

TOWN OF PROVINCETOWN
MASSACHUSETTS
OPEN SPACE AND RECREATION PLAN
1995



View of Downtown Provincetown over Shankpainter Pond



Prepared by:
The Compact of Cape Cod Conservation Trusts, Inc.



Prepared for:
Open Space and Recreation Planning Committee
Town of Provincetown

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SECTION 1 PLAN SUMMARY

This 1995 Open Space and Recreation Plan update is a complete revision of Provincetown's earlier plan, and is designed to give it meaning for today's town, and to meet the state's 1990 Open Space and Recreation Plan Requirements. The update builds on the earlier plan, incorporating goals of protecting natural resources, conserving open space and providing a varied recreation program. The plan seeks to address these goals simultaneously where possible by encouraging preservation of open space, while allowing opportunities for its enjoyment through modest improvements which provide access for passive recreation.

The update presents some new ideas for recreation, such as a multi-use recreational corridor, and incorporates new goals for accessibility for both recreation and open space facilities. There is an emphasis on open space preservation by means other than direct acquisition, for instance, through conservation easements, donation, etc., in response to current economic conditions.

Public participation was an important part of the plan. A survey was used to obtain a real sense of public opinion on the town's approach to open space and recreation, and public hearings were held throughout the planning process.

SECTION 2 INTRODUCTION

A. Statement of Purpose

Provincetown's Open Space and Recreation Plan is intended to provide a framework for decisionmaking by its residents. The purpose of the plan is to serve as a guide to responsible action to conserve Provincetown's natural resources, preserve its open space and provide ample opportunities for recreation for its citizens.

B. Planning Process and Public Participation

The Executive Office of Environmental Affairs' Open Space Planner's Workbook: A Companion to the 1990 Open Space and Recreation Plan Requirements was used as a guide to preparing the plan. The 1986 Provincetown Open Space and Recreation Plan update began with the formation of a committee whose aim was to revise the existing plan to reflect current conditions. This committee included representatives from the Conservation Commission, Conservation Trust, Bicycle Committee, Environmental Action Committee, Recreation Department and the community at large. The Assistant Town Manager provided administrative support. Several committee members had been involved with preparation of the 1986 plan, which enabled the group to readily use the earlier plan as a starting point. We also consulted the Provincetown Master Plan (Lane Kendig Inc., 1988) and progress made to date in the Provincetown Harbor Plan, Lower Cape Capacity Study, and the Provincetown Local Comprehensive Plan. In accordance with the state Uniform Procurement Act (MGL30B), The Compact of Cape Cod Conservation Trusts, Inc. (Mark H. Robinson, Executive Director) was hired by the town at a cost of \$4,200 to provide technical assistance to the Committee.

One of the first tasks undertaken was to conduct a series of surveys to determine residents' attitudes and opinions about open space and recreation. The first survey, designed by the Open Space and Recreation Planning (OSRP) Committee, was distributed at the October 24, 1994 Special Town Meeting and other gathering places in Provincetown. The OSRP also administered surveys at Provincetown High School and Provincetown's Veterans Memorial Elementary School. Appendix A contains the sample surveys and tabulated results. Section 7 analyzes the responses of these surveys. The surveys were used in conjunction with interviews of town officials to develop the Goals and Objectives for the plan.

The OSRP Committee held public hearings on the planning process on January 5 and May 4, 1995. Comments from these hearings were incorporated in the plan. A public hearing on the draft final plan was held by the Provincetown Board of Selectmen on May 22, 1995. All hearings were publicized in the local media as well as by Town Hall posting. Town, regional, and state officials reviewed the plan in the Spring and Summer of 1995 and their comments were also used to revise the final plan.

SECTION 3 COMMUNITY SETTING

A. Regional Context

Provincetown is unique. Singularly, spectacularly, unique. Imagine a place isolated by geography, geology, history and cultural traditions and you begin to get a sense of what makes Provincetown different. Different, not only from the rest of Cape Cod, but perhaps from the rest of the world. The place has changed from being the "First Outpost" to the "Outermost Resort" in Massachusetts. But it is one of very few places where people are attracted to a town inexorably linked to its natural splendor, rather than to a set of attractions. It is a working, living town, not a theme park.

Provincetown is a destination. When you arrive, you know you are there. It is impossible to be bored in Provincetown, because even if you have had enough of the bustling downtown, you can walk one way and be on the broad tidal flats or back in the high dunes the other way within minutes. Located at the fingertip of Cape Cod, it is closer to Boston by water than by land, and, more than any other Cape Cod community, the town's orientation has always been towards the sea. Provincetown is the cultural and commercial anchor for the other Outer Cape towns of Truro and Wellfleet. Provincetown is one of but a few U.S. towns where one can watch the day's sun rise and set over the ocean.

Located at the tip of Cape Cod between an area commonly described as the "wrist" (North Truro) and the extreme eastern tip known as the "finger" (Long Point), Provincetown is isolated from the other Cape Cod centers of population. (See Map 1.) It is located 117 (road travel) miles from Boston and 290 miles from New York City; it is closer to Boston by boat (50 miles) than by car, leading to the increasing popularity of the regular summer ferry runs from the capital.

Provincetown encompasses 8.35 square miles of land area, or 6400 acres, of which 4500 acres (70%) have been, since 1961, under the jurisdiction of the Cape Cod

National Seashore, administered by the National Park Service. Municipal Provincetown is a highly urbanized stretch of land, three miles long and one and a half miles wide in breadth. Town government has direct jurisdiction over 1900 acres outside the defined boundary of the National Seashore, generally that area south of Route 6. Historically, downtown has been divided into two neighborhoods, East End and West End, with MacMillan Wharf and Town Hall acknowledged to be the informal dividing line.

Provincetown is the only Cape Cod municipality to have only one neighboring town (Truro), but it has always found it necessary to work with its Cape brethren on resource issues. In 1907 Provincetown secured state legislative approval to acquire land in North Truro (Knowles Crossing) for the first public wellfield on Cape Cod. Ever since that time, the protection and utilization of groundwater between Truro and Provincetown has been a joint concern, and occasional source of friction. (In fact, Provincetown returns Truro water to supply Beach Point of North Truro via a public water supply line, the only part of Truro to have municipal water.) Provincetown is concerned that Truro should adopt strict groundwater quality protection regulations. For its part, Truro is anxious for Provincetown to control its growth in water demand. In 1994 Provincetown joined other Lower Cape towns in preparing a Lower Cape Water Management Plan, which extends the bilateral work of Truro and Provincetown to Wellfleet and Eastham, other towns lacking municipal water supplies.

Provincetown is engaged in the natural resource and planning issues of Cape Cod through participation in the Cape Cod Commission, Coastal Zone Management Advisory Committee, Barnstable County Health Department, Shellfish Task Force, and other regional organizations. And, as a major destination of the Cape Cod National Seashore, Provincetown has a successful cooperative relationship with the National Park Service, even in the face of significant differences in management

policy. Provincetown is a natural start and end point for the Capewide bikeways system to link the county from the Canal to the Cape-tip. Provincetown is a busy port for the bicyclists and assorted athletic groups that use the Boston shuttle ferry to Provincetown as one access for bicycling opportunities on the Cape. Provincetown is a natural destination for the network of Cape Cod hiking trails recently envisioned in the Cape Cod Commission's Pathways concept. Cooperative ventures in protecting the large Clapps Pond - Duck Pond ecosystem will require partnerships with the three large landowners in this wetland area: the town, the Mass. Division of Fisheries and Wildlife, and the National Park Service.

Potential regional and neighboring threats to the quality of resources and open space in Provincetown include several items. Of recent concern is the state Dept. of Highways' widening or "double-barreling" of Route 6, the Mid-Cape Highway from Dennis to the Orleans Rotary. Now in the impact report process, this move could provoke unforeseen consequences in Provincetown's quality of life. Although economic development is a consistent concern in a town with very high unemployment, a greater ease of vehicular transport to the Lower Cape might increase total tourist visits, which Provincetown, with its limited parking and local road system, may find difficult to accommodate. Some residents fear that extra number of motorists would be attracted by an "improved" Route 6. Ironically, there is some local sympathy for the actual abandonment of the double-barrel of Route 6 near Herring Cove in Provincetown. At this spot, it is a wide, high speed, limited access roadway to a dead end.

Provincetown also participates in the Lower Cape Cod Capacity Analysis Study, sponsored by the Cape Cod Commission and also including representation from the towns of Truro, Wellfleet and Eastham. This study is expected to conclude in summer 1995 and identify measurements of sustainable growth by examining water supply, traffic, fiscal impact, natural resources and community character.

B. History of the Community

Were it not for the lack of fresh water, the *Mayflower* Pilgrims might have stayed and built their colony at Provincetown. Instead because of the inadequacy of water supplies, a continuing problem, and barely farmable land, the Pilgrims journeyed on to Plymouth. (The actual first landing place of the Pilgrims was recently rededicated at the West End rotary, in time for the 375th anniversary in 1995.) For the Pilgrims were certainly impressed in 1620 by the "goodly" harbor at the tip of Cape Cod, as explorer Captain Batholomew Gosnold had been when he named the Cape for the species of fish "pestering" his vessel. The collapse of the commercial fishing industry in the 1990s will affect the port of Provincetown as much in its cultural ties to the fisheries as in its economic reliance on the stocks. It will be impossible for Provincetowners to "turn their backs" on the fishing trade.

"Settlement was usually strung out around the harbor and along the roads that led to it with only a moderate commercial and institutional core at the center."¹ This statement pertaining to Cape Cod in general certainly applied to colonial Provincetown. In Provincetown's case, the harbor was Provincetown Harbor, the road was Commercial Street and the small core was fixed at its Town Hall Square. The harbor is described by the Mass. Coastal Zone Management Office as "one of the best natural harbors on the Atlantic coast."² Even before there were citizens of Provincetown, there were transient fishermen who built fish houses and fish drying-flakes along the three mile long shoreline.

Unlike the rest of early Cape Codders, who were farmers first and fished on the side, Provincetowners were always fishermen, because farming (other than

¹ Massachusetts Historical Commission, Historic and Archaeological Resources of Cape Cod and the Islands, 1987, p. 90.

² Massachusetts Coastal Zone Management Office, "Massachusetts Coastal Resources and An Atlas of Resources," 1978, p. 194.

subsistence) was difficult on a geologically young barrier beach. In his visits to the Cape in the mid-nineteenth century, Thoreau described the qualitative difference between the dark, rich clays of Concord with the yellow sands of much of the Cape and the white sands of the Provincelands. Where the yellow sands were deficient in nutrients for crop growing, the white sands were absolutely destitute. (Thoreau reported that he "did not see enough black earth in Provincetown to fill a flower pot.") From its beginning then, Provincetown exported fish, participated in subsistence farming and imported everything else, (except perhaps cranberries, which were locally grown in bottomlands into the twentieth century.)

As a consequence of this poor soil, there was no reason for the Provincetown settlement to spread out over its corporate boundary. The other reason was a legal one; until its incorporation in 1727, title to land in Provincetown was informal at best downtown and non-existent in the dunes. The dunes of the Provincelands were a common resource, originally of the Province of Massachusetts and, after the Revolution, of the Commonwealth of Massachusetts. It was administered from afar in Boston, when at all. But mostly, it was a wide open territory, which accounted for much of its attraction for the free spirits among the state's populace. The broadmindedness of the Provincetowner was established early on and continues to this day, and the freedom has generated the most socially-liberal people living on the Cape today. "Like Key West in Florida, Homer in Alaska, and Lahaina in Hawaii--other towns with end-of-the-road ambiance--Provincetown has a live-and-let-live ethos that some say arrived with the religious seekers aboard the *Mayflower*."^{2A}

By 1900, artists seeking that same creative freedom flocked to create the "cradle of American Art" at Provincetown. Summer art schools and galleries were

^{2A} *The Boston Sunday Globe*, "At land's end, succor for the spirit," February 19, 1995, p. 89.

established, that continue to flourish. By 1915, Provincetown had become one of the foremost art colonies in the U.S. and Europe. A 1987 marketing study found that the cumulative economic impact of non-profit arts and cultural organizations in Provincetown was \$5.52 million for 1986, for ripple effect spending based on wages, services/materials, admissions and admissions-related spending.^{2Aa}

Provincetown was settled and evolved, for economic, geological and political reasons, as an unintentional "cluster development." (See Map 2.) Part of the charm of Provincetown today is the incredible density of its downtown area, with stores and homes packed tightly against each other in a way that suburban zoning abhors, but the new wave of small city planners advocate. Surrounding this urban core is a sweeping natural backdrop of dunes, beaches, tidal flats, salt marshes and freshwater ponds: the common open space (preserved by the National Park Service) serving the cluster development. If Provincetown was a clean slate and planned afresh with modern land use principles, it would be hard to improve on this layout, accidental though it was.

Not that the design is perfect. The intense density has led to wastewater problems (there is no sewer in town, purposely, according to some people who prefer it that way as a growth management tool, though a wastewater management plan is being readied), traffic nightmares in the summer, and lack of urban parks, particularly town beaches, landings and playgrounds. And new growth has forced residential sprawl onto the former downtown open spaces. The town, then, has not struck an appropriate balance of intermingling its development and open space. If all of the open space is on the far side of town, it is less available and useful as open

^{2Aa} ArtsMarket, Marion MA, "Preliminary Study, Summary of Findings and Recommendations, March 16, 1987.

space for recreation. The artificial division between the two is now the Route 6 Highway.

A small town in area compared to other Cape communities, and always considered a small town in absolute population, Provincetown has consistently had a high density of population relative to other Cape Cod towns. By 1727, when Provincetown was incorporated, the town had few permanent residents (mostly in the East End) and grew slowly until after the Revolution. Unlike most Cape towns, which lost population due to economic recession and downturn in the maritime professions around the Civil War period, with its deep harbor and easy access to fishing and whaling grounds, Provincetown continued to flourish through the 1800s as "the prime maritime, fishing and commercial center of the Cape."^{2B} The completion of the Old Colony Railroad to Provincetown by 1873 assured Provincetown of continued growth, servicing railroad trade and more importantly, summer vacationers.

In the 20th century, vacation homes sprang up throughout the area north of Bradford Street and in scattered spots elsewhere, such as The Moors. Since 1950, development for seasonal visitors, retirees and residents has spread throughout the East and West Ends of town.

Unlike most Cape towns, Provincetown never had the extensive interior of developable land that other towns, such as Brewster and Truro, have and which is associated with cheap prices and "land-banking" for future public needs. For instance, the backwoods of Brewster in the rapid growth of the 1980s not only accommodated large developments, but, also provided large land areas for town wellfields, public golf courses, a 1,000 acre conservation area (Punkhorn) and 100-

^{2B} Massachusetts Executive Office of Communities and Development, "Provincetown, Barnstable County: A Community Profile," 1993, p. 2.

acre industrial park. Provincetown will never have this same opportunity for satisfying expansive future municipal needs.

This physical constraint - a scarcity of large tracts of vacant land - means that Provincetown must think small and creatively when it comes to planning, whether for open space or commercial development. Creative infilling, or maximizing limited available space potential, of the business zones is more appropriate than dreaming of new industrial parks. The value of small pockets of protected open space are magnified in Provincetown proper relative to other towns, due to their scarcity.

C. Population Characteristics

Relative to the rest of Cape Cod, Provincetown's year round population has remained fairly stable. More people lived in Provincetown in 1900 (4,247) than in 1990 (3,561). Though the town's year round population grew between 1970 and 1990 (2,911 to 3,561), most of that growth (625) was during the 1970s, not the 1980s (25) when most of the Cape experienced a rapid development boom which increased the county population by 26 per cent. In absolute numbers, Provincetown's summer population swells more than most other Cape towns, but, again, this figure is not expected to increase in rate much for the rest of the century, according to Cape Cod Commission projections.³ In 1990, there were an estimated 18,800 people living in Provincetown in the summer, compared to the 3,561 souls who reside year round.^{3A} Among Cape municipalities, only Truro experiences a greater swelling in summer population relative to winter population than Provincetown, but Truro spreads out

³ Cape Cod Commission, "CapeTrends: Demographic and Economic Characteristics and Trends, Barnstable County - Cape Cod, 2nd Ed.," 1994, p. 14.

^{3A} Cape Cod Commission, "CapeTrends: Demographic and Economic Characteristics and Trends, Barnstable County - Cape Cod, 2nd Ed.," 1994, p. 14.

its increase over a much wider geographical area. Provincetown packs them in downtown. So, nowhere on the Cape is there such a marked contrast to walking through a village on a summer day or a winter night than in Provincetown. The former seems like a bustling, jostling Mideast bazaar; the latter is as urban-stark as an Edward Hopper painting.

Provincetown's year round population (from which the remaining comparisons are drawn)⁴ is predominantly middle-aged, though its median age became much higher between 1980 and 1990 relative to the rest of the Cape. Its citizens over 55 years of age are 28 per cent of the town's population, still slightly below the county median of 33 per cent (though much above the state median of 18 per cent.) The fastest growing segment of the population is persons between 35 and 45 years old. Births are declining and school enrollment was way down through the 1980s (dropping from 440 in 1980 to 320 in 1990), while the rest of the Cape was stable. (Meanwhile, the cost per pupil has risen from \$2,121 in 1982 to \$8,888 in 1992.) The implications of this aging, stagnant population factor for open space and recreational services are that, all else being equal, the town should perhaps emphasize leisure activities oriented towards older citizens. As will be seen in the Inventory section of this plan, however, the dearth of youth-oriented facilities needs to be addressed as well.

In addition to having an older population than other Cape towns, Provincetown is also poorer. Household income in 1990 was \$20,487 for Provincetown, the lowest not only on Cape Cod, but the *lowest in Massachusetts* as well. Though fluctuating rapidly between winter and summer, owing to its tourist economy, average annual unemployment rates are frighteningly high (30 per cent in 1991). Even during the (economic) Massachusetts Miracle, when the state

⁴ Ibid.

unemployment rate was statistically at zero (3.3 per cent in 1988), Provincetown still had a rate of 19 per cent. In 1990 more than 14 per cent of Provincetowners lived below the poverty level, compared to nine per cent for Massachusetts. As might be inferred from the above statistics, in which a large amount of the population is poor and unemployed for much of the year, and there are many transients in the summer, the crime rate is also much higher in Provincetown than in the rest of the state, almost double.^{4A} Another predominant feature of the town's citizenry is that it is fairly homogeneous by race. In 1980 only 2.6 per cent was non-white; by 1990 the percentage had risen to 3.5, but was still below the county percentage (4.6%) and the state's (12.2%).⁵

These characteristics of the population seem to indicate that while recreational facilities of most types should expand to serve all residents, much of that recreation should perhaps emphasize inexpensive opportunities. Walking trails, scenic lookouts and sidewalks may be more appropriate than active recreation facilities (such as tennis or basketball) or private health clubs. In general, then, passive recreation should be emphasized over active recreation to serve the needs of Provincetown, except for specific facilities for children.

Planning for the outdoor needs of elders need not be complicated or expensive. Items as simple as a bench to stop and catch one's breath along a hiking trail would be useful. While the town is obligated to provide some safe and convenient outdoor enjoyment for disabled people, many of whom may be elderly, the majority of senior citizens' only infirmity may be a tendency to tire easily.

^{4A} Massachusetts Executive Office of Communities and Development, "Provincetown, Barnstable County: A Community Profile," 1993, p. 8.

⁵ *Ibid.*, p. 25. The US Census includes Hispanics (Spanish-surnamed or Spanish-speaking) as part of the minority population, but apparently not Portugese, which would be a large part of the Provincetown population.

Benches, firm footing, safe parking access should be easy, yet important, design considerations.

The economy of Provincetown is still largely dependent upon the tourist trade. In 1991 the largest employment sectors were in the retail trade, particularly at eating and drinking places, services, and government, accounting for 85 per cent of jobs in town. The largest employers in 1993 were the Town, the A & P supermarket, two motels and a restaurant. The construction sector is very small relative to other Cape towns, owing to the scarcity of large tracts of developable land.

Commercial fishing, though always a vibrant cultural (as well as economic) asset and tourist attraction, employs fewer and fewer people and the 1994 federal closure of most groundfish stocks in New England will inevitably lead to more decline, at least in the near future, until exhausted stocks can rebuild. (The 1988 Provincetown Master Plan stated that 300 to 350 people were employed year round in commercial fishing,^{5a} but most of these provided fishing-related services, not on-board crews.) There are no significant manufacturers or industries to provide steady, year round employment. There is a vibrant entrepreneurial class of many craftspersons and retailers. This decentralized, spasmodic economy renders Provincetown ever more reliant on the ability to attract, retain and expand its tourist base. Nevertheless, there are few residents who would welcome an increase in tourist numbers, particularly in the "overheated" summer months. Attempts by the town and Cape chambers of commerce to extend tourism horizontally (off-season) rather than vertically (during the summer) have been welcomed. This broadening of the tourist season is a major goal of the 1988 town master plan.^{5A}

^{5a} Lane Kendig, Inc., "Provincetown Master Plan," 1988, p. IV-5.

^{5A} Lane Kendig, Inc., "Provincetown Master Plan," 1988, p. IV-3.

As stated previously, it is unlikely that industry or other large-scale commercial enterprise will enter town or consume huge chunks of open space. Most new businesses will have to be small and located in existing business zones, clustered downtown. Remaining open spaces are more likely to be threatened by residential development.

People are attracted to Provincetown because of its proximity to the water, the views that this proximity provides and recreational opportunities that are incorporated by the town into the scheme of natural resources and man-made facilities. While the National Seashore beaches are large enough to accommodate a great number of tourists and is a strong attraction, many visitors nowadays seek quieter enjoyment, a theme reflected in a new campaign by some Cape commerce leaders and resort owners called "green tourism." For the town to continue to please the economy's lifeblood (tourists), a wider variety of outdoor offerings besides beach-going and miniature golf seems desirable. Good maps of natural areas with walking and picnicking facilities would encourage this more low-key type of tourism. "Green tourism" could be extended to the waterfront and preservation of marine water quality should be made one of Provincetown's paramount goals. Areas which naturally suit certain activities should be identified, such as space for additional moorings, locations for wind surfing, etc. to avoid conflicts between different uses of the water.

D. Growth and Development Patterns

Owing to the densely settled downtown surrounded by the preserved National Seashore, there simply is not the large acreage available to develop in Provincetown as there is in other Cape communities. In 1983, for instance, it was estimated that only 655 acres were vacant and buildable in the Cape-tip town (compared to 2500 acres in Truro, 6800 acres in Brewster and 14,000 acres in

Barnstable.)⁶ Nevertheless, incredibly, these 655 acres exceeded the 630 acres of Provincetown that had been developed by 1983. In 1986, the Provincetown Planning Board estimated that the 655 acres (minus 69 acres developed between 1983 and 1986) was too high a figure, given topographic and soil constraints, and that the likely estimate was closer to 100 to 125 acres of developable land left in town.⁷ Even so, given Provincetown's minimal zoning standards (5000 to 8000 square foot minimum lots; 50-foot frontage requirements), it is likely that Provincetown can still expect significant growth and infilling of residential development. (See Map 3.) In fact, the 1988 master plan estimated that an additional 1,959 dwelling units would likely be built in town.⁸ This would increase the amount of housing in Provincetown by another 80 per cent, or almost double today's number.^{8A} The ability of the town's infrastructure to absorb such long-term growth is questionable at best, threatening a choke hold on traffic, a strain on natural resources and potential loss of Provincetown's small town atmosphere. It is unlikely that open space set aside will grow apace with development unless the cluster zoning concept gains favor with residents or significant new purchases of open space are made. The preservation of some of the remaining open space may be an important way to manage growth, in addition to preserving resources and providing recreation.

Fortunately, Provincetown saw its real growth in the 1800s, not the 1900s; a view from the harbor towards downtown from a century ago would look quite similar to today's. According to the US Census, about 67 percent of the houses in

⁶ Association for the Preservation of Cape Cod, Options for Cape Cod's Future, 1985, Table H-1.

⁷ Town of Provincetown, "Open Space and Recreation Plan," 1986, p. 14.

⁸ Lane Kendig, Inc., "Provincetown Master Plan," 1988, p. II-6.

^{8A} A more recent analysis by The LandUse Collaborative Inc. in the (draft) 1995 Lower Cape Capacity Study indicates that 1,346 additional units could be built under current zoning.

Provincetown were built before 1950. This early development of Provincetown leads to its quaint, charming architecture (which attracts tourism) and settled pattern. Despite its density, which at 1,874 persons per square mile in the winter is the most closely-packed Cape town, Provincetown still has a "small town" atmosphere appreciated by its citizens. The rural seaside charm is still extant in views of historic homes and glimpses of ponds and dunes through the trees.

There is no sewer service in Provincetown nor is there likely to be in the five-year scope of this plan. All septage is pumped and transported to the Tri-Town treatment facility in Orleans. The town landfill was closed in 1994, but a solid waste transfer station will continue at the Race Point Road location, the town having reached agreement with the National Seashore for its operation. The 1988 master plan noted, "Thus, in the areas of septage and solid waste, there seems to be an existing capacity to support very little or no additional growth...the town aggravates the problem every time it issues a building permit because the result is a potential demand for services from new development that the town cannot provide."⁹

Transportation systems are already overburdened for at least the summer season and cannot expect to handle an 80 per cent increase^{9A} in demand resulting from a build-out of the town. A 1985 study¹⁰ found that:

- Local roadways are narrow, two-lane facilities with limited capacity;
- Bradford Street functions as the major local street carrying more than 15,000 vehicles per day and operating near capacity for most of the day;
- The intersection of Bradford and Standish Street is the major controlling factor with respect to traffic flow within the Center;

⁹ Lane Kendig, Inc., "Provincetown Master Plan," 1988, p. II-5 & II-7.

^{9A} Lane Kendig, Inc., "Provincetown Master Plan," 1988, p. II-6 & II-7.

¹⁰ Vanasse/Hangen, Inc., "Parking and Traffic Management Study, Town of Provincetown," 1985, cited in Town of Provincetown, "Open Space and Recreation Plan," 1986, p. 16.

- On average, a third of downtown traffic flow is estimated to be circulating in the local street system due to the inability to find a convenient parking space;
- Commercial Street is heavily traveled by a combination of vehicles, pedestrians, and bicycles, creating constant conflict and competition for available roadway space; and,
- Several bottleneck locations exist along Commercial Street including the intersection of Commercial Street/Standish Street and the segment between Carver and Court Streets.

Though roads are underbuilt to serve current or future needs, lack of access has not served as a hindrance to growth. Town roads connect most areas and their long established pattern leaves few areas of Provincetown far from public roadways, so there are very few landlocked parcels, again because of the lack of interior backwoods cited earlier. Provincetown cannot rely on the inadequacy of its roads from preventing growth; the roads will only suffer more.

Town water service extends throughout town reaching 100 percent of buildings in town. Since Provincetown imports all of its water from Truro, which began in 1907, there is less anxiety about this issue in Provincetown than there should be. A 1985 water supply plan for Provincetown recommended an emphasis on water conservation efforts as a means to augment supply and the town water department has diligently implemented this program. Nevertheless, various reports throughout the 1980s concluded that there are few new developable well sites in Truro, and the National Seashore is unlikely to allow municipal water development within its bounds. Provincetown is beginning to explore other alternatives, such as creating a regional water district with Truro, Wellfleet and Eastham.¹¹ Searching farther and farther afield for water, however, should not be a practical alternative for Provincetown water needs. The availability (or lack

¹¹ Lower Cape Water Management Task Force, "Lower Cape Water Management Plan (Grant Application)," March 1994 (draft).

thereof) of an expanded public water supply should be a major controlling factor to Provincetown growth, but the town has not faced this issue squarely as yet. The 1988 master plan states "Currently,...water represents a resource that limits the town's growth," and urges a policy of setting a growth rate of "close to zero" based on the emergency conditions posed issues of water, sewage, solid waste, transportation and community character.¹² In 1989 Town Meeting approved a growth management bylaw which places a limit of 28 new dwelling units to be built each year, though renovations or additions are not affected.

Consequently, there are few places immune to development in municipal Provincetown, except wetlands. The town must assume, therefore, that development will continue to consume open spaces throughout town. Since physical impediments are not stopping development, legal and political will must be used if growth is to be abated.

One result of development's spread throughout town is that at least everyone is aware of it. People feel more threatened by the foundation being poured next door than the twenty units hidden in the woods over on the far side of town. Provincetown was the only town not to purchase protected open space on the Cape in the 1980s, when 14 towns spent \$114 million to buy over 5,000 acres for conservation and recreation.¹³

This attitude may be changing, however, given the townspeople's overwhelming vote to pursue the open space acquisition of 14-acre Foss Woods in the East End in April 1995. While natural resource protection drives some of the motivation, many townspeople are beginning to understand that the fiscal impact of development on the town can be an even more crucial reason for protecting land

¹² Lane Kendig, Inc., "Provincetown Master Plan," 1988, p. II-3 & II-10.

¹³ The Compact of Cape Cod Conservation Trusts, Inc., unpublished data, 1990.

from subdivision development. As part of the ongoing "Lower Cape Capacity Study," The LandUse Collaborative has conducted a potential build-out calculation and fiscal impact analysis for the town. Their conclusion is that development does not pay its way in new taxes to offset the increased cost of municipal services. And example for development of Foss Woods is given in the footnote below.^{13A}

Similarly, the town should recognize the need for neighborhood open space. A conservation/ recreation area within walking distance of every home in Provincetown would be a fine objective, particularly since there is a general aversion to more traffic and parking lots in town. Opportunities to add natural areas, through linkages or inholdings, should be examined. Provincetowners do not want to have to rely on permission from the federal government, owners of the National Seashore, for all of their open space needs. Residents who want to regain control over public recreation choices would do well to look to the area under town control, south of Route 6, for these opportunities, while continuing to explore ways to coordinate physical connections and programs with the Seashore. As one 1994 open space survey respondent declared, "The town put its recreation fortune into

^{13A} The LandUse Collaborative Inc., Lower Cape Cod Capacity Analysis Study, (draft) 1995.

Under present zoning, according to this study, Foss Woods could have a maximum of 68 housing units proposed. About 22 of these new units could be expected to be lived in year-round, while 46 would be used by summer residents. For every new dollar in town income derived from new building, each new year-round household in Provincetown demands \$2.35 in municipal services, while summer residences need \$0.81. Therefore, even if each of the 68 new units added \$1.00 in new revenue to the town, or \$68.00, this new subdivision would require \$88.96 in added town services ($22 \times \$2.35 + 46 \times \$0.81 = \$88.96$). The subdivision would not pay its way. The \$19.00 difference would have to be made up by the rest of the taxpayers in the town.

A more likely build-out of Foss Woods would be 23 over-sized house lots of which 7 would be year-round and 16 would be summer homes. Assuming the valuation of the lots and year-round homes would be \$250,000 each (higher than LandUse's assumption), the 7 year-round lots would generate \$2,730 in taxes and need \$4,494 in services, or \$1.65 for each revenue dollar. The 16 summer homes might have better views and cost \$350,000 each which would generate \$3,822 in taxes and need \$3,092 in services or \$0.81 for each revenue dollar. Even in this scenario, the summer homes does not support or subsidize the drain imposed on the town by the new year-round homes. (For each \$23.00 in new tax revenue, the Foss Woods development would need \$24.51 in new town expenditures.)

the hands of the National Seashore. We must not give any more control to any outside agency."

SECTION 4 ENVIRONMENTAL INVENTORY and ANALYSIS

Provincetown's natural resources, physical development, and social structure create unique problems and opportunities for open space/conservation and recreation planning. This section examines how these features influence policy.

A. Geology, Soils, and Topography

Provincetown is a barrier beach. (See Map 4.) Unlike all the other Cape Cod towns, which are primarily composed of glacial deposits (sands and gravel laid down as outwash plains or pushed up into moraine ridges by the Wisconsin Glacier 15,000 years ago), Provincetown is underlain entirely by shifting sands and is much younger (less than 5,000 years old) than the rest of the Cape, geologically speaking. After the retreat of the glacier, sea level rose and, by 6,000 years ago, the ocean began to lap at the bluffs of Truro, eroding them with storm-driven waves. Some of the eroded material was carried offshore to form the long, steep bars, which have caused so many shipwrecks off the Cape's backshore; the remaining eroded sand was transported to the north and west by lateral, longshore currents. A spit or hook formed and continued to build off what is now Truro's High Head. (See Map 5.) The hook grew in width from south to north, so the oldest part of Provincetown is the south side or downtown area.¹⁴

As waves laid the platform for Provincetown's substructure, wind created the superstructure: dunes. The prevailing northwest wind, which howls unimpeded in from the Atlantic throughout the winter, blew the sand into parabolic dunes, whose leading edges, called slip faces, are very steep (34° angle of repose for unvegetated sand) and generally face southeast. Behind these slopes are blowout depressions,

¹⁴ Boston University, Arthur Brownlow, ed., Cape Cod Environmental Atlas, 1979, p. 6

which, if their bottoms are low enough, fill with groundwater to become ponds or freshwater wetlands.¹⁵ (See Map 5.)

The shifting of the dunes has caused problems throughout Provincetown's history. Even though most of Provincetown was originally stabilized by vegetation, and a thin veneer of topsoil began to accumulate over it, supporting upland forests, the colonists soon stripped the timber from the woods and the topsoil blew away, leaving loose, white sand. As early as 1714, Provincetowners voted to prevent cattle from grazing the dunes in an effort to prevent desertification. The utility of East Harbor (now, Pilgrim Lake) was diminished as sand encroached into the embayment, silting in the depths. Wetlands and woods have been buried by migrating dunes (for example, the Beech Forest off Race Point Road.) Maintenance budgets for highway crews (both state and town) still include funds for plowing sand off roadways.

The dunes in the downtown area exhibit the same essential features as the classic ones in the National Seashore, but they are older, relatively stabilized by vegetation and retaining walls and more manipulated by development. Still, the remaining undeveloped slip faces in particular pose significant development obstacles due to erosion and aesthetic issues, while at the same time being very attractive for residential development owing to the magnificent water views they afford.

Twenty of the dune hills are about 100 feet in height; downtown, the highest is High Hill (100 feet) under the Pilgrim Monument and the second is Telegraph Hill in the West End at 98 feet, which had a subdivision development approved in 1994. In 1991 Town Meeting voted to establish a High Elevation Protection District "to preserve high elevation dunes which are of natural scenic beauty important to

¹⁵ Arthur N. Strahler, A Geologist's View of Cape Cod, (NY, 1966), pp. 82-86.

the tourist base of the Town and which present serious concerns regarding the consequences of erosion."¹⁶ (See Map 6.) Areas above the 40-foot elevation have stringent performance standards for new construction to meet to prevent erosion and visual intrusion.

The soils of Provincetown are uniform. They are all derived from beach deposits: sands and small gravels from the cliffs of Truro. There are no boulders in Provincetown because they are too heavy to have been transported alongshore by waves and currents. In the wetlands, organic decay has formed the acidic muck and peaty soils typically found in wetlands. These areas present sewage disposal difficulties due to their lack of percolation capacity. The coastline is flat and subject to flooding along most of the length of Commercial Street, the street "fronting" the shore. (See Map 9.)

To date, neither soils nor topography, with the exception of wetlands, has proven to be an effective impediment to development. Retaining open space by relying on natural development constraints is not a realistic approach in Provincetown.

B. Landscape Character

The most appealing aspect of Provincetown's landscape is its 21.3 miles of coastal shoreline¹⁷ (all but three miles of it in the National Seashore) and the scenic backdrop formed by the high, steep dunes. The human eye delights in scenes where land meets water, and it does so in Provincetown with dramatic frequency and variety. Provincetown has 333 acres of salt marsh (almost all in the Seashore) and the broad sweep of these "meadows", as the colonists knew them, is breathtaking

¹⁶ Town of Provincetown (MA), Zoning By-Law, 1993.

¹⁷ Massachusetts Dept. of Commerce and Development, "Tidal Shoreline," 1943.

from the West End Breakwater. The scene at Race Point Beach is bolder, with frequent large waves breaking in a curl down the long beach.

The more intimate shoreline scenes are prized as well, such as the narrow inlet to Hatches Harbor (a good place to glimpse harbor seals). The large tidal range (ten feet on Cape Cod Bay, three to four feet elsewhere) assures different perspectives even at the same location. In his recent popular photograph book, A Summer's Day, Joel Meyerowitz trains his camera lens on the same spot out his Provincetown waterfront window over the course of a day and tides and moods. And while the tops of dunes are marvelous to get panoramic views from, the bottoms of dune blowouts adjacent are fascinating places in which to hide from the pressing world.

The best places to get a view of Provincetown are from its high tops, such as Pilgrim Monument, Mount Ararat, Mount Gilboa, Telegraph Hill, and Race Point Visitors Center, and its extremities, including MacMillan Wharf, Wood End, and Long Point. From many of these vantage points, one can see the streets of downtown, but they seem a lot more interesting than busy. Downtown is the stage on which the human play is set, but one can easily travel out to watch from the wings of the theater. And the perspective is changed.

The scenic quality of the Provincetown coastline was underscored in the 1981 "Massachusetts Landscape Inventory", conducted by the Department of Environmental Management.¹⁸ A greater percentage (about three-quarters) of Provincetown was ranked highly than any other town on the Cape. (See Map 7.) The survey classified the entire National Seashore in Provincetown as a "Distinctive" landscape (the top category statewide, including only four per cent of the Massachusetts land mass) or as "Noteworthy" (the second highest ranking, consisting of only five

¹⁸ Massachusetts Dept. of Environmental Management, "The Massachusetts Landscape Inventory," 1981, p. 107.

percent of the statewide land mass.) Ironically, the survey did not include urban areas as prized "landscapes", but clearly the downtown of Provincetown is a visually distinctive part of Massachusetts. The mix of historical architecture, cultural diversity and natural splendor is what attracts many tourists to Provincetown.

C. Water Based Resources

1. Salt Water Bodies

As previously discussed, the town's landscape character and 21 miles of salt water shorefront are the primary focus of informal outdoor activities and form the background for the town's tourist based economy, including swimming, fishing, shellfishing, hunting, and boating. These activities are spread throughout the town's marine areas: Provincetown Harbor, the Moors (West End), Herring Cove, Hatches Harbor, and the open Atlantic. Major public bathing beaches are at Herring Cove (New Beach) and Race Point Beach. The primary boat anchorage is located inside the Breakwater around MacMillan Wharf. Smaller boats are moored all along the harborfront, though, due to the extensive ten foot tidal range in the harbor, many of these boats sit high and dry on the flats at low tide.

Surfcasting for bluefish and striped bass is a popular pastime along the Outer Beach from Truro to Race Point. Recreational fishermen use off road vehicles (ORVs) on the Beach to reach more remote fishing spots. As part of its agreement to allow continuity of access for Provincetown residents and others, the National Park Service has allowed ORVs on this section of beach, while restricting portions during nesting season in order to protect piping plovers, and rare species of terns.

There are nine town landings on the salt water shorefront. Only one of these has a paved ramp for boat launching at high tide (55-57 Commercial St., West End). The town has compiled an inventory of these public landings in an effort to prevent private encroachment. Nevertheless, the ability to get to the waterfront is severely

limited by the lack of parking at all of the landings. Also, the landings are not well-distributed; there is no defined public access to water in the East End east of Conwell Street. Finally, the intense development along the waterfront precludes most opportunities to create new landings.

2. Fresh Water Bodies

There are no navigable freshwater rivers or streams in Provincetown. The town's primary freshwater resources are its nine state-recognized ponds, totalling 94 acres of surface area. Most of these ponds are located in the triangle created by Race Point Road, Province Lands Road and Route 6 in or near the National Seashore. (See Map 8 and Map 8A.) Three of the nine ponds are greater than ten acres in size, which classifies them as Great Ponds of the Commonwealth and means the public owns them and is entitled to access, while other ponds can be owned privately by surrounding landowners and public access can be prohibited. Provincetown's Great Ponds are Clapps, Shankpainter and Great Ponds. There are at least 15 other "pondlets" which look like small ponds during high groundwater periods, but are primarily vegetated swamps.

The entirety of 40-acre Clapps Pond is owned by the National Park Service (the northwest quarter of the pond) and the Massachusetts Division of Fisheries and Wildlife (remaining three-quarters), though the town owns some abutting wetlands. (See Map 8 and Map 11A.) The MDFW maintains a dirt access off Route 6 to the southwest corner of the pond for launching of small boats. A 1982 MDFW description of the pond describes it as a "very shallow, extremely weedy, warmwater pond...The pond is so weedy as to be swamp like and is characterized by very dark water having a transparency of one foot. The bottom is muck; the 2 miles of shoreline are undeveloped...The pond is very difficult to fish because of the

TABLE 4.1**POND CHARACTERISTICS, TOWN OF PROVINCETOWN¹⁹**

Pond Name	Surface Acreage	Max. Depth (ft.)	Shore Length (miles)	Activities	Public Access*	Comments
Clapps Pond	40	4	1.8	Fishing, hunting	off Rt. 6	boat launch, dirt ramp
Shankpainter Pond	15	3	1.2	?	none	major sphagnum bog
Great Pond	10	<3	0.7	nature study, picnic	CCNS	abuts bike path, Beech Forest
Grassy Pond	6	<3	0.4		CCNS	
Pasture Pond	6	<3	0.5		CCNS	
West Shankpainter Pond	5	<3	?		none	major sphagnum bog
Bennett Pond	5	<3	0.4		CCNS	
Duck Pond	4	<3	?		Route 6	town owns west half
Clapps Round Pond	3	<3	0.1		CCNS	abuts bike path
Also: Jimmys Pond	2	<3	?		PCT	quaking bog; rare plants

* (CCNS = pond is in Cape Cod National Seashore, public domain; PCT = Provincetown Conservation Trust owns adjacent land.)

weeds."²⁰ Nevertheless, a recreational fishery for largemouth bass and chain pickerel exists here and other species include pumpkinseed sunfish and brown bullhead.^{20A} This less than glowing description of the pond's "utility" belies the scenic beauty of the area and the small quaking bog found there.

From 1870 until the turn of the century, Bennetts Pond and Webbers Pond were used commercially as ice ponds. Mr. Bennett capitalized on the era's demand for fish kept fresh by freezing rather than drying/salting and grew his business to

¹⁹ University of Massachusetts, "An Inventory of Ponds, Lakes and Reservoirs of Massachusetts: Barnstable County, 1969, p. 62. (Comments by 1995 observations.)

²⁰ Massachusetts Div. of Fisheries and Wildlife, "Clapps Pond (Providencetown)" (*sic*), unpublished, 1982.

^{20A} Massachusetts Div. of Fisheries and Wildlife, Letter of Stephen T. Hurley, District Fisheries Supervisor, to Leslie Luchonok, Massachusetts Dept. of Env. Management, April 13, 1992.

5,000 tons of pond ice cut, stored and delivered annually from the shores of these ponds. He employed up to 120 men during the winter harvest.²¹

Clapps Pond is the only pond with a practical shallow-draft boat access point, the dirt landing provided by the Massachusetts Division of Fisheries & Wildlife off Route 6. No pond is suitable for swimming, owing to lack of depth and weedy bottoms. Fishing is conducted sporadically at Clapps and Shankpainter Pond, though no ponds are stocked with trout or other sport fish, again due to lack of appropriate habitat.

The ponds in Provincetown are not classic kettlehole ponds, formed elsewhere on the Cape as deep depressions in the glacial outwash left by stagnant ice blocks. Rather, they were formed by dune blowouts induced by storm winds. All are isolated; that is, they do not drain to the sea. These ponds, dependent solely on the fluctuation in the aquifer's water table for their own surface level, often expose a wide shore during the summer when the water table is low. These exposed shorelines comprise the unique habitat called "Coastal Plain Pond Shores" which harbor rare and endangered plants, such as golden club and long-beaked bald rush.²² There are no anadromous fish (herring) runs in town.

The significance of Provincetown's ponds lies not in their recreational importance, as is the case in other Cape Cod towns, but rather the fact that they are the town's primary sites for rare plant and animal species and should be protected as sensitive habitat.

²¹ Herman A. Jennings, Provincetown, or, Odds and Ends from the Tip End, 1890, (reprinted 1975 by Peaked Hills Press), p. 137-138.

²² Association for the Preservation of Cape Cod, Cape Cod Critical Habitats Atlas, 1990, Map 1.

3. Surface Water Quality

All of Provincetown's waters are generally of high quality, though problem spots exist. The Massachusetts Department of Environmental Protection²³ lists all of the marine (salt) waters of Provincetown as Class SA, the top salt water ranking, meaning they are an "outstanding resource" whose purity should be suitable for all types of water recreation, including swimming and shellfishing. All freshwater ponds are included in Class B, the top freshwater ranking for ponds not used as a source of a public drinking water supply. These ponds must be maintained at a high level of purity and cannot be degraded by point source discharges. Freshwater ponds on the Cape tend to be naturally acidic due to a lack of alkaline materials in the soils, and accelerated acidification seems apparent in several ponds.

4. Floodplains

Provincetown participates in the Federal Flood Insurance Program, which requires that new shorefront development meet engineering standards for floodproofing. Flood velocity zones or V-Zones, land areas where storm surge or direct wave action occurs, are found along the shore of Provincetown Harbor. (See Map 9.) A 1988 analysis by the Massachusetts Coastal Zone Management Office found that Provincetown has 24 dwellings along Commercial Street clearly located in the V-Zone.²⁴ State and local wetlands protection legislation should help prevent future development in this high hazard area.

Landward of the velocity zones are other flood prone areas (A-Zones) in which standing waters can be expected during 100-year storm events. These areas consist mostly of salt marshes and shorefront uplands up to about the 15-foot

²³ Massachusetts Department of Environmental Protection, Massachusetts Surface Water Quality Standards, 1990, p. 101. (314 CMR 4.00)

²⁴ Memo (unpublished), "Cape Cod Coastal Areas with Habitable Structures within the Designated Flood Velocity Zone," May 10, 1988, Mass. Coastal Zone Management Office.

contour (See Map 9). Both commercial and residential developed areas occur in the A-Zone, including the Municipal Parking Lot and Town Hall Square. Hurricanes are typically associated with storm damage, and 1991's Hurricane Bob caused havoc in Provincetown. Erosion from the intense waves and winds of Northeasters, such as the Great Storm of 1978 and the Halloween Storm of 1991, can cause property damage by undermining the revetments and seawalls. In fact, Provincetown is vulnerable to any storm from the east (northeast to southeast). Long Point and the Breakwater help to protect downtown from westerly storms.

In coming decades, flooding and erosion will be increasingly exacerbated due to relative sea level rise. This phenomenon, the result of land submergence and ocean expansion from global warming, could result in the loss of between 10 and 33 acres of upland in Provincetown by the year 2025. These areas will basically coincide with the 100 year floodplain and the downtown shorefront. Sea level rise will also mean an increase in the severity of storm damage.²⁵ At the same time, Race Point will continue to experience accretion or build-up of sediment transported alongshore from Truro.

5. Wetlands

Wetlands, both fresh and salt water types, are the food factory and habitat for most of Provincetown's wild animals. Fortunately, Provincetown is blessed with a diversity of wetland, in type, size and distribution, scattered evenly throughout the Town (See Map 8 and Map 8A.)

²⁵ Massachusetts Coastal Zone Management, "Coastal Submergence Program: Executive Summary," no date, p.9. (based on a relative sea rise of 0.45 to 1.57 feet between 1980 and 2025).

A 1990 University of Massachusetts study²⁶ found that Provincetown had 271 acres of freshwater wetlands, no acres of cranberry bogs and 384 acres of saltwater wetlands. A 1985 Massachusetts Coastal Zone Management report identified 332 acres of salt marsh in Provincetown, located at Hatches Harbor and behind the West End Breakwater.²⁷ This difference in salt marsh acreage figures is due to differences in methodology, not loss of habitat. A salt marsh's high biomass makes it excellent habitat for birds, shellfish, and finfish nurseries. Efforts have been made by the National Park Service to reestablish salt marsh east of the Hatches Harbor dike by reintroducing tidal flow, but a compromise was needed to allay concerns about flooding the Provincetown Municipal Airport.

As with Provincetown's ponds, most freshwater wetlands are dependent on water table fluctuations, rather than surface runoff, to ensure the soil saturation necessary for wetlands plants. Most wetlands are at low elevations, close to the water table and the sand and gravel soils readily transmit groundwater through wetlands. Wetlands play an important role in filtering out contaminants from freshwater and reducing flooding during major storms.

Quaking bogs--mats of vegetation floating on the surface of a waterbody--are uncommon in general and very unusual on a barrier beach system, such as Provincetown. The 20-acre plus bog on Shankpainter Pond is the largest known quaking bog on a barrier beach system in the world. Smaller quaking bogs occur at Clapps Pond, Jimmy's Pond, in the white cedar swamps and in a small bog between Clapps and Duck Ponds.²⁸

²⁶ McConnell, William P. et al., University of Massachusetts, Amherst, Department of Forestry and Wildlife, "Land Use Update for Cape Cod and the Islands with Area Statistics for 1971, 1984 and 1990." (See also, 1984 edition for 1951 statistics.)

²⁷ Massachusetts Coastal Zone Management Office, Barrier Beaches, Salt Marshes & Tidal Flats: An Inventory of the Coastal Resources of the Commonwealth of Massachusetts, 1985, p. 6.

²⁸ Town of Provincetown, "Open Space and Recreation Plan," 1986, p. 8 & 9.

The 1990 Critical Habitats Atlas for Cape Cod²⁹ identifies five separate wetlands dominated by Atlantic White Cedar (*Chamaecyparis thyoides*) in Provincetown. These forested wetlands, all in the East End, are highly acidic and are uncommon throughout the Cape and the Provincetown cedar swamps are the single known occurrence of this tree on a barrier beach system in New England. (See Map 8.) These areas were once much more extensive before the trees were harvested in earlier centuries. Most of the cedar swamps are privately owned. The Provincetown Conservation Trust owns and protects 1.4 acres of cedar swamp at Somerset Heights.

Vernal pools were officially recognized as critical habitat in 1987 when the Massachusetts General Court amended the Wetlands Protection Act to include their protection. These small temporary ponds are crucial breeding grounds for woodland amphibians, such as Eastern spadefoot toads and salamanders. Three vernal pools (all in the National Seashore) have been documented in Provincetown so far,³⁰ but the downtown area has not been inventoried yet. These small isolated wetlands can be expected to be found throughout the town owing to its steep hill and swale topography.

Another significant, though often overlooked, wetland resource in Provincetown are tidal flats.³¹ Provincetown has 162 acres of estuarine flats, which are portions of the beds of embayments exposed at low tides. (See Map 4.) They are particularly productive for eelgrass and shellfish populations. In Provincetown, these flats are primarily found in Hatches Harbor and in Provincetown Harbor.

²⁹ Association for the Preservation of Cape Cod, Cape Cod Critical Habitats Atlas 1990, Map1.

³⁰ APCC, 1990.

³¹ Massachusetts Coastal Zone Management Office, Barrier Beaches, Salt Marshes & Tidal Flats: An Inventory of the Coastal Resources of the Commonwealth of Massachusetts, 1985, p. 12.

There are also 43 acres of marine flats of the type found in open coastal areas, such as along Herring Cove and the Atlantic backside. Both of these types of flats are an important recreational resource in the town. The firm, hard footing of the flats along Provincetown Harbor is popular for activities ranging from shellfishing to walking to kite flying. The broad tidal flats are truly the most open of open spaces.

6. Groundwater Resources

In 1982 the U.S. Environmental Protection Agency designated all of Barnstable County as a Sole Source Aquifer in recognition of the region's complete reliance on groundwater as its potable water supply. Provincetown is served by the Pamet Lens, one of six discrete components of the aquifer. This lens provides water for the towns of Truro and (via piping) Provincetown. Acknowledging that inter-town cooperation is needed to manage the quantity and quality of this aquifer, Provincetown is currently participating with Truro and other lower Cape communities and the Cape Cod Commission on the Lower Cape Water Management Plan, which seeks to identify carrying capacities, withdrawal limits and distribution for aquifer resources in the sub-region.

Of the forty six inches of precipitation that falls on the Cape in a typical year, about sixteen inches reaches the water table underground to replenish or "recharge" the aquifer. The freshwater lens in Provincetown (named the Pilgrim Lens) is the thinnest (not exceeding five feet in water table depth) and most vulnerable aquifer body on the Cape. It was abandoned as a public water supply at the turn of the century due to high levels of sodium and iron. (See "Water Resources Map"). Being almost entirely surrounded by the Atlantic Ocean renders Provincetown particularly sensitive to salt water intrusion into the aquifer, resulting in non-potable water due to elevated sodium counts. High sodium water can exacerbate health problems in persons with hypertension or kidney trouble. Even the drinking water imported

from Truro frequently exceeds the recommended standard for sodium during high pumping times, such as the summer season.

In 1991, Provincetown Town Meeting adopted a Water Resource District to protect land owned by the town and the state between Route 6 and the railroad bed (east of Howland Street). (See Map 3.) In 1974 this area was investigated as a possible emergency wellfield and, though the chemical quality was insufficient, its water could be treated to serve as a potable supply. Its safe pumping capacity was estimated at 60 percent of that of the South Hollow Wellfield in Truro, Provincetown's largest supply well.³² The Water Resource District prohibits land uses that store hazardous materials, such as underground fuel tanks, in order to protect ground water. The likelihood of establishing a wellfield in this area is slim, and by itself should not hold up consideration of ballfields there, but the town has at least preserved the future option through this zoning amendment.

For additional information about the Provincetown water supply and its protection, please refer to the 1995 Local Comprehensive Plan for the Town of Truro, Massachusetts, which is available at the Provincetown Public Library.

D. Vegetation

In 1620 the *Mayflower* Pilgrims described Provincetown's lofty forests of "oaks, pines, sassafras, juniper, birch and holly."³³ "...[T]he sandy peninsula that protects the harbor from the Atlantic Ocean was covered with trees to the water's edge. To construct a [fishing] stage, the [early] fisherman needed to walk only a few

³² The Compact of Cape Cod Conservation Trusts, "Del Deo Conservation Restriction, Provincetown," 1993, p. 20.

³³ Mourt's Relation, cited in Leona Rust Egan, Provincetown as a stage: Provincetown, The Provincetown Players and the Discovery of Eugene O'Neill, p. 45.

steps back from the shoreline to fell pine, red oak, or cedar."³⁴ As the population developed, residents decimated the woods to build "wharfs, houses, salt vats and windmills...After only one generation of settlement, dunes and hollows were stripped of tree and bush; the unanchored sand nearly buried the town."³⁵ After several failed attempts to revegetate the town, in 1893 the Commonwealth began a "major project to plant woody trees and shrubs around Provincetown."^{35A} Because the opportunistic species of pitch pine and oak are not of millable quality, the new forest of Provincetown does not face the same threat that the original one did.

Today, 87 percent of Provincetown (including the National Seashore) consists of barren or scrub cover, while about 13 percent has canopy cover (mostly oak and pitch pine).^{35B} The primary vegetative categories and their coverage are as follows:

beach grass areas	1726 acres
scrub/pitch pine	1151 acres
barren sand/dune	923 acres
pine/oak	462 acres
oak	400 acres

Despite its paucity of rich and varied soils, Provincetown still supports some interesting plant communities in addition to the typical pitch pine and oak association found throughout Cape Cod. Provincetown is the only barrier beach known to contain the American beech (*Fagus grandiflora*). The most famous stand

34 Leona Rust Egan, Provincetown as a stage: Provincetown. The Provincetown Players and the Discovery of Eugene O'Neill, p. 36.

35 Leona Rust Egan, Provincetown as a stage: Provincetown. The Provincetown Players and the Discovery of Eugene O'Neill, p. 44.

35A National Park Service, "Beech Forest Trail," 1980.

35B Memo to Celine Gandolfo, 22 March 1995, from Mike Reynolds, Resource Management Div., National Park Service, South Wellfleet MA.

is in the National Seashore on Race Point Road and is a top attraction for tourists curious to see the big trees growing straight out of the dunes. There are scattered pockets elsewhere in the downtown area, such as the half-acre beech stand protected by the 1993 Del Deo conservation restriction east of Atkins Mayo Road.³⁶ (See Map 10.)

Other tree species found throughout town include red maple (*Acer rubrum*), black cherry (*Prunus serotina*), sassafras (*Sassafras albidum*), gray birch (*Betula populifolia*), tupelo (*Nyssa sylvatica*) and white pine (*Pinus strobus*). The habitat significance of the woodlands of Provincetown lies in its ability to provide migratory corridors and refuge for wildlife "from the 'heat' and openness of the dunes and the built up environment along Commercial Street."³⁷ The recreational value of these wooded areas for humans is remarkably similar. For much of the summer and winter, the great recreation areas of the interior dunes are not as popular as one might expect because of the exacerbated heat and cold there. Woodlands offer important relief from the searing sun and the bitter winds. The largest blocks of uninterrupted wooded upland are found on the 50-acre Patrick parcel northeast of Shankpainter Pond and the 14-acre Foss Woods parcel at the East End next to Mount Gilboa. Presently, the former has been proposed for a 30-lot subdivision, while the latter has been proposed for purchase by the town for \$425,000.

Rare plants in Provincetown protected under the 1991 Massachusetts Endangered Species Act include quaking bog and pondshore species, including few-flowered sedge (*Carex oligosperma*), golden club (*Orontium aquaticum*), bogbean

³⁶ The Compact of Cape Cod Conservation Trusts, "Del Deo Conservation Restriction, Provincetown," 1993, p. 21.

³⁷ Mario DiGregorio, Sabatia, Inc., "Letter, Foss Woods Parcel, Provincetown," August 15, 1994.

(*Menyanthes trifoliata*) and adder's tongue fern (*Ophioglossum vulgatum*). The only known Cape Cod sites for the dragon's mouth orchid (*Arethusa bulbosa*) and the insectivorous pitcher plant (*Sarracenia purpurea*) are found at Shankpainter Pond. The only site in southeastern Massachusetts and the largest in the state for the bog twayblade orchid (*Liparis loeselii*) is along Jimmy's Pond. Broom crowberry (*Corema conradii*) and the northernmost site in Massachusetts for prickly pear (*Opuntia humifusa*) (the only native cactus growing east of the Mississippi) is found in Provincetown's coastal heathland.³⁸ State regulations now prohibit the taking or habit alteration of these species without a state permit.

Owing to the poor soil of the town, landscaping came late to Provincetown. "In his 1874 *Gazetteer*, Elias Nason reported that 'the man now lives...who made the first artificial garden here.'"³⁹ Nevertheless, owing to the density of the downtown area, gardens have become increasingly important for the Provincetown psyche. The 1988 town Master Plan found that "landscaping in Provincetown is important in softening the urban character of the town. Homes and other buildings are closely spaced, usually with small yards; therefore, the plantings in these yards are a critical character factor. Preventing these landscaped spaces from being converted to parking is very important to the character of the community..."⁴⁰

E. Fisheries and Wildlife

Provincetown is located in the Acadian biogeographic region, defined by the cold waters of the Labrador Current coursing down through the Gulf of Maine into

³⁸ Town of Provincetown, "Open Space and Recreation Plan," 1986, p. 8 - 10.

³⁹ Leona Rust Egan, Provincetown as a stage: Provincetown, The Provincetown Players and the Discovery of Eugene O'Neill, p. 50.

⁴⁰ Lane Kendig, Inc., "Provincetown Master Plan," 1988, p. III-27.

Cape Cod Bay. In many ways, it is the marine life of Provincetown which is more diverse and interesting than its terrestrial fauna. As the closest town to the Stellwagen Bank National Marine Sanctuary (established 1993), Provincetown stands to benefit from this protective designation. Whale-watching cruises from MacMillan Wharf have become an important component of the Provincetown tourist economy over the past 15 years, and, with the collapse of the commercial fishery, promises to become even more significant as a reason for tourists to wander out onto the Wharf. In 1994, the National Marine Fisheries Service proposed categorizing the Stellwagen/Cape Cod Bay area as critical habitat for the endangered North American right whale. Finbacks and humpbacks, dolphins and harbor seals are other marine mammals found here. The scientific research on the Stellwagen whales by The Center for Coastal Studies in Provincetown is world-renowned.^{40A}

Stellwagen Bank and the waters of Provincetown also support a wide array of pelagic birds, such as fulmars, gannets, shearwaters and alcids (guillemot, murre, razorbill) all attracted to the abundant baitfish. Shore birds include terns (common, least and an occasional Arctic) and piping plovers, all listed as protected rare species in Massachusetts. Owing to the importance of Race Point Beach and the Atlantic shore for piping plover nesting, the National Park Service has had to close sections of the beach to off-road vehicle travel during the nesting season in recent years. The U.S. Fish and Wildlife Service indicates this measure has improved breeding success for the plover: at Race Point, nesting pairs increased from three in 1988 to 29

^{40A} Dennis Murley, "Nature Notes," quoted in Wellfleet Bay Wildlife Sanctuary, Massachusetts Audubon Society Newsletter, February 1995, p. 11: "In late November 1994, a pair of Humpback Whales spent a few days in Provincetown Harbor. A Sunday trip to McMillan [sic] Wharf provided a two hour long show by one of these. A small crowd grew to a sizable one, as every few minutes the whale circle the pier dodging around the fishing fleet. This was my closest look ever at a humpback, and it came without the expense of a whale cruise."

in 1993.^{40Aa} The Massachusetts Division of Fisheries and Wildlife tallied 26 pairs of plovers along Race Point Beach in 1994, along with 11 nesting pairs at Wood End.^{40Ab}

The state wildlife division also reported 60 nesting pairs of least terns at Race Point Coast Guard Station in 1994, and 49 pairs at the Mission Bell area.^{40Ac} The National Audubon Society recently listed Provincetown as one of America's premier places to witness winter bird migration, owing to its strategic location as a stopover on the Atlantic Flyway.^{40B}

While a complete inventory of birds is not available for Provincetown, other important or interesting breeding birds include prairie warbler, pine warbler, red-eyed vireo, cedar waxwing, red-breasted nuthatch, horned lark, eastern phoebe, great horned owl, black-billed cuckoo, black duck and wood duck.⁴¹ An injured bald eagle, rescued in the East End, was rehabilitated at Tufts University Veterinary School and returned to the wild.^{41A}

Other rare species found in Provincetown include the Eastern spadefoot toad, which breed in vernal pools, and the Eastern box turtle, which prefers woodlands

^{40Aa} U.S. Fish and Wildlife Service, "Revised Recovery Plan for the Atlantic Coast Piping Plover," February 14, 1995.

^{40Ab} Massachusetts Division of Fisheries & Wildlife, "Status of Piping Plovers in Massachusetts - 1994 Summary," Scott Melvin, 30 December 1994.

^{40Ac} Massachusetts Division of Fisheries & Wildlife, "Massachusetts Tern Inventory - 1994," Brad Blodgett, 25 November 1994.

^{40B} National Audubon Society, cited in "Saving Foss Woods," Trust for Public Land, March 1995, p. 2.

⁴¹ Veit, Richard & Petersen, Wayne, Birds of Massachusetts, Massachusetts Audubon Society, 1993.

^{41A} Personal communication, Anne Lord, May 9, 1995.

with access to water.⁴² The Massachusetts Audubon Society is presently preparing a herpetological atlas for Massachusetts, which should be consulted for additional information.

Mammals in Provincetown include the common assemblage: red and gray squirrel, white-tailed deer, raccoon, red fox, rabbit, skunk, opossum, shrew, muskrat, bat, weasel, mice and voles. In recent years, a top-of-the-food-chain predator, the Eastern coyote, has extended its range throughout all of Cape Cod and is even seen in the outskirts of downtown Provincetown. The main threat to the coyote is alarm by an uninformed citizenry; there is no evidence that coyotes will bother humans, though pets may be stalked.

Wildlife corridors enable animals, particularly upland mammals, to migrate to new territories in search of food or breeding grounds. Biologists estimate that undisturbed linear areas of 300 feet in width are necessary for many species to feel comfortable with moving undetected. Owing to the dispersal of residential development throughout the town and its continuing saturation, wildlife corridors are fewer and more narrow than they perhaps should be. Most wildlife would seem to migrate through the Provincelands, north of Route 6. Therefore, it is more important to provide wildlife linkages to the Provincelands from the still-wooded areas at the extremities of the East and West Ends.

Among invertebrates, the rare water-willow borer moth (*Papaipema sulphurata*), which nests in the hollow stems of *Decodon* or water willow along pond edges, is found at Jimmy's Pond.⁴³

⁴² Massachusetts Natural Heritage and Endangered Species Program, Boston, 1995. The box turtle was documented on the Foss Woods parcel in September 1994 by C. Gandolfo.

⁴³ Town of Provincetown, "Open Space and Recreation Plan," 1986, p. 9.

Provincetown has about 480 acres of productive shellfish beds, along the harborfront.⁴⁴ Species harvested recreationally include soft-shell clam, quahog, sea clam, blue mussels and, rarely, bay scallops. Commercial permits are issued only for sea clams. In 1979 this harvest had a total value of \$22,230.⁴⁵ No shellfishing is allowed in Hatch's Harbor. In 1992 over two million quahog seeds were planted on private grants (of which there are 38 in town) on the West End flats. Town public aquaculture projects include a 30,000 seed quahog bed in the West End and experimental spat collection for oysters and steamers. Over two hundred recreational permits are issued each year.^{45a}

Because shellfishing is a popular pastime, there is always pressure on the shellfish supply. The town has tried to enhance natural sets of shellfish by broadcasting quahog seed purchased from private growers elsewhere.

F. Scenic Resources and Unique Areas

Though environmental educators and activists are trying to increase public appreciation of the complex ecological relationships among soils, water, plants and animals, many people still approach the environment from primarily an æsthetic viewpoint. If it is an attractive landscape, it is valuable, according to this perspective. Fortunately, Provincetown abounds in beautiful natural scenes which are also environmentally-sensitive areas, such as pondshores, salt marshes, barrier beaches, dune bogs and cedar swamps.

⁴⁴ Marine Research, Inc., "Shellfish Management Proposals for Barnstable County, Massachusetts," 1981, p. 103.

⁴⁵ Ibid., p. 20.

^{45a} Provincetown Annual Reports, 1992 & 1993.

Significant Natural Resource Areas: (See Map 10.)1. Shankpainter Pond (See Figure 1.)

Although the state has not designated any Areas of Critical Environmental Concern (ACEC) under MGL c. 21A, s. (7) in Provincetown, the Shankpainter Pond ecosystem would be the most obvious site and in 1979 state agencies suggested that the town pursue such a designation.⁴⁶ (A similar case could be made for designation as a District of Critical Planning Concern [DCPC] by the Cape Cod Commission.) As cited earlier, Shankpainter is the largest known quaking bog on a barrier beach system found anywhere in the world. Its rare and threatened plant species include dragon's mouth orchid, rose pogonia, golden club, adder's tongue fern, bogbean, few-flowered sedge, threadleaved sundew, pitcher plant, bladderwort, grass pink and nodding ladies' tresses. Rare animals found there include the Eastern spadefoot toad and the bog turtle.⁴⁷ Recreational fishermen haul up large and small-mouthed bass and pickerel.

A brief chronology of events surrounding this large, rare ecosystem denotes the tension between efforts to develop and protect it:

YEAR	ACTION	(SPP = Shankpainter Pond)
late 1950s	National Park Service (Hal Hinds) conducts study indicating unique value of SPP	
1961	Cape Cod National Seashore (CCNS) established with boundary excluding most of SPP due to local opposition	
1963	Dragon's mouth orchid discovered in SPP bog (Hinds)	
1966	State legislature enacts inland wetlands protection act	
1968	Provincetown Master Plan recommends adjusting CCNS boundary to include SPP	
1973	11 acres of SPP wetland filled for campground, south side	
1974	3 acres of SPP wetland filled, east side	
1975	Provincetown Open Space Plan gives SPP highest priority for protection	
1976-77	Provincetown Planning Board seeks land swap with CCNS to protect SPP	
1979	0.5 acre of SPP wetland filled; dragon's mouth orchid site reconfirmed on bog	

⁴⁶ Outer Cape Environmental Association, "The Quaking Bog of Shank Painter Pond, Provincetown, Massachusetts," 1981, p. 11.

⁴⁷ Outer Cape Environmental Association, "The Quaking Bog of Shank Painter Pond, Provincetown, Massachusetts," 1981, p. 2.

1979	Town Meeting article to buy 75 acres on southwest side of SPP for \$750,000 withdrawn due to lack of support; ACEC nomination suggested by state
1980	Provincetown Conservation Trust (PCT) founded as a voluntary, private means to preserve SPP
1986	Provincetown Open Space Plan lists SPP as the top Significant Natural Resource Area
1987	Zoning Bylaw revised to prevent filling or building in inland wetlands (Section 3700)
1991	Cape Cod Commission includes SPP in its proposed regional open space greenbelt
1992	PCT receives gift of 3.2 acres of shoreline on south side of SPP

Since 1986, when the last town Open Space Plan was prepared and Shankpainter Pond was considered the town's top natural resource priority, a 19-lot subdivision plan was submitted in 1995 by the Patrick family, for its 50-acre parcel along most of the northern shore. The subdivision, currently being reviewed as a Development of Regional Impact by the Cape Cod Commission, could well determine the fate of the pond.

The other Significant Natural Resource Areas identified in the 1986 Open Space Plan are reviewed briefly below:

2. Clapps Pond and Duck Pond

The largest open water pond in town,⁴⁸ the Clapps Pond/Duck Pond ecosystem is crucial due to its size and opportunity to provide integrated management. Unlike Shankpainter Pond, which is almost exclusively held in private ownership, Clapps Pond has only three owners, all public: Cape Cod National Seashore (federal), Division of Fisheries and Wildlife (state), and 40 acres of Town of Provincetown land. The Duck Pond basin is controlled by that Town land, the Department of Highways (state) and the Cape Cod National Seashore. This combined ecosystem is defined by Route 6 on the south and a dune ridge to the north, with freshwater wetlands extending continuously from one pond to the other.

⁴⁸ Clapps Pond is 40 acres of open water; Shank Painter Pond has 15 acres of open water plus 20 -30 acres of bog mat over water. The state DEP identifies pond by their open water expanse.

Owing to the lack of a coordinated management plan for this 100-acre area, recreational use and abuse has had a detrimental impact on the quality of portions of this ecosystem. Evans Field, though 80 years old, is a small ballfield on town land between the ponds and, because it was created by converting a wetland (probably a cranberry bog), seasonal flooding makes it unusable for much of the year. Off-road vehicle riding, particularly motorcross cycles, for the past 20 years has impacted wetland quality and in 1995 the town Conservation Commission and Selectmen began to put an end to the random trail spread there. Bonfires, parties and illegal camping at the west end of Clapps Pond have also persisted.

The first step to coordinating a management plan for this area would be for the town to designate all or part of its 40-acre parcel as conservation land. Presently, it is held as general municipal land for no designated purpose, under the control of the Selectmen. In 1994 the town won an important environmental battle by persuading the National Park Service to allow the town landfill to continue at its present site on Race Point Road, rather than forcing its relocation to the southeast corner of Clapps Pond off Route 6. This action could perhaps become a spur for continued cooperation on a joint management strategy among the town, state and federal agencies for this area. A nomination of the area as an ACEC or DCPC (see above) could be pursued as a recommendation of the management plan.

3. Jimmy's Pond

This wetland system, located between Route 6 and Harry Kemp Way, includes pond, cranberry bog, quaking bog, marsh, meadow, and shrub and tree swamp habitats. It is the town's most important habitat for the water-willow borer moth (*Papaipema sulphurata*), the threatened few-flowered sedge (*Carex oligiosperma*), and the only site in SE Massachusetts for the bog twayblade orchid (*Liparis loeselii*).

Broom crowberry (*Corema conradii*), an upland shrub and listed by the state as of Special Concern, is found nearby.⁴⁹

The town holds a strip of land perpendicular to Harry Kemp Way (0.63 acre) for general municipal purposes. Abutting this piece is 2.24 acres of wetland owned by the Provincetown Conservation Trust. Next to that is a vacant 2.08 acre parcel owned by the Academy for the Performing Arts, which the Academy may offer to sell to the town (\$66,000 assessed value-FY95) for open space.⁵⁰ (For other vacant adjacent parcels, see Table 5.4A.) This combined area could make a small yet strategically-located open space area halfway between the West and East Ends of town and at the western terminus of the railroad bed, an active public recreational trail.

4. Foss Woods; other significant woodlands

Foss Woods, the second largest undeveloped upland parcel in town, consists of 14 acres of sloping woodland between Route 6A and the town-owned railroad bed in the East End near Mount Gilboa. (See Figure 2.) In 1994 the Estate of Paul Foss offered to sell the parcel to the town for \$425,000, less than its appraised value of \$460,000.⁵¹ In July 1994, The Trust for Public Land, a national non-profit conservation organization acquired an 18-month option on the property for that amount. Town Meeting will be asked to purchase the property at the Spring 1995 session. State and federal reimbursement will be sought for about half of the purchase price.

⁴⁹ Town of Provincetown, "Open Space and Recreation Plan," 1986, p. 9.

⁵⁰ Napi van Dereck, personal communication, January 1995.

⁵¹ Elizabeth Foss-Mayo, personal communication, January 1994.

Beech forests are found in pockets throughout the East End as well as in the National Seashore.⁵² Because they represent the "climax" forest, in terms of natural succession, of Cape Cod, American beech stands should be preserved wherever they are found in Provincetown, since it is the only barrier beach system known to contain the uncommon tree. The 1993 Del Deo conservation restriction preserves a half-acre stand in a dune hollow in Mayo's Woods. Another stand is found at the south end of Howland Lane.

5. Atlantic white cedar swamps

The five small white cedar swamps of Provincetown total 14 acres and are found in the East End east of Atkins-Mayo Road and on either side Route 6, straddling it. No other barrier beach in New England can claim to have this wetland tree species growing on it. The National Park Service owns part of the cedar swamp north of Route 6; the other part is owned by the state Highway Department. In 1981 the Provincetown Conservation Trust was given 1.4 acres of bog, including a portion of white cedar swamp, at Somerset Heights. The remainder is held privately. (See Map 10.)

"It is not known whether any of these separate wetlands were connected prior to construction of the old railroad grade or route 6...Mosquito control ditches were maintained in the largest of these wetlands until about 1978...The wetland north of route 6 was briefly considered as a possible location for a municipal [water] pumping station. It is unlikely that the CCNS would allow this to occur.

At least two good examples of the Cedar Bog, uncommon on Cape Cod, occur...One open-grown cedar stem was aged at 74 years...Approximately 2 acres of

⁵² The Beech Forest off Race Point Road is the "type site," or best example, of this critical woodland community on Cape Cod, according to the Association for the Preservation of Cape Cod, Critical Habitats Atlas, 1991.

extremely dense, vigorous cedar occur in the southwestern-most wetland. A series of very wet, overgrown ditches bisect this area..."⁵³

Since cedar swamps are particularly susceptible to changes in water levels and quality, runoff from Route 6 should be studied to determine if it is helping or hindering maintenance of this rare habitat.

6. Telegraph Hill

Though not a Significant Natural Area *per se*, Telegraph Hill has been a major scenic resource of the town. Historically, it was used by observers to signal workers at MacMillan Wharf when fishing boats were inbound around Race Point. The hill was also used to signal Boston Harbor pilots waiting at the wharf whenever a ship was rounding the Point headed for Boston. A pilot would head out, board the ship and guide it to Boston.⁵⁴

In 1986 the five-acre site was subdivided into 20 lots and approved by the Planning Board. The developer went bankrupt and Sentry Bank foreclosed. In 1992 a new subdivision for eight homes was proposed.⁵⁵ The development is now proceeding and the significance of the hill as a natural feature has been diminished.

G. Environmental Problems

Many of the environmental challenges which Provincetown faces are a direct result of its development pace and pattern over past three hundred years. As described in earlier chapters, the biggest, persistent problems are environmental and public health issues related to wastewater disposal. Despite its high density, which

⁵³ University of Massachusetts-Amherst, Glenn Motzkin, Atlantic White Cedar Wetlands of Massachusetts, 1991, p. 29.

⁵⁴ Provincetown Conservation Trust, "Letter of Richard LeBlond," April 18, 1989.

⁵⁵ The Cape Codder Newspaper, (Orleans MA), "State Required Archaeological Dig Delays Telegraph Hill Development," November 19, 1993, p. 2.

typically is a favorable factor for installing sewers, Provincetown continues to rely on on-site individual septic systems. Though most of the town's soils are highly permeable, there are still failed systems due to overloading, particularly during the summer. *Because* the soils are highly permeable, nitrates and viruses are readily transmitted off-site to surface waters, particularly ponds and the harbor. There is insufficient depth to groundwater on many lots, leading to the design of "mounded" systems, which can be aesthetically displeasing to many people. Though the town has made great strides in encouraging and requiring low-flow solutions to wastewater problems, the potential for continued degradation of the town's most important open space asset, its broad harbor and tidal flats, will remain. (The April 1995 Town Meeting voted \$27,000 for an engineered scope of a wastewater management plan.)

The use of the harbor is another problem. Space conflicts, lack of adequate shorefront access, and commercial versus recreational disputes all need to be addressed in addition to water quality problems. The harbor management plan being developed should serve as a blueprint for resolving some of these issues. (The Town Meeting of April 1995 appropriated \$27,000 to conduct the harbor plan.)

A third issue relates to the impact of continued development on biodiversity and open space availability in general, since there is no local mechanism for requiring dedication or set-aside of open space to match the lots being developed. Relative to other Cape towns, there are very few potential subdivisions (the current Patrick proposal may be the only one) which would exceed 30 acres in size and fall under the purview of the Cape Cod Commission as Developments of Regional Impact (DRIs). Residential DRIs must dedicate 60 percent of the parcel to open space use; commercial DRIs, 40 percent. Perhaps with the approval of the town Local Comprehensive Plan, mandatory clustering of subdivisions of any size can be instituted.

Finally, the town is exploring methods to manage the closed "burn dump" located on the town-owned portion of the Clapps Pond parcel. This site has been designated as a hazardous waste site by the Commonwealth and needs to be secured to prevent unauthorized entry.

SECTION 5 INVENTORY OF CONSERVATION AND RECREATION LANDS

A. Introduction

Provincetown is the only town on Cape Cod without a town conservation area. On the other hand, no other town on the Cape has as much protected open space, about 70 percent of its land mass. With federal acquisition of the state-controlled Provincelands in the 1960s to create the Cape Cod National Seashore, many people felt that Provincetown would never have to worry about having enough open space; the dunes and beaches were, after all, the town's backyard playground from time immemorial.

But as time has passed, many residents have come to believe that the National Seashore, known colloquially as "the Park," is not the panacea for the town's outdoors needs. The town has no direct say in how the Park is used, and some residents resent many of the management decisions made by federal officials that limit "traditional" uses, such as off-road vehicle and dune shack policies. Still, there are many other residents who recognize that, whatever the frustrations, having the Park is much better than not having the Park. Most people silently recognize that Provincetowners would not have preserved the Provincelands from development and are relieved a different entity did it for them. They were saved from themselves.

In 1991 the Cape Cod Commission proposed a regional open space greenbelt system throughout Barnstable County, whose purposes is to "link existing protected open space and sensitive resources including wildlife habitat, wetlands, and zones of contribution to public wells to establish a regional network of connected open space."^{55A} Towns were asked to refine this greenbelt as it falls within their borders, as they develop local comprehensive plans. In Provincetown, the Commission

^{55A} Cape Cod Commission, Regional Policy Plan Atlas, 1991.

proposed to include all of the Cape Cod National Seashore in the greenbelt, as well as West End lands around Clapps, Duck and Shankpainter Ponds.

B. Public Lands and Facilities (See Map 11A and 11B.)

With 4500 acres under its control, the National Park Service is the largest landowner in Provincetown. By Autumn 1995, NPS will produce a new General Management Plan for the entire Seashore, its first comprehensive resource inventory and framework for land use since 1970. Without neglecting the impact the Park has on open space and recreation in Provincetown, then, this town Open Space and Recreation Plan will concentrate on facilities and properties within the area under municipal jurisdiction (1900 acres), for the most part, south of Route 6. (See Table 5.1.)

The Commonwealth of Massachusetts is represented in Provincetown primarily by its 238-acre holding of the Route 6 right of way, running as a double-barrelled, limited access highway from the Truro line to Herring Cove Beach. The right of way varies in width from 250 feet to 650 feet, though the actual road bed rarely exceeds 100 feet wide. The wide shoulders, therefore, provide a natural greenbelt to the highway. In the past, there have been discussions by the Mass. Highway Department and the town about transferring control of the wide shoulder to the town for municipal use, perhaps for a bike trail. The right of way abuts and is parallel to the town-owned railroad bed for a long segment. The width of the two combined strips could make some useful space. MHD also owns the Route 6A rotary, which provides parking for the adjacent West End Breakwater, a popular strolling structure. The Town, with a grant from the Department of Environmental Management, is currently refurbishing the rotary to commemorate the site as the first landing spot of the *Mayflower* Pilgrims.

The Massachusetts Division of Fisheries and Wildlife owns 68.4 acres on the south side of Clapps Pond as a state conservation area. There is no state

management presence at this facility, the Division's only refuge north of Wellfleet Harbor. An unadvertised, dirt boat ramp into Clapps Pond is the only public access facility provided. Hunting and fishing is allowed and the public strolls on the cartpaths around the Pond. No parking area is provided.

The Commonwealth also owns the 200 acres of tidal flats found in Provincetown Harbor and Hatches Harbor. Provincetown is unique in Massachusetts in this regard; other towns have privately-held lands below the mean high tide line. The genesis of this feature lies in Provincetown's history as unincorporated "lands of the Province" of Massachusetts. The significance lies in the ability to allow legal public access for recreation laterally along the shore.

The only town-owned protected open space are the two cemeteries, totalling 22.34 acres, and the 8 town landings on the harbor, totalling less than an acre. The only town-owned, useful playing field is the 4.39-acre Motta Field, (see Figure 2) and there are two pocket parks, the half-acre Chelsea Earnest Playground and the quarter-acre Mildred Greensfelder Park, in the West and East Ends, respectively. Interestingly, these playgrounds are surfaced with sand, not grass, which makes them cheaper to maintain; as it becomes dirty, the sand is merely scraped and replenished every two or three years, and sand is easy to come by in this sand-dune town. Evans Field is isolated by Route 6, frequently inundated by a high water table and consists of a mowed wetland, rendering it only marginally and occasionally useful nowadays for softball and little league baseball, though it was historically very important for ball-playing (see historical photo #5.1.) A recent survey indicates that most residents would be inclined to abandon Evans Field if a replacement site could be found. The Bas Relief Park below the Monument and Town Hall Park are sitting parks only.

Nevertheless, the town owns other properties for general municipal purposes which are used *de facto* for conservation and recreation. The 45-acre Clapps

Pond/Duck Pond parcel, which includes Evans Field and the former burn dump, is an important wetland and woodland ecosystem. Hiking trails cross the parcel and controversial motorcross dirt bike riding persists. Hunting and fishing occur near these ponds, though there are no specific policies governing this use. There is currently no management plan, which could identify appropriate types and levels of use, for this large tract, though one is proposed.

The 24-acre railroad right of way is town-owned for its entire length (about 7,000 feet) except for a short section near the Truro line, and the western segment, which was converted into Harry Kemp Way and Railroad Avenue. Unlike Truro and Wellfleet, (where the abandoned right of way was chopped into short pieces and sold to private abutters after the trains stopped running in the early 1960s), Provincetown acquired municipal ownership of the rail bed and had the foresight to keep it. One attempt in October 1994 to create a formal, paved recreational/bicycle path on the rail bed failed owing to abutter concerned about paving the trail, but it is used *de facto* by many people jogging, walking, skiing and mountain-biking on the unimproved surface.

Just as it is ironic that a town with thousands of acres of open space has no dedicated municipal conservation land, so is it odd that a town built on sand has no dedicated beach of its own. Herring Cove Beach (or "New Beach," in local parlance), a former state-operated beach, and Race Point Beach (where swimming is less popular due to larger currents and surf) are both large public facilities with bathhouses and adequate parking, but they are operated by the National Park Service and cost residents as well as tourist to use. *De facto* beach use by the public occurs throughout the harbor, particularly at the East End near the town line, and at the West End boat ramp, but the town provides no lifeguards or facilities, though the town swimming instruction program is operated here.

The major town-owned access to the harbor is the half-acre MacMillan Wharf, named for the Arctic explorer Donald MacMillan, who hailed from Provincetown. On Cape Cod, only Wellfleet (to a lesser degree) has a municipal wharf as popular and significant as a tourist attraction, where ferries, sightseeing tours, sailing and whalewatching cruises embark and the commercial fishing industry can be appreciated. (See historical photo #5.2 .)

The "wye" parcel is a 3.12 acre lot that abuts the railroad bed and the Route 6 right of way. (See Figure 3.) Originally used as a turnaround for Old Colony trains (after all, Provincetown was the "end of the line"), this flat, dry, sparsely-vegetated parcel is considered by the Recreation Department to have potential as playing fields for softball, baseball, soccer and field hockey.⁵⁶ An intensive engineering study has not been conducted, but it seems apparent that the lack of topography or unique habitat concerns would not prevent this parcel from being devoted to that active use. Some town acquisition or lease of the state-owned right of way (the highway roadbed is 200 feet away from the wye-parcel boundary line) may be necessary to design a proper facility.

See Table 5.2 for a complete list of town-owned open space lands.

C. Private Lands and Facilities (See Map 11A and 11B.)

The Provincetown Conservation Trust (PCT) was founded in 1980 to provide a private, non-profit vehicle to dedicate natural lands to conservation in town. In its first 15 years, PCT has protected 14 parcels of land totalling 28 acres (18 acres of wetland and 10 acres of upland). All was donated in fee (outright gifts of land title) with the exception of donated conservation restrictions (the first ever in Provincetown in 1993) on three parcels totalling 3.11 acres from the Del Deo family

⁵⁶ Provincetown Recreation Director, January 1995.

on Atkins Mayo Road. Lands held in fee by PCT permit public access, though it is not actively promoted. (See Table 5.2A).

The Roman Catholic St. Peter's Church operates a private 12-acre cemetery next to the town cemetery. The public is allowed only to walk here.

There are a variety of unprotected commercial open space facilities in town. None are presently enrolled under the MGL Chapter 61, A, & B current use assessment programs,⁵⁷ which defer property taxes while the land is not developed, though some could qualify (riding stables, campgrounds) since they meet the 5-acre minimum area requirement.

See Table 5.3 for a complete list of private recreational facilities.

There are no open space or "cluster" subdivisions in Provincetown, in which a common area is provided for the neighborhood. With the exception of the facilities noted above, the only institutional land of conservation/open space interest is a two-acre parcel on Harry Kemp Way owned by the Provincetown Academy for the Performing Arts. Originally donated to the Academy as a potential site for a future 300-seat theater, the Academy trustees believe that its isolated location (away from downtown) and proximity to wetland renders it not eminently suitable for that proposed use. The parcel abuts town and PCT land at Jimmy's Pond, a special natural resource area. The Academy is exploring options of transferring title to the town in exchange for other compensation.

Listed below are the eight largest parcels of developable, unprotected land remaining in Provincetown. The fate of these parcels represents the last opportunity for Provincetown to preserve significant blocks of open space near or in the downtown area.

⁵⁷ Provincetown Assessor, 9 March 1995.

Table 5.4A
Large, Unprotected, Undeveloped Land Parcels,*
Provincetown, 1995

<u>Owner</u>	<u>Map/Lot</u>	<u>Acres</u>	<u>Location</u>	<u>Comments</u>
Patrick	7-3/21	50	Rt 6 & Shank Painter Pond	19-lot subdivision proposed 1995
Foss Estate	18-2/12D	15	30 Berry Lane, East End	Town purchase proposed 1995
Roderick	6-1/11	8	66 West Vine Street	West End
Costa	2-3/15 & 16	9	Bayberry Ave	West End
Phillips	2-3/2	8	74R Bayberry Ave	West End
Hawthorne	13-1/25	3.5	46 Harry Kemp Way	Abuts town land & PCT
Malicoat	15-3/114	3	308 Bradford Street	East End
Beede	19-1/36	2.5	820 Commercial St.	East End
Gee	13-1/25A	2	52 Harry Kemp Way	Abuts town land
Academy Perf. Arts.	13-2/34B	2	74 Harry Kemp Way	Abuts Prov. Cons. Trust
Wells	13-2/34A	2	82 Harry Kemp Way	Abuts Prov. Cons. Trust
Fiset	6-1/14	2	43 West Vine St.	West End
Sateriale	18-1/23A	2	37 Snail Road	Abuts Foss Woods

* (There are other large parcels in town capable of being subdivided, but because they already have at least one dwelling unit on them, they have been excluded from this list.)

D. Recreational Programs

The staffed Town Recreation Department, overseen by an appointed committee of volunteers, provides a wealth of offerings for residents and visitors, of all ages, throughout the year. In 1993 there were 46 different activities and programs and events for children, ranging from baseball to nature walks to puppet workshops to fishing derbies. That same year there were 26 offerings for adults, including yoga, skating, rug hooking, dance, aerobics and basketball. A breakdown of participation is given in Table 5.5.

Assisting the Recreation Committee is a volunteer organization called HOP/HOP (Help our Parents/Help our Playgrounds), whose objective is to refurbish the playground equipment in both the West End (Chelsea Earnest Playground) and East End (Mildred Greensfelder Playground). Because these playgrounds have not been upgraded in the past, the refurbishing means complete replacement of all equipment; much of the existing equipment has been deemed unsafe. The Greensfelder Playground had all of its new equipment installed in March 1995 and

was made handicapped accessible. This playground thus has a new, large, safe play structure, swing set and spring rider. Plans are continuing similarly to raise \$24,500 to replace all equipment at the Earnest Playground.

The parents' group had raised \$16,850 by the Spring of 1995. The 1994 Town Meeting provided \$3,000, but the remainder has been donated from area businesses and fundraising events. As soon as all the equipment has been purchased, HOP/HOP intends to explore options for appropriate landscaping (shade trees) and picnic tables.^{57Aa}

^{57Aa} Memo, Evelyn Gaudiano, 28 March 1995.

SECTION 6. COMMUNITY GOALS

A. Description of Process

In order to determine what the people of Provincetown want with respect to conservation, recreation and open space in their town, the Town of Provincetown conducted a series of surveys which asked residents how they felt about acquiring additional open space and what improvements they felt were needed at open space and recreation lands and in programs. Questions were asked about what residents liked and disliked most about the town to get information about how residents perceive Provincetown now and what the focus of long range planning should be.

A townwide survey, distributed at the Fall 1994 Town Meeting and through Town Hall, generated 168 responses. The same survey was distributed in the high school in the winter of 1995 and generated 137 responses. The students at Veterans Memorial Elementary School (VMES) were also polled using a list of recreational activities and a simplified, open-ended questionnaire that asked "Do you think Provincetown should keep some open space to preserve trees and wild animals?" and "What else do you think is important?" VMES responses totalled 172.

The surveys were developed by the Open Space and Recreation Plan Committee and the Assistant Town Manager. The sample surveys and the tabulation of the responses is found in Appendix A.

In general, the surveys found that the adult population of Provincetown seemed to place more emphasis on the need for open space conservation and passive, outdoor recreation. High school students preferred to have the town enhance active recreation activities and to create a teen center. Both respondent classes are dissatisfied with the availability of youth recreational facilities. Both adults and teens support spending funds for open space conservation. Perhaps nine out of ten elementary school children support open space protection and considered recreational programs and facilities to be important.

B. Statement of Open Space and Recreation Goals

The uniqueness of Provincetown lies in its geographic location and development history, both of which distinguish the community from other Cape Cod towns. Provincetown is a destination for many travellers even if they do not stay there. It is the most outermost of this sandy outpost called Cape Cod. Its people revel in their cultural distinctness and the unparalleled scenic beauty of the town.

Provincetown's charge is to preserve the natural and human qualities which make it unique, while promoting these features appropriately to attract tourism and bolster the economy. It is very clear that providing recreational opportunities for all its citizens is more than a matter of placing National Seashore brochures in the hands of all. Downtown Provincetown must augment the fine opportunities for passive recreation offered by the Seashore with more active facilities of its own. The ability to provide pocket parks of open space downtown is also important; after all, this is where most of the people are. There are still opportunities to bring open space to the people instead of sending people off to find the open space. Provincetown must seize the day and protect some of these best instances now before it is too late.

SECTION 7 ANALYSIS OF NEEDS

A. Summary of Resource Protection Needs

The townwide survey and the high school survey both found that less than ten percent of all respondents were satisfied that Provincetown had enough open space available. Even when asked if the town should spend money on this issue, most people responded affirmatively. (See question #1 results in Appendix A.) The April 1995 Town Meeting vote was overwhelming in favor of the Foss Woods acquisition, bolstering this sentiment in a tangible way.

Most people would agree that the National Seashore provides much of the open space Provincetown needs, but its location across the state highway makes it less accessible than might be supposed. Provincetown needs more downtown open space, where people can walk out of their doors and into a piece of woods. The town must also seek protection of critical habitat that is outside the Seashore boundary, such as at Shankpainter Pond, Clapps Pond and Jimmy's Pond.

The fiscal constraints of the 1990s will require more innovative approaches to preserving open space. Some of these techniques have been applied in Provincetown, but perhaps not emphasized. Better education of town officials, landowners, and citizenry about these alternatives may lead to improved implementation.

Land can be preserved through regulatory or non-regulatory means. Regulatory means include mandatory cluster subdivisions, DRI set-asides, and minimum lot size increases. Non-regulatory methods to preserve crucial resource lands in Provincetown include the following approaches:

Fee acquisition (conveying full title to land)

- *Donation: immediate or installment: to Town or Provincetown Conservation Trust
- *Purchase: friendly sale, eminent domain, bargain sale, installment sale
- *Bequest
- *Tax title transfer

Less-than fee protection (conveying partial rights to property)

- * Access easement
- * Conservation restrictions
- * Lease
- * Remainder interest/reserved life estate
- * Option/rights of first refusal
- * Tax-deferral programs: MGL 61, 61A, 61B
- * Differential assessment program: Special Act 797 of 1979

To determine which protection technique is best suited to each target parcel, the following set of circumstances should be evaluated:

- 1) Needs of the community
 - * Is the parcel desirable for access and active use, or resource protection and passive use?
 - * Are acquisition funds available (cash donations, town appropriation, outside grants?)
 - * Is the parcel needed immediately or in the future?
- 2) Needs of the landowner
 - * Are income tax or property tax advantages, or cash most important for landowner's financial situation?
 - * Is continued privacy an issue?
 - * Is the landowner sympathetic to public protection?
- 3) Size and value of parcel
 - * Is the parcel large enough to protect what needs protection or serve as a linkage?
 - * Is the entire parcel needed or only a portion?
- 4) Development pressures
 - * Will the parcel likely be available later if not acquired now?
 - * Is the real estate market likely to push prices beyond reach or is market declining for the foreseeable future?
 - * Can the Town relieve land development pressure through advantageous tax policy?
- 5) Maintenance
 - * Can the community manage the property better than current landowner, given expected levels and types of use?
 - * Does the Town have the money and expertise to manage the parcel?

In general, it is recommended that parcels proposed for active use, such as parks, swimming beaches or boating facilities, be publicly owned for liability reasons. Resource protection uses may not require public ownership.

B. Catalogue of Non-Regulatory Methods of Open Space Preservation

1) Fee Acquisition

a) Donation (outright gift of land)

The landowner gives the entire interest in a property (fee simple title) to the Town or charitable conservation organization, such as the Provincetown Conservation Trust. The donor is relieved of future property taxes because ownership is relinquished. The donor may receive income tax deductions amounting to the appraised fair market value of the land.

The landowner may impose use restrictions on the deed, such as prohibiting motor vehicles, though these limitations may reduce the value of the gift. The landowner may also donate parts of the property in different years or donate undivided interests in the entire property over successive years, in order to maximize income tax benefits.

Land donations are the easiest, quickest and, obviously, cheapest land acquisition methods for the community. A title exam and hazardous waste survey should be conducted prior to conveyance. Deeds specifying conservation use should read, "to be managed under the authority of MGL Chapter 40, section 8C," to ensure the land cannot be devoted to other municipal use. Land donations are subject to Town Meeting approval, or Selectmen approval if accepted by the Conservation Commission. Gifts of land to the Provincetown Conservation Trust do not need any municipal approval.

b) Purchase

If funds are available, and the landowner cannot or will not donate the parcel, the Town may wish to purchase the fee simple title to the land. The length of time necessary to complete the transaction depends on negotiations, title research, appraisals and Town Meeting scheduling. The Town Meeting must approve the purchase by a two-thirds majority and, if bonds are issued, a simple majority of a town-wide election is needed to exempt the bonds from the tax levy limit (proposition 2 1/2.)

The Town also has the right to take a key property for public use by eminent domain, if a negotiated price cannot be reached. Even if the Town bases compensation on an accurate appraisal, landowners often feel aggrieved and sue for additional damage awards. Juries typically side with the landowner. Because takings automatically clear away title defects, friendly negotiated sales are often written as eminent domain takings in the Town Meeting article.

Land purchases can also be structured in installments or at bargain prices to satisfy a landowner's tax needs. A bargain sale is one at a price below fair market value by at least 20 per cent. The difference between appraised value and the sale price qualifies as a tax-deductible gift, which can offset the landowner's capital gains tax on the sale. The proposed 1995 town purchase of the 14-acre Foss Woods property is an example of a bargain sale: the Foss Estate offered to sell for \$425,000 or 80 percent of its appraised value.

c) Bequests (Gifts by Devise)

Property can be given for public use after the landowner's death if his or her will specifies such a disposition. This technique allows the landowner full use and enjoyment of the land during his or her lifetime, while removing the asset from estate tax obligations at the time of death. There are no income tax or property tax savings using this approach and the community gets no immediate use of the property. There is also no assurance that the will won't be altered before deccase.

d) Tax Title Transfers

Tax title properties are parcels acquired by a municipality through foreclosure owing to non-payment of property taxes (G.L.C. 60.) People may neglect to the minor amount of taxes due on their "worthless" wetland parcels and lose their land through foreclosure by the Town. Although land values today are generally high enough to dissuade owners from risking the loss of their land through tax default.

In the past, many properties were acquired by towns through this method. The half-

acre parcel on Creek Road was taken by the town for non-payment of taxes, for example.

Once acquired by the community, tax title lands are general purpose municipal lands, usually under the control of the Selectmen. They can be kept, sold by Town Meeting, or transferred to another town agency for a specific use. The Conservation Commission, for example, could request wetlands and parcels with special resource value. Barnstable and Wellfleet are two Cape towns which have regularly transferred these types of parcels to their Conservation Commissions.

2) Less-than-Fee Acquisition

a) Access Easements

Many landowners are familiar with positive easements, such as for drainage, driveways or utilities. Easements may also be constructed to link open space parcels or to create viewsheds. Unfortunately, most landowners fear the loss of privacy and liability concerns sometimes associated with public use. If privacy loss is significant and fair market value is reduced, the Town should lower the tax assessment on the affected parcel accordingly. Massachusetts General Law (c. 21, s. 17C) protects landowners from liability if they allow public access without charging admission, so liability fears are probably exaggerated. Access easements must be approved by the Selectmen.

The Department of Environmental Management's (DEM) Sea Path program, which would grant public strolling rights below the high tide line (currently, public trust rights in this intertidal zone are limited to fishing, fowling and navigation), is not particularly relevant in Provincetown, which is the only town in the Commonwealth where the state owns the intertidal zone. The Sea Path program does not address Provincetown's primary obstacle, which is getting perpendicularly

from the street down onto the tidal area. As mentioned above, the town's eight town landings are not adequate in size or distribution to accomplish this task.

b) Conservation Restrictions (G.L. 184 s. 31-33)

Conservation restrictions are voluntary, yet binding legal agreements between a landowner and the Town or conservation organization, such as the Provincetown Conservation Trust. The landowner is offered powerful incentives through estate tax and federal income tax deductions and property tax relief, to keep the parcels in an undeveloped state. Since authorized in 1969, three acres in Provincetown (and 20,000 acres statewide) have been preserved through this technique. The owner keeps control over the land, while the holder of the restriction promises to enforce the terms of protection. The state Secretary of Environmental Affairs and the Selectmen must approve each restriction based on the land's environmental significance or other public benefit.

In 1993 the Provincetown Selectmen and Assessors, based on work prepared by the Provincetown Conservation Trust, adopted a set of policies encouraging the use of restrictions as a means of preserving natural areas without the town having to purchase them. Only perpetual agreements will be considered. There is no parcel size requirement. Property valuation will be reduced by as much as 90% for lands under permanent restriction. In 1993 the Del Deos became the first family to participate in this program, preserving part of historic Mayo's Woods in the East End.

c) Lease

The Town could lease private land for open space needs, such as for a community garden. Leased are effective in their flexibility and "trial-run" aspects. A landowner who is reassured by the community's responsible management of the leased land may be more willing to cooperate later on a more permanent arrangement, such as a donation in fee or conservation restriction.

Leases are recorded in the Registry of Deeds and remain in force until their expiration date, even if the land's title is conveyed. Land leased for public use is typically relieved of property tax obligation. No income or estate tax deduction can be claimed due to the temporary nature of the lease.

d) Remainder Interest/Reserved Life Estate

A landowner can give or sell land to a town while retaining the right to live on or use the property for the rest of his or her life. The landowner keeps a "reserved life estate," while transferring the remainder interest to the Town. The landowner receives a charitable deduction for the value of the land minus the value of the life estate (based on IRS actuarial tables) and minus any depreciation. The landowner typically must still pay property taxes and maintenance costs.

Reserved life estates are typically used by elderly landowners who still need their home, but not their land. Benefits to the community include immediate access to the property and knowledge that, eventually, full control will result.

e) Options/Rights of First Refusal

An option is a right, but not an obligation, to purchase a property at an agreed upon price at a specific time. Options allow a town or land trust the time needed to raise funds for a parcel it knows it wants to acquire. Options are particularly useful in times of development pressure and rising realty markets because they lock in a price and take the land off the market. The Town pays a nominal price for the option itself to indicate genuine intent, and records the option. Landowners derive no tax incentives from this technique, but many landowners would prefer to sell their property for conservation than for development. The Foss Woods signed an option to the Trust for Public Land for one year from August 1994 to enable the town to explore the purchase funding.

Rights of first refusal similarly can buy time for the town to assemble acquisition funds, but are less certain than options. These agreements set neither a

purchase price nor an execution date. The town cannot determine when the owner will decide to sell the land - now, later or never - but it gives the public the right to determine the land's fate if and when that time comes. No tax incentives accrue to the landowner from these agreements; civic cooperation may be the only motivation.

f) Current Use Assessment Programs

Farms, forest and private recreation lands often receive preferential tax treatment under the current use assessment programs (G.L.C.61, 61A, 61B.) These programs enable local assessors to value open lands in their current state rather than at their "highest and best use," which in Provincetown generally means as a housing development or commercial zone. It is similar to a conservation restriction program, in that, it is employed strictly at the owner's request. Differences include: no benefit as income tax or estate tax deductions; annual application necessary; and, town has automatic right of first refusal. A major advantage is that eligibility criteria and property tax reductions are simple and standard throughout the state:

- c.61- Ten acres of woodland with a state-approved forest management plan; 95% tax reduction plus stumpage fee,
- c.61A- Five acres in agricultural production grossing \$500 annually; reduction based on crop type,
- c.61B- Five acres used for public recreation or resource protection; 75% reduction.

The disadvantage is that property owners can withdraw from the program at any time.

No farms of over five acres exist in Provincetown, so ch. 61A is not applicable. No ch.61 forest management plans have been approved by DEM in Provincetown, nor are 10-acre tree farms likely. Ch. 61B is applicable to the campgrounds and riding stables, but they have not applied for the program.

g) Differential Assessment Programs

Private retention of open land could be stimulated by Special Act 797 of 1979, which provides the Selectmen with an option to tax open land at a rate up to 15 percent less than residentially-developed land. It is based on the premise that developed land requires more municipal services and should generate more taxes than open land. The advantage to this program is that it applies indiscriminately throughout the town; everyone gets a tax break for keeping land undeveloped whether they want it or not. The drawback is that the open space rate reduction of 15 percent is much smaller than the discount offered by other techniques, such as conservation restrictions.

In 1990, only five Massachusetts communities (Bedford, Concord, Norton, Nantucket and Somerset) used this classification program. It is an equitable conservation option that need not cost the Town a penny. The Town's total tax revenue remains the same; more of the burden is simply shifted onto developed properties.

3) Private Conservation Organizations (See Table 5.2A.)

The local land conservation trust is playing an important role in shaping open space protection in Provincetown. As a private organization, the Provincetown Conservation Trust (PCT) can work separately from town government, while pursuing shared goals. As a charitable group recognized by the IRS, it can offer similar tax advantages as the town to a landowner for gifts of land. Land trusts are directly involved in acquiring and managing land for its natural, recreational, scenic or historical qualities. It is supported by public memberships and directed by a board of volunteer citizens.

What can non-profit groups do that town agencies cannot? First, they can work quietly and confidentially with landowners, forging relationships patiently (sometimes hard to do in government circles) that may result in open space

protection, such as a land donation. Second, these groups are an attractive alternative for landowners skeptical about working with "government." Non-profits are not susceptible to the same type of political pressure to which a town agency may be subjected, such as converting town conservation land to another use. Finally, these groups can be instrumental in performing much of the pre-acquisition work needed for a town to purchase land, including surveys, title exams, appraisals and options.

PCT is a member of The Compact of Cape Cod Conservation Trusts, which provides technical assistance and professional expertise on matters relating to planning, land acquisition and management, and non-profit administration in addition to linking them to their counterparts across Barnstable County. These groups should supplement, not supplant, the town's role in implementing the Open Space Plan.

C. Summary of Recreation Needs

Provincetown is a small town, with great natural beauty, and large numbers of its residents would like it to stay that way. The town's wonderful views and environment of native plants and wildlife are aspects which residents and visitors wholeheartedly enjoy. Many of its important natural resources, including beaches, woods, fish, and shellfish, are also recreational resources. These have an economic aspect as well, as Provincetown has many businesses that serve the tourist attracted by its unique charm and beauty. The purpose of this plan is to identify means by which to protect these valuable resources which are vital to the town's environment, while promoting appropriate use of these resources to enhance the town's communal well-being.

The 1988 Massachusetts Statewide Comprehensive Outdoors Recreation Plan (SCORP) found that the Cape Cod and the Islands region was deficient in facilities

for golf, tennis and ice-skating. Critical planning needs were listed as expanding coastal access and water recreation (swimming, fishing and boating), developing trail corridors, and conserving wildlife habitats and water supply areas.^{57A} The 1994 Provincetown survey found that residents agreed that ice-skating was lacking; that the total number of tennis courts in town was adequate, but that more should be public, rather than private; that the town was deficient in providing coastal access points; that the Cape Cod Pathways trail network was a good idea; and, that additional lands should be acquired for habitat conservation.

The surveys also revealed some discrepancies in local attitudes. For example, the overwhelming (over 75%) response from adults was that town land should be used to create bicycle and walking trails (Question #5). But when Town Meeting was asked in October 1994 to dedicate the town-owned railroad bed to use as a bicycle path, the idea was rejected by a slight majority, owing in part to opposition from abutters who were concerned that the proposed trail would have to be paved. High schoolers were evenly split about the need for more trails. Younger children declared bike riding their most popular recreational activity. The Town Master Plan suggests creating a pedestrian path system and bike path system.⁵⁸ The survey also found that there was general sympathy for the town keeping title to the old fire station, yet Town Meeting voted to sell it.

Survey respondents were somewhat unsatisfied with adult recreational facilities, but very disappointed with recreation facilities for children and teens (Question #10 & #11). Most of the sticking point lies in the lack of a teen center for

^{57A} Massachusetts Department of Environmental Management, Massachusetts Outdoors! For Our Common Good, 1988 - 1992, Vol. 1, p. 104.

⁵⁸ Lane Kendig, Inc., "Provincetown Master Plan," 1988, p. V-7.

kids to meet each other after school hours. Both adults and teens understand this need (Question #8).

In terms of specific activities (Question #12), a majority of adult respondents judged the community was doing a good to excellent job of providing the following facilities: community center; soccer/football; tennis courts; bike paths; baseball; and basketball. Adults were dissatisfied with the following facilities: cross country skiing; children's playground; and freshwater beaches. They were fairly evenly split on the issues of hiking trail, boat landings and salt water beaches. Asked to rank the top priorities for recreational improvement, adults answered that picnic tables, beach access and a freshwater canoe dock should be primary aims (Question #9).

All agree it can be tough finding some types of recreational outlets for teenagers in Provincetown, which can be very isolating for youngsters without driving licenses. The nearest skating rink is 45 minutes away and the nearest movie theater is 30 minutes from home. A teen center where youths can "hang" without either being hassled or disruptive of the neighborhood is high on everyone's list of perceived needs.

Teen respondents perceived local success in providing bike paths, baseball, basketball, tennis courts, boat landings, children's playgrounds and saltwater beaches (Question #12). They were dissatisfied with cross country skiing, community center, and freshwater beaches. They held divergent opinions on the provision of soccer/football, and hiking trails. Teenagers also felt that better beach access and a freshwater canoe dock should be primary improvements (Question #9).

The lack of availability of freshwater beaches may be more a problem of water depth, accessibility and protection of the ecosystem than town indifference. Provincetown's ponds are not suitable for swimming owing to their marginal depth. Promoting freshwater beach use may be counterproductive for quality

recreation, other than canoeing. It may also conflict with the need to preserve plant habitat along these shorelines, as outlined in Section 4.

Both adults and teenagers agree that Evans Field may have outlived its usefulness and prefer to see it abandoned in favor of a new field elsewhere (Question #13). Eliminating Evans Field would allow the natural wetland to reestablish itself there and enhance the habitat value of the town-owned land near Duck and Clapps Pond. The "wye"-parcel on Harry Kemp Way may be the logical candidate site for the Evans Field replacement.

Judged against some objective standards,⁵⁹ Provincetown's supply of recreational facilities meets or exceeds the demand generated by its winter population of 3,561 (in 1990), but falls short when the summer population's (18,800 estimate in 1990) demand is taken into account. See Table 7.1. The greatest lack appears to be in playground space and ballfields, particularly during the summer season, when use of these facilities is obviously at its peak. It is unlikely that Provincetown will ever have the space, funds or population necessary to support an indoor skating rink, though many of its youths yearn for one. Hockey is very popular in Provincetown, but the teams must play home games 30 miles away in Orleans.

Though Provincetown has an enormous excess capacity of recreational beach in theory, many survey respondents bemoan the lack of access and parking available to reach the beach. Over 60% of the respondents (adults and teens) feel that the old fire station at 189 Commercial Street should be retained in town ownership and redeveloped to improve harbor access (Question #6).

The recreational needs of Provincetown's aging population can perhaps best be met by incorporating sensitive design features into open space and recreation

⁵⁹ National Park Service Standards and National Recreation and Park Association Standards, cited in Orleans, Mass. Open Space and Recreation Plan, 1994, p.84.

area, such as handicapped access, resting benches and sidewalks. Sidewalk improvements are planned for West Vine Street and Bradford Street. The new Senior Citizen Center can accommodate an expanded offering of programs and activities.

D. Management Needs

Most residents do not believe that the town is currently managing its landholdings appropriately and would be willing to pay more to enhance this service (Question #7). Frequent survey comments reflected a concern over littering, uncleaned beaches, and illegal trash dumping in the woods. Adults strongly believe that police patrols should be increased to prevent illegal waste dumping, even if it results in higher taxes (Question #4). Town meeting may want to deputize other town officials, such as health agents, in addition to police and harbor masters, to bolster enforcement of MGL c. 270 s. 16, which designates fines and vehicle seizure for illegal dumping on public land.

Part of the land management problem stems from a lack of staff to act as steward town properties. There is no conservation agent or natural resource officer. No highway department employee is charged with specific land maintenance. The Provincetown Conservation Trust has organized *ad hoc* clean-up days for its own properties, but there are no volunteer stewards of town properties, as other towns, such as Falmouth, have succeeded in establishing.

The other part of the problem is that Provincetown has not dedicated any town lands to conservation use. As explained in Section 5, the largest town-owned parcel at Clapps Pond is simply held as municipal property with no designated use. Consequently, decisions about uses such as dirt bike riding cannot be made in any informed context. Defining uses for town properties (recreational, conservation, housing, etc.) is a necessary first step in providing a land management framework

for those parcels. Once specific management plans have been designed, volunteers or staff can be directed to implement them.

Both adult and teen respondents believe that the town should emphasize a blend of land maintenance and new open space acquisitions (Question #14). Providing good management plans, accessible use and promoting open space opportunities for town lands will rally support among constituents and tourists. How Provincetown manages its open space will likely determine whether voters will trust it with more land when the chances to acquire other key parcels arise.

The Provincetown Disability Commission conducted an inventory of open space and recreation sites (public and private) in 1994. (See Appendix B.) The inventory found that most trails in the National Seashore are too steep ever to be fully accessible, due to Provincetown's unique dune topography. The report states, however, that "since only 5% of the disabled are wheelchair bound," simple features such as Braille signs, handrails, and benches would enhance accessibility for the other 95% of disabled persons. The report commends HOP-HOP's work in enhancing accessibility to the playgrounds. The report also suggests innovative options to making structures, such as Pilgrim Monument, or sensitive areas, such as Clapps Pond, fully accessible: produce videos of the views of and from the facilities that can be shown upon request by the disabled. (Who knows? In the future even able-bodied persons may enjoy open space by virtual reality!)

SECTION 8 GOALS AND OBJECTIVES

The goals described in this section are the long-range aspirations of the Town of Provincetown for the protection of natural resources and the provision of recreational opportunities for its citizens and visitors. The objectives are conceptual steps to be undertaken to achieve these goals. Specific, tangible actions to implement the objectives are found in Section 9.

These goals and objectives were developed by the Open Space and Recreation Planning Committee with input from the community through a public opinion survey and three public hearings. Previous town studies, particularly the 1986 Provincetown Open Space and Recreation Plan and the 1988 Provincetown Master Plan, were consulted for current applicability and compatibility. The goals and policies of the 1991 Cape Cod Commission Regional Policy Plan and the 1988 Massachusetts Statewide Comprehensive Outdoor Recreation Plan were also referenced for compatibility, where appropriate.

1. GOALS:

I. Conservation: Protect and enhance Provincetown's fragile environmental resources and unique habitats.

II. Open Space: Preserve and manage sufficient areas to maintain a healthy natural environment, provide habitat for wildlife, encourage outdoor recreation and retain community character, not only within the National Seashore, but also throughout the town.

III. Recreation: Meet residents' recreational needs by providing a balanced, year-round recreational program with adequate facilities, while protecting sensitive natural resources and keeping maintenance costs within a limited budget.

2. OBJECTIVES

I. **Conservation Goal: Protect and enhance Provincetown's fragile environmental resources and unique habitats.**

A. **Protect and Enhance Coastal/Saltwater Resources:** Preserve coastal water quality that will enable fishing, shellfishing, swimming and boating to continue for residents to enjoy and as a mainstay of the town's tourist economy and support native industries of commercial fishing and shellfishing.

B. **Protect Freshwater and Wetland Resources:** Preserve the quantity and quality of groundwater, ponds and fresh water wetlands which provide wildlife habitat.

C. **Preserve Unique Land Areas:** Protect and preserve the value of identified lands for wildlife habitat, rare plants and animals, uncommon woodlands (such as beech forest or cedar swamp), and historic resources.

D. **Mitigate Natural Hazards of Storm Flooding and Sea Level Rise:**
Promote sound land use principles to prevent acute storm damage and chronic sea level rise from causing undue threats to public safety and natural resources.

E. **Manage Town's Open Space Properties to Protect Natural Resources while Encouraging Appropriate Public Use:**

Evaluate town-owned open space to dedicate portions to conservation use and develop management plans which ensure maximum natural resource protection, while enhancing recreational access for purposes such as hiking, fishing, and small-craft boating.

F. **Prevent Degradation and Abuse of Open Space Areas.**

Provide cost-effective means of patrol and maintenance for town-owned open space to prevent overuse, dumping and resource degradation.

G. Coordinate Protection of Natural Resource Areas with Multiple Jurisdictions:

Cooperate with nearby jurisdictions, such as the National Park Service and Massachusetts Division of Fisheries and Wildlife, to design compatible and integrated management of coastal and freshwater resource areas, migratory wildlife and other natural resources.

II. Open Space: Preserve and manage sufficient areas to maintain a healthy natural environment, provide habitat for wildlife, encourage outdoor recreation and retain community character, not only within the National Seashore, but also throughout the town.

A. Protect Environmentally Sensitive Lands:

Acquire or protect, through regulatory and non-regulatory mechanisms, lands in or near sensitive natural or unique areas identified in this plan.

B. Protect and Retain Lands of Recreational Value:

Dedicate appropriate areas of town-owned open space to recreational use and encourage retention of existing private recreational facilities, particularly campgrounds and riding stables.

C. Protect the Town's Scenic Resources:

Preserve the natural features and working waterfront of Provincetown and ensure that views of these features are available to residents and tourists alike.

D. Protect Significant Historical Sites:

Acquire or protect lands which contribute to the unique Cape Cod character of the Town, provide historical, prehistoric or educational perspectives, and/or meet the criteria of the National Register of Historic Places or the Massachusetts Historic Commission.

E. Promote an Integrated, Cost-Effective Open Space Acquisition Program:

Except when development threat is imminent and/or public ownership necessary to accomplish intended public purpose, use cost-effective land protection tools, with tax-incentives, such as conservation restrictions and current use assessment, to retain open space in the community.

F. Coordinate Open Space Protection with Regional Jurisdictions:

Cooperate with nearby jurisdictions to promote protection of regional open space resources, such as the Cape Cod Commission regional greenbelt system.

III. Recreation: Meet residents' and visitors' recreational needs by providing a balanced, year-round recreational program with adequate facilities, while protecting sensitive natural resources and keeping maintenance costs within a limited budget.

A. Meet Local Recreation Needs through Balanced Offering of Programs:

Develop and/or expand recreational programs which address the needs of citizens and tourists including those of different age (particularly youths), incomes and abilities, subject to availability of funds.

B. Upgrade Active Recreation Facilities to Provide Better Service:

Develop, relocate and/or expand recreation facilities to meet local recreation needs, particularly for youths, in a manner in keeping with the rural seaside character of Provincetown and subject to availability of funds.

C. Enhance Fresh and Salt Water Bathing and Boating Facilities:

Develop a town harbor beach within walking access of most of the town's population and promote low-impact, non-motorized boating on larger ponds.

D. Encourage Alternative Transportation on Safe Routes to Reduce Congestion, Conserve Energy and Improve Air Quality:

Promote walking and bicycle paths around downtown and connecting to outlying parking lots and long-distance trail systems.

E. Provide Access to Open Space and Recreational Facilities for Those with Varying Physical and Other Abilities: Ensure that conservation areas, trails, parks, and playgrounds are accessible to residents with a variety of levels of mobility, mindful of site characteristics and financial considerations.

F. Coordinate Management of Recreation Resources Which Cross Town Boundaries: Cooperate with nearby jurisdictions to promote protection of regional recreational resources, such as the Cape Cod Pathways regional trail network.

SECTION 9 ACTION PLAN

The following actions are designed to implement the Goals and Objectives outlined in Section 8 and to address the needs identified in Section 7 above. They are also intended to conform, to the maximum extent practical, given Provincetown's distinctiveness, with the "Recommended Town Actions" of the Cape Cod Commission Regional Policy Plan (RPP) of 1991. Each specific action is subject to additional directed town approval and/or appropriation. The recommended agent with responsibility for implementing the action is identified at the end of each action and the year in which the action is presumed to occur.

I. CONSERVATION ACTIONS

I.A. Coastal Resources/Saltwater Quality

1. Prohibit direct discharge of untreated stormwater and wastewater into Provincetown Harbor (complies with Policy 2.1.1.5 of RPP). Mitigate untreated stormwater discharges through the use of vegetated swales, leaching catch basins and other best management practices (2.1.1.8 of RPP). Board of Health & Dept. of Public Works. 1996.
2. Nominate portions of Provincetown Harbor as federal EPA No Discharge areas for boats (2.2.Town.A of RPP). (This would confirm the town's own no-discharge policy.) Coordinate with regional health officials on marine head pumping options (2.2.Town.G of RPP). Harbormaster & Board of Health & Harbor Water Quality Task Force. 1996.

I.B. Freshwater/Wetland Resources

1. Amend local wetlands protection bylaw to protect vernal pools and isolated wetlands and consider a policy of no alteration/replication of wetlands. Also, authorize Conservation Commission to hire consultants, at applicant's

expense, to review applications to alter wetlands (2.3.Town.B of RPP). Conservation Commission & Town Meeting. 1996.

2. Evaluate and, if necessary, mitigate stormwater drainage patterns into Shankpainter Pond and Duck Pond, particularly from Route 6 (2.3.Town.D of RPP). Conservation Commission & Board of Health & Mass. Highway Dept. 1998.

I.C. Unique Areas

1. Identify and certify all vernal pools within the municipal jurisdiction of Provincetown (2.4.Town.A of RPP). Conservation Commission. 1998.

2. Pursue nomination of Clapps/Duck Ponds ecosystem and Shank-painter Pond as an Area of Critical Environmental Concern under MGL c. 21A, s. 2(7) and/or a District of Critical Planning Concern under the Cape Cod Commission. Conservation Commission & Selectmen. 1996.

3. Pending evaluation through land management plan, dedicate appropriate portions of town-owned land at Clapps/Duck Ponds as conservation land under MGL c. 40, s. 8C. Conservation Commission & Town Meeting. 1997-98.

I.D. Flooding/Sea Level Rise

1. Amend zoning bylaw to prohibit new non-water dependent construction in the Federal Emergency Management Area (FEMA) V flood zones, except where the height of the first floor elevation meets or exceeds the 100-year storm wave height (2.2.2.1 & 2.2.2.2 of RPP). Planning Board & Town Meeting. 1998.

2. Amend local wetlands protection bylaw to accommodate inland migration of saltwater wetlands, where feasible, based on a 2-foot sea level rise. (2.3.Comm.E of RPP). Conservation Commission. 1998.

I.E. Natural Resource Management

1. Develop natural resource inventory and management plan for town, state and federal land around Clapps/Duck Ponds ecosystem, identifying appropriate types and levels of recreational use. Investigate alternative locations for a motorcycle track. Conservation Commission, National Park Service & Mass. Div. of Fisheries & Wildlife. 1996.

2. Evaluate conservation significance of town-owned Creek Road parcel, acquired through tax-title foreclosure. If significant, dedicate to conservation land under MGL c. 40, s. 8C. Conservation Commission & Town Meeting. 1998-99.

I.F. Patrol/Land Maintenance

1. Deputize appropriate town officials, including health agents, in addition to police and harbormasters, to bolster enforcement of MGL c. 270, s. 16, preventing illegal dumping on public land. Selectmen & Town Meeting. 1996.

2. Encourage non-profit groups, such as the Provincetown Conservation Trust, and volunteers to organize land clean-ups of public and private open space. Selectmen. 1996.

3. Evaluate landfill/transfer station fees and collection policies to discourage residents to dispose of bulk items in unauthorized areas. Explore alternative means of legal disposal. Board of Health & Selectmen. 1998-99.

I.G. Regional Coordination

1. See I.E.1 above.

2. Cooperate with Stellwagen Bank National Marine Sanctuary officials to promote marine conservation values and ecotourism of the Bank. Selectmen & Harbor Committee. 1996.

II. OPEN SPACE ACTIONS

II.A. Protection/ Sensitive Lands

1. By means of regulatory or non-regulatory methods (see Section 7.A), protect lands which meet one or more of the following criteria: 1997-98.

a. Lands within or adjacent to designated Areas of Critical Environmental Concern (ACEC) or District of Critical Planning Concern (DCPC), the Cape Cod National Seashore, or Unique Areas (such as Shankpainter Pond and Foss Woods) identified in Section 4.F of this Plan;

b. Lands within or adjacent to fresh and saltwater bodies, beaches, (salt and fresh water), wetlands, (marshes, swamps, bogs, meadows, ponds, and creeks), and floodplains;

c. Lands containing vernal pools or which provide refuge to federally or state listed endangered, or threatened species or species listed as of special concern.

d. Lands providing "wildlife corridors" which allow movement and migration of wildlife indigenous to Provincetown. Conservation Commission & Town Meeting.

2. In accordance with April 1995 Town Meeting vote, pursue town purchase of the Foss Woods parcel for conservation and passive recreation purposes. Seek town and/or federal reimbursement of project costs. While retaining title in the name of the town, convey perpetual conservation restriction to Provincetown Conservation Trust, as voted by Town Meeting. Selectmen & Conservation Commission. 1995.

II.B. Protection/Recreational Lands

1. By means of regulatory or non-regulatory methods (see Section 7.A), protect lands which meet one or more of the following criteria: 1997

- a. Lands which abut town landings where development would be incompatible with the use of town landings or to expand access/parking;
 - b. Lands which abut existing public and private recreation and open space lands (6.2.Town.D of RPP);
 - c. Lands which could be designed to promote hiking or bicycle trails;
 - d. Lands which could allow for expanded recreational and open space facilities in parts of Town presently undersupplied and including lands within subdivisions. Recreation Commission & Town Meeting.
2. Encourage private riding stables and campgrounds to apply for property tax reduction via MGL c. 61B application for current use assessment. Recreation Director and Assessors. 1999.

II.C. Protection/Scenic Resources

1. Consider amending zoning bylaw by adoption of overlay historic districts. Historical Commission and Town Meeting. 1997.
2. Implement other recommendations of the Community Character section of 1988 Provincetown Master Plan. Historical Commission. 1998.
3. Encourage adoption of construction and design standards contained in "Designing the Future to Honor the Past: Design Guidelines for Cape Cod," Cape Cod Commission, 1994. Planning Board. 1998.
4. Where feasible, require placement of new utility lines underground. (7.2.Town.J of RPP) Planning Board. 1999-2000.

II.D. Protection/Historical Sites

1. Cooperate with the Massachusetts Highway Department in honoring the *Mayflower* landing at the West End rotary. 1995.

2. Refurbish Bas Relief Park. Selectmen & Dept. of Public Works. 1995.

II.E. Cost-Effective Program

1. Conduct mailings and hold workshops for large landowners describing tax benefits (income tax, property tax, estate tax) associated with land preservation options, such as the 1992 town conservation restriction program. Conservation Commission, Selectmen, Assessors, & Conservation Trust. 1997-98.
2. Adopt a policy to acquire tax title lands and evaluate for conservation, open space or recreation significance before deciding to dispose of them (6.2.Town.E of RPP) Selectmen. 1997-1998.

II.F. Regional Coordination

1. Identify and map strategic parcels needed to implement open space greenbelt system, particularly parcels providing connections to the Cape Cod National Seashore (6.2.Town.A of RPP). Conservation Commission. 1995.
2. Encourage cluster subdivision design to protect significant linkages in the greenbelt system (6.2.Town.A of RPP). Planning Board. 1997.

III. RECREATION ACTIONS

I.A. Recreation Programs

1. Continue to provide a wide mix of activities, incorporating new Senior Citizens Center and emphasizing youth program. Recreation Director. 1996.

II.B. Active Recreation Facilities

1. Conduct a feasibility study for a centrally located teen center, either new or, preferably, an adaptive reuse of existing town building. Recreation Commission. 1996.

2. Identify parcels suitable for several more tot lots and playgrounds, in both the West and East Ends. HOP/HOP & Recreation Commission. 1997.

3. Allow Evans Field to revert to a natural condition and explore feasibility of developing new ballfields at the "wye" parcel near Harry Kemp Way or other locations. Recreation Commission & Dept. of Public Works. 1996.

4. Continue design and installation of sidewalks, particularly on Bradford Street. Planning Board & Dept. of Public Works. 1995-96.

5. Install picnic tables at all appropriate town-owned open space facilities. Dept. of Public Works. 1996.

II.C. Swimming/Boating Facilities

1. Evaluate ownership and feasibility of designating a portion of the West End Beach as a town-operated beach. Recreation Commission & Selectmen. 1996.

2. Subject to management plan findings, develop a canoe landing (hand-carry launch) on town-owned land on Clapps Pond. Dept. of Public Works. 1997.

II.D Alternative Transportation

1. Develop the town-owned railroad bed as a recreational corridor in accordance with Americans with Disabilities Act requirements, by means of hardening, but not paving. Selectmen & Town Meeting & Dept. of Public Works. 1996.

2. Study feasibility of siting an off-site parking facility connected to downtown by paths. Selectmen & Planning Board. 1996.

3. Install additional bicycle racks at beaches, parks and in commercial areas. Dept. of Public Works. 1996.

4. Develop management plan to define appropriate use of improved railroad bed pathway. Recreation Commission. 1997.

III. Handicapped Accessibility

1. Adopt recommendations of Disability Commission in Appendix B. Selectmen. 1996.

2. Provide some identified handicapped parking at all open space parking areas. Dept. of Public Works. 1996.

II.F. Regional Coordination

1. Appoint a local coordinator and/or committee to participate in and advise on the Cape Cod Pathways program of the County Commissioners. Selectmen. 1995.

SECTION 10 PUBLIC COMMENTS

Public comments included are:

1. Minutes of the Open Space and Recreation Planning Committee Public Hearing
January 5, 1995
2. Minutes of the Open Space and Recreation Planning Committee Public Hearing
May 4, 1995
3. Cape Cod Commission letter of review
4. Cape Cod National Seashore letter of review