to conclude that this planning effort should serve as the basis for a comprehensive Island-wide planning effort to re-articulate the broader community's vision for the future growth of the Vineyard. This effort should be a collaboration between the Martha's Vineyard Commission and all six Island towns.

Certain issues can only be dealt with on an Island-wide basis, such as how much additional commercial development there should be and where it should take place. In the community development plans, most communities reaffirmed the extent of the present business districts, with the possible exception of Tisbury that wished to explore a possible expansion of the Upper State Road business area into a presently underused area to create a mixed-use neighborhood. It is believed that more efficient use of existing commercial districts will be able to accommodate future growth. However, the Martha's Vineyard Commission and the towns should work together to test this hypothesis in more detail by estimating how much additional commercial development can be absorbed in existing commercial areas. A significant limiting factor to more concentrated development is the limited community sewer capacity for two of the three Down-Island towns and all of the Up-Island towns. Ideally, this testing could be done by preparing sketch plans for each of these areas. If it is anticipated that additional commercial space will be needed, several options can be explored:

- enlarging existing commercial districts,
- creating a large new commercial district in a new location (e.g. the airport,
- creating small commercial districts dispersed in various Island locations.

Other issues that could be dealt with in this comprehensive planning effort are:

- rate of growth;
- affordable and moderate housing;
- wastewater management;
- preservation of scenic values including a revisitation of the Island Road DCPC and the Coastal DCPC with a view to strengthening their effectiveness;
- traffic and transportation;
- dealing with economic changes in the community;
- open space protection;
- implementation of smart growth principles of concentrating development in compact, mixed-use neighborhoods and preserving rural and other natural areas.

APPENDIX I – WATER RESOURCES

There are two significant coastal water bodies in the Town of Aquinnah. Both Menemsha and Squibnocket Pond are shared with the Town of Chilmark. Based on water quality analyses, the growth of phytoplankton and marine wrack algae, Menemsha and Squibnocket Ponds are clearly limited by the availability of nitrogen during the growing period.

The watershed of Menemsha Pond is 1793 acres, entirely within the Western Moraine. Vigorous tides flush 95 percent of the water out of the pond within 3.2 days. In 2001, there were 373 existing residential and commercial units. This is projected to grow to a maximum of just over 1000 units.

The watershed of Squibnocket Pond is 1260 acres in area and contained 101 residential units in 2001 (MVC, 2001). Buildout is projected to raise the number of units in the watershed to at least 255. Black Brook and Witch Brook drain into the Pond from the Aquinnah side. The entire watershed is within the Western Moraine and is marked by numerous wetlands.

Buildout and Related Water Quality Concerns

The greatest threats to water quality are the nitrogen loading from septic systems. Disposal of wastewater from existing dwellings adds nitrogen to the groundwater and eventually to the coastal pond to which that groundwater discharges. The ability of a coastal pond to process nitrogen is dependent on how quickly tidal exchange carries the nitrogen out of the system. The longer the nitrogen is resident in a coastal pond, the more times it can be passed on to stimulate the growth of new generations of phytoplankton and wrack algae. The water quality in the systems will be impacted by nitrogen loading from their watersheds because marine plant growth in the systems is limited by the availability of nitrogen. The degree of the impact and its acceptability can be assessed by determining the nitrogen-loading limit for the desired water quality goal.

Both Menemsha and Squibnocket have small watersheds compared to the area of the ponds. As a result, at buildout, wastewater will not be as large a component of the total nitrogen load as it might be if the watersheds were very large. Acid rain, on the other hand, will be a proportionally larger source.

Menemsha Pond receives nitrogen loading from both its own watershed and the Squibnocket Pond watershed. Substantial fresh and salt wetlands may serve an important function in nutrient removal services. The Pond is exceptionally well flushed and nitrogen loading is not expected to be a problem. The Pond is an important source of bay scallops, soft-shell clams and quahogs as well as herring and sport fish.

Squibnocket Pond is a brackish pond that is poorly flushed through the Herring Creek. It displays some symptoms of nutrient loading, including phytoplankton blooms and low dissolved oxygen levels. Due to the sparse development in the watershed, this response is suspected to be driven by natural nutrient sources as well as by the nutrients contained in acid rain. The exchange period is estimated to require as much as 354 days. Nitrogen loading limits of 1500 to 3000 kilograms were proposed. In 2001, 101 residential units were identified within the watershed. This was projected to grow to as much as 350 units at buildout. Projected nitrogen loading ranges from 2200 to 4000 kilograms. The nutrient loading from the watershed may be substantially lowered by the extensive wetlands found throughout. Squibnocket Pond has great potential to yield oysters and is the spawning grounds for a very large herring population.

Options to address water quality impacts include:

- Create nitrogen management area(s) where denitrifying technology is required.
- Educate the public to continue to keep landscape areas small and fertilizer inputs low.
- Eliminate stormwater discharges to streams at road crossings including at Black Brook and Hariph's Bridge.
- Provide improvements to circulation in Squibnocket Pond.
- Acquire conservation easements and title to reduce buildout and resulting nitrogen loading.

Freshwater Resources

Growth of aquatic plants and phytoplankton in these resources are usually not limited by nitrogen but instead are affected by phosphorus loading from the surrounding watershed. Fortunately, unlike nitrogen, phosphorus does not travel freely. Because much of the Town is within the Western Moraine there are extensive fresh wetlands and numerous, small fresh water ponds. The primary fresh water resources in the Town of Aquinnah include:

Lily Pond	3 acres
Occooch Pond	4 acres
Witch Pond	5 acres

None of the fresh water resources has been studied in any detail.

Water quality in fresh water ponds may be maintained by treating sewage within a fixed distance of the shoreline to remove both nitrogen and phosphorus. The typical distance for a wastewater management area ranges from 300 to 500 feet. Elimination of stormwater runoff directly into the system will reduce a phosphorus source. Encouragement of a natural plant buffer around the pond will help remove nutrients running off from residential landscapes.

PREPARED FOR THE TOWN OF AQUINNAH
BY THE MARTHA'S VINEYARD COMMISSION

