



Population Density Effects on the Island Are Assessed

Latest Metcalf and Eddy Report Concerned with Greenbelts, Potential Water Supply Problems

The Dukes County Planning and Economic Development Commission, which began a study a year and a half ago of what lies ahead for the Vineyard, and what can be done to protect its beauty and individuality during upcoming boom years, has just released a report on the Island, printed below, and to be continued next week, prepared by the Metcalf and Eddy engineering and planning firm. The study is concerned with the problems of land use, water supply, preservation of greenbelts, population density, transportation on the Island and to and from the Island, and refuse disposal that are imminent. A final report from the planners is expected next month.

The report follows:

Based on the future projection of both year-round and seasonal population, the total resident population of Dukes County is expected to be on the order of 50,000 people in 1990. This amounts to an increase of approximately 20,000 seasonal residents and 3,000 year-round residents. These additional 23,000 residents will require land for both residential and nonresidential use. If current trends continue over the next 20 years, house lots on the average of one-half to one acre in size will probably be the predominant form of development. Some residential lots of

two acres and over would be developed, as would somewhat higher density housing in the form of garden apartments and conversion of existing town and village homes. But the large majority of people will no doubt settle outside the present town and village areas. New commercial and noncommercial facilities would be required to service such residential development. Their location would be in one, and probably both, of two locations: (1) in the existing town and village centers, leading to increasingly crowded and congested conditions and perhaps eventually to some form of limited urban renewal; and (2) in conjunction with new residential development outside of present centers, thus further obliterating the present distinctions between the unique, identifiable towns and villages and the diverse, open countryside. Sprawl would become increasingly evident in the form of random development up-Island and coalescence between centers of population down-Island.

Municipal zoning for both residential and nonresidential uses, with minimum lot sizes based on water and sewerage requirements and controls on parking and other aspects of commercial development, would certainly help the future of Dukes County. But the missing

ingredient from a land use planning point of view is an overall strategy to control physical growth and development on Martha's Vineyard and the Elizabeth Islands. Thus on the level of planning policy, the real alternative to the present approach of local zoning reaction to uncontrolled development on a piecemeal basis is the formulation of a regional or county-wide land use plan.

The future land use plan presented here contains three key design elements or strategies. The first and most important is the proposed open space plan, which, if implemented, will protect the most fragile natural environments and conserve the most important natural resources of the islands. Second, in terms of overall importance, but first with respect to actual land acquisition and assembly, is the development of a new community with a containment greenbelt on Martha's Vineyard. Third is the planning for ultimate residential densities which both respect the natural physiography and ecology, and allow for a livable and flexible manmade landscape. Separated for reasons of verbal and visual clarity, these three key elements are closely related conceptually. They work together as a whole to fulfill the essential long-range goals of this comprehensive plan, which simply stated, are to maintain the distinctive character of the county, while at the same time, trying to solve the serious seasonal imbalances of life there.

Island Open Space

Open space consists of both existing major conservation and outdoor recreation areas and the proposed greenbelt system.

Essentially, greenbelts are continuous natural systems of permanent conservation and recreation land and water, linking as much existing public and semi-public open space as possible.

The basic purpose of the proposed

greenbelt system is to protect and maintain a wide variety of land forms, vegetation, habitat, and wildlife on Martha's Vineyard and the Elizabeth Islands. These distinctive physiographic and ecological resources include the following: glacial moraine, outwash plain, unique geological features, woodland, scrubland, heathland, wetlands, sand dunes, beaches, immediate coastal areas, bays and ponds (tidal, brackish, and fresh), brooks and stream valleys, shellfish, finfish, waterfowl, shorebirds, upland game (including furbearers and game birds), rare plants, and song birds. Since the majority of the acreage of the Island serves as a watershed area to recharge the ground water table, water conservation is one of the most important functions of the proposed greenbelts.

The greenbelt system, as it is proposed, includes the state forest, Cedar Tree Neck and bottomlands, shore, pond and surrounding land areas at South Beach and the Great Ponds, Gay Head and Squibnocket, Cape Pogue and Wasque, the Northeast Ponds, Lake Tashmoo and Lambert's Cove, along with morainal streambelts. It is recommended that these greenbelt elements be permanently established on Martha's Vineyard between now and 1990, with as much of the plan implemented in the next five to 10 years as possible. It will take a combined municipal county and private conservation group effort to acquire, restrict or otherwise reserve this land. Increased public use of beaches, with controlled access points and resource management programs, as well as the expansion of selected harbors for new boating facilities, are integral features of this open space plan.

An additional element of the plan has to do with expanding certain harbors for increased recreational boating. The major harbors for future expansion are

Edgartown harbor into Katama Bay, Vineyard Haven harbor into Lagoon Pond and the Menemsha Basin into Menemsha Pond. All these existing harbors are now crowded; all-three have already been the subject of proposed pressures for expansion in the form of dredging projects and local interest.

The important point to be made here is that not every tidal bay and brackish pond on the Vineyard can be indefinitely kept in a completely natural state. Some allowances have to be made for increased recreational use, the demand for which will develop logically from the daily summer population of 40,000 expected to be nearly doubled in the next 20 years. The trick of course is to be quite selective as to which bays and ponds are to be maintained primarily in a natural condition for shellfish and waterfowl, and which are to be carefully developed to support new boating activity. It is realized that these two functions are not mutually exclusive, assuming of course that pollution from boats is strictly controlled. In the context of the comprehensive land use plan, it is important that these general distinctions are made in the proposed greenbelt system, so that incompatible land and water uses do not develop in the future.

Increased Public Use of Beaches

One of the most controversial planning subjects on Martha's Vineyard is the idea of having more unrestricted public beach. Only 19 per cent of the approximately 42 miles of sand beach on the Vineyard are open without exception to the general public.

As a corollary of any proposal to have more public beaches is the question of how best to maintain and manage the fragile beach and sand dune landscape in the context of increased human use. One way to look at the problem is that the two major public beaches owned by the state and the county currently show signs of mismanagement and associated

environmental abuse. State Beach between Oak Bluffs and Edgartown is really only a very narrow strip of sand, but it is the most intensively used beach on the Vineyard. Cars park on both sides of the main road and cyclists and walkers add to the traffic congestion there. Natural processes of erosion are not helped by uncontrolled tramping of footpaths through the private dunes between South Beach and the Mattakeset [sic] Herring Brook in Katama. Lack of adequate parking at the public entrance to South Beach no doubt is part of the reason for such flagrant abuse. The county portion of South Beach east of Mattakesett is not a model for beach maintenance either. Cans, bottles, plastic, paper, and other forms of litter are not properly handled; nor are there any life guards and safety equipment. Four-wheel jeeps and beach buggies, as well as the new all-terrain vehicles, should not be allowed to roam freely between the dunes and the ocean on the vulnerable shelf of the beach, but should, where possible, be restricted to roadways behind the main dunes on the bay side.

There are, on the Island, eight miles of unrestricted public beach, including the County Beach east of Mattakesett and the Edgartown-Oak Bluffs State Beach, as well as the beach below the Gay Head cliffs, the beach along Menemsha Bight and Menemsha Beach. This is 19 per cent of the Island's total beach area.

There are 4.5 miles of semi-public beach, including the beach owned by the Trustees of Reservations along Cape Pogue, Wasque and the Tisbury Pond Club at Long Cove, though the last is still under private control. This makes up 11 per cent of the Island's beaches. There is one mile of beach for town use only, and this includes beaches in Chilmark, West Tisbury and Gay Head. This is three per cent of the Vineyard's total beach area. Finally, 28 miles of

Island waterfront are believed to be in the restricted private beach category. This is 67 per cent of the Island's total sand beach.

If the premises of over-crowding at the State Beach as well as crowding and mismanagement of County Beach can be accepted, then what are the future possibilities to relieve the problem? Certainly the system of small municipal beaches restricted by parking stickers to turn residents and guests will not, in the long run, solve the needs of the 75,000 people expected on a sunny summer day in 1990. More locally controlled beaches in the towns of West Tisbury, Chilmark and Gay Head (which also has the little-used beach at the Lobsterville Dunes and Cranberry Bogs) will not meet the needs of seasonal population increase down-Island, especially in Tisbury and Oak Bluffs. When viewed realistically in the present perspective, neither Dukes County nor the Commonwealth of Massachusetts would seem to be the logical agency to administer an expanded public beach program on Martha's Vineyard. The Department of Natural Resources is naturally more concerned with expanding public outdoor recreation facilities along the seashore farther north, closer to where the major concentration of population is in Boston. In terms of present financial resources, technical manpower, and professional knowledge only the National Park Service in the United States Department of Interior seems capable of properly managing and maintaining more public beaches on the Vineyard. A National Seashore along South Beach, while understandably a threat to many people on the Island, is not the worst possible thing which would happen there.

Without proper land controls, zoning subdivision, building and health codes, a developer could conceivably build a motel or restaurant any place along the southern shore from the Edgartown line

west to Gay Head Cliffs; there is nothing legally to prevent such a calamity from happening tomorrow. It was just such development pressure as this which led to the establishment of National Seashores on Cape Cod and Cape Hatteras, two of the most beautiful beaches along the whole eastern seaboard. Of course, the South Beach-Great Ponds area has the resource potential to take advantage of other programs of the United States Department of the Interior, should the occasion demand. The National Wildlife Service was interested in making the southern shore from Katama to Squibnocket into a refuge for migrating waterfowl and shore-birds in the 1930s.

In combination with an expanded and improved shellfish industry concentrating on scientific aquaculture, there is reason to think that perhaps some day this proposed greenbelt could become a national model for multi-purpose conservation management including a dunes stabilization program and controlled public outdoor recreation. There is no doubt, however, that the goodwill and understanding of private land-owners in the South Beach-Great Ponds area will be a prerequisite to any such achievement.

These primarily seasonal properties, some of the land of their kind in New England to remain unchanged in the same family for generations, are both a help in preserving the natural environment, and a hindrance to increased public recreation.

It is therefore recommended that with the consent and leadership of the Trustees of Reservations when the Tisbury Pond Club at Long Cove becomes one of their properties, that it be managed as an example of enlightened conservation and recreation, open to the public with reasonable safeguards imposed. Perhaps the newly formed Vineyard Open Land Foundation will be able to assist with such a pilot

project, helping to acquire rights-of-way from Tiah Cove Road in West Tisbury to this old fishing and hunting club on Tisbury Great Pond.

New Community

Essentially, the idea of establishing a new community on Martha's Vineyard is an old concept in modern idiom. It follows the historical New England settlement pattern within the context of contemporary growth pressures.

There are three principal reasons for locating the proposed new community down-Island. First and most important is the intention to keep such large-scale development away from the more vulnerable ecology and physiography of up-Island. Second, it makes sense to take advantage of pressures for growth already being felt along the recently reconstructed Edgartown-Vineyard Haven Road, where the new regional high school has already been built. Third, the proposed location between Lagoon Pond and where the Barnes and County Roads intersect with the above-mentioned road is strategically removed from the existing down-Island towns. Secondary reasons for the selection of this particular site are the naturally deep basin at the head of Lagoon Pond and naturally deep channel to Vineyard Haven harbor, thus providing ample opportunity for the development of new boating facilities and other water-oriented recreation. In addition, the State Forest acts as a natural buffer along the southern boundary of the site to prevent development from spreading.

The basic design strategy is to protect the integrity of the existing down-Island town centers and, as much as possible, of the open land around them. Therefore, a containment greenbelt is proposed around the northern perimeter of the new community in order to prevent the inevitable sprawl from developing between it and the centers of Vineyard Haven and Oak Bluffs. In order to be

successful in physical planning terms, all so-called new towns must be surrounded by some sort of greenbelt both to contain their growth and to limit the eventual two-dimensional spread of any nearby centers. This classic planning concept has had its best results in the English New Towns, which combine the best features of both town and country.

The composition of the proposed new community should include a variety of housing types and densities to suit a variety of tastes and incomes. The current need for low-income housing has already been established and if the construction of new units is subsequently determined as the best way to meet this need, then the logical location for such housing is in the new community. In any event, the largest market for new housing is expected to be in the rental and sale of seasonal homes and apartment units, including town houses and condominiums.

General and special commercial services, including a planned shopping mall, should be developed to serve the expected new population. Such commercial development needs very careful timing so as not to affect existing establishments to the point where they are in danger of going out of business. A certain amount of marketplace competition is inevitable on the Vineyard whether a new community is built or not. The construction of a new community through the planned-unit-development device, coupled with strict zoning controls elsewhere on the Island, can serve to minimize the undesirable aspects of commercial competition. An educational campus and environmental research laboratories would be highly desirable.

More Recreation Facilities

Recreational facilities should be developed for new boating activity at the head of Lagoon Pond. Facilities for other kinds of outdoor recreation such as

swimming, riding, hiking, and camping should be developed in the surrounding greenbelt. Golf courses and specialized agriculture are also compatible uses within the containment greenbelt.

In time, the Steamship Authority will probably need a larger pier and parking facilities in Vineyard Haven. If such a future need cannot be met along the present waterfront area in Vineyard Haven harbor, then a logical place to expand, as mentioned in earlier reports, would be into Lagoon Pond. The existing bridge at the entrance to Lagoon Pond would admittedly be a problem. However, an eventual relocation of the Authority's terminal facilities to the head of Lagoon Pond would be an important event towards making the proposed new community a reality.

At this point in the discussion of a new community, it should be pointed out that in one of the preliminary study reports, new seasonal resorts were also proposed at two widely separated sites on Martha's Vineyard. At the time this proposal was made public, it was felt that this alternative planning concept was not really acceptable to people on the Vineyard.

In view of the fact that the large majority of transient-oriented seasonal facilities are presently located within the existing town and village centers, a site plan for the new community that included summer hotels, restaurants, and associated facilities there, might be the answer. The most important consideration from the point of view of regional land use planning is not to permit the random location of such resort facilities at isolated scenic spots around the Island.

In terms of population size, the proposed new community should be designed for a maximum of 10,000 to 15,000 people. This general size approximates the existing daily population of the three respective down-Island towns during the summer. For

the remainder of the year, Tisbury, Oak Bluffs, and Edgartown each currently contains from 1,000 to 3,000 people. The extent to which the new community reflects this pronounced seasonal difference depends upon the success or failure of Martha's Vineyard in developing a broader base for its year-round economy and population. The future resident population of the county has been projected to 35,000 in 1980 and to 50,000 in 1990. Thus the majority of the 23,000 new residents expected between now and 1990 are planned to be located in the new community.

The basic assumption in planning for the Island's future is that the majority of year-round and seasonal residents like Martha's Vineyard and the Elizabeth Islands pretty much the way they are today (or at least the way they were before some of the previously described trends began to disturb the natural and human environment). Therefore, the same average residential densities that exist now, and the same proportion of people currently living in general density categories, are projected into the future. Allowance is made for a reasonable amount of choice on the part of future residents who choose to settle at lower average densities, with the general classification derived from the study of existing land use. While this may appear to be a rather mechanical and thus inflexible way of extending the present density pattern to 1990, the land use plan itself allows for a wider degree of latitude, in the selection of future residential environments.

Ultimate Development

Even though 25 per cent and 15 per cent respectively of the total land area of Dukes County are eventually to be used for open space and development, a majority of the area of the county, or about 60 per cent of the land, will probably still be largely vacant in 1990. Even with 16,600 acres of land devoted

to conservation and outdoor recreation and a new community accommodating the majority of new residents expected during the next 20 years, the natural environment of Martha's Vineyard will continue to be susceptible to unwise development without proper land use planning and controls.

The general principle in planning a new development is that it should not be located too close to the low-lying seashore or to any kind of bay or pond for fear a septic tank will pollute either the groundwater supply or water that contains shellfish. In addition, the closer the new development is located to the shore, the greater the chance of salt water intruding into a fresh well. The other general situation on the Vineyard is in the folded and faulted area up-Island, where the location and depth of the water table is very unpredictable, and where the only impermeable clays in the Island make the proper functioning of septic tanks problematic.

It should be added that the cluster zoning concept whereby residential uses are concentrated in a smaller area than would normally be allowed under the minimum lot provisions of municipal by-laws are encouraged, providing that a prescribed amount of open space is set aside for permanent conservation and recreational uses. Planned-unit-development projects on a smaller scale than the proposed community are also encouraged at suitable locations where such development is compatible with the surrounding natural and manmade landscape. The physical prerequisites for such relatively new zoning devices is that adequate water supply and sewage disposal are provided. Both of these rather sophisticated land use controls are discussed more fully in subsequent sections of this report.

Finally, the permitting of such densities should be considered in the true sense of the word as ultimate or not to be exceeded densities. Even then, it is

not clear cut that such densities may not upset the fragile ecological balance of the Island.

Land Use Controls

Formalized land use controls are practically nonexistent in Dukes County. In view of this fact, it is quite surprising that recent pressures for growth have not produced more unorderly development than has actually occurred. The prospects of increased population growth and corresponding development over the next two decades, however, make it necessary that local planning and zoning measures be enacted.

Under Massachusetts enabling legislation, local municipalities have the power to adopt zoning ordinances, to set up planning boards, to enact subdivision regulations, and to organize conservation commissions. In addition to administering development through subdivision control, the town planning board has the authority to conduct long range planning studies, especially so-called master plans (actually community-oriented comprehensive plans). Zoning maps and by-laws are best prepared in the context of local comprehensive plans, although this is not a legal requirement; however, the reasonableness of zoning, if it ever becomes tested in court, is better defended when it is based on a well thought-out and technically satisfactory plan. Conservation commissions serve as a counter-balance to development planning in a community and they can conduct their own technical studies and carry out open space acquisition programs. Ideally, there is a close working relationship between the various town groups and officials so that decision affecting the use of land can be made in the best interests of all concerned.

In Dukes County only the towns of Tisbury and Edgartown have established planning boards, and no town has

officially adopted subdivision regulations. Of the seven municipalities in the county, only Edgartown, Oak Bluffs, and Tisbury have any kind of zoning. Edgartown, Tisbury, West Tisbury, and Chilmark have set up conservation commissions, with only Edgartown having drawn up an open space plan. None of the towns have prepared local comprehensive plans.

In terms of net residential density patterns, the existing zoning by-law in Edgartown calls for one-acre minimum lots on Chappaquiddick and one-half acre minimum lots in the rest of the town, except in and around the only business district (the boundaries of which have been subject to recent revision). Oak Bluffs requires no minimum lot sizes under its zoning by-law, although it does have two residential and one commercial zoning district.

Tisbury's existing zoning by-law pertains only to West Chop where 25,000 square foot minimum lots for dwellings are required. A town wide zoning ordinance was proposed last year but turned down because it failed to gain the required two-thirds majority vote at town meeting. Under the proposed by-law, the minimum 25,000 square-foot residential lots would have extended generally from West Chop to the West Tisbury town line, including the Lake Tashmoo area. The rest of Tisbury was proposed for minimum 10,000 square-foot residential lots, except for two business and one industrial zoning district.

None of the up-Island towns has enacted zoning, although West Tisbury has been considering it.

The following principles should be adhered to with respect to amending or establishing municipal zoning by-laws in Dukes County. First of all, minimum residential lot sizes should be based generally on the proposed ultimate development densities, and more

particularly on operational soil surveys conducted by the United States Soil Conservation Service and on any ground-water favorability surveys. These soils and water studies should be used to establish the capability of the land in each town with respect to on-lot sewerage systems (septic tanks) and private wells for water supply. The general principle is that the more severe the physical limitations for development, the larger the minimum lot size should be. It is important here in Massachusetts that large-lot zoning be based on scientific facts and ecological and physiographic principles, rather than on exclusionary policies which legally can be construed to be snob zoning.

Second, general commercial zoning districts should in most cases be centrally located within the existing town and village centers. Such a local zoning policy would tend to facilitate one of the overall objectives of the future land use plan which is to contain the physical development of such centers. Zoning districts which form commercial strips along major roads are to be especially avoided, both for their immediate visual and traffic safety liabilities, but also because they are one of the chief causes of sprawl.

Third, an effort ought to be in all towns on the Vineyard to enact coastal zoning, which would have the same effect as flood-plain zoning along rivers. In other words, areas along the shore that are prone to coastal storms and high tides should not be developed with uses or structures such that property and human life are endangered.

Fourth, cluster zoning provisions should be combined with previously determined minimum residential lot sizes to provide a certain amount of design flexibility in future developments. This zoning technique permits controlled flexibility in new residential areas, such that the number of dwelling units

contemplated by the minimum lot requirements is maintained on an overall basis. In exchange for reduced lot size requirements in residential zoning districts, the town may require that developers permanently set aside prescribed open space areas. This open space can either be deeded to the town conservation commission or owned and maintained by a local homeowner's association. In residential districts where cluster zoning is permitted, it is always optional to the developer. His benefits include construction savings on roads and on any required utilities, such as water or sewer lines.

Planned-Unit-Development

Both cluster zoning and planned-unit-development are relatively recent planning innovations. Their use has been widely encouraged by professionals as a way to maintain control over new land developments, and yet allow more variety in use and density than would be possible under conventional zoning and sub-division regulations. With the wide diversity of the natural landscape on the Vineyard, these two land use controls are particularly suited to maintaining the environmental and aesthetic qualities of areas subject to development. Cluster zoning and Planned-unit-development provisions are the most advanced legal controls available to counter land sprawl. As with any new tool, however, special care and sensitivity are required to translate planning concept into pleasing reality. Planned-unit-development regulations are particularly well suited to the development of the proposed new Island community at the head of Lagoon Pond, as well as to any special commercial developments such as seasonal resort complexes.

The main purpose of Planned-unit-development is to ensure the planned and orderly development of a mixture of related land uses on a site that can be designed as a whole. If a special zoning

district were created in the proposed location, then a new community could be developed in phases over the next 20 years. The developer or developers would be required to present a detailed site plan, including architectural models, well in advance of actual development. He would be subject to special regulations such as are spelled out in the zoning by-laws. Such regulations may specifically control overall densities, building coverage, amount of planned open space, access, parking, draw-age, landscaping, water supply, sewerage systems, illumination, and sign control, in addition, more general qualities such as safety, harmony with the environment, sensitive design and the actual location of uses and structures may be controlled through the official planning body's power of site plan approval. If necessary, certain mutually satisfactory agreements can be worked out between the developer and the town.

From the developer's point of view, land costs and zoning are closely related. Through Planned-unit-development, a developer can gain permission to put many more houses or apartments on a site than conventional zoning allows. Thus both his land costs per unit and his utility costs are reduced. (In the same manner, the community's maintenance cost for roads and any public utilities are also reduced.) Theoretically, he can construct more and more reasonably priced houses and derive a greater profit than under conventional zoning. In a particularly large development, such as in the proposed new community, the developer can construct a broader range of housing to satisfy a variety of incomes and tastes. The planned development of commercial, educational, recreational, and other public facilities to serve the residents of such a new community adds significantly to its ability to make money for the developer, as well as to

create a quality environment for all concerned.

Other Implementation Measures

In implementing the future land use plan, particularly the proposed new community, it may be necessary to go well beyond traditional land use controls. If the strongly recommended town zoning by-laws containing Planned-unit-development provisions are not locally established within a reasonable period of time (say two to three years), then the Dukes County Planning Commission will have to consider alternative measures. Although the details of such a continuing planning and implementation program go beyond the scope of this Comprehensive Plan, some thoughts and information are presented here to give at least a discernible outline of future possibilities.

Most Islanders are now aware of the Vineyard Open Land Foundation, a nonprofit trust organized last year. This organization includes among its membership such planners, developers, and conservationists as Edward J. Logue, Robert E. Simon, Richard H. Pough, and Kevin Lynch — all summer residents of Martha's Vineyard. The Vineyard Open Land Foundation is now in the process of raising money to acquire certain key tracts of land, develop imaginative site plans for them, put legal restrictions (such as conservation easements) on the uses to which such land may be put, and sell the land to interested parties on a nonprofit basis. If this venture is successful within the next few years, and the Foundation is able to demonstrate the economic and environmental value of such site planning for comparatively small-scale developments, then it might find itself in a position to do something about implementing the proposed new community. Within the last few years, federal legislation has been passed to

enable "new town corporations" to be formed and soon large amounts of both public and private money may become available for such purposes on a national scale.

The other possibility that needs foreshadowing here is the brand new Island Trust concept. The idea was put forward in outline form in a recent publication of the United States Department of the Interior. Essentially, a national system of Island Trusts is suggested to protect vulnerable Island environments. Martha's Vineyard and the Elizabeth Islands are among those islands recommended for further study of possible Trust status.

Open Space Acquisition

Nothing will maintain the natural character of Dukes County as much as implementing the proposed greenbelt system. An open space plan and implementation program provide the preservation forces within a community, whether they are publicly or privately organized, with a constructive means of protecting their natural heritage. It is unrealistic to think that all of the undeveloped land on Martha's Vineyard can be maintained indefinitely in a natural state. Therefore, the approach in the Island open space plan is to concentrate on acquiring, restricting, and otherwise reserving the most important natural resource areas with the best outdoor recreation potential. If the over 9,400 acres of proposed open space can be added to the present 7,200 acres of land already in public and semi-public control, then all Islanders will have accomplished something of which they can be proud.

In the long run, the surest and safest way to implement any open space plan is to acquire the land. Although Massachusetts has enacted four progressive pieces of wetland legislation in the last eight years, and although municipal "wetland" zoning (especially for coastal wetlands) is becoming

increasingly popular in shore communities, there is no legal substitute for actual ownership. Acquisition of land for open space purposes need not entail outright purchase, especially where is to be limited public use. Such conservation easements or deed restrictions are used to acquire certain public rights to an area (such as for access or to ensure scenic views), while all other rights to the property remain privately owned and subject to taxation. Whether a particular piece of land should be purchased outright, or whether only a certain easement should be acquired, depends upon the specific circumstances in each case. The intended conservation and recreation uses to which the land is to be put, as well as the assessed and appraised values of the property, are among the considerations usually involved. Certainly a combination of tools and techniques ought to be used in Dukes County to implement the open space plan. But the initial emphasis should be on public, semipublic or even private ownership of land for a variety of natural and human uses.

The open space element of this comprehensive plan, if adopted by the Dukes County Planning Commission, will enable either the county itself or any town within it to qualify for federal open space funds. An additional requirement for the seven municipalities to receive such matching open space funds is that they at least prepare local open space plans. Dukes County, however, is presently eligible for up to 50 per cent matching grants to acquire land for open space purposes. A seldom used act passed by the State Legislature in 1967 enables any county in Massachusetts to acquire land for conservation purposes. If the county appropriated money in next year's budget to purchase land included in the proposed greenbelt system, then chances are that 50 per cent of the cost could be reimbursed to

it from United States Department of Housing and Urban Development. Such an acquisition is subject to the approval of the Massachusetts Department of Natural Resources, and also of the conservation commission of the municipality within which the land lies; also, if the town has no commission, then a two-thirds vote of the selectmen is required. Even with the admitted limitations inherent in this implementation procedure, such a method for acquiring open space is highly recommended to Dukes County. In this way, the Island open space plan can begin to be implemented almost immediately, without having to wait for further planning requirements to be satisfied at the municipal level. These planning requirements, as well as the federal and state funding programs available, are explained more fully in the following paragraphs:

The Massachusetts Department of Natural Resources conducts a "self-help" program which makes funds available to communities for acquiring conservation and recreation land. Grants are available only to those municipalities which have a public conservation commission. In addition, the town must have prepared a natural resource, open space, and recreation plan. As of this date, Edgartown is the only town in Dukes County to have prepared such a plan; if the plan is filed with the Division of Conservation Services of the Department of Natural Resources in Boston, then the Edgartown Conservation Commission is eligible to apply for self- help funds. An approved project is eligible for up to 50 per cent of the cost of acquisition. If the community is also receiving assistance under a federal program, it is eligible for 25 per cent of the total cost (50 per cent of the non-federal share). In other words, towns in Dukes County may receive up to 75 per cent of the cost of carrying out their open space programs from federal

and state sources. It is suggested that those towns which have presently not prepared open space plans do so and that those municipalities which do not presently have conservation commissions establish them, and then prepare local open space plans.

There are two major sources of federal funds available to the localities in Dukes County. One is through the Open Space Land Program of the Department of Housing and Urban Development. The other is through the Bureau of Outdoor Recreation of the Department of Interior. Both programs provide 50 per cent matching grants to local public bodies (conservation commissions, park commissions, etc.) for acquiring land for permanent conservation or recreation use. Under the Bureau of Outdoor Recreation program, up to 50 per cent of the cost of developing a specific outdoor recreation facility may be granted; however, under the Housing and Urban Development program, only 12 per cent may now be granted for specific development costs. Inasmuch as each program is subject to change with respect to what kinds of projects are eligible for funding, the county or municipality interested in applying for federal funds should get in touch with the appropriate agency for specific information in each case. The Dukes County Planning and Economic Development Commission should act as an additional source of information, and as the planning and coordinating agency for such open space activities.

Planning requirements with respect to these federal programs are as follows: Open space acquired under the HUD program should be in general conformance with a comprehensive town plan. (But none of the municipalities in Dukes County has prepared such a so-called master plan.) In addition, projects of a regional or intermunicipal nature should be in general agreement with an open space plan for the region in which

the community is located. The Bureau of Outdoor Recreation program here in Massachusetts by the Department of Natural Resources; local funding under the Bureau of Outdoor Resources program would therefore also be made in the context of the statewide plan.

(To Be Continued)