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THE OFFICE OF COASTAL ZONE MANAGEMENT

SHOREFRONT ACCESS

AND

ISLAND PRESERVATION

STUDY

Shorefront Access and Island Preservation Study

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Chapters IV and VII were originally prepared for a Sea Grant project and will be published as a part of Sea Grant Publication UNC-SG-77-18 entitled, "Access to the Nation's Beaches: Legal and Planning Perspectives."

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Chapel Hill, North Carolina

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I. Introduction

> Americans are fortunate to have so much shoreline. In gross terms, there is certainly enough for everybody to enjoy--enough, that is, if it is both accessible and available to the public.
>
> -- ORRRC Report, 1962.

> The mountains are still there, the Atlantic Ocean still crashes its surf onto the rocks as it has done since the ice age, and there is still some wilderness. It's just a little farther away now--on the other side of the fence.
>
> -- Pat Sherlock "The Best of Maine Lost to the Rest of Maine"

Background

In 1972, Congress passed the Coastal Zone Management Act "to preserve, protect, develop, and where possible, to restore or enhance the resources of the Nation's coastal zone for this and succeeding generations." The Act established the Office of Coastal Zone Management within the Department of Commerce to assist States wishing to participate through grants-in-aid to develop programs for the wise management of their coastal resources. Thirty-three States and territories are in the process of developing or have already developed management programs. In its passage of this Act, Congress was recognizing that the coastal areas--where land and water meet and interact--contain many and unique resources which the Nation relies upon not only for economic well being, but also for spiritual nourishment and recreational enjoyment. In addition, Congress was expressing fear that the increasing developmental pressures which the coastal area is experiencing from many directions could result in irreparable damage to these valuable national resources.

The average person, when asked, would no doubt acknowledge and appreciate the purely economic and ecological values of the coastal zone; however, it is the recreational aspects which would stir his imagination. How many countless photographs and memories exist of the "beach," the "coast," or the "waterfront?" One envisions sea-drenched bodies and idle days in the sun; long barefooted walks or sandcastles melting back into the tide; the nether world of slippery, wave-splashed rocks; stands of glistening marsh grasses and the sight of ducks from the blind; and harbor lights and the rope and rust world of the fishing fleet. The list--infinite and varied--draws on rich remembrances of very special places.

However, the pictures are not always so bright. Increased private ownership of shorefront property has fenced off many of these places and literally barred people from gaining access to them. Too little parking, the threat of towing, or inadequate alternative transportation measures make it difficult, if not impossible, for the would-be vacationer to reach his sandy destination. Similarly, extremely heavy traffic and long lines are not atypical for boaters and eager fisherman as they vie for limited launching space. These and other problems of access to the shoreline grew with population growth, increased leisure and affluence, and the sprawl of residential and commercial resorts that have typified the last quarter century.

Increasing national concern over such issues as energy, shorefront access, and island preservation, among others, persuaded Congress to amend the Coastal Zone Management Act in 1976. Two of the new provisions address access: Section 305(b)(7), the shorefront access planning element, and Section 315(2), shorefront access acquisition. They were designed to dovetail each other: one providing for a planning process and the other offering a tool for implementation. They read as follows:

Section 305 (b)(7):

> The management program for each coastal state shall include...
> * * * * * *
> A definition of the term "beach" and a planning process for the protection of, and access to, public beaches and other public coastal areas of environmental, recreational, historical, esthetic, ecological, or cultural value.

Section 315(2):

> The secretary may, in accordance with this section and in accordance with such rules and regulations as the Secretary shall promulgate, make grants to any coastal state for the purpose of...
> * * * * * *
> ...acquiring lands to provide for access to public beaches and other public coastal areas of environmental, recreational, historical, esthetic, ecological, or cultural value, and for the preservation of islands. The amount of any such grant shall not exceed 50 per centum of the cost of project involved...

These provisions, particularly Section 315(2), are the subject of this study which was designed to provide a framework for policy and decisionmaking within the Office of Coastal Zone Management.

Methodology

The study as a whole represents a composite of the work of six authors (Ann Cowey, William Dreyfoos, Denise Fiorovante, Reed Huppman, Sylvia Szee, and Jeffrey Treple) under the direction of David Brower. It draws on the current literature, plus information and data gathered from interviews with selected individuals and governmental officials. At the outset, several features need explaining in order to clarify certain inconsistencies which can be found and the reasons for the format chosen. First, Section 305(b)(7) requires that States must develop a planning process to address the "protection of" as well as "access to" beaches and other areas. One of the main intents of this study was to provide a framework for writing the regulations for the 315(2) provision. As a result, discussion of 305(b)(7) purposefully eliminates the "protection" aspect and focuses only on the access planning.

Second, certain inevitable confusion surrounds Section 315(2) because it actually deals with three subject areas:

1. public beaches
2. other public coastal areas, and
3. island preservation

The planning issues and strategies for these areas can overlap, interrelate, or be totally independent depending on particular circumstances. The study reflects this situation and contains certain disparities of emphasis.

For example, this study's heavy concern with "beach" access reflects not only the importance of, and popular appeal of, the beach as a prime area of recreational focus, but also the amount of pertinent literature on the subject as compared with the literature on islands or other coastal areas. However, this does not mean to imply that the other areas of coastal attraction should be overlooked. Access to wetlands, bluffs, scenic natural areas, and waterfronts, to name a few, offer a different but highly interesting recreational milieu. A chapter has been devoted to urban waterfront, only one possible "other coastal area," because of its special nature, and the fact that it is the coastal area closest to the most people and those with the least mobility.

Third, island preservation stands alone and was singled out due to its unique concerns. The island chapter is more technically detailed than any

other because, prior to this study, such a comprehensive description of the Nation's island resources by type and by region had not been set down in one source.

With these thoughts in mind, the following format was chosen:

Chapter II gives an historical perspective of shorefront access and island preservation by tracing national concern in recreational shoreline and island development. It provides a background and legislative history for the Coastal Zone Management Act and especially for Sections 305(b)(7) and 315(2).

Chapter III discusses the supply and demand question, and also reviews some of the recreation statistics generated at the Federal and State level especially where these figures regard availability and accessibility of beach areas.

Chapter IV presents a legal overview of existing rights of public ownership and use rights of the coast.

Chapter V suggests Federal direction alternatives for access policy relating to both 305(b)(7) and 315(2).

Chapter VI reviews shorefront planning activity in several States and developes a model shorefront access planning process.

Chapter VII describes the variety of tools and techniques States may use to acquire access.

Chapter VIII gives background on urban waterfronts, their potential for providing increased access, planning considerations, and suggested Federal direction to shorefront access planning.

Chapter IX gives an overall description of the islands of the Nation by geologic and regional type to help identify priorities and formulate policy with regard to island resources. Federal program direction geared to the 315(2) provision is recommended.

The Appendices include: other Federal programs, pertinent statutes and regulations, copies of State work programs, a concept paper for 315(2), and the historical legislative source material. Since it is recognized that achieving the goals of increasing access to beaches and other areas as well as island preservation will take the creative use of many Federal, State,

and local program dollars used in concert, the section on other Federal programs is of particular importance. The 315(2) acquisition provision cannot possibly do the job alone, nor was it designed that way. The Land and Water Conservation Fund, after all, has available capital which can be used for the same purpose. However, in respect to this fund, "coastal recreation projects vie with all other demands for recreational land and water projects, and the allocation of the money, among non-Federal projects, is left to the discretion of State and local officials."[1]

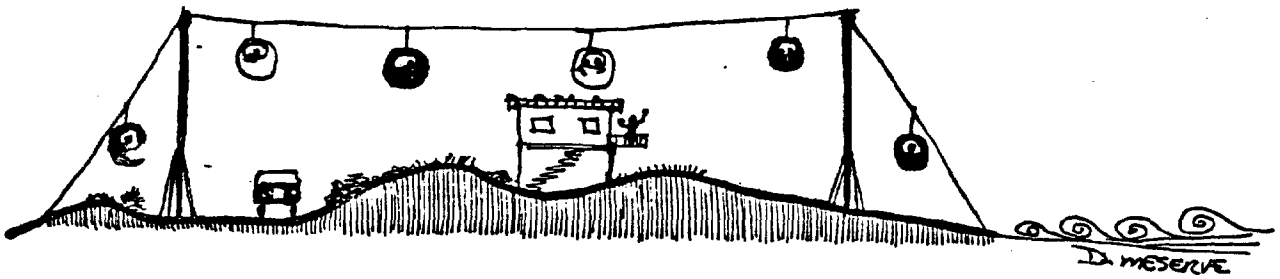
The 315(2) acquisition provision thus becomes advocate funding for beach access and island preservation. 315(2) funds were not designed to compete with HUD, BOR, or other Federal funding sources. Instead, these sources should be used together to enable States to better implement their shorefront planning policies.

---

[1] George H. Sichl, Recreation and the Coastal Zone, Congressional Research Service, Library of Congress, Washington, D.C. September 1977.

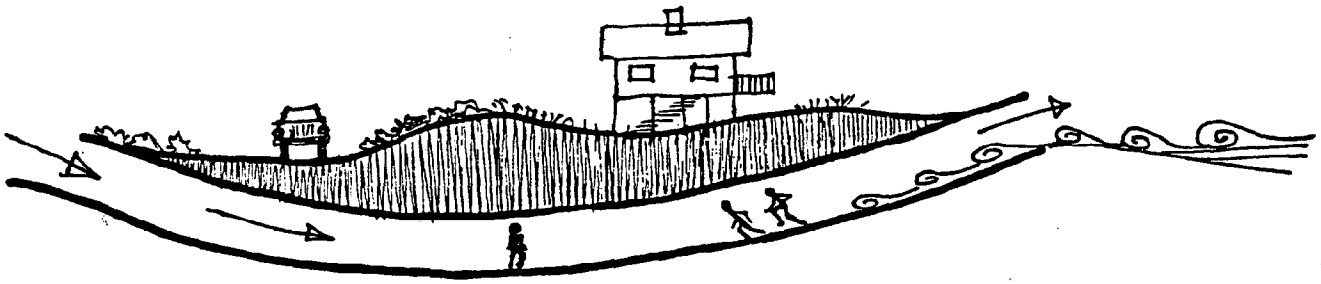
BEACH ACCESS ALTERNATIVES STUDY

ALTERNATIVE #1: SWISS SKY RIDE



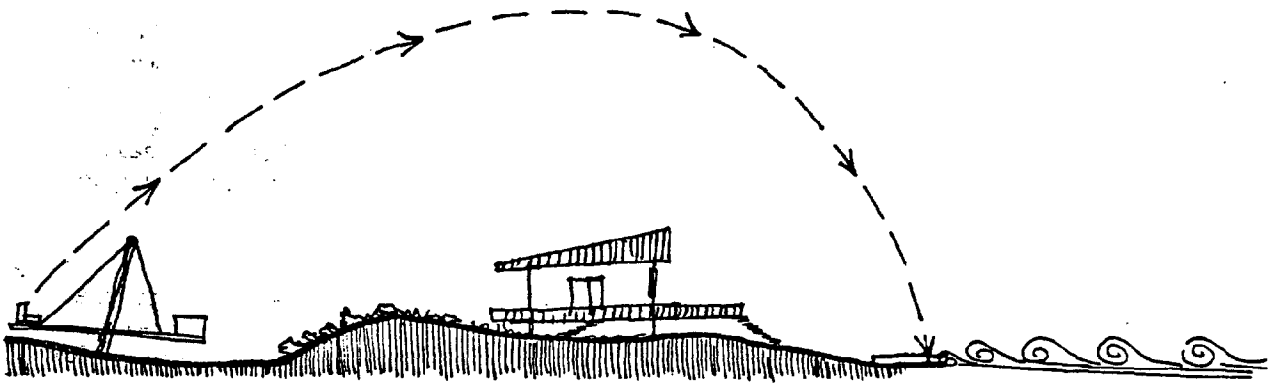
PROBLEMS: 1. KITES GET TANGLED IN WIRES.
2. TRASH GETS DROPPED ONTO HOUSES

ALTERNATIVE #2: TUNNEL



PROBLEM: 1. CANT CONTROL TIDES TO KEEP THE WATER OUT:
SKUBA GEAR REQUIRED AT HIGH TIDE.

ALTERNATIVE #3: CATAPULT *< BEST & CHEAPEST



PROBLEMS: 1. OCCASIONALLY OVERSHOOTS SMALL CHILDREN INTO OCEAN.
2. FREQUENT INJURIES FROM HARD LANDINGS.

II. Background

National Perspective - A Historical Background

Over the past 45 years, the Nation's coastlines, beaches, and islands have been the subject of numerous Federally sponsored studies and commissions. National concern was expressed over a variety of problems and issues. At the outset, it is important to note that while islands were not singled out for Federal focus until 1969, previous studies involving the shorelines included islands within their purview and the findings and recommendations within these studies apply to islands as well as beaches.

The following review of reports and studies serves three purposes: it creates a background against which to place shorefront access and island preservation, it builds up considerable testimony for the concern Congress has expressed in these issues over a very long period of time, and it lends credence to the fact that 315(2) should be funded so that States might expedite their shorefront access planning and preserve their island resources.

Sensing a need for more public coastal recreation lands, New Deal planners, in 1934, obtained funds from the Interior Department to map out a National seashore recreational system along the East Coast. Their report stated that the seashore of New England was "intensely developed" and that dense development also was the main feature of much of the New Jersey coast.

The best and most virginal place to accommodate the recreational needs of the population of the mid-Atlantic States, they concluded, would be an area running from Rehoboth Beach, Delaware, to the tip of Assateague Island. They justified this proposed acquisition of park land by pointing out that 29 million people lived within a 300 mile radius of this shoreland.

In their still-surviving memo to Interior Secretary Ickes, the planners expressed their worry over the cost of farmland along the shore in Maryland's Worcester County, which was running around $25 an acre. On the other hand, the ocean beach land was cheap, at $4 an acre. Government dallied. World War II occurred. Today the population in the area within a 300 mile radius of the once proposed park is approximately 60 million people, roughly double what the 1934 planners felt would justify their acquisition. However, it took nearly 30 years for this parkland to be set aside.

In 1937, Cape Hatteras National Seashore was established through the National Seashore Program, which requires special legislation for each seashore. Twenty-five years elapsed before any others were designated. Now

nine more have been added by means of this program. These are: Cape Cod, Massachusetts (1961); Point Reyes, California (1962); Padre Island, Texas (1962); Fire Island, New York (1964); Assateague, Maryland and Virginia 1965); Cape Lookout, North Carolina (1966); Gulf Islands, Florida and Alabama (1967); Cumberland Island, Georgia (1972); and Canaveral, Florida (1975). Many of these areas were identified earlier by the National Park Service as priority areas.

Early in 1954, the National Park Service was assigned the task of ascertaining the remaining opportunities to preserve outstanding stretches of the Atlantic and Gulf coasts--not only places valuable for scenic qualities and public recreation, but areas also desirable as sanctuaries for unique or rare plant and animal communities. The introduction to the Park Service's report, Seashore Recreation Area Survey of the Atlantic and Gulf Coasts,[2] speaks for itself:

> About 20 years ago the Service conducted a seashore recreation area survey with emergency funds and was able to identify many important, unspoiled natural areas which seemed deserving of preservation for future public use and enjoyment. But time had passed swiftly; a war had intervened, followed by a period of great economic growth and development. No one seemed to know how far development might have spread up and down the coast as a whole, spilling over into or engulfing the quiet natural areas we had once known.
>
> The National Park Service had neither the personnel nor the funds to answer these questions. But as the result of a generous donation of private funds for the purpose, the Service was able to assemble a small professional staff and undertake an 18-month study of the coast and offshore islands between the Canadian and Mexican borders.[3]

Of a total of 126 acres classified, the survey identified 54 as most suitable for public seashore recreation. It recommended the following:

> That at least 15 percent of the general shoreline of the Atlantic and Gulf coasts be acquired for public recreation purposes. If public agencies acquire half of the suitable undeveloped seashore land remaining, they would then have, including their existing areas, the recommended 15 percent.
>
> That highest priority be given to the acquisition of the following 16 areas:
>
> Great Beach, Cape Cod, Massachusetts [National Seashore]
> Fire Island, New York [National Seashore]
> Shinnecock Inlet, New York
> Padre Island, Texas [National Seashore]
> Smith Island, North Carolina Bogue Banks, North Carolina [State Park-partial]
> St. Joseph Spit, Florida [State Park-partial]

Mosquito Lagoon, Florida [Partial Wildlife Preserve]
Parramore Island, Virginia [Nature Conservancy Preserve]
Kiawah Island, South Carolina
Marco Beach, Florida
Debidue Island, South Carolina
Popham-St. John, Maine Crescent Area, Maine [State Park]
Brazos Island, Texas [State Park-partial]

That prompt action be taken to acquire available beach sites before the best of the remaining areas are acquired for private or commercial development. The attention of all persons and organizations in a position to give aid should be solicited.[4]

In the past 20 odd years, 10 of the 16 areas have been acquired for public recreation or conservation purposes, either fully or partially. Their methods of preservation are described in the parenthetical comments adjacent to their names in the above list.

In reference to resource preservation--a concept to be researched in subsequent studies--it also recommended:

> That ample quantities of hinterlands of marsh and swamp, which provide a valuable habitat for a large and interesting variety of bird and animal life, be acquired in connection with acquisition of beach property.
>
> That biotic communities of great scientific interest found along the seashore be acquired and preserved regardless of the desirability of the adjoining beach, and that consideration be given to biotic communities at present in a modified condition but which might return to a more natural condition if permitted to remain undisturbed.
>
> That more detailed studies be made of selected coastal areas of unusual importance, giving consideration to proper boundaries and long-range planning for best utilization of recreation values.[5]

In 1958, the Outdoor Recreation Resources Review Commission (O.R.R.R.C.) was created (P.L. 85-470, 12 Stat. 238). Its mission was essentially three-fold:

> To determine the outdoor recreation wants and needs of the American people now and what they will be in the years 1976 and 2000.
>
> To determine the recreation resources of the Nation available to satisfy those needs now and in the years 1976 and 2000.
>
> To determine what policies and programs should be recommended to ensure that the needs of the present and future are adequately and efficiently met.[6]

The ORRRC presented a report of its findings to the President and Congress in 1962.[7] One of the reports, Shoreline Recreation Resources of the United States, dealt exclusively with the Nation's coastline. It is a benchmark document whose often quoted national shoreline inventory (which includes the alarming information that only 5 percent of the shoreline is in public ownership) remains the most comprehensive one published to date.

The significance and difficulties of shoreline recreation were enunciated in the following passage from the report:

> Americans are fortunate to have so much shoreline. In gross terms, there is certainly "enough for everybody" to enjoy--enough, that is, if it is both accessible and available to the public. These particular conditions consitute a major problem, as all those familiar with the needs of outdoor recreation are acutely aware.
>
> Three difficulties now confront us. First, a good deal of the shoreline is not close enough to where people live to be widely useful for recreation. Second, some of it is so close to large metropolitan centers as to be already overwhelmed by people.
>
> A third complicating factor is that most of the shoreline, especially that near metropolitan centers, is privately owned and therefore not available for public use.
>
> On the basis of current trends for outdoor recreation, and recognizing the longstanding popularity of shoreline recreation, there is little doubt that the demand for recreation shoreline will be many times greater by 1976 and 2000 than at the present. It is obvious that long before the end of this century the recreation shoreline within the radius of large urban populations will have to be managed with an efficiency unknown today. Outside of these areas of major impact, some changes in the balance of public and private ownership will have to be made to accommodate public demands for the recreation use of these shorelines.[8]

This noteworthy summary of the shoreline recreation situation remains as valid today as it did over 15 years ago. Shoreline recreation target areas were described as follows:

> While all of the shoreline has some recreation value, and the entire shoreline consitutes a recreation resource, not all of the shoreline is equally sought out for outdoor recreation. Of the three categories of shoreline--marsh, bluff and beach--the latter is by far the most popular kind of shoreline in present patterns of outdoor recreation activities.
>
> * * * * * * * * * *
>
> Some shorelines are almost never used, either for recreation or for any other activity. Others are so overused that their

recreation values are greatly reduced. The important shoreline recreation targets are those which have the characteristics of (1) accessibility and (2) availability. Accessible shorelines are those which are close enough to large using populations for day and/or overnight use. Available shorelines are those whose use is not restricted by the nature of ownership, high fees, or some other inhibiting factor.

Both characteristics are essential in any assessments of the wants and needs of the American people for recreation shorelines and in any evaluation of the ability of our resources to fill those needs. In some large metropolitan areas the per capita amount of accessible and available shorelines is extremely limited. Shorelines accessible to less densely settled parts of the country may be used by only a few people. Thus, shoreline recreation demands are highly concentrated, geographically.

Accessibility--people who seek outdoor recreation do so within very definite time patterns; these are usually described as day outings, weekend or overnight trips, and vacations. The most important of these, in terms of its impact upon outdoor recreation resources, is the day outing.

* * * * * * * * * *

Availability--in general, the only beaches widely available to the public are public beaches, and even some of these are restricted. For example, some municipal beaches admit only bona fide citizens of the municipality. Others practice some form of segregation or other restriction. The use of private beaches is normally under the control of the owners, although in some States access may be gained to the foreshore--the area below high tide--through public thoroughfares. Because of time and fund limitations, it was impossible to make an inventory of restrictive policies of either private or public beaches. The authors have assumed that public beaches are usually available to anyone. However, it may be that the extent of adjacent parking areas is the greatest single factor restricting the availability of accessible public beaches.[9]

Shoreline recreation needs were summarized in this passage:

There seems to be little question that the role of the American shoreline in satisfying outdoor recreation needs is becoming more important every year. However, the usefulness of shoreline to satisfy recreation needs varies with the:

1. Type of shoreline,
2. Accessibility of the shoreline,
3. Availability of the accessible shoreline.

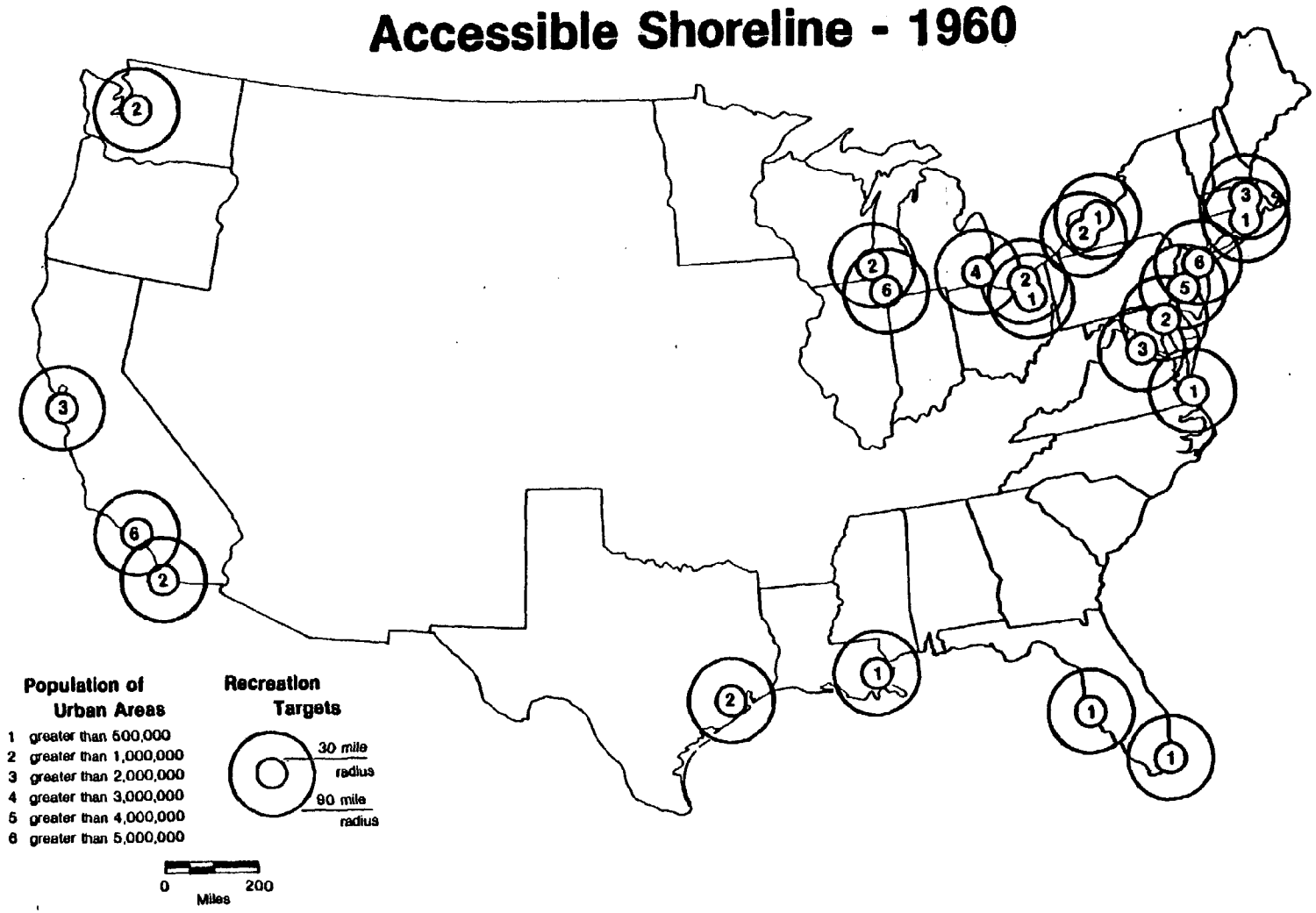

Accessible Shoreline - 1960
Population of Urban Areas
1 greater than 500,000
2 greater than 1,000,000
3 greater than 2,000,000
4 greater than 3,000,000
5 greater than 4,000,000
6 greater than 5,000,000
Recreation Targets
30 mile radius
90 mile radius
0
200
Miles

Figure 1

Accessible and Available Beaches

The greatest recreational use pressure is on public beaches not more than 60-90 miles away, depending upon the highways, or about 2 hours automobile travel time from metropolitan areas of a half million or more people. Within this range, the heaviest demands are normally placed on beaches within 30 miles or less than 1 hour travel time of metropolitan areas. The 19 metropolitan areas which presently have more than 500,000 people are shown in Figure 1. Circles of 30 and 90 miles radius respectively have been drawn around these metropolitan areas. These are the crucial beach recreation targets. The inner circles are the "bull's eyes." Where the impact areas of a number of metropolitan areas overlap, use pressure is extremely high.

Inaccessible nonbeach shoreline

The other side of the coin is extreme non-use. The least use pressure on recreational shoreline is on marsh or bluff coast with no beach areas and distant from metropolitan centers. While recreation use of these areas is slight at present, they are often important as unique superlative examples of bluff or marsh shoreline, as natural phenomena, or as wildlife habitats.[10]

A national policy for the shoreline and recommended Federal responsibilities were put forward as follows:

The shoreline is a unique resource in many ways. For the most part, it forms a national boundary. For a single resource, a shoreline has unusually high recreational qualities. It is limited in extent. Improper use, pollution, or erosion can decrease its extent and value. All of these factors can be controlled to preserve recreational values if proper steps are taken. Shoreline is a dynamic resource physically, a system of related checks and balances which do not recognize political boundaries. It is, in other words, a national resource.

As a national resource, shoreline merits a national policy. That policy should serve three purposes: (1) it should state the public purpose in the recognition and encouragement of, as well as the provision of the means for, outdoor recreation; (2) it should define the roles of the various levels of government by which this purpose is realized; and (3) it should relate recreation use of the shoreline to other valid uses.

The Federal Government should be responsible for the following program:

1. Acquiring, developing, and operating shorelines of national significance for recreation, scenic beauty, wildlife habitat, or biotic communities.

2. Optimizing shoreline recreation possibilities on Federal lands including defense lands.

3. Assisting State and local governments where other financial and technical resources are not adequate to meet State and local shoreline recreation needs, especially in areas of high recreation impact by:

   (a) providing financial assistance for planning, acquisition, and development of shoreline recreation areas.

   (b) providing technical assistance for planning, acquisition, and development of shoreline recreation areas.

   (c) specifying program standards as a condition of Federal assistance, including review and coordination of State and (local) plans.[11]

The Report emphasized the need for a more thorough study and inventory of the shoreline resources in this paragraph:

> One of the greatest stumbling blocks in evaluating recreational use of the American shoreline is a lack of precise information; data on both users and the resource are badly needed. How many people use the shoreline now, and for what purposes? How much do they spend on various kinds of recreation? How far do they travel? How often do they visit specific areas of the shore? What are the specific areas of the shore? What are the specific qualities and traits, mile-by-mile, of the total shoreline, and what potentials for recreational use do these represent? It is not possible to plan the intelligent and balanced use of this precious and limited resource without knowing a great deal more about the nature of both demand and supply.[12]

Many of these questions remain unanswered.

In 1963, the U.S. Study Commission, Southeast River Basins, recommended protection of all coastline recreational values and public acquisition of four or five larger islands off the coast of South Carolina and Georgia for recreational purposes.[13]

In 1965, the White House Conference on Natural Beauty recommended that public and private protection be extended to all remaining natural shorelines and, specifically in panels devoted "to water and waterfronts," declared that "new techniques for extending the use of waterfront lands to metropolitan residents should be developed. There is far too little actual water's edge available to the typical city dweller."[14]

In 1966, the President directed the Secretary of the Interior to inventory American islands, and this was the first time islands were singled out. Previously, as can be noted in the earlier studies, islands were subsumed under the general category of beaches and shorelines. The resulting study, Islands of America, published in 1970, revealed that there were 26,325 islands 10 acres or larger, comprising 28.6 million acres. Excluding Alaska's 21.1 million island acres, of the 7.5 million remaining, only 1.5 million acres are available for public recreation.[15]

The Interior Department report also stated that:

> An additional 3 million acres have recreational potential but are mostly in private ownership and not open to the public. Nearly half of these 3 million acres lie within 25 miles of urban populations of 50,000 persons or more; three-quarters of this "urban" island acreage is either undeveloped or minimally developed.
>
> Thus, there are almost a million acres of prime, largely undeveloped, potential recreation land on islands near America's metropolitan areas.
>
> From these factors and others uncovered in the study, it is apparent that America's islands are a major untapped national resource with a variety of lands and locations that could help fill many types of outdoor recreation needs, especially those of many metropolitan area residents and the fast-growing numbers of water-oriented recreationists throughout the country.
>
> Many of our islands, particularly those near our growing metropolitan areas, are threatened with development that would destroy their distinctive qualities and their recreation potential.
>
> America's island heritage can be protected ... by concerted action in both the public and private sectors. This study recommends two major goals: (1) public control of representative island areas sufficient to meet public recreation, scenic, wilderness, historic, and scientific needs; and (2) restoration and maintenance of the environmental quality of all American islands.[16]

The report further pointed out that:

> Once an island's remoteness or inaccessibility has been reduced, it is drastically changed. Once developed, it is difficult or impossible to restore its natural character. Not that change always is bad--an island may well be the best location for an industrial installation or a residential community--but, because of their fragile nature, development of islands should be based upon careful consideration of their wise use and protection. Since most islands have not yet been developed, there still is time to consider all aspects of their environment.

> The purpose of this report is to alert the Nation to the importance of its islands and to identify conservation opportunities for the various public and private interests . . . it is recommended that a National System of Island Trusts be established and that the Casco Bay Islands in Maine be the initial component of the System.[17]

In 1973, Senator Jackson introduced a "National Islands Conservation and Recreation Act" to establish:

> . . . a national policy to protect and manage islands of the Nation which possess unique environmental, recreation, historical, and cultural values; to authorize a study by the Secretary of the Interior of our Nation's islands including recommendations of islands to be added to the national park, wildlife refuge, and forest systems; to encourage and establish State islands conservation and recreation programs; to add to the land and water conservation fund and authorize the provision of a portion of the additional funds to State and local governments for the acquisition of islands and the purchase or lease of Federal surplus island property; and for other purposes.[18]

The bill did not pass; however, in 1976 the Bureau of Outdoor Recreation (BOR) began updating the 1966 inventory. This update is scheduled for completion in 1978. The 1976 amendments to the Coastal Zone Management Act included a provision for island preservation under Section 315(2), to be discussed at length in Chapter IX. To date this provision has not been funded.

Legislation to put into effect the island trust concept proposed by the Interior Department's island survey report in 1970 was again offered to the Congress in the Nantucket Sound Island Trust bill.

As reported by the Senate Interior Committee on November 26, 1975, the purpose of this bill was:

> To set up a Federal-State-local partnership for land use planning, preservation, and conservation of the valuable and threatened resources of the Nantucket Sound Islands. This bill provides the necessary authority and funding to carry out the goals and plans of the local residents in a shared and cooperative effort with all levels of government.
>
> In general the bill, as amended, provided a federal grant to local commissions for protection and regulation of development of the islands in the Nantucket Group.[19]

In 1977, President Carter placed emphasis on the barrier islands in his Environmental Message. He said that:

> Coastal barrier islands are a fragile buffer between the wetlands and the sea. The 189 barrier islands on the Atlantic and

> Gulf Coasts are an integral part of an ecosystem which helps protect inland areas from flood waves and hurricanes. Many of them are unstable and not suited for development, yet in the past the Federal Government has subsidized and insured new construction on them. Eventually, we can expect heavy economic losses from this short-sighted policy.
>
> About 68 coastal barrier islands are still unspoiled. Because I believe these remaining natural islands should be protected from unwise development, I am directing the Secretary of Commerce, the Council on Environmental Quality, and State and local officials of coastal areas, to develop an effective plan for protecting the islands.
>
> His report should include recommendations for action to achieve this purpose.[20]

A Barrier Islands Task Force is currently working on recommendations which are scheduled for completion in 1978.

Between 1966 and 1970, several important studies were carried out which all placed emphasis on the need for increased shoreline recreation, especially near urban areas. In 1966, the Commission on Marine Science, Engineering, and Resources, more commonly known as the Stratton Commission, was established with a mandate to investigate the broad array of marine problems ranging from the preservation of our coastal shores and estuaries to the more effective use of the vast ocean resources. The commission's report, Our Nation and the Sea, published in 1969, noted that:

> A decent concern for preserving life's amenities as well as economic considerations demands that more adequate provisions be made for recreational use along the Nation's crowded shoreline.
>
> Access to the shoreline for the populations that increasingly are concentrated in urban areas along the coasts and the Great Lakes will present a major coastal zone problem. Of all the uses of the coastal zone, recreation uses are the most diversified and pose some of the greatest challenges to any coastal management system.

Appearing in the same Commission's panel report on "Managment and Development of the Coastal Zone,"[21] which formed the basis of the Coastal Zone Management Act of 1972, were these recommendations for immediate action:

> The amount of shoreline available for public use should be doubled over the next 10 years. Priority should be given to near metropolitan areas where public area is most urgently needed. More imaginative attempts are required to integrate recreational projects with other uses of the coastal zone such as conservation and industrial uses.[22]

As regards Recreation--Beaches and Parks, the panel reported that:

> Competition for land and water is sharpest precisely where the need for water-based recreation is greatest--near metropolitan areas. The problem involves not so much the water's physical amount as its quality and accessibility. Outdoor recreational facilities are most urgently needed near metropolitan areas.
>
> The competition for land use poses both a challenge and an opportunity for those metropolitan areas situated near the coasts and the Great Lakes. Although such areas may not be able to reserve facilities for the complete range of water-associated recreational activities, the potential to secure some is shared by all.
>
> Population pressures on public and outdoor recreation facilities are exceeding previous expectations by wide margins. A 1965 survey conducted by the Bureau of Outdoor Recreation indicated that visits to beaches and seashores in 1980 would total nearly 10 billion, more than double the same estimate made in 1960. Projected visits in the year 2000 would be nearly 17 billion, four times the 1960 estimate.
>
> Based on the 1965 survey the most popular summertime activities ranked in order are: walking for pleasure, swimming, driving for pleasure, playing outdoor sports, bicycling, sightseeing, picnicking, fishing, attending outdoor sports events, boating, nature walks, and camping. Projections for the year 2000 indicate some changes in ranking with the following top eight activities: swimming, playing outdoor sports, walking for pleasure, driving for pleasure, sightseeing, picnicking, and boating.[23]

In 1968, the President's Council on Recreation and Natural Beauty submitted a report, From Sea to Shining Sea, a Report on the American Environment--Our Natural Heritage,[24] and in it, the section on Shoreline and Islands declared that:

> Unfortunately, opportunities to know and enjoy shorelines and islands are steadily diminishing. Natural shorelines increasingly are being fenced, bulldozed, paved, and built upon. Increasingly, scenic stretches of tidelands, beaches, dunes, and seacliffs are covered with shacks and chalets, hamburger emporiums and parking lots, highways and billboards, powerplants, and even oil derricks.
>
> It is time to proclaim the principle that all Americans--of present and future generations--have a right to enjoy the shoreline experience, and that ocean and lake shoreline with high quality scenic and recreation values are natural resources to be conserved and not destroyed.

* * * * * * * * * *

Regardless of which institutions take the lead, there is an urgent need for up-to-date knowledge upon which comprehensive and systematic efforts can be based. . . . There is also need for a comprehensive nationwide inventory and survey of the best remaining opportunities for conservation of natural beauty and recreation resources of ocean and lake shoreline--in addition to those directly associated with island and estuarine areas. Such a study would be a logical follow-up to the National Park Service inventories of a decade ago; it should determine current status of shoreline preservation efforts, identify conservation opportunities for the various levels of government, and focus renewed public attention on this vanishing resource.

A national shoreline conservation survey would provide an informed basis for action to protect not only the water's edge but the total shoreline setting. It could do this by developing model protective standards for State and local land use controls, and guides for coordination of planning for public acquisition and appropriated development of critical areas; for coordination of programs of technical and financial assistance through the concerned States; and for technical assistance and incentives to private landowners to conserve remaining natural shoreline environments along lines consistent with today's natural beauty goals.

The Council recommends that increased public and private efforts be made to develop comprehensive plans and balanced programs for use of the Nation's ocean and lake shorelines, islands, estuaries, and adjoining wetlands that include appropriate provision for protection and enhancement of their natural, scenic, recreation, and economic values through:

(1) Full consideration of shoreline problems and potentials in comprehensive studies by appropriate governmental institutions with responsibilities for planning for shoreline resources;

(2) State, county and local zoning or other land use regulation; and

(3) establishment of State or interstate management commissions, where appropriate.[25]

In 1971 the Corps of Engineers released The National Shoreline Study[26] (authorized in 1968) which, in the following passage, recognizes Federal concern for beach and shore erosion as a national problem:

Probably the most significant and important problem with respect to erosion is the loss of beach recreation area, a valuable natural resource. Counts of users of good beaches less

> than one-half mile long show hundreds of thousands of visitors each year. Considering all the beaches of the United States, there are many hundred million beach visits each year. For example, annual attendance at the major public beaches on Long Island totals more than 70,000,000. The most intensive use area is at Jones Beach State Park, which has an annual attendance of about 13,000,000, equivalent to 6,000,000 per mile for the developed area. On the outer part of the island, at Robert Moses Park, the annual attendance of 2,000,000 would indicate an intensity of one-half million per mile. Obviously, beach losses affect a considerable percentage of our population. The population expansion and increased leisure time cause rapidly increasing demands for beach areas. Because the quantity of beaches is limited, continued loss of beach areas will increase in importance and economic value.[27] This is of particular significance near large population centers.

Still another movement was afoot in the late 60's which should not be overlooked: the effort to pass national land use legislation. Such an act has yet to be enacted. The "Papers on National Land Use Policy Issues"[28] published in 1971 in connection with hearings for one of the land use bills (S. 692) stressed the coastal aspects of land use. Six of nine papers in the collection were devoted to coastal topics: shoreline recreation, estuaries, salt marshes, wetlands, and offshore power plant siting. Familiar themes which had previously received attention were given added exposure. Federal control of land use was politically unpalatable and remains so, but the coastal issue, after repeated study and attention, finally received legislative approval with enactment of the Coastal Zone Management Act in 1972. This Act declared that "there is a national interest in the effective management, beneficial use, protection and development of the coastal zone,"[29] and it created as part of the Department of Commerce, through NOAA, the Office of Coastal Zone Management (OCZM) to carry out the Act's goals.

Coastal Zone Management

The intent of the Act (see Appendix 1 for excerpts of the Act) is to provide Federal encouragement to the coastal States, including the Great Lakes States, for the protection and wise use of coastal resources. So far, 33 States and territories (out of 34 eligible) are participating in the program. Through the original Act of 1972, participants are eligible to benefit in two ways: first, through financial assistance in the forms of three types of grants: (1) to develop management programs (Section 305); (2) to operate approved management programs (Section 306); and (3) to help States acquire estuarine sanctuaries (Section 315(1)). Second, through the Federal consistency aspect of the Act; whereby, once the management program has passed through an overall Federal review process and received approval by the Secretary of Commerce, subsequent Federal actions affecting the States' coastal zones must be consistent with the States' coastal zone management programs, to the maximum extent practical. Federal coordination is a key feature of the Act, which further provides that in the case of a

"serious disagreement between any Federal agency and the State in the development of the program," the Secretary of Commerce, in cooperation with the President, shall seek to mediate the differences.

The following 15 Federal agencies were deemed relevant to each State program: the Departments of Agriculture; Energy; Commerce; Defense; Health, Education, and Welfare; Housing and Urban Development; Interior; Justice; Transportation; the Council on Environmental Quality; the Environmental Protection Agency; the Nuclear Regulatory Commission; the Federal Energy Administration; the Federal Power Commission; and the General Services Administration.

In order to meet the requirements of the Act, the States must include the following "elements" in their management programs:

- -- a definition of the coastal boundaries
- -- a definition of permissible land and water uses which have significant impact on the coastal waters
- -- a designation of areas of particular concern
- -- a definition of priorities of uses
- -- a definition of existing authorities by which the State will exercise control over the land and water uses
- -- a choice of an organizational structure to administer the program
- -- an assurance of public participation in the program development process

Once the program has been developed, the State can choose one or a combination of three methods of control: (1) direct State regulation; (2) local regulation consistent with State-established standards; or (3) local regulation subject to State review.

The Federal Office of Coastal Zone Management's basic functions are the awarding of grants and the overseeing and reviewing of State programs (the latter of which is divided among the management staff and the regional coordinators or State liaison people). In addition, the OCZM is involved in the following activities: technical assistance (including coastal zone information coordination, which also supports an information center), legal counsel, Federal interagency coordination, public information, special interest group liaison, and congressional liaison.

Coastal zone management, given the extensive area and the complexity of issues involved, is tremendously comprehensive. In order to give added direction and focus to the program, Congress amended the Act in 1976. The major changes include: the introduction of a Coastal Energy Impact Program; the addition of three new planning elements addressing shore erosion, shorefront access, and energy facility siting; and provisions for interstate grants, research and technical assistance grants, and grants for the purpose of acquiring land to provide shorefront access and island preservation. This last provision, shorefront access and island preservation, (Section 315(2), in conjunction with the shorefront access planning element, 305 (b)(7), is the subject of the study at hand.

Legislative History of Section 305(b)(7)

Section 305(b) of the Coastal Zone Management Act, as amended, states that "the management program for each coastal state shall include . . . (7) a definition of the term 'beach' and a planning process for the protection of, and access to, public beaches and other coastal areas of environmental, historic, esthetic, ecological, or cultural value" (Sec. 305(b)(7).

Section 305(b), as amended, further states that "no management program is required to meet the requirements in paragraph (7) . . . before October 1, 1978[11] (Sec. 305(b)(9)).

Funding to complete this requirement is to be derived from Section 305 authorizations, irrespective of whether this requirement is being fulfilled (prior to 10/1/78) as part of the 305 program development process or as part of the 306 program implementation process:

> "Whenever the Secretary approves the management program of any coastal state under Section 305, such state thereafter . . . (1) shall not be eligible for grants under this section (305); except that such state may receive grants under subsection (c) in order to comply with the requirements of paragraph (7) . . . of subsection (b)" (Sec. 305(h)).

The Committee report[30] on P.L. 94-370 (H.R. 3981/S. 586) indicates that the addition of 3 new planning requirements in the program development process (Section 305) does not represent the addition of brand new considerations into the process in which most States are presently engaged. Rather the inclusion or expansion of these "implicit" planning elements represents a decision "to give specific emphasis and support for these areas."

With specific reference to Section 305(b)(7), the report notes that: "The Committee wants, by this requirement, for State Coastal Zone Management Programs to identify their publicly held coastal areas and to devise policies which will either provide for their protection, where that is appropriate as with ecologically significant wildlife areas, and for their ready access as is appropriate with a public beach. Whereas the present management programs must include an inventory and designation of 'areas of particular concern,' this new requirement focuses particular attention on publicly held properties and directs that plans for their best management be included in the State program."

Further guidance on the intent of this section is provided in the following Committee discussion of the need for H.R. 3981:

"Access to public beaches and other attractions in public ownership in the coasts has come to be identified as one of the critical problems facing local and State governments. . . . The Committee position is that action is needed now to help provide the needed access, especially in urban areas, and that to wait will only mean additional expense to the taxpayers. The key again is that the purchase of such access, as is provided in the addition to Section 315, . . . be tied to a comprehensive plan. That is the intent of this new requirement under 305 program development--that all such purchases fit into an overall program for each state."[31]

Legislative History of Section 315(2)

Section 315(2) of the Coastal Zone Management Act provides that:

> The Secretary may, in accordance with this section and in accordance with such regulations as the Secretary shall promulgate, make grants to any coastal state for the purpose of . . .
>
> * * * * * * * * * *
>
> . . .acquiring lands to provide for access to public beaches and other public coastal areas of environmental, recreational, historic, esthetic, ecological, or cultural value, and for the preservation of islands. The amount of any such grant shall not exceed 50 percentum of the cost of the project involved.

Funding is provided in subsection 318(a)(7) which provides for sums, "not to exceed $25 million for each of the fiscal years ending September 30, 1977; September 30, 1978; September 30, 1979; and September 30, 1980, respectively, as may be necessary for grants under section 315(2) to remain available until expended." As of November 1, 1978, no funds had been appropriated for the program.

There is not a legislative record in the usual sense of testimony, i.e., discussions on the floor and in committee report. However, the intent of Congress in adding subsection 315(2) is plainly stated in what little legislative history exists. The House Committee Report accompanying the 1976 amendments discussed the shorefront access acquisition provision as follows:

> This authorization complements the new requirement the Committee has added to section 305 for a beach protection and access planning process. Because time is of the essence in acquiring access, particularly in or near urban coastal areas, it was felt advisable to accompany the planning requirements with funds to carry out the plans.

> The Committee does not intend to authorize the purchase of lands for beaches or other public uses. The concern is that there are areas already in public ownership on the shore which, for one reason or another are not readily accessible to the public.
>
> The Committee's further concern is that in providing the means of opening up this access, we do not overburden the resources. That is why this authorization is tied to the planning requirment of Section 305--the intent is to see to it that this expanded means of access fits into an overall recreational plan and that due care is given to protect areas susceptible of damage from excess use.[32]

The Senate Report discussed why the bill included these provisions, as follows:

> In recent years--both before and after passage of the Coastal Zone Management Act--coastal States have realized the increasing difficulty of assuring public access to and protection of beaches and islands in the coastal zone. Time is of the essence, since property values are rising steeply and quickly on waterfront property.
>
> The Committee is persuaded that providing assistance to the states for the acquisition of lands for these purposes is amply justified and in the national interest. With population and leisure trends pointing to increased demands on limited public waterfronts, it is imperative to protect these properties. To wait longer would mean the public will have to pay higher prices for the property needed for enjoyment of public beaches.[33]

The inclusion of the island preservation provision is clearly for a different purpose. The major aim here, legislative history makes clear, is to put into public ownership those coastal islands now relatively unspoiled before they are developed intensively. This notion was emphasized in previous Federal studies as discussed earlier.

From the legislative history, the Office of Coastal Zone Management has concluded in a concept paper circulated to program managers that section 315(2) is intended to provide ways of getting to areas presently in public ownership and is not for adding to those areas. Congress did not intend that these funds be used to add to beach areas; for example, the purchase of the dry sand area above the mean high tide line (or the ordinary high watermark in the Great Lakes), delineating where public ownership ends in certain States, was not intended. Also, the word "public" appears before "beaches" and the listing of the other shorefront areas to which access might be provided. Thus, it is clear that Congress did not intend for access to be provided to privately held property. However, it would seem appropriate to provide right of access through private property to public areas.

Access should be provided according to the criteria established pursuant to the section 305(b)(7) planning process and must be sensitive to the areas involved. The island funding provision is to preserve islands which are largely undeveloped and to keep them in that condition. Some limited public access to islands purchased under this provision may be provided.

Concluding Remarks

The survey of Federal reports and studies in the first part of this chapter indicated a history of national concern in the following general problems and issues:

- -- The value of the limited coastal resources which are subject to increased and competing pressures.
- -- The escalating demand for swimming, boating, and other leisure activities located along the coastline.
- -- Loss of beaches due to erosion.
- -- Lack of access due to private development and inadequate transportation or parking facilities.
- -- Change in coastline character from natural to developed.
- -- Need for more recreational areas close to metropolitan centers.
- -- The unique value of islands.
- -- The fragility and the special ecological role of islands, especially barrier islands.

The passage of the Coastal Zone Management Act gave States an opportunity to address all of these issues through the mechanism of their management programs. Section 315(2) and 305(b)(7) place special emphasis on shorefront access and island preservation and potentially offer a means to obtain national assistance directed particularly on these areas which were felt to be especially important.

FOOTNOTES

[1] John Fialka, "The Rush to the Shore," reprinted in Congressional Record, Record, Senate, October 30, 1973, S. 19623-19624.

[2] U.S. Department of the Interior, National Park Service, A Report on the Seashore Recreation Survey of the Atlantic and Gulf Coasts, (Washington, D.C., 1955).

[3] Ibid., p. ii.

[4] Ibid., pp. 11-13.

[5] Ibid., p. 9.

[6] Outdoor Recreation Resources Review Commission, Outdoor Recreation for America, (Washington, D.C., 1962), p. 2.

[7] O.R.R.R.C., Shoreline Recreation Resources of the United States, Study Report 4, (Washington, D.C., Government Printing Office, 1962).

[8] Ibid., p. 2.

[9] Ibid., pp. 4-5.

[10] Ibid.

[11] Ibid.

[12] Ibid.

[13] The U.S. President's Council on Recreation and Natural Beauty, From Sea to Shining Sea, (Washington, D.C., 1968), p. 176.

[14] U.S. White House Conference, "Beauty for America," Proceedings of the White House Conference on Natural beauty, (Washington, D.C., Government Printing Office, 1965), p. 16.

[15] Department of the Interior, Bureau of Outdoor Recreation, Islands of America, (Washington, D.C., Government Printing Office, 1970), p.6.

[16] Ibid.

[17] Ibid., p. 42.

[18] Henry Jackson, Congressional Record, Senate, March 30, 1973, p. 35273.

[19] U.S. Congress, Senate, Committee on Interior and Insular Affairs, Nantucket Sound Island Trust; report to accompany S. 67. (Washington, D.C., Government Printing Office, 1975). 94th Congress, 1st session, Senate Report No. 94-493, pp. 9-10.

[20] Council on Environmental Quality, The President's Environmental Program, "The President's Message to Congress," (Washington, D.C., Government Printing Office, 1977) p. M-8.

[21] U.S. Commission on Marine Science, Engineering and Resources, Science and Environment, Volume 1, "Report of the Panel on Management and Development of the Coastal Zone," (Washington, D.C., Government Printing Office, 1969).

[22] Ibid., p. II. 5.

[23] Ibid., p. III. 17.

[24] The U.S. President's Council on Recreation and Natural Beauty, From Sea to Shining Sea, (Washington, D.C., Government Printing Office, 1968).

[25] Ibid., pp. 175-179.

[26] U.S. Department of the Army, Corps of Engineers, The National Shoreline Study, (Washington, D.C., Government Printing Office, 1971).

[27] Ibid., p. 13.

[28] U.S. Congress, Senate, Committee on Interior and Insular Affairs. Papers on National Land Use Policy Issues, by Massachusetts Institute of Technology, Woods Hole Oceanographic Institution and Boston University (Washington, D.C., Government Printing Office, 1971).

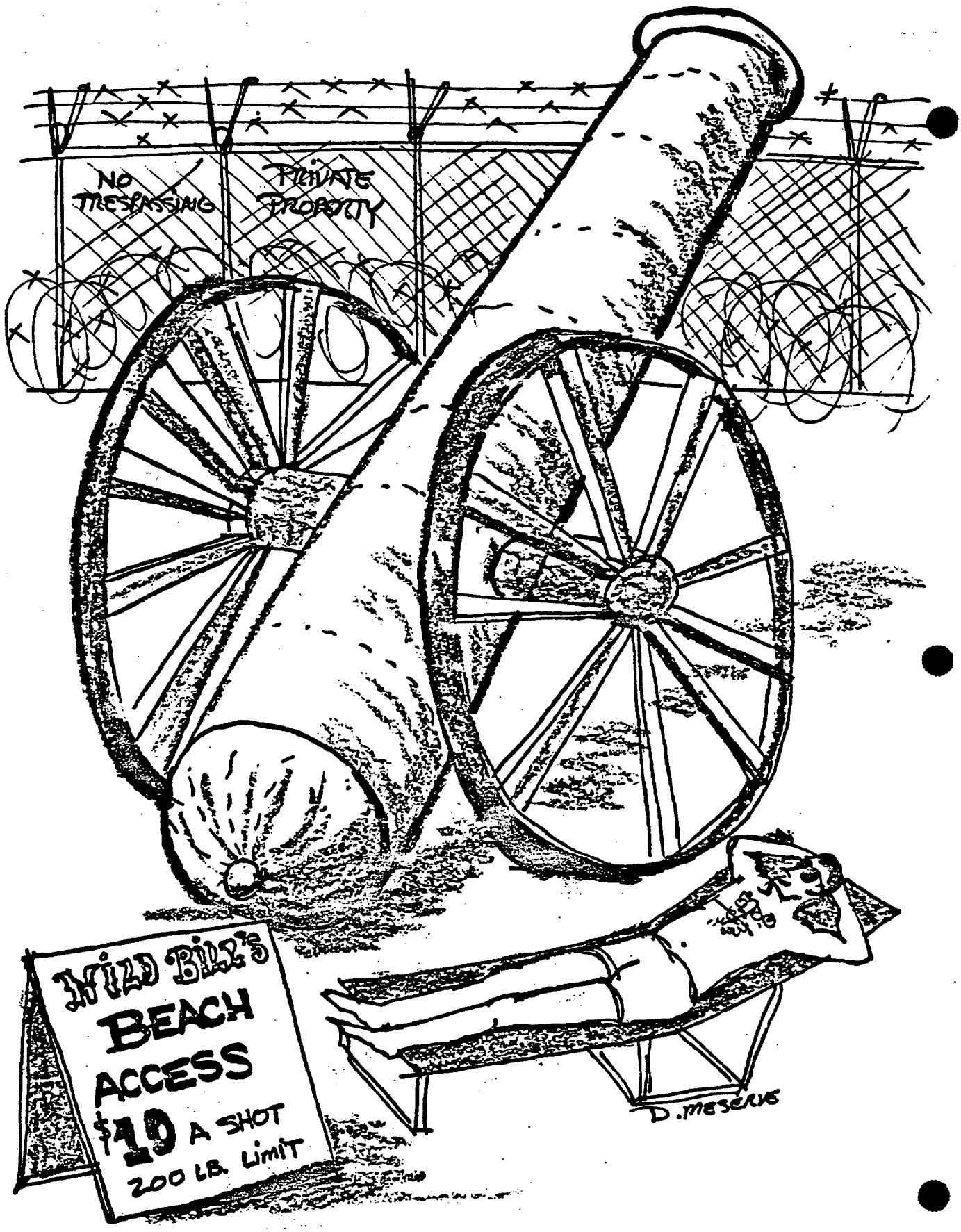
[29] U.S. Congress, Senate, Coastal Zone Management Act of 1972. Section 302(a).

[30] U.S. Congress, House of Representatives, Report No. 94-878, 94th Congress, 2nd section, March 4, 1976.

[31] Ibid.

[32] U.S. Congress, House of Representatives. Committee on Merchant Marine and Fisheries, Report, Coastal Zone Management Act Amendments of 1975, (Washington, D.C., Government Printing Office, 1976), p. 38.

[33] U.S. Congress, Senate, Committee on Commerce, Coastal Zone Management Act Amendments of 1975, report to accompany S. 586, (Washington, D.C., Government Printing Office, 1975). 94th Congress, 1st session, Senate Report No. 94-277, p. 2.


NO TRESPASSING
PRIVATE PROPERTY
WILD BILL'S
BEACH
ACCESS
$10 A SHOT
200 LB. LIMIT
D. MESERVE

III. Supply of and Demand for Beaches

The beaches of this Nation are one of our most valued resources. More generally, water can also be considered an important resource in terms of outdoor recreation. Activities defined as water-based include swimming, boating, and fishing and because of their popularity a large portion of America's outdoor recreation occurs in the coastal zone.[1] In addition, many shoreline areas have environmental, historical, ecological, aesthetic, and cultural value.

Beaches can be used to accommodate a wide variety and range of recreation activities. In the coastal States people participate more in swimming than they do in any other form of outdoor recreation. The 744 million activity days of swimming per year exceed the participation in the next most popular activity (walking for pleasure) by nearly one-quarter of a billion activity days. (An activity day is defined as one person engaged in recreation in an activity for one day.) Boating and water skiing are projected to be the third and fifth fastest growing outdoor recreation activities. It has been projected that the greatest increases in demand will be for water-based activities.[2] It is predicted that by 1980, swimming will be the number one outdoor recreation activity overall, and will have experienced an increase of 72 percent over what it was in the year 1965.[3]

Long and continued upward demand trends are apparent in terms of coastal-based outdoor recreation areas. Increases in the total population are a significant factor in placing greater demands on coastal areas. Increases in disposable income and an improved standard of living have also led to an increased usage of the shoreline. Accompanying this increase in disposable income is an increase in the amount of leisure time, which also heightens the demand for water-related recreation. Improvement in transportation similarly is a factor in increasing the demand placed on our beaches.

In 1954, the National Park Service conducted a survey of the Atlantic and Gulf coasts, which documented the use and ownership of coastal recreation resources. The inventory reported that only 6.5 percent of the Nation's shoreline in this area was in Federal and State ownership.[4] Not all of this land was dedicated to recreational purposes. Therefore, Federal and State governments began acquiring land and increasing public ownership.

In 1962, the Outdoor Recreation Resources Review Commission (ORRRC) submitted to Congress a report entitled Shoreline Recreation Resources in the United States. The total shoreline of the United States was found to be 59,157 statute miles, of which 21,157 was classified as recreation shoreline (see Table 1). These figures indicated that less than 2 percent of the total detailed shoreline was in public ownership. Of the shoreline classified as recreational, only 5.5 percent was publicly owned.

Table 1. Mileage of detailed shoreline, recreation shoreline, public recreation shoreline, and restricted shoreline, by major coastlines.*

Shoreline Location	Detailed Shoreline (Statute Miles)	Recreation Shoreline[1] (Statute Miles)	Public Recreation Shoreline (Statute Miles)	Restricted Shoreline (Statute Miles)
Atlantic Ocean	28,377	9,961	336	263
Gulf of Mexico	17,437	4,319	121	134
Pacific Ocean	7,863	3,175	296	127
Great Lakes	5,380	4,269	456	57
U.S. Total	59,157	21,724	1,209	581

[1] Recreation shoreline is measured by the same methods and criteria used by the Coast and Geodetic Survey. The totals in this table and the State totals found elsewhere in the study are the result of including all such measured shoreline that meets the above criteria. These figures will undoubtedly differ from those published by many States. While some difference in the totals may be attributed to the inability of this study to identify all public shoreline areas, a major reason for the discrepancy is the different criteria used by this study and by the various States in their reports.

* Source: Outdoor Recreation Resources Review Commission, Study Report 4, Shoreline Recreation Resources of the United States (1962)

Table 2. National Shoreline Study*

Shoreline Location	Total Erodible Shoreline	Publicly Owned	Public Recreation Use
Atlantic Ocean and Gulf of Mexico	27,680	6,260	2,130
Pacific Ocean	4,650	1,240	790
Great Lakes	3,680	650	370
Total	36,010	8,150	3,290

NOTE: This study excludes Alaska and Hawaii.

* Source: U.S. Department of the Army Corps of Engineers, The National Shoreline Study, (1971)

Approximately half of this public recreation shoreline is restricted for military use.

The most recent available data on the status of public shoreline is supplied by The National Shoreline Study, authorized by Congress in 1968. This study was completed by the Army Corps of Engineers in 1971 (see Table 2). In comparison with the 1962 study discussed above, these figures seem to indicate a large increase of 2081 miles in terms of public recreational opportunities. But a problem of interpretation arises when one attempts to compare these data with that of the ORRRC report. Dennis Ducsik in his Shoreline for the Public speaks to this point:

> The most important difficulty arises from the uncertain relationship between shore ownership to shore use. Much of the shoreline reported as used for public recreation may actually be in private ownership and thus susceptible to the increasing trend of private owners to restrict public access as demands increase. Furthermore, data on public ownership is not disaggregated to indicate how much is devoted to recreation purposes.[5]

Ducsik also points out that although the supply of public recreation shoreline has increased, the percentage used by the public still remains low.

This imbalance between the supply and the ever-increasing shoreline demand for resources must be redressed. Measures should be taken to broaden public access to coastal beaches. A major factor influencing the recreational use of coastal or water resources is accessibility. The lack of access significantly diminishes the use of available resources. Man-made barriers have inhibited the public's access to and use of coastal areas and water resources. For example, development projects and the construction of second homes have created walls of private property along our shorelines.

One of the greatest difficulties in assessing the demand and supply of our coastline is the lack of adequate data. As part of States' Comprehensive Outdoor Recreation Plans, surveys funded by BOR are being undertaken to determine the number of people involved in particular recreation activities and the amount of use and supply of facilities and resources. But all of these data yield only aggregate recreation figures for the individual States. Information pertaining to the supply of publicly owned coastal resources and the demand to use these resources does not exist, except for a few isolated instances (for example, Public Beach Access and Recreation in South Carolina). Studies which do speak to the coastal zone supply recreation figures only. They do not deal with the importance of coastal beaches in terms of their aesthetic, ecological, historical, and cultural value. Therefore, for the purposes of this report, a large part of the data comes from eleven State Comprehensive Outdoor Recreation Plans. Other surveys were used and reference is made to these reports in the

bibliography. The eleven States used in this study were chosen based on the availability of pertinent data. Hence, supply and demand figures will pertain to these eleven States, unless otherwise noted.

DEMAND

The lure of the sea has been fictionalized at least since the time of Homer's Odyssey. Man has always been drawn to the sea and to its glistening sandy beaches. Our Nation's shoreline, consisting of over 20,000 miles of unusual and lovely landscape, is one of our most priceless resources. The 1962 ORRRC study, Shoreline Recreation Resources in the United States, describes the qualities of land and sea which have attracted man through the ages:

> A feature that does seem to discriminate "the shore" from other areas, in the public mind, is the coupling of expanse of view with proximity to the sea or other large body of water. The broad sweep of water extending to or near the horizon is invariably associated with "the shore" uniquely. Another discriminating quality is the existence of a marine climate and environment, identified by such weather phenomena as the occurrence of wind from off the water, the temperature influence of the water, waves and other weather feature associated with large water masses.[6]

This Nation is characterized by increases and gains. More people, with growing disposable incomes and ever-increasing amounts of leisure time, have intensified the demand for coastal beaches and their importance as a significant outdoor recreation resource. Any survey that is undertaken is sure to find that beaches and water oriented activities are emphasized American modes of recreation. The ORRRC makes reference to the presence of water as a main recreation attraction in its final report:

> Most people seeking outdoor recreation want water to sit by, to swim and fish in, to ski across, to dive under, and to run their boats over. Swimming is now one of the most popular outdoor activities and is likely to be the most popular of all by the turn of the century. Boating and fishing are among the top 10 activities. Camping, picnicking, and hiking, also high on the list, are more attractive near water sites.[7]

Increases in water-related activities have been found to surpass increases in population. The U.S. Bureau of Outdoor Recreation's Outdoor Recreation Trends indicates that for the years 1960 to 1965 the damand for water-oriented activities such as swimming, boating, and fishing increased by 18 percent, 15 percent, and 12 percent respectively. The increases in population were only 8 percent. Projections were also made for

the years 1960 to 1980. They indicated that the demand for swimming will rise by 72 percent while an increase of only 2 percent is projected for the population.[8] In terms of the particular States studied by BOR, water-oriented activities ranked among the top five for Florida, Massachusetts, Michigan, New Jersey, Oregon, South Carolina, Texas, and Wisconsin, and the top ten for the States of Maryland, Virginia, and California.

Swimming has been found to be one of the most popular water-related activities. It has been reported that in terms of user participation, swimming was ranked second, but by 1980 it will be the number one outdoor recreation activity.[9] In a 1970 Bureau of Outdoor Recreation report, swimming and boating were found to have increased by almost fifty percent from 1960 levels.[10]

In assessing the demand for coastal beaches, several determinants can be used. In terms of recreational use of beaches, demand is based on participation rates. But the primary factor contributing to the determination of demand for coastal beaches should be their accessibility. Potential users should be able to reach the shoreline and then use it for whatever their desired activity may be. New Jersey's comprehensive outdoor recreation plan is one of the few studies in which accessibility is used as a factor in ascertaining demand. Due to lack of appropriate data, any demand figures given for specific States will therefore be based on participation or user rates.

Wisconsin's shoreline and water resources are primary attractions and the use of water-related facilities has been increasing. This is evidenced by the fact that the most popular activity in the State is swimming. Approximately 673,000 people are involved in swimming on the average seasonal weekend and about twice this number are expected to participate on the largest use-day of the season.[11] Swimming ranks first in terms of use by residents, and in some instances nonresident use may equal or exceed that of the residents. State-owned beaches were found to have four times as many users as private beaches. The demand for coastal beaches in Wisconsin is great, but conflicts with private lakeshore owners has deterred the fulfillment of this demand.[12]

A growing demand for coastal beaches and water-oriented activities exists in many other coastal States (see Table 3). Swimming ranks number one in terms of activity days in the State of Michigan.[13] In South Carolina, in-State vacation activity participation for swimming at beaches is 84.5 percent and for boating and fishing it is 40.2 percent. These beach- and water-related activities yield the highest percentages in terms of participation.[14] Participation percentages in beach activities along the Texas Gulf Coast were projected for several years. By the year 2000, participation in swimming is expected to increase by 375 percent, fishing by 225 percent, boating will increase by 400 percent, and surfing by 325 percent. Over the projected years, the resources which indicated the

greatest need for access improvement are those which show expected increases in participation, namely beach activities.[15] In the State of Virginia, beach use and other water-related activities show anticipated increases in activity demand of 60 and 70 percent for the years of 1972 to 1990.[16] Beach use ranks among the top five activities in the State of Oregon, and other water-oriented activities rank among the top ten in terms of activity days.[17]

Table 3. Projected Growth in Shoreline Recreational Activities

Activity	Annual Growth Rate (Percent)	Coastal Participation 1975 (Millions)
Swimming	3.8	40
Boating	4.0	14
Fishing	1.8	16

Source: Dennis W. Ducsik, Shoreline for the Public, A Handbook of Social, Economic, and Legal Considerations Regarding Public Recreational Use of the Nation's Coastal Shoreline (1974).

According to Massachusett's comprehensive outdoor recreation plan, swimming, with a response of 41.7 percent ranks first as the activity most frequently used (see Table 4). None of the other recreation activities can compare to swimming in terms of its prominence. The demand for coastal beaches can be demonstrated by the relative importance of a water body on or near a site. Visitors to particular recreation sites in Massachusetts elicited responses pertaining to the importance of water bodies as a drawing factor 98.5 percent of the time.[18] The projected growth is most significant in terms of swimming in natural bodies of water. This activity already accounts for the largest number of activity days and its projected annual growth rate is 4 percent.[19]

Due to Florida's physiography, the most popular recreation activities are beach-oriented. Nearly half of the residents and two thirds of the tourists make use of Florida's beaches.[20] But these have become heavily congested due to decreasing resource availability, limited accessibility, and rapidly increasing demand. Much of this pressure comes from a growing State population along with developmental encroachment upon the beaches by hotels and motels. The demand for saltwater beach (in units of one thousand square feet) in 1975 was 64,545 and the projected demand for 1990 equals 87,781.[21] The annual statewide participation rate for beach activities yields a percentage of 46.6 for residents and 67.6 percent for tourists.[22] Clearly the demand to use beaches is very high in Florida and it is expected to increase, placing more pressure on the State's existing supply of beaches.

Table 4. Summer Recreation Activities: Percent Respondents Mentioning Activity As Most Frequent

Activity	Statewide	Boston	Springfield
Swimming	41.7%	23.3%	34.4%
Picnicking	2.5	8.3	16.4
Camping	4.8	1.7	8.2
Canoeing and Sailing	3.0	3.3	0.0
Hiking and Walking	7.8	10.0	1.6
Tennis	8.1	0.0	3.3
Golf	3.3	0.0	3.3
Various Ball Sports*	1.8	15.0	11.5
Going to the Beach	4.5	13.3	0.0
Fishing	1.3	3.3	11.5
Bicycling	1.5	0.0	4.9
None/Nothing	8.8	15.0	0.0
All Other	10.9	6.8	4.9
Total	100.0	100.0	100.0

*Football, baseball, soccer, kickball, etc.

Source: Department of Environmental Management, Massachusetts Outdoors, Statewide Comprehensive Outdoor Recreation Plan (1976).

Swimming ranks as the most popular outdoor recreation activity in New Jersey. During the peak season there is a demand for approximately 40 million recreation days in New Jersey. Fishing and boating, the second most popular water-related activities, rank among the top ten outdoor recreation activities in New Jersey (see Table 5).

New Jersey is the most densely populated State in our Nation. This density and the many man-made barriers preventing use of beaches, has caused the demand on existing swimming facilities to be very great. At the present time, 97 percent of the existing swimming facilities are provided by the private sector and municipal level.[23] High user fees and restrictions which attempt to limit the use of beaches to residents have created barriers to public use. On an average weekend day during that year's peak season, the 1985 recreational demand for swimming is projected to be 1,117,500 people and in the year 2000 it is expected to be 1,628,100.[24]

Projected demand indicates an increasing use of and need for coastal beaches. If one takes into account that the American people show a decided preference for the shoreline, that there has been an increasing use of coastal beaches for nonrecreation activities, and that many of our beaches are relatively inaccessible, it becomes clear that means for dedicating more of our shoreline for recreational purposes must be sought.

Table 5. Ranking by Popularity of Twenty-Three Outdoor Recreation Activities, 1970 (In Recreation Days, Peak Season Demand)

Swimming	38,731,414
Driving for Pleasure	33,497,825
Walking for Pleasure	29,134,123
Playing Outdoor Games	19,733,592
Picnicking	14,111,780
Sightseeing	12,063,002
Fishing	9,637,482
Boating	7,964,043
Bicycling	7,131,093
Nature Walking	5,636,572
Attending Outdoor Sports	5,537,280
Sledding	5,528,605
Ice Skating	5,014,118
Camping	2,778,600
Hunting	3,728,734
Water Skiing	1,823,584
Hiking	1,743,625
Attending Outdoor Concerts	1,683,857
Horseback Riding	1,268,661
Snow Skiing	1,201,668
Sailing	613,631
Canoeing	468,090
Mountain Climbing	63,809

Source: Department of Environmental Protection, Office of Environmental Review, Outdoor Recreation in New Jersey (1973).

SUPPLY

One of the most pressing problems with coastal beaches is their supply. Our shoreline is a resource in great demand, yet it is extremely scarce in terms of public ownership. Approximately 90 percent of this highly desirable resource is in private control, less than 7 percent is in public ownership for recreational purposes and about 3 percent of the total shoreline is restricted for military use.[25] The present supply of publicly owned shoreline is not adequate to meet the existing demand and is dramatically short of meeting the projected demand.

The two shoreline characteristics which are most essential in any determination of the needs of this Nation are accessibility and availability. The demand for coastal beaches is growing. There are now a great number of public beaches but the demand exceeds the supply by a wide margin. This burgeoning demand can be met by making much more of our shoreline accessible to the public. As the ORRRC report of 1962 emphasizes,

the shoreline is there, the demand to use it is also there, but the means of getting to many coastal areas does not exist. "Although comparative figures are not available, it is a valid generalization that certain easily accessible beaches are more popular and well attended while others less accessible but equally well endowed are less popular."[26] The report gives examples of several early accessible beaches in Los Angeles and on Long Island that are overcrowded while equally good or better beaches receive much less use due to their inaccessibility.

The tidal coastline of Massachusetts is approximately 1200 miles long, but public access to Massachusetts beaches is extremely limited.[27] Less than 175 miles of Massachusetts shoreline is open to the public, but a large portion of it is restricted by the use of prohibitive fees, regulations, and inadequate parking.[28] The Massachusetts SCORP states that "since the ocean beaches of Massachusetts are a resource of statewide if not national significance, the severe limits on their availability to the public poses a serious problem."[29]

Swimming has one of the highest participation rates of any form of recreation. Only part of the demand for swimming is being met and the demand of those still searching for coastal swimming opportunities is higher than it is for any other activity.

Salt water fishing in Massachusetts is another coastal activity which has been on the rise. The amount of participation in fishing in Massachusetts is greater than it is in the combined States of Maine, Rhode Island, and New Hampshire.[30] Fishing generates substantial income for the State but it places further demand on coastal access. Even the smallest access points along the coast can be useful to fishermen. The supply of publicly owned access to fishing areas is inadequate. If more shoreline was accessible and open to the public, Massachusetts's unfulfilled demand could be met.

One of the most critical problems facing Florida is the decreasing accessibility and availability of coastal beaches. Out of the nearly 11,000 miles of Florida's shoreline, 1358 miles are sandy beaches. Only 151 miles of the shoreline have been designated as public beach. Many problems have handicapped Florida in its efforts to meet the public's demand for these beaches. The power of eminent domain to acquire lands for outdoor recreation does not exist. Nor is the public access to beaches and navigable waters often provided over private lands. Public access has been and is still being diminished by intensive coastal development projects. The demand to use Florida's shoreline is great, but the supply of publicly owned beach is not sufficient to meet this demand.[31]

New Jersey's Atlantic coastline consists of 127 miles and it is the State's single greatest natural resource. Approximately 55 percent of the State's shoreline is found in the South Shore Region and the remaining 45 percent is located in the North Shore. Nearly 70 percent of New Jersey's Atlantic coastline is publicly owned and less than 30 percent is owned by private interests (see Table 6).

Table 6. New Jersey's Atlantic Coastline Ownership 1969

Region	Total Shoreline (feet)	Publicly Owned Shoreline: Length (feet)	Publicly Owned Shoreline: Percent of Total Shoreline (%)	Privately Owned Shoreline: Length (feet)	Privately Owned Shoreline: Percent of Total Shoreline (%)
North Shore	263,646	153,841	58.5	109,805	41.6
South Shore	376,234	298,501	79.3	77,733	20.7
State Total	639,880	452,342	70.7	187,538	29.3

*Source: Department of Environmental Protection, Outdoor Recreation In New Jersey, (1973)

Although a large percentage of the shoreline is publicly owned, beach user fees, charged by many of the shore communities, severely limit accessibility. An inadequate supply of parking and launching areas also reduces the usefulness of the State's coastal resources. The lack of access to New Jersey's coastline is considered to be a significant factor. Demand for the coastal beaches is great and despite the access problems, the shoreline draws hordes of people every hot and muggy weekend. But the relatively few and easily accessible areas are the most heavily used. Other parts of the coastline are underutilized because of their lack of accessibility.

Public accessways are considered to be an important factor in meeting the demand for coastal beaches in Texas. The Texas coastline consists of 2264 miles, but approximately 72 percent of the bay frontage and 56 percent of the Gulf frontage is considered inaccessible. (Accessible frontage is defined in Texas' SCORP as coastline that is within one mile of any known public road. The total amount of accessible open Gulf frontage is 173 miles and accessible bay frontage is 529 miles (see Table 7).

Private ownership and natural barriers have limited access to Texas's public beaches. There are only a few roads running along the coastline which permit visual contact with the Gulf and the ocean. Only three major highways provide meaningful coastal access and these are heavily utilized. Therefore, access to many coastal areas must be by boat. But many Texas counties restrict boat launching access. This situation has left large portions of the Texas shoreline relatively inaccessible.

Wisconsin has many high quality shorefront resources. Coastal beaches are numerous in the northern lake country and the Great Lake counties. The total number of beaches in Wisconsin is 1261. The private sector is the major provider of beach facilities but, in terms of area, there is more public beach than there is private (see Table 8).

Table 7. Texas Shoreline Summary* (in miles)

Region	County	Gulf Frontage Accessible Miles	Gulf Frontage Inaccessible Miles	Total Gulf Frontage Miles	Bay Frontage Accessible Miles	Bay Frontage Inaccessible Miles	Total Bay Front Miles
24	Calhoun	0	42	42	73	184	260
24	Jackson	0	0	0	14	24	38
25	Harris	0	0	0	35	30	65
27	Orange	0	0	0	2	6	8
27	Jefferson	25	9	34	22	2	24
28	Brazoria	22	11	33	11	67	78
28	Chambers	2	0	2	42	16	58
28	Galveston	62	0	62	83	70	153
28	Matagorde	10	50	60	32	108	140
33	Aransas	0	19	19	59	112	168
33	Kenedy	0	48	48	0	203	203
33	Kleberg	13	9	22	10	227	237
33	Nueces	22	0	22	73	19	92
33	Refugio	0	0	0	16	36	52
33	San Patricio	0	0	0	33	19	52
34	Cameron	17	16	33	22	144	166
34	Willacy	0	13	13	2	78	80
	Total	173	217	390	529	1,345	1,874

*Source: Texas Parks and Wildlife Department, Texas Outdoor Plan, (1975).

Table 8. Swimming Facilities in Wisconsin, 1975*

Ownership	No.	Beaches Sq. Meters	Beaches Sq. Feet
Public			
Federal	54	329,117	3,542,704
State	34	419,079	4,511,074
County	138	570,813	6,144,384
Municipal	246	768,301	8,270,194
Subtotal	476	2,087,310	22,468,356
Private	740	812,594	8,746,974
Total	1,216	2,899,904	31,215,330

*Source: Wisconsin Department of Natural Resources, Wisconsin Outdoor Recreation Plan, Statewide Analysis, (1976).

Recreation activities dependent on coastal beaches in Wisconsin have reached a level of participation which can no longer be efficiently accomodated under present supply conditions. Improved fishing opportunities in the Great Lakes have resulted in increased demands for facilities which allow shoreline fishing and also for access to those facilities. Conflicts have erupted among water users between coastal homeowners and those who have come to the shore merely for recreation. The upland owner has the exclusive right to use the beach area between the mean highwater mark and the existing water's edge. An increase in the public access to Wisconsin's shoreline needs to be brought about both to meet the rising demand and to ease the growing tensions between coastal users.

The State of Maryland owns all lands below mean high tide, but less than 2 percent of Maryland's Chesapeake Bay shoreline is open to public. This lack of public access is due in part to the fact that a majority of the land adjacent to the mean high tide mark is either privately owned or within Federal military reserves.[32] The inaccessibility of many of Maryland's water resources is obviously a major deterrent to their use.

The California coastline consists of 1154 miles, of which 740 are privately owned and the remaining 414 are owned by the public.[33] The public has the right to use any tidal or submerged lands in California. But in order to use them the public must be able to get to them. Most of the uplands are in private ownership, and it has become common practice for upland owners to ban access or to charge parking or access fees to get to the State-owned lands beyond.[34]

The lack of public access in the State of Michigan is also significant. There are 1611 miles of recreational shoreline, of which only 67 miles are available for public use. Private ownership usually extends to the water's edge.

The supply of publicly owned coastal beaches in several States is adequate, but overall, the demand to use this valuable resource is far greater than the existing supply. The demand for beach activities has been increasing at a rapid rate. By the year 1980, swimming is projected to be the number one outdoor recreation activity. But the supply of publicly owned shoreline is projected to basically remain the same with only a few increases in acreage. In States in which there is a sufficient supply of coastal beaches, the demand is still unmet due to problems of distribution. A few popular and accessible beaches are heavily used, while other beaches of equal quality and value remain underutilized due to the lack of access to them. In order to meet this growing demand for one of our Nation's prized resources, more beaches must be made accessble to the public.

Thus it is seen that in many States there are large beach areas owned by the public or which the public has the right to use (see Chapter IV) but to which it has no access. It is also clear that the demand for beaches and other water recreation resources is great and exceeds the existing supply, and the demand promises to become even greater.

Beach Access

The surging popularity of beach activities has greatly increased the necessity of supplying public access to our coastal beaches. By doing so, it is possible to open up coastal beaches previously blocked by privately owned and, perhaps, developed property which has inhibited the use of the available coastline. Many existing water access areas are small, extending from one-fourth of an acre to 40 acres.[35] But access areas are the medium by which great areas of water and coastline can be made available to the public.

The extent of use on water access points within publicly designated recreation areas was inventoried in the ORRRC Study Report 1. The patterns of use pressure for State and Federal areas were found to be similar. But for local areas the degree of use was much higher. The study reported that between 50 and 58 percent of their total recreation areas were being used at or above capacity.[36] The most common access problem found in public recreation areas was lack of parking facilities. Local areas once again reported the heaviest pressure. Out of the total number of water access areas, most are State controlled and the smallest number are managed by local levels of government. But local recreation areas receive the heaviest use pressure on their water access points. This clearly points to the need for more public access land.

Many coastal States feel that the problem of public access is an acute one. They have spoken to the need for more access land to coastal beaches in their State Comprehensive Outdoor Recreation Plans (SCORPS). Several States have established boards or set up programs to deal specifically with the subject of managing and controlling the use of the shoreline.

The State of Texas stresses that a higher priority should be placed on providing better access to the existing waters and coastal beaches which offer recreational opportunities.[37] According to that State's SCORP, "Land access to public recreational waters in Texas should be increased. Texas has many lakes, reservoirs, rivers and streams, and miles of bay and Gulf frontage. However, existing public recreation areas adjacent to many of these waters themselves are underutilized".[40] The State of Texas feels that the public should be able to exercise its right to use public beaches. In 1959, the Texas legislature passed the "Texas Open Beaches Act" which grants public use, from the mean low tide to the vegetation line, of beaches which have open Gulf exposure.[41] In the State of Texas it is considered public policy that people have the right to gain access to and to use and enjoy the coastal beaches.

In defining the recreational goals for Oregon the legislative assembly acknowledged and announced in Chapter 299, Oregon Law of 1965, that:

> It is the public interest to increase outdoor recreation opportunities commensurate with the growth in need through necessary and appropriate actions, including but not limited to, the following:
>
> Provision for access to public lands and waters having recreational values.[42]

Oregon also has an open beach law which preserves intertidal areas for public use. The law permits the purchase of private property adjacent to the ocean shore so that it may be used for public access if it is not already used for that purpose.

Public access is considered a major element for the recreational use of Wisconsin's coastal beaches and navigable waters. The Great Lakes are an underutilized resource existing next to many of Wisconsin's major concentrations of population. However, the public cannot make use of the State's water and coastal beaches unless it can lawfully gain access to them. Wisconsin's Coastal Management Program completed a policy study in 1976 which reported that "a need for public access exists, including harbor access, ramp access, shore access, pier access, and visual access."[44]

Wisconsin's concern for public access is evidenced by the State's resolution to provide funding for an Access Aid Program. Wisconsin has also chosen to adopt a public access subdivision requirement.[45] In addition, a Public Access to Water Program has been developed. The program's funds are essentially used for the development of ramp access sites. Wisconsin's local units of government may use this money for the acquisition of lands which can supply public access by the use of water, road, trail, or through the privilege of crossing public or private lands without trespassing.[46] In 1966, Wisconsin adopted the Water Resources Act both to provide public access to navigable waters and to prevent the destruction of scenic shoreline due to development projects.

A high priority is placed on the Great Lakes due to their unique coastal beaches and their great potential in terms of recreational opportunities. Hence, public access to lake shoreline is considered to be one of the most important issues in coastal recreation.

According to the Massachusetts SCORP it is the State's policy to "take aggressive measures to broaden public access to coastal beaches in the context of current coastal zone planning efforts."[49] In a study undertaken to determine the relative importance of negative factors affecting recreation and other uses of coastal beaches, inaccessibility accounted for 76.7 percent of the total acreage in which this factor was mentioned. Limited parking and restrictive use by the general public also yielded high percentages as negative factors. A Public Access Board was established which further points out the importance of public access as an issue in Massachusetts. The board examines and indicates areas in which access should be provided to coastal beaches and waters. In particular, it arranges for the construction of approach roads, parking areas, and launching ramps.

The State of Virginia reported that, if legal physical access should be provided to the many miles of beach and water, projected needs could be reduced. Virginia's SCORP advises that areas with recreational ocean frontage should receive favorable priority based on their physical characteristics or location.[48] Providing public access to land and water resources is also considered to be one of Virginia's general priorities. Virginia also has a Recreational Access Road Fund which provides for public access to officially designated recreational or historic areas.

Florida's beach access problem is particularly acute. Development projects have created walls of hotels and private residences which in many places make it virtually impossible for the general public to get to the shoreline. Beach activities constitute the most popular resource-based form of recreation. Florida's SCORP recommends that a high priority be placed on acquiring beaches and developing public access to them. The SCORP states specifically that:

> The State should formulate a policy concerning the provision of public access to beaches. Through its sovereignty, the State owns virtually all lands seaward of the high mean water line. Thus, the public has the right to be on that portion of the beach. But, corridors should be provided to the public in areas of high demand where privately owned lands would otherwise seal off access to the beach.[49]

In the State of New Jersey, a detailed study of the coastal zone and bays is expected to be undertaken. According to New Jersey's SCORP, this study will attempt to insure the proper distribution of shore use between private owners and the general public. The SCORP also makes several recommendations of what the State's general acquisition priorities should be. Acting upon these priorities would bring about increased public access to the coastal zone. A few of these priorities are as follows:

> Areas possessing significant natural and cultural resources including outstanding scenic resources, coastal beaches and wetlands, natural areas with rare or unique biotic communities, potential reservoir sites, aquifer recharge areas, flood plans and historic sites;
>
> Most desirable recreation development sites reflecting physical suitability and public accessibility;
>
> Public access to recreation resources with unrealized potential such as bays, rivers, lakes, and existing publicly owned open space areas.[50]

Also mentioned in the SCORP are general access needs. One example is accessibility in the form of additional launching facilities to unlock the potential of New Jersey's water and coastal resources. The SCORP further points out that the State needs to procure rights-of-way in order to provide boaters legal access to water bodies. Recreational waterways should also be established with adequate access and supporting facilities.

California's SCORP also suggests that acquisition and development problems should receive high priority. Acquisition of access lands is considered to be one of the more urgent priorities. California's waterways and coastal beaches are limited and valuable resources, not only in terms of recreational opportunities, but also in terms of their aesthetic and visual value. A great number of California's waterways and beaches have been engulfed by metropolitan development projects. One of the SCORP recommendations to alleviate the intense pressure being placed on California's waterways is that "Federal, State, and local governments should acquire

access to those major waterways with a large potential for recreation on the water surface or at the immediate shoreline, where access alone, without extensive development can provide for major recreational use."[51]

In addition, the SCORP speaks to the need for lightening the use pressure that is being applied to California's shoreline. This recommendation should be directed towards meeting recreational needs in the coastal zone. California's SCORP advises that "the State of California should provide more public beach area and more access to the coast in central and southern California."[52]

California also addresses the coastal access problem and suggests that a high priority should be given to "areas that will provide for public access to and protection, preservation, and recreational use of ocean and bay frontage. Projects in this category include acquisition and development projects primarily for visitor access and recreational use of the ocean shoreline."[53]

The State of California has adopted several strong measures to deal specifically with problems facing the coastal zone. In 1970, California passed AB493 which prohibits the approval of any shoreline subdivision that does not supply reasonable public access from the public highways to the land which lies below the mean high watermark, within or at a reasonable distance from the subdivision.[54] California's Coastline Commission has also stressed the need for public access land. The Commission suggests that exclusive subdivisions (second home developments) need to take more of the public's needs into consideration, for example providing public access to beaches, before permission for construction will be granted.[55]

In undertaking studies to determine specific coastal access problems, several other States have spoken to the need for more public access land. Maryland's SCORP suggests a variety of considerations which should be taken into account when present and future needs are being assessed. It states that "a pleasant recreation area will be heavily used if it is convenient to large concentrations of people."[56] Maryland's SCORP also feels that the need for public access land is great.

The Great Lakes have been facing increasing use of their waterways and shoreline by those participating in the activities of swimming, boating, and fishing. As use accelerates, so too will the demand for more and better access sites. According to the Michigan SCORP, "The purchase and development of one access site in each lake not presently accessible by the public would increase the amount of manageable inland lake surface from the present 500,000 acres to 600,000 acres in the State."[57]

South Carolina has undertaken one of the most detailed beach access studies (Public Beach Access and Recreation in South Carolina). The State's beaches were inventoried and their suitability for intensive use was determined. Access problems were identified and a Beach Access Acquisition Program was devised for recommendations. This study advises that beach access is definitely a problem in South Carolina and that the legislature should focus specifically on beach access needs.

The supply of coastal beaches in the Virgin Islands is severely limited, yielding problems of intense overcrowding. Adding to this inadequate supply and growing demand is the problem of beach access; the Virgin Islands' beaches have been severely altered due to shoreline development. Access has been restricted by the construction of tourist-oriented projects. In 1971, the Virgin Island's territorial government enacted the "Open Shorelines Act" (No. 3063) as an attempt to provide public access rights to the shoreline. As a result of this legislation, the public has seaward access and both lateral use and access to the coastline. However, upland property owners may still restrict the public from access to the beaches, so the problem remains unresolved.[58]

FOOTNOTES

[1] Department of Environmental Protection, Office of Environmental Review, Outdoor Recreation in New Jersey (1973).

[2] U.S. DOI, BOR, Outdoor Recreation, A Legacy for America, Appendix A, An Economic Analysis (1973).

[3] U.S. DOI, BOR, Outdoor Recreation Trends, (1967).

[4] U.S. DOI, National Park Service, Seashore Recreation Area Survey of the Atlantic and Gulf Coasts, (1955).

[5] Ducsik, Dennis W., Shoreline for the Public, A Handbook of Social, Economic and Legal Considerations Regarding Public Recreational Use of the Nation's Coastal Shoreline, Cambridge, Massachusetts, (1974), p. 44.

[6] Outdoor Recreation Resources Review Commission, Study Report 4, Shoreline Recreation Resources of the United States, (1962), p. 11.

[7] U.S. DOI, BOR, Outdoor Recreation for America, A Report to the President and Congress by the Outdoor Recreation Resources Review Commission, (1962), p. 20.

[8] See U.S. DOI, BOR, supra note 3.

[9] U.S. DOI, BOR, The 1965 Survey of Outdoor Recreation Activities, (1965).

[10] U.S. DOI, BOR, The 1970 Survey of Outdoor Recreation Activities, Preliminary Report, (1972).

[11] Wisconsin Department of Natural Resources, Wisconsin Outdoor Recreational Plan, Statewide Analysis, (1976), p. vii-2.

[12] Wisconsin Department of Natural Resources, Wisconsin Outdoor Recreation Plan, (1972), p. 5.

[13] Michigan Department of Natural Resources, Mighigan Recreation Plan, (1974), p. 27.

[14] U.S. DOI, BOR, South Carolina Department of Parks, Recreation and Tourism, Public Beach Access and Recreation in South Carolina, (1976), p. 110.

15 Texas Parks and Wildlife Department, Texas Outdoor Plan, (1975), p. 34.

[16] Commission of Outdoor Recreation, The Virginia Outdoors Plan, (1974), p. 36.

[17] U.S. DOI, BOR, Oregon State Highway Division, Supplements and Revisions to Oregon Outdoor Recreation, (1972).

[18] Department of Environmental Management, Massachusetts Outdoors, Statewide Comprehensive Outdoor Recreation Plan, (1976), p. 47.

[19] Ibid. at 20.

[20] Department of Natural Resources, Division of Recreation and Parks, Outdoor Recreation in Florida, (1976), p. 92.

[21] Ibid. at 140.

[22] Ibid. at 88.

[23] Department of Environmental Protection, Office of Environmental Review, Outdoor Recreation in New Jersey, (1973), p. 94.

[24] Ibid. at 40.

[25] See ORRRC, supra note 6.

[26] Ibid. at 13.

[27] See Department of Environmental Management, supra note 18, at 68.

[28] Ibid. at 112.

[29] Ibid.

[30] Massachusetts Coastal Zone Management Program, Draft, (1977), p. 2-F/8.

[31] See Department of Natural Resources, Divisions of Recreation and Parks, supra note 20.

[32] Perkins, Kenneth E., Director; Coastal Zone Unit, Memorandum to Richard Gardner, Deputy Director; Office Coastal Zone Management, "Importance of Section 315(2) Fundings to Maryland," March 8, 1977.

[33] Stanford Law Review 564, Public Use of Coastal Beaches, Vol. 22, (1970).

[34] ORRRC, Inventory of Physical and Administrative Aspects of Shoreline Recreation, Appendix B, (1962), p.42.

[35] ORRRC, Study Report 1, Public Outdoor Recreation Areas Acreage, Use, Potential, (1962), p. 139.

[36] Ibid. at 59.

[37] See Texas Parks and Wildlife Department, supra note 15, at 17.

[38] Ibid. at 84.

[39] Ibid. at 14.

[40] Ibid. at 81.

[41] Ibid. at 378.

[42] See U.S. DOI, BOR, Oregon State Highway Division, supra note 17, at 2.

[43] Council on Environmental Quality, Subdividing Rural America, (1962), p. 43.

[44] See Wisconsin Department of Natural Resources, supra note 11.

[45] Newman, Michael T., Public Access to the Great Lakes, A Policy Study, (1976), p. 2.

[46] Ibid. at 29.

[47] See Department of Environmental Management, supra note 18, at 112.

[48] See Commission of Outdoor Recreation, supra note 16, at 151.

[49] See Department of Natural Resources, Division of Recreation and Parks, supra note 23, at 132.

[50] See Department of Environmental Protection, Office of Environmental Review, supra note 23, at 166.

[51] Department of Parks and Recreation, California Outdoor RecreationResources Plan, (1974), p. 10.

[52] Ibid.

[53] Ibid. at 42.

[54] See Council on Environmental Quality, supra note 43, at 111.

[55] Ibid.

[56] Maryland Department of State Planning, Maryland Outdoor Recreation and Open Space, Concept Plan I, (1970), p. 30.

[57] See Michigan Department of Natural Resources, supra note 13, at 62.

[58] U.S. DOC, NOAA, OCZM, The Virgin Islands Coastal Management Program and Draft Environmental Statement, (1977), p. 94.

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IV. The Law of Ownership and Use of Coastal Beaches

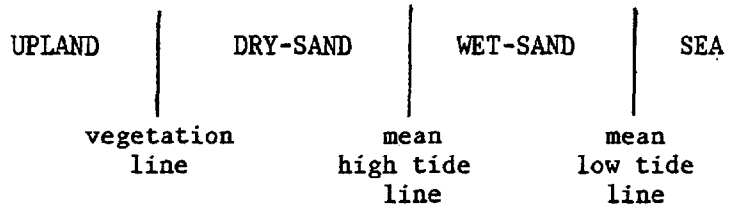
I. Introduction

Can coastal motels fence off their beach area for the exclusive use of motel guests? Can members of the public fish from the surf anywhere they want, or use any beach for swimming, sunbathing, or picnicking? To what extent can owners of beach cottages prohibit others from sitting on "their" beach or walking across their property to get to the beach?

These questions raise the issue of who owns the beach, and to what extent the public has a legal right to use the beach and to gain access to it. The answers to the questions are based on sometimes complex legal issues and doctrines. This chapter examines these issues and how they have been treated by courts in several coastal States.

Before examining these cases, it is important to clarify terminology on two points--what is "ownership" and what is the "beach." Ownership may include all the rights associated with a parcel of land, such as when the public owns a park. However, sometimes a number of different people may own separate rights associated with the same parcel of land; for example, owner A may have title to the land, owner B may have an easement that gives him the right to cross the land, and owner C may be in actual possession of the land by virtue of a long-term lease. All three "own" a part of that land.

On the second point, what is the "beach," for the purposes of this discussion the "beach" is divided into four parts: the sea, the wet-sand, the dry-sand, and the upland. First, that area seaward of the mean low tide line is termed the sea, or sea bed (lake or lake bed in non-oceanic situations.) Second, the area between the mean low tide and mean high tide lines, assuming the usual flow of tides, is termed the wet-sand. "Foreshore" and "tideland" are generally synonymous with this term. Third, the area inundated only during severe storms, between the mean high tide line and the line of vegetation or dune line, is termed the dry-sand. Fourth, that area landward of the vegetation line is termed the upland. The following diagram illustrates this division.



II. Public Ownership and Use

A. Overview

The issue of the extent to which the general public has the right to use coastal beaches has come before the courts in several States. Major

cases have been decided in New Jersey, California, New York, Oregon, and Florida. Each of these cases involved different fact situations and different aspects of the beach access and use issue. Each decision was also based on different legal theories. In the following sections these cases are examined in terms of the facts involved, the requirements for the application of the particular legal concept involved, and the case's implications in terms of the public's right to use coastal beaches.

B. The Public Trust Doctrine

1. Development of the Public Trust Doctrine in the United States

There are certain lands that are owned by the Government in a special fashion. These lands are different from, for example, a parcel owned for a fire station site that is purchased when the fire station is needed and then freely disposed of if that fire station site becomes unnecessary. These "special" lands are those lands held in trust for the people and are called public trust lands. Although the government holds complete legal title, it is not free to act in any way it wishes regarding these public trust lands because their title is subject to the interests of public, which is the beneficiary of the trust.

The public trust doctrine has a long legal history. Roman law held the seashores to be publicly owned, open to the common use of all citizens with the Government being the supervisor or trustee for these public rights. Much the same concept was adopted by the English courts well prior to the American Revolution.[1]

Very early in their history the American courts adopted this doctrine and applied it to navigable waters and associated tidelands.[2] In the leading case on this point, the U.S. Supreme Court in 1892 said that these lands are held in trust for the people so that public rights of navigation, fishing, and commerce could be preserved. The court further said that the State could not abdicate its control over these areas in any fashion that would diminish the public's rights in the trust lands.[3]

2. General Applicability of the Doctrine to the Wet-Sand Area

As the following chart indicates, approximately three-fourths of the oceanic States have held that wet-sand beaches are publicly owned:[4]

Publicly Owned		Privately Owned
Alabama	New Jersey	Delaware
Alaska	New York	Maine
California	North Carolina	Massachusetts
Florida	Oregon	New Hampshire
Georgia	Rhode Island	Pennsylvania
Hawaii	South Carolina	Virginia
Louisiana	Texas	
Maryland	Washington	
Mississippi		

In most of these States, the public ownership of the wet-sand beaches has been held to be of the "public trust" nature. Whether the private ownership of wet-sand beaches is also subject to the public trust is a good question, and one which illustrates a possible limitation on the scope of the public trust doctrine. This issue arises in those States which have opened some of their trust lands to entry-and-grant or conveyance to private individuals,[5] for it is conceivable that public trust rights have thereby been extinguished. Fortunately, the general rule applied under these circumstances is that the grantee cannot obtain better title than that of his grantor; thus, private parties hold their lands subject to the public trust.

3. The New Jersey case -- Borough of Neptune City v. Borough of Avon-by-the-Sea

Avon is a small New Jersey resort community bordering the Atlantic. The city owned a dry-sand beach that for many years was free to all comers. In the 1950's the New Jersey legislature allowed cities to start collecting user fees for the beaches in order to defray maintenance costs. Avon established such a fee and it was the same for residents and nonresidents. In 1970, Avon changed their beach fee ordinance so that it would charge nonresidents about twice as much as residents to use the beach. Neptune City, a neighboring inland city, brought suit to challenge this change in the ordinance.

4. Implications of a Public Trust Finding

The first question relative to the public trust doctrine is just what public rights it protects. Traditionally, the doctrine only protected rights of navigation and fishing. Some States, for example New York, have added a recreational access dimension, saying the public has a right to cross these lands to reach publicly owned areas.[7] Other States such as Wisconsin and California, have held the doctrine to include public rights of bathing, swimming, skating, recreation, preservation, and the enjoyment of scenic beauty.

A second question is the determination of what lands the public trust applies to. While traditionally restricted to navigable waters and tidelands (the wet-sand area), many observers feel courts will increasingly expand coverage to include publicly used dry-sand areas, as was done in the New Jersey area.

C. Implied Dedication

1. Introduction

A 1970 California Supreme Court case confirmed the public's right to use two privately owned beaches. In doing so, the court used a legal concept that could, if followed in other States,[10] have great implications for the public's right to use beaches.

The court said that, when the public has used a beach for a long time and has paid no attention to the fact that the beach is privately owned, the

public acquires a legal right to use that beach. The legal concept used to reach this result was the concept of "implied dedication." Unlike the commonly used "express dedication," where the private owner signs a deed granting the land to the public and some public body formally agrees to accept the dedication, there are no formalities required for "implied dedications." The owner's intent to give the land to the public may be implied from his conduct of not preventing public use of the beach. The public's acceptance of the dedication may be implied from public use of the beach. Nothing need be written by either side--the dedication and acceptance is implied by their conduct.

2. The California cases -- Gion-Dietz

The decision that used this principle to confirm the public's right to use the beaches was actually two different cases, involving different areas and different owners, but consoldiated because the legal issues were the same.[12]

The first case involved three lots between a public road and the ocean. The lots were 70 to 160 feet deep and each had some area level with the road and a sharp cliff-like drop of 30 to 40 feet to a second area level with the ocean. It was shown that at least 1900 members of the public freely used both areas--the upper level for parking and the lower level for fishing, picnicking, and the like. In more recent years, the city had paved the upper level and regularly cleaned up trash from both areas. The owners occasionally posted signs that the area was private, but the signs quickly blew down and were generally ignored by the public.

The second case involved a small privately owned peninsula jutting into the ocean, with the beach on the peninsula being reachable only along a 3,000 foot long dirt road connecting the beach to a public road. The public had freely used both the road and beach for at least 100 years. The owner involved in this court action bought the property in 1960 and placed a large timber across the road. It was removed within two hours. Although the owner occasionally put up "No Trespassing" signs, the public ignored them and continued to use the road and beach. In 1966, six years after purchasing the property, a second large log was placed on the road by the owner and promptly removed by the public. The owner then sent out an earthmoving crew to permanently close the road. Before the crew could act, the owner was sued and the case eventually wound up in the California Supreme Court.

In both these cases, the court upheld the public's right to continue using the beaches and accessways. The key fact leading to this decision was that the general public used the beaches for a long time (over five years) just as if these lands were public recreation areas. The court refused to presume that the owners had given the public permission to use the beaches. Further, the court noted that even if the present owners wanted to keep the public out, the conduct of previous owners in not preventing public use consituted the "implied dedication," and once the dedication to the public has been made, it cannot be taken back.

3. The Requirements for Finding an "Implied Dedication"

There are two basic requirements for finding an "implied dedication" of a beach or accessway to the public: (1) the owner's intent to dedicate the area; and (2) the public's acceptance of the dedication. As both of these acts are "implied," it is the conduct of the parties that determines whether the acts have taken place.

On the first point--the owner's intent to dedicate the land to the public--it is often said that the courts are using a "legal fiction." This is because in many of these "implied dedication" cases the owner has absolutely no intent to give his land away. But the court says that since the owner was confronted with widespread public use of his land and since he did not keep the public off the beach, the court can assume that the owner wanted to give it away, even if he really did not want to do so. Further, the court says minimal, ineffective attempts to exclude the public, such as occasionally posting a no trespassing sign, are not enough to show that the owner really did not want to give away his land. To do that, he must effectively keep the public off the beach. This has led some observers of the California decision to fear that more beaches may now be shut off to the public as owners attempt to preserve their exclusive private rights. Finally, the court noted that an "implied dedication" is irrevocable--once it has happened, it cannot be taken back.

The second point--public acceptance of the dedication--may also be implied. The public use of the beach is the acceptance. Active governmental maintenance of the beach helps in this regard but, as the second case indicated, it is not necessary. All that is required is public use over an extended period of time.

4. Impacts of an "Implied Dedication" Finding

Once a court finds that the public has been granted use of a beach through "implied dedication", the public has a legal right to continue using that beach forever. The owner cannot take the beach back without public permission.[13]

5. "Express Dedication"

A recent New York case establishing a public right to use a beach also used the dedication concept--but in this case the court found an "express" rather than "implied" dedication. The case, Gewirtz v. City of Long Beach,[14] is particularly interesting because the owner of the beach was not a private citizen. The owner was the City of Long Beach.

The beach land in question was obtained by the City between 1935 and 1937. Following improvements made with State and Federal funds, the area was opened to the general public as a park in 1936. In 1970, the city passed an ordinance that would have restricted the use of this beach to residents of the City of Long Beach and their guests. Nonresidents would have been excluded.

The New York court refused to let the ordinance take effect, saying that by opening the beach to all comers in 1936, the city had intended to dedicate it to the general public. The actions of the city in maintaining and operating the park, as well as use by the general public, were said to consitute acceptance of the dedication.

Thus, once the park had been dedicated to general public use, the city (like the private landowners in the "implied dedication" cases) had no power to take the dedication back and exclude nonresidents. For this reason, the New York court held the city's ordinance invalid.

D. Customary Rights

1. The Oregon Case -- Thornton v. Hay

In 1969, the Oregon Supreme Court announced a decision that some observers feel could be the most significant beach access case in recent years. In this case, Thornton v. Hay,[15] the court employed the legal doctrine of "customary rights" to confirm the right of the public to use Oregon's dry-sand beach area.

The facts of this case are similar to situations ever more frequently arising across the country--relatively undeveloped beach areas start growing, resorts are built, and conflicts arise between resort owners and members of the public accustomed to freely using the beach area.

This case involved the efforts of Hay, a motel owner, to fence in a portion of the dry-sand beach adjacent to his motel for the exclusive use of motel guests. The publicity generated by this act in 1966 helped trigger, among other things, legislation recognizing the public's right to use dry-sand beaches. However, since legislation of this sort cannot change or determine property rights, the matter of Hay's fence wound up in court.

This occured when, after a 1967 winter storm destroyed his fence, Hay replaced it without obtaining a permit required by the legislation. The state went to court seeking an order to force Hay to remove the fence.

In reviewing Hay's claim of a right to exclude the public from this dry-sand area, the Oregon court noted that ever since the beginning of recorded history the public had been freely using the State's dry-sand beaches as if they belonged to the public. Public use of this specific beach for over 60 years was shown at the trial. At no time had anyone sought or obtained the upland owner's permission to use the dry-sand area--everyone, including the upland owners had always assumed the public had the right to use the area. For these reasons, the court held that the public, by "customary right," has obtained the right to continue using the drysand beach.

2. Requirements

"Customary rights" is a legal doctrine developed in England long before the American Revolution. This doctrine says that where there has been very

long and common use of a defined area, that use becomes legally established for that area.

There are seven requirements that traditionally have to be met before it can be said that the public has a "customary right" to use a beach area:[16]

(1) The use must be "ancient," so long that nobody remembers otherwise;

(2) The use must have been without interruption, which is to say that the public must not have been excluded by the upland owners during this period;

(3) The use must have been peaceable and free from dispute, the public entering and using the area without resort to force;

(4) The use must have been reasonable and in keeping with the character of the land;

(5) There must be certainty as to just what land was being used;

(6) The use must have been obligatory for the upland landowners; that is, the public's use not being subject to the option of each individual upland owner; and

(7) The use must not be repugnant or inconsistent with public policy and other laws.

3. The Impact of a Finding of "Customary Rights"

If the court finds the public has a "customary right" to use a dry-sand beach, upland owners may not exlude members of the public from that area.

One very important difference between this doctrine and the "implied dedication" doctrine used in California is that a finding of customary rights may well eventually apply to very large areas of coastline, not just to the specific parcel of land involved in the case before the court (as in the case with "implied dedication"). This was clearly an intention of the Oregon Court. It specifically said that one of the reasons for choosing this legal doctrine was to avoid a long series of litigation going down the coast parcel by parcel to determine public versus private rights. Of course, individual owners might still bring actions alleging that their land had not been customarily used by the public, but in a sense the burden is on the landowner to show this and defeat a presumed public right to use the beach.

So, where there is a defined "beach" area (here below the vegetation line) that the public has freely used as long as anyone can remember, the old doctrine of "customary rights" might be used to confirm the public's right to continue that use.[17]

E. Prescriptive Easements

A recent Florida case raised the issue of whether the public, by using a beach area for a set period of time in a fashion that conflicts with the owner's property rights, can obtain an easement to continue using the beach. The legal concept at issue here was "prescriptive easements," a legal concept very similar to that of "adverse possession."

This case, City of Daytona Beach v. Tona-Rama[19] involved a pier owner's attempt to construct an observation tower in the dry-sand area next to the pier. The city granted the permit but, before construction began, the owner of another nearby observation tower sued to prevent construction. The basis of the suit was that construction of the tower would interfere with the public's "prescriptive easement" to use the dry-sand beach area.

The area in question had been used by the public as a public recreation area for well over twenty years. The public had freely engaged in sunbathing, picnicking, and parking in the area. The city had installed public showers, cleaned up trash, and enforced traffic regulations in the area. The proposed tower would carry 25 passengers 176 feet above the ocean and would be a part of the owner's pier-recreation center complex. The tower was actually constructed before the case was tried.

While both the trial court and the court of appeals[9] ruled that the tower would have to be removed, the Florida Supreme Court said in a 4-3 decision that the tower could stay. There seemed to be three reasons for this decision; (1) the court felt that the long public use of the dry-sand beside the pier was not adverse to, but in furtherance of, the pier owner's property rights; (2) the tower was consistent with public recreational use of the beach; and (3) the tower cost $125,000 to construct and an order to tear it down seemed rather drastic.

2. Requirements for "Prescriptive Easements"

There are five requirements for establishing a public "prescriptive easement" to use beach areas:

(1) There must be actual use of the property by the general public;

(2) The use must be continuous[20] (not occasional) and uninterrupted for a set period;

(3) The use must be open and fully visible to the owner;

(4) The user must be claiming a right to use the property; and,

(5) The use must be adverse to the property interests of the owner.

The Florida decision really turned on this last point--the court's majority felt public use of the dry-sand beach was not adverse to the interests of the owner (in doing this the court, to a certain extent, seemed to confuse adversity to the owner's economic interests with adversity to the owner's property interests).

3. Impact of a Finding of "Prescriptive Easements"

If it is found that the public has acquired a prescriptive easement for the use of a specific beach area, then the public has a right to continue to use the area in the same fashion as before. What has started out as a trespass becomes, when enough time passes without the owner evicting the trespassers, a legal right to use the beach. The owner still "owns" the property, but cannot do anything on it that would reduce the public's established right to use it.

For example, if the public over the prescribed period regularly used a dry-sand area for sunbathing and a prescriptive easement were established, the public would have the right to continue sunbathing there. The owner could not evict sunbathers or do anything, such as constructing a building on the site, that would interfere with the public's sunbathing. The public's rights, though, are confined to sunbathing--the area could not, for example, be converted to a public parking lot. Thus, to a large degree, the use of the property is effectively frozen.

F. The Great Lakes: Problems with Non-Tidal Coastal Beaches

While the Great Lakes are technically "inland lakes" rather than oceans, their shorelands share many of the attributes and problems of oceanic coast. Some of the areas have a number of the physical characteristics of ocean beaches; many areas are also increasingly being faced with the same public versus private use conflicts that led to the litigation discussed earlier in the chapter.

Over the years, State and Federal courts have developed a strong position that the States must manage the Great Lakes in a fashion to benefit all residents of the State; that the Great Lakes are public resource that cannot be appropriated for private gain or use. In fact,[21] the U.S. Supreme Court's landmark decision on the public trust doctrine,[22] Illinois Central R.R. v. Illinois, set aside an attempt of the Illinois legislature to deed away part of the lake bed of Lake Michigan. However, as is the case in many oceanic States, this doctrine has generally been interpreted only to protect public rights lakeward of the water line. The "ordinary high water mark" is usually used to set the division between public and private ownership in the Great Lakes. In Wisconsin, this line is set by observation of physical factors; the other Great Lakes States generally use an elevation for definition of the line.

Apart from the question of whether there are sufficient public parks, boat launching facilities, and the like, one of the most pressing legal questions relative to public use of Great Lakes beaches is this--when water levels recede,[23] does the public have the right to use that strip of exposed land between the ordinary high water mark and the actual water line?

Several older cases have held that this strip of land cannot be freely used by the public, that the riparian owner has an exclusive right to use these areas. One of the most influential of these decisions was the 1923 Wisconsin Supreme Court decision of Doemel v. Jantz.[24] While noting a

public right to use any area actually covered by the waters of a navigable lake, the court accepted the shorefront owner's argument that there was a greater public need to protect the rights of thousands of lakeside farmers than to expand the rights of a few hunters and fishermen to walk along lake fronts. Although this case involved an inland lake, it has generally been assumed that the Great Lakes shoreland would be treated the same way. In the 1930's the Michigan court explicitly applied this concept to the Great Lakes.

However, these cases were decided in different times and under circumstances significantly different from those existing today. Several cases involved inland lakes. It seems that the courts increasingly recognize that the Great Lakes are different from inland lakes and should be so treated. Also, the beaches of the Great Lakes are becoming subject to the same recreational pressures that led to a reevaluation of the laws of public use of beaches in California, Oregon, New Jersey, and other oceanic States. Modern cases in Great Lakes States may follow that trend.

FOOTNOTES

[1] For a more detailed history of the early development of the public trust doctrine, see D. Owens and D. Brower, Public Use of Coastal Beaches, 15-26, and the references cited therein.

[2] See Martin v. Waddell, 41 U.S. (1y Pet.) 367 (1842); Illinois Central Railroad v. Illinois, 146 U.S. 387 (1892); and Shively v. Bowlby, 152 U.S. 1 (1894).

[3] Illinois Central Railroad v. Illinois, 146 U.S. 387 (1892)

[4] See D. Owens and D. Brower, supra note 1 at 15.

[5] The North Carolina situation has been described in Schoenbaum, Public Rights and Coastal Zone Management, 51 N.C.L. Rev. 1, 7-16 (1972).

[6] Borough of Neptune City v. Borough of Avon-by-the-Sea, 61 N.J. 296, 294 A.2d 47 (1972).

[7] See, e.g., Tucci v. Salzhauer, 69 Misc. 2d 266, 329 N.Y.S. 2d 825 (Sup. Ct. 1972), modified, 336 N.Y.S. 2d 721, affirmed, 352 N.Y.S. 2d 198 (1973).

[8] See, e.g., City of Madison v. Tolzmann, 7 Wis. 2d 570, 97 N.W. 2d 513 (1959).

[9] Marks v. Whitney, 98 Cal. Rptr. 790, 491 P. 2d 374 (1971).

[10] The importance of this case is reflected in the great number of articles written about it. For a collection of citations to the articles on the case in legal periodicals, see D. Owens and D. Brower, Public Use of Coastal Beaches, 101-102 (1976).

[11] Such as with dedications for highways or subdivision exactments requiring dedications for park, open space, or school site lands.

[12] Gion v. City of Santa Cruz, Dietz v. King, 2 D.3d 29, 84 Cal. Rptr. 162, 465 P. 2d 50 (1970).

[13] The private owner may retain ownership of the beach on record and can sell his interest in the property since he retains ownership of the underlying fee interest. However, the public's use rights remain in effect. In other words, the public has an easement on the property.

[14] Gewirtz v. City of Long Beach, 29 Misc. 2d 763, 330 N.Y.S. 2d 495 (Sup. Ct. 1972), aff'd memo., 358 N.Y.S. 2d 957 (App. Div. 1974).

[15] State ex rel. Thornton v. Hay, 254 Ore. 584, 462 P. 2d 671 (1969).

[16] For a detailed discussion of these requirements, see Note, "The English Doctrine of Custom in Oregon Property Law: State ex rel. Thornton v. Hay," 4 Enviro Law 383, 395-410 (1974). Also generally see Owens and Brower, Public Use of Coastal Beaches, at 140-56 (1976).

[18] While the Oregon court is the only modern State court to apply the doctrine of customary rights in a beach context, the concept is receiving increasing serious legal consideration. See, for example, Justice Ervin's dissent in the Florida beach case, City of Daytona Beach v. Toma-Rama, 294 So.2d 73 (1974).

[18] 294 So.2d 73 (1974).

[19] 271 So. 2d 765 (1972).

[20] The length of this period varies from State-to-State. In Florida it was twenty years.

[21] Discussed in Section B of this chapter.

[22] 146 U.S. 387 (1892).

[23] In addition to seasonal fluctuations (and some daily variation), the Great Lakes are subject to long term variations in water levels on the order of, for example, about a six foot variation in lakes Michigan-Huron.

[24] 180 Wis. 225, 193 N.W. 393 (1923). This case involved an inland lake though not one of the Great Lakes. The New York court also reached a similar result in a similar case in the same year. Stewart v. Turney, 237 N.Y. 117, 142 N.E. 437 (1923). Interestingly, Justice Cardozo dissented in this 4-3 decision.

[25] Hilt v. Weber, 252 Mich. 198, 233 N.W. 159 (1930); Meridian Township v. Palmer, 279 Mich. 586, 273 N.W. 277 (1937). The rationale was accepted by implication in a more recent case involving an inland lake, McCardel v. Smolen, 399 Mich. 849, 250 N.W. ed 496 (1977). That case, however, found an express dedication to public use.

V. Shorefront Access: Federal Direction

Overview

According to Section 305(b)(7), each coastal State must address the question of shorefront access involving an initial assessment of access needs and a determination of policies to meet those needs. Funding is made available to the States in Section 305 and, in some cases, Section 306. Funding to develop and implement these programs is authorized under Section 306 and Section 315(2).

OCZM's role in implementing the Act is divided into three related but separable parts. These include:

1. Funding and guiding the States' responses to the Section 305(b)(7) requirement;

2. Funding the acquisition of accessways authorized by Section 315(2); and

3. Coordinating OCZM shorefront access with other Federal programs.

The first part involves OCZM support of access planning and program development activities. OCZM's emphasis here is with each States's determination of its access needs and policies. OCZM can aid the States in making these determinations through both monetary and substantive assistance.

The second part of OCZM's role involves use of acquisition funds under Section 315(2). Acquisition funding supplied by OCZM may constitute one method of implementing State shorefront access policies. Because Section 315(2) limits funding to land acquisition, other funding sources will be necessary to fund other portions of the State policies. It is anticipated that Section 315(2) funding will be used to supplement and leverage funds which are available from other sources, but which the States may use to implement their programs. Examples of departments from which States may elicit funding are BOR, EDA and HUD.

The third part of OCZM's role involves implementing the consistency requirements of Section 307 which require that other Federal programs be consistent with approved State coastal zone management programs. If the State shorefront access plans and policies are included in these programs (as 305(b)(7) requires), Section 307 provides a mechanism for implementing these plans and policies. For example, if BOR money is to be spent in the coastal zone of a State with an approved management program, that expenditure must be consistent with the program. It should be obvious, however, that if the consistency requirement is going to work at all, there must be a program which is sufficiently explicit that other programs can be consistent with it. A program that is explicit enough to direct State expenditures of State funds would probably meet this test. This third facet accordingly places a burden on OCZM to ensure that the State management

programs contain substantive shorefront access elements. In addition to implementing Section 307, OCZM's role might include securing the cooperation of other Federal Agencies (e.g., by letters of agreement) to facilitate the implementation of the State shorefront access plans and policies.

OCZM Interaction with State Shorefront Access Plans and Policies

At the initial stage in its interactions with a State, OCZM's role involves providing substantive guidance and funding to the State's planning and policy formulation efforts. OCZM may wish to establish formal control over some aspects and provide only advisory services for others. Methods of OCZM input include:

1. Regulations and guidelines for §305(b)(7)
2. Regulations and guidelines for §315(2)
3. Funding restrictions for §305 and §306
4. Technical Assistance and Workshops
5. Clearinghouse Functions

Regulations currently exist to implement §305(b)(7). However, these regulations are nonspecific, and require only that a planning process be established. As such, they do not require any planning, or a plan to be generated. Consequently, the existing regulations do not amplify in any real sense the language of the Act.

OCZM could and probably should provide guidance for the States by revising the §305(b)(7) regulations to include substantive requirements, e.g., that specified elements be contained in the State management programs. The decision whether or not to amend the regulations entails political ramifications, including the fact that several States have already done substantial work on the access portion of their programs. However, two of these, the Virgin Islands and Massachusetts, have indicated a willingness to change their programs given substantial OCZM input. Moreover, a number of States responding to the OCZM issue paper have stated that they are waiting for OCZM guidance before committing much time to shorefront access. Inasmuch as the existing regulations provide little guidance, new regulations might be welcomed by most of the States.

If the §305(b)(7) regulations are not or cannot be amended, the substance of the States' access submissions for §305 approval could nevertheless be substantially shaped by OCZM guidelines or other advisory means which list the different program components OCZM would like the State submissions to contain. The substance of the guidelines would be roughly the same as amended regulations. Guidelines could be either formal (Federal Register publication) or informal (approval criteria for 305 elements). In either case, the purpose of developing guidelines is to assist the States and to promote the development of meaningful access submissions.

The primary purpose of writing §315(2) regulations is to set forth the procedure for implementing the OCZM acquisition program should funding become available. However, a secondary purpose could be the shaping of State shorefront plans and policies developed within the context of §305 and §306. States contemplating acquisitions will undoubtedly want to use §315(2) funds. If the 315(2) regulations emphasize specified selection criteria and program foci, the States in all probability would adopt these orientations in their program.

OCZM assistance in the form of workshops and information dissemination appears to be an important vehicle for the development of sound State programs. Past experience indicates that in many States (e.g., Hawaii), a number of States and local agencies are currently working on access-related projects independent of each other, and without knowledge of each others' existence. One function of the workshops would be to bring these agencies together to discuss the access needs and implementation capabilities of each State, and thus to coordinate access activities within each State around the program development efforts of OCZM.

Workshops are an effective means of providing the States with programmatic guidance and assistance. Technical assistance in terms of methods of funding, land use techniques, the leveraging of other programs, and similar programmatic components could be provided by OCZM and by representatives of other agencies.

OCZM could operate as a clearinghouse to disseminate access related information to the States. This function would require a person at OCZM to be aware of both the literature and the State programs in order to operate as a conduit of information. At present, there is no individual at OCZM in a position to assume this function.

Given the structure of the 305/306 program, OCZM interaction with the States will be conducted through the Regional Managers. This interaction will probably provide uneven assistance unless there is programmatic guidance for the access program. Accordingly, attention should be paid to personnel, e.g., either by altering job descriptions, or by adding new staff to carry out the OCZM program direction function.

Program Elements

There are three generic types of access to beach and coastal resources: (1) physical ingress and egress; (2) visual access, for viewing the aesthetic qualities of the coastal zone; and (3) transportation networks that enable the public to get to the beach and coastal resources. While the dominant emphasis in the State programs is likely to be physical ingress and egress, the other types of access are important to a number of States. Any rational access plan must consider all of the above mentioned types of access.

The State shorefront access elements should and undoubtedly will reflect State needs and policies. Although the focus is on State determinations, OCZM should insist that specific elements are included to

ensure that national goals are not disregarded. Specific programmatic elements are discussed in detail in Chapter VI, State Direction. They include:

- an inventory of beach and coastal recreation resources;
- an inventory of access to these resources;
- an assessment of access needs;
- development of an access policy;
- development of a program to implement this policy;
- if needed, litigation to establish the scope of existing public rights and the availability of acquisition techniques;
- coordination with other State agencies, e.g., the designated BOR-State liaison office;
- site-specific acquisition planning;
- determination of how the State proposes to use §315(2) acquisition money if it becomes available;
- parking and related problems, including transportation linkages.

OCZM-Funded Implementation of State Shorefront Access Plans: §315(2)

State efforts under §305(b)(7) will undoubtedly include a variety of approaches for increasing access. Especially where a State has multiple objectives, a number of different funding sources can and should be drawn upon to carry out access projects. For example, transportation-related projects can be funded by DOT and related State agencies. Projects concerning urban redevelopment can be funded by HUD and perhaps DOT with its new urban recreation concept. Accessway management activities and litigation can be funded by OCZM under §306. Once their programs have been approved, States should be encouraged to explore these and other sources for the implementation of the various aspects of their programs. (See Appendix Two for examples of relevant Federal programs.)

An issue paper (see Appendix I) outlining alternative methods of using §315(2) funds was prepared by OCZM and sent to the States in late July, 1977, for comment.

The two principal issues raised in the paper deal were the allocation of Section 315(2) money and the criteria to be used by OCZM in choosing among projects submitted by the States for funding. These two issues are of major import in determining how money will be used when it is appropriated.

The States responding to the paper were almost equally divided between those desiring to give OCZM complete flexibility in determining how to allocate §315(2) funds, and those wishing to remove OCZM input entirely by the use of precise formula. Many responses expressed concern that there be geographic equity. Those States most concerned with geographic equity seemed to opt for a precise formula method of allocation. These States appeared to feel that such a method would assure them of getting something. The remaining States preferred to give OCZM varying degrees of funding flexibility but each of these also were concerned with regional (though not necessarily State by State) balance. In short, there was nothing resembling a consensus among the responding States concerning the method of fund allocation, but all were interested in having some measure of geographic equity.

Similarly, the States seemed to favor flexibility in project selection criteria, so that OCZM could fund what the States wished to propose. None of the responses adequately addressed the selection problems OCZM will face in judging among projects when each of them fulfills the access needs and policies identified in an approved Coastal Zone Management Program. OCZM's selection dilemma involves choosing among projects which all will probably meet the stated requirements for selection.

In short, the State responses to the issue paper were favorable in that each State expressed a desire for a §315(2) grant, but their responses provide no clear guidance to OCZM about how to disburse these grants.

Despite this lack of guidance generally, there seems to be substantial agreement concerning some issues involved in §315(2) fund dispersal, though the mechanics of certain program elements still need to be worked out. These elements include the following:

1. Projects funded under §315(2) must be consistent with any approved Coastal Zone Management Program which addresses §305(b)(7).

2. Fund dispersal should be accomplished by some mechanism other than first-come, first-served. In other words, OCZM should select those projects most worth funding according to some standard which includes a national perspective. These standards should be addressed in the Rules and Regulations for the program.

3. All responding States would like to use a variety of nonland acquisition monies for the State match for §315(2). These monies would include operation and management funds, capital expenditures, funds from other Federal agencies, etc. A determination of exactly what can and cannot be used for the State match should be made by the legal staff. The BOR Land and Water Conservation Fund manual may be instructive, but the statutory basis for the BOR and OCZM programs are different and BOR's conclusions, accordingly, may not apply to the Section 315(2) program.

4. Local governments will be involved in the operation and management of the OCZM funded accessways and may be the governmental units actually providing the State match. OCZM therefore, needs to adopt procedures for local governmental involvement in Section 315(2) acquisitions. If the State is the grantee and is to remain responsible for operation and management, this should be made clear in regulations and spelled out in the grants to the State. If pass-through grants to local governments are allowed, reverter clauses should be included in §315(2) grants to prevent the use of acquired accessways for non-access purposes. Where Federal funds are used to assist with the acquistion of local accessways, OCZM ought to take steps to insure that they are open to all users, not just local residents.

c. There are two other major issues which must be resolved in the context of §315(2) dispersals. These issues are (1) whether both wet sand and dry sand can or should be purchased, and (2) project selection criteria.

1. A major focus of Section 315(2) is water-related recreation. The access provisions are designed to facilitate public recreation in the coastal zone which, in many cases, is the beach. However, it should be noted that there is no beach on many parts of the Great Lakes; similarly, Louisiana's comments to the issue paper point out that much Louisiana property which is contiguous to water is not beach, so that access needs for such areas frequently involve boat ramps and walkways through swamps and marshes. Moreover, much of the beach--both dry sand and wet sand--is privately owned in States such as Massachusetts in which the public trust extends seaward from the low tide line. In these and similar situations, access to water-related recreation involves access to the water, which is considered a component under "other public coastal areas of . . ." in the CZM Act.

   Given the language and the legislative history of the Act, one may conclude that the purpose of the access provision is to facilitate water-related recreation by providing access to publically owned recreation resource. As mentioned above, in some States this will be the water. Access is authorized to whatever this resource happens to be in the State in question. Accordingly, acquisition of dry sand only is authorized in some States and acquisition of both dry and wet sand is authorized in others. Both the length and the width of the sand to be acquired is governed by the public recreation purpose. It would seem that the Act authorizes as much as is needed to give the public access to, and hence use of, water-related recreation sites.

   This approach is the one favored by several responding States, with Wisconsin, North Carolina, Louisiana, and Massachusetts specifically drawing OCZM's attention to this problem. Conversely, this approach has at least informally been eschewed by OCZM in the past. Inasmuch as both viewpoints are predicated on legislative history, it seems most advisable for OCZM simply

to decide on a policy and justify it as much as possible. It is recommended that OCZM adopt the scope favored by the States and outlined above.

2. The problem in developing selection criteria is that all proposed projects must be consistent with the access policies contained in management programs approved by OCZM. This means that all proposals will be for projects OCZM can consider both needed and important. Choosing among such projects must accordingly involve factors other than the simple determination that the project is worthwhile and is consistent with the management program. OCZM should consider the other possible selection criteria. They are:

   a. The extent to which OCZM investment in the project will leverage other money from other programs.

   b. The proximity, character, and level of use of other accessways. A relatively unused accessway a mile from a proposed access project might weigh against funding the proposed accessway. Conversely, the opening of new beach area in an area currently used over capacity would be especially worthwhile.

   c. The aesthetic and/or uncommonly scenic qualities of the shorefront area.

   d. The demographics of the geographical area which the accessway will serve. A neighborhood accessway would serve a small number of people; a State park in the same location would serve a much larger number and geographical spread of people. Depending upon the circumstances involved, there may be substantial reasons for funding or not funding accessways of similar size and projected usership in any particular location.

   e. Environmental impact.

   f. Transportation parameters, including road capacity, parking capacity, and accessibility by public transportation.

   g. Unique recreational characteristics.

   h. The availability of other funding sources.

   i. Proximity to urban populations.

All proposals from a given State should come to OCZM through a designated State agency.

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VI. Shorefront Access: State Direction

Suggested elements of an approach to State shorefront access are set forth below. The key element is direction--each State needs to decide what it wants to do regarding access, and how it wants to do it. Once these major decisions have been made, the details can be filled in to provide one unified structure.

The following elements are suggested as components:

1. Policy Determination
2. Needs Assessment and Documentation: Inventory
3. Plans Formulation
4. Public Hearings
5. OCZM Program Approval
6. Access Project Generation

1. Policy Determination

The most important process in a State's approach to shorefront access is the development of a policy focus. This should consist of at least two components:

a. A Statewide policy regarding access. Such a policy should address particular access needs in the State and indicate program directions for meeting these needs.

b. A determination of sources of funds and authority that can be used to meet some of the program's needs and pursue its directions.

The State's policy determination should indicate how a program of Federally funded access acquisitions will fit into an overall State access program. The statewide policy must accordingly be broader than an assessment of how only Federal funds will be utilized.

A number of States have already addressed access concerns in their §305 and §306 submissions to OCZM. While most State access policies are still in developing stages, these can be used to illustrate the kinds of policy determinations that need to be made.

Virgin Islands. Chapter Six of the Virgin Islands Coastal Management Program sets forth basic policy considerations for access.

The emphasis is on reversing the trend of hotel and condominium construction closing off public access to the beach. Three strategies are

oulined: judicial determination of public rights, use of police power, and purchase. The management program states that purchase of easements is to be favored over purchase in fee.

The Virgin Islands' program indicates that further work on access will be done under §306. However, even in the program's current state, it addresses most of the major elements outlined above. Several means of acquiring access are emphasized, funding sources are identified, and a policy regarding the method of acquistion is put forth.

Massachusetts. The July 1977 draft of the Massachusetts's 305(b)(7) submission includes an extensive discussion of the difficulties of increasing access in a highly urbanized and developed shorefront context. A key element of the State's access policy involves increasing the accessibility of public shorefront sites by improving the transportation system.

The following statements taken from the July draft indicate, in reference to the State program, that "CZM believes that solving transportation access problems is the first step to improving coastal recreation opportunities" (2-F/12). And, "acquisitions must also be sensitive to the scale of potential recreation appropriate on the site, as well as the scale of the surrounding community. For this reason, Coastal Zone Management finds that, generally, acquisition of small dispersed sites is preferable to acquisition of very large sites" (2-F/2). Also, "our plan is to improve transportation and access; to acquire new sites in recreation poort areas; to expand suitable existing sites through small acquisitions or encouraging multiple uses; and to improve maintenance" (2-F/3).

While the July draft fails to identify in precise terms how the State program will be developed and implemented, it does identify a focus. Details concerning program elements can be generated within the context of this focus.

South Carolina. The publication, Beach Access and Recreation in South Carolina, funded by BOR, identifies a third type of Statewide focus. This report advocates a two-faceted policy toward access acquisition, involving both large beachfront parks and neighborhood accessways. The parks focus is a part of the long-range State program for public recreation along the coast. The neighborhood accessways focus involves governmental acquisition of access easements, induced by tax benefits where possible. Again, the development of such foci is the first part of a State shorefront access policy.

To reiterate the primary reason why States should have policy determinations is for them to decide early what efforts they should take to increase access. Once an access policy has been established, a program will have a specific focus and the State can concentrate on the realization of specific goals.

2. Needs Assessment and Documentation: Inventory

At the same time they formulate policy determinations, States should assess access needs. An initial overview of needs can probably be developed

using current recreational data (e.g., SCORPs) and other data regarding existing access. This overview should be followed by a detailed statewide assessment of access supply and needs. Most elements of the needs assessment and documentation can be developed by completion of the inventory described below.

The inventory is an information gathering tool which can indicate where access currently exists and what options might be available to increase access. By conducting the inventory, a State will increase its awareness of potential access sites--for example, where private easements can be turned into public; where existing rights-of-way can be preserved and expanded; where local subdivision ordinances can be used to require dedication of accessways; where development is impending; and so forth. Once these data have been compiled, the State can accurately assess the current availability of beach and coastal recreation resources, and will have the information needed to plan for access.

The inventory consists of a number of inter-related components, outlined in detail below. These components are:

a. Identification of publicly owned resources and accessways

b. Selection of potential access areas

c. Physical and environmental field inventories

The inventory should be designed to provide the required physical, environmental, and ownership data needed for State access planning under 305(b)(7) and 315(2). Using this information, the States should be able to determine the locations and characteristics of existing and needed access.

A. Identification of Publicly Owned Coastal Resources

The identification of publicly owned resources involves two discrete elements: an inventory of public beaches and other resources, and an inventory of access to these resources. Both elements are needed in order to determine where more access should be provided.

(1) Public Beaches

The focus of the Act is placed on publicly owned beaches. "Public beaches," within the meaning of the Act, currently exist where States own beach property up to the mean high tide line or vegetation line. In those States owning beach only to the mean low tide line, and in the Great Lakes States, the publicly owned resource is more difficult to identify. These States do own the submerged sea floor and, in practice, the water. Given the broad purpose of the Act to increase public use of the land/water interface, one may conclude that in these States the recreation resource is the water. The Act focuses on obtaining access to this interface recreation resource, whether it be land (e.g., beach), water, or both.

In all States, State and local governments may own beaches, shorefront land, rights-of-way to the beach or water, and access rights. These

proprietary rights are a central concern of the inventory. In all States, identification of public land should include a parcel-by-parcel inventory of all shorefront property in which the public holds proprietary rights. In States which own at least the foreshore (i.e., "high tide" States), the inventory of publicly held land should identify the beach by segment, indicating where public ownership of the dry sand and uplands exists. It would be advantageous for the States to inventory all publicly owned coastal properties, not just those contiguous to the water, to determine the possiblility of trading properties or banking land. By identifying the parcels of land in which the public holds proprietary rights, the State can ensure that existing public land is not lost by adverse possession or other procedures or so encumbered by adjacent development as to destroy the existing recreational potential.

The Act also authorizes the acquisition of access to non-beach resources including "public coastal areas of environmental, recreational, historical, aesthetic, ecological, or cultural value." Most such areas have been identified and classified by ownership, use, and similar factors by State or local agencies (e.g., parks, natural resources departments, or county planning agencies). An inventory of these areas can probably be accomplished by culling the appropriate information from existing sources. Access data can most probably be generated for these resources by using these same sources.

(2) Public Access to Public Beaches

In addition to outright ownership of beach and other coastal property, the States, various local governmental agencies, and the Federal government (e.g., Department of Defense) may already own considerable access to beach and other coastal resources. Examples may include rights-of-way, dedicated accessways, and public access rights established by deed provisions or prescription. Effective access program development requires the States to ascertain where public right of access currently exists. On the statewide inventory level, this information does not necessarily have to be in the form of a list of all public accessways--e.g., it may be sufficient to note that the rights-of-way of all city streets perpendicular to the shore extend down to the water, rather than mapping or describing each in detail. However, it should be noted that many neighborhood accessways and potential accessways (e.g., those which can be established as "public" by means of prescription) will not have been previously identified. At least in areas in which increased access is the goal of the State program, the State should make an effort to inventory all existing accessways to public (and potentially public) beaches and other resources.

(3) Methodology

The initial surveys of public ownership can in most instances be made from existing records, without the need for on-site physical investigation. At a minimum, the statewide inventory should identify publicly held lands and accessways. In addition, to facilitate evaluation of the suitability of particular sites for accessways, the inventory can include ownership

information about adjoining parcels. Tax maps and existing inventories should provide most of the needed information if ownership is uncertain or the possibility of public easements (e.g., by prescription) exists. Delinquent tax records can be used to identify land to which the public has acquired some right. In addition, the States should investigate the possibility that rights-of-way leading to the recreation resource belong in public ownership, even in the absence of improved roads.

Law students might be used to make field investigations and to review tax maps, records, and deed books. Local realtors and long-time community residents might also be of assistance. The product should consist of annotated lists and maps indicating where public proprietary rights currently exist and where they could be established.

B. Selection of Potential Accessways

The first part of the inventory involves cataloging coastal resources by ownership and examining the existing and potential access to those resources in which the public holds proprietary rights. The second part of the inventory involves selecting sites which have the greatest potential for increased public access. Once this process is complete, detailed suitability studies can be conducted. The method of site selection will depend in large part on the directions of the State policy. For example, a State focusing on increasing recreational opportunities to urban residents may choose to concentrate its acquisition activities near urban centers, to the exclusion of nonurban parts of the coast. Other States that want to acquire neighborhood access corridors will not expend time and money doing detailed environmental and physiographic analyses of State park-size parcels.

The Statewide cataloging of the first part of the inventory thus provides a master list of sites where public access might be increased. Depending upon its program priorities, a State may want to eliminate some sites from more detailed examination, at least at the outset. Other sites also initially may be set aside due to the acquisition mechanisms that would have to be used. From the master list, a State should select those sites which are the most likely areas for increasing access. This may be a large number of sites if the State has multiple policy foci--but the purpose of this phase of the inventory is to make implementation manageable. Once these sites have been selected, it is then necessary to conduct detailed studies to determine the suitability and feasibility of increased public access for each site.

(1) Physical and Environmental Field Inventories

Once potential access areas have been selected, on-site assessments should be conducted to determine the relative suitability of each site for increased public utilization. The field inventory consists of two major parts: a physical characteristics/ownership component, and an assessment of environmental impacts.

The following physical factors have been used in the Virgin Islands as elements of an on-site beach inventory. They are illustrative of the types of information that can be acquired by field investigation:

--Beach Material

--Beach Texture

--Beach Length and Width

--Recreational Use: Current and Potential

--Shoreline Vegetation

--Geomorphic Characteristics

--Beach Stability

--Adjacent Land Use

--Ownership of Beach, Access Routes, and Adjacent Land

--Parking Availability and Road Capacity

--Development Intensity, Imminence, and Type

--Public Facilities

--Boat Ramp Potential

--Waves and Currents

--Anchorage Potential

--Scenic Qualities (from shoreline, shore overlook, and water perspectives)

Evaluation of these physical factors can indicate both the suitability of the resource for public recreation, and the difficulties that may be encountered in access acquisition efforts.

The environmental component of the field inventory is designed to show the effects of increased use of the shorefront resources resulting from increasing public access. Most of this component will involve empirical inventory techniques, though some elements would be more useful if analytical methods were used. The Virgin Islands and South Carolina reports use a low-to-high scale in evaluating the environmental impacts of intensive public use of factors such as:

--Water Quality

--Air Quality

--Fish and Shellfish Habitats

--Wildlife Habitats

--Wetlands

--Ecosystem Continuity

--Vegetation Integrity and Diversity

In addition, environmental assessments can evaluate the sensitivity of the recreation resource to change, the ecological uniqueness of the site, and educational/preservation values inherent in the site.

The level of detail of the physical and environmental components of the inventory will vary form State to State. Ideally, the inventory should discuss the environmental and recreational parameters involved in using each site, and make suggestions as to future use. However, considerably less detail may be sufficient to differentiate among potential access sites and provide information required for Environmental Impact Assessment. In some States substantial information may already exist in agency files, contracted studies, SCORPs, aerial/satellite inventories, and similar sources. Such sources and Federal programs, such as the developing National Heritage Trust Classification System, may also suggest inventory elements and evaluation criteria. These sources may provide substantive data that can confirm the findings of the physical and environmental components of the inventory. However, there is no substitute for an on-site inventory, and these other sources should supplement, not replace, the inventory procedures described above.

(2) Use of the Inventory in the State Access Planning Process

Given the ownership information and physical/environmental data acquired in the first two stages of the inventory process, it should be possible to formulate discrete project descriptions for each area inventoried. Such descriptions would map potential accessways, include estimates of cost and method of acquisition, and discuss such variables as parking availability and road capacity.

Each potential access project can be evaluated using the data acquired. Examples of criteria that can be used in evaluating projects are:

--Accessibility

--Beach/Resource Quality

--Potential for Multiple Activities

--Environmental Damage Potential

--Existing Access

--Cost (relative to the amount of recreational benefit realized)

--Imminence of irreversible commitment to non-public uses if the site is not acquired

These or other criteria would be selected according to the State's policy focus.

Using the evaluation criteria, projects should be grouped according to priority, as done by the California Coastal Zone Conservation Commission in their Recommended Coastal Properties for Public Acquisition (1976). Each priority group can list a number of projects which will vary by cost, feasibility of acquisition, and location. The end product of such a grouping will be a listing of projects arranged according to their ability to meet State access needs. Selection of projects can then be made from this listing.

3. Plan Formulation

The State access program should seek to effectuate the acquisition policies developed in Step 1 of the plan. The exact nature of the program will vary from State to State. Some States may wish to plan only discrete projects. Others may wish to develop a continuing program of inventorying, access protection and acquisition, and litigation. Regardless of the output, the program formulation phase of the access plan should include the following elements:

A. Implementation, Operations, and Management Determinations. The State should determine what levels of government and which agencies will be responsible for the operation and management of the accessways acquired as part of the program. In addition, the plan should examine complimentary programs administered by other State agencies (e.g., the BOR State Liaison Office) and outline means of coordinating access activities throughout the State. Even if the State CZM office can mandate some degree of coordination by negative comments under the 307 consistency regulations, this type of input should be considered secondary to active cooperation among State (and local) agencies.

B. On-going Inventory and Planning. The State should decide what types of continuing investigative and planning efforts will be made regarding access acquistion and recreational needs.

C. Site Identification Process. The access plan should indicate the procedure the State will use to identify new access sites and develop project proposals. The mechanics of site identification--e.g., using local planning staffs or interns to review county deed records--should be as specific as possible.

D. Tools Analysis. The access plan should address the various mechanisms available for access acquisition, and should discuss the legal and political feasibility of using each tool in the State's acquisition program. This type of analysis is illustrated

in the Public Access to Ocean Beaches report prepared by Brower et. al. for North Carolina's Sea Grant program.

E. Public Ownership Litigation. Extent of public beach ownership (e.g., to mean low tide or mean high tide lines) can be identified in most if not all coastal States and will be an initial inquiry of the Inventory. However, in many States, conclusions as to public ownership are based on old case law or statutes which have not recently been tested in litigation. Litigation of the ownership question might result in new interpretations which would increase the public's proprietary rights. This occurred in 1976 in Georgia, where the landward limit of public ownership was changed from the mean low tide to the mean high tide line.

Similarly, legal doctrines that can be used to establish public rights of access often have not been tested in the courts. As the Gion-Dietz decisions in California demonstrate, new judicial interpretations of property law concepts can have a substantial effect on the public's access rights to the beach, and on rights to use upland areas for recreational purposes (See Chapter IV).

Litigation on these issues could potentially increase the public's rights in some States, and would in any event establish conclusively what these rights are. However, litigation is expensive. Accordingly, one use of Section 306 program money could involve underwriting the cost of litigation issues relating to beach ownership and access.

F. Site-Specific Acquisition Planning. Many States should rank potential access projects and decide that certain projects should be funded and need detailed planning. Site-specific planning could involve coordination with transportation plans or local government land use plans. In addition, facility designs for boardwalks, restrooms, and parking facilities to be used (with slight variations) in all acquisition projects might be developed in the access planning process.

G. Multi-Year Approach. The access plan is the programmatic device through which the State should seek to accomplish its access goals. Accordingly, it should look past short-range funding of individual projects and attempt to coordinate both Federal and State acquisition efforts. The plan approach should emphasize long term increases in access and resource use, coordinated under the State's access policy, rather than merely the immediate acquisition of a few properties.

The product will be a process through which access may be increased and will also be a detailed evaluation of specific projects to be used in this process.

4. Public Hearings

The product of the foregoing will be a definition of what the State intends to do, where it intends to do it, and how it proposes to do it. Most, if not all, of these definitions will be made with no input from the public at large, including those individuals in coastal areas who may be affected by the State's access acquisition efforts. Accordingly, it is advisable at this stage to hold at least one public hearing in the State's coastal area to ascertain public reaction to the access plan. These public hearings would presumably be conducted in accordance with existing NOAA/OCZM hearing requirements, with provision made for consideration of written comments and revision of the access plan based upon both oral and written comments.

5. Program Approval

Once the access plan has been prepared and public hearings have been held, the State Program must be approved under §305(b)(7). Such approval is essential to trigger the operation of the consistency requirements of §307. Once the Program is approved, each access project (of all agencies, not just the State CZM agency) should show how that project will fit into the State's access objectives, and how it is consistent with the elements of the State program.

6. Project Generation

Once the State Program has been prepared and approved by OCZM, the State's efforts will focus on individual access projects. Again, each project should be consistent with the approved State Program, with sufficient flexibility allowed to enable the State to take advantage of unexpected acquisition opportunities.

VII. Legal Tools for Preserving, Perfecting, and Acquiring Beach Access

I. Overview of Legal Constraints

The prevalent pattern of beach ownership involves public ownership of the wet-sand or foreshore and private ownership of the dry-sand and uplands. The access problem can be defined by reference to this ownership pattern, using the example of a public highway running parallel to the ocean. The road itself is publicly owned. Accordingly, the public has the right to use the road, though such use does not necessarily include the right to park along it. The land on the ocean side of the road, the upland area, is privately owned, and may or may not be developed. The land to the ocean side of the uplands is the dry-sand, again in private ownership and usually belonging to the owners of the adjoining upland. Seaward of both the upland and the dry-sand is the wet-sand or foreshore, which the public owns and has the right to use. Thus the public has the right to use the road and the wet-sand. However, the public has no right, either of ownership or use, in the lands in between--the upland and the dry-sand. The access problem by and large concerns the way in which the public obtains the right to proceed from the road down to the foreshore.

Access accordingly involves the availability to the public of beach and ocean recreational resources. This definition of the access problem leads to three important points. The first is that the public currently does have the right of access to many beaches and other ocean areas. Examples of such areas include municipal beaches, State parks, and National Seashores, as well as beaches already served by accessways. It should be remembered that the access with which we are concerned involves the public's <u>right</u> of access to the beach. This should be distinguished from permissive public use of private property as an accessway. For instance, a beachfront property owner who sets up a pavilion and encourages members of the public to park, use his facilities, and walk over his property to get to the beach does not give the public a right to use his property, and may withdraw his permission at any time. There are, nevertheless, a substantial number of beach and ocean recreational areas to which the public currently does have the right of access. The problems are that there are not enough accessways and those that do exist are not always located where they are easily accessible to the public.

The second point is that, while more beach access is needed, this does not necessarily mean that all of the upland should be declared open for public access to the rest of the beach. Littoral owners have proprietary rights that must be protected. Increased public access can and should be coordinated with the use of private land, and public utilization of the beach need not interfere with littoral owners' enjoyment of their land. Local governments should be selective in choosing accessways for acquisition that are compatible with both public and private use. Moreover, once public accessways have been acquired, public management and maintenance of beaches and accessways is essential to continued use and enjoyment of the beach by both littoral owners and the public. With regard to the protection of

private rights and uses, a beach access program accordingly involves maintenance and management as well as the initial acquisition effort.

The third point is that there may currently exist a large number of potential accessways in which the public currently has or can easily acquire proprietary rights. Examples of such areas include rights-of-way which lead down to the foreshore and which have been offered to the public but have not yet been accepted by the appropriate local government body. A check of the titles of beachfront property may reveal other instances in which the public can perfect title to accessways. Similarly, there may exist areas which are currently dedicated to the public but which are neither used nor maintained by the governmental body to which the land was dedicated, and hence are subject to having dedication withdrawn. The public rights in this type of property can be preserved through adequate maintenance and management of the accessway and the beach resource to which the accessway leads. In many communities, access problems can be substantially alleviated by perfection and preservation measures which involve discovering who currently has rights of access and use, and then acting accordingly. These generally will be less costly than outright acquisition measures, easier to implement, and quicker to bring about.

The basic problem remains: more access is needed in appropriate locations to increase the amount of beach available to the public. Means of obtaining access can be classified within three general approaches: (1) legislation, (2) perfection and protection of existing access, and (3) acquisition of new accessways. Legislation, as exemplified by the Texas Open Beaches Act, can simplify the task of access acquisition, but should not be considered essential to any beach access program--adequate legislative authority already exists in most jurisdictions to facilitate the use of at least some acquisition strategies. Perfection and preservation measures, as discussed above, should provide the groundwork for any beach access program. This simply means that any program should begin with full knowledge of the existing situation and a solid legal base. To increase the amount of beach access available to the public, acquisition strategies generally will be required. Many of the tools for acquiring access involve the application of general property law concepts to a beach access context. These tools can and should be used in concert to most effectively acquire increased public access. It is anticipated that use of acquisition tools will form the core of most access programs. The selection of tools will depend upon a variety of factors, including local circumstances and access needs, existing legal authority, and available resources.

Efforts to acquire public access to beaches may generate litigation, particularly by owners of beachfront properties. As a preliminary matter, therefore, the acquiring entity should anticipate legal challenges which emanate from the Federal and State constitutions. (See Godschalk, Brower, McBennett, and Vestal, Constitutional Issues of Growth Management, ASPO Press, 1977; and Godschalk, Brower, Herr, and Vestal, Responsible Growth Management: Cases and Materials, in press.) Two major challenges should be anticipated.

The first challenge is based on the constitutional doctrine that States retain all power not expressly or implicitly given to the Federal government

by the United States Constitution or preempted by Federal legislation. Under this doctrine the States have created local governments and have given them the power to engage in certain activities. Unless State enabling legislation authorizes local governments to perform a given function (i.e., the acquisition of land and the regulation of its use), they may not do it. To avoid challenges based on lack of authorization, the specific enabling language of these delegated powers should be reviewed before local governments adopt acquisition strategies.

The acquisition tools most likely to raise constitutional challenges are those which, without compensation, require a private owner of beachfront property to provide the public with access across his land to the beach. (Banta and Callies, The Taking Issue.) The Fifth Amendment provides that private property is not to be taken for a public use without just compensation. The Fourteenth Amendment due process clause extends this restriction to the States. Thus, since local governments derive their power from the States, this extends to them as well. The landowner burdened by beach access obligations imposed by the local government may object that his property has been taken for a public use for which he should be compensated. The courts in North Carolina require that compensation be paid if the owner's property has been rendered valueless for normal uses (State v.Joyner, 23 N.C. App. 27) or for practical purposes (Roberson's Beverages, Inc. v. New Bern, 6 N.C. App. 632; Helms v. Charlotte, 255 N.C. 647, cited in Strong's North Carolina Index 2d, section 30, Municipal Corporations) by the local action. Local governments must be sure that their actions do not exceed the limits of the police power, or else compensation to the burdened landowners will be required, making acquisition an expensive proposition.

The following sections outline the tools that can be used to increase public access within each of the three approaches outlined above, with greatest emphasis given to acquisition strategies.

II. Legislation

The legislative approach to access acquisition involves the statutory establishment of public rights to beach utilization and access, or evidentiary presumptions which favor public rather than private use.

The legislative approach to the acquisition of beach access is exemplified by the Texas Open Beaches Act [TEX. STAT. ANN. Sec. 5415(d) (Vernon Supp. 1972)] which has been in effect since 1959. The statute is predicated upon the right of the public to free and unrestricted use and enjoyment of the beach.

The Act creates several presumptions and instructs the State Attorney General to enforce them. It creates a presumption that the public enjoys a prescriptive easement to use the area between the mean low tide and the line of oceanfront vegetation, or if there is none, the line two hundred feet landward of the mean low tide. It also creates the presumption that title to littoral land does not entitle its owner to exclude the public from using this part of the beach or the part below. Both of these can be overcome on a sufficient showing of facts by the landowner that no prescriptive right

exists. The Act also creates a presumption that the public has a prescriptive easement for purposes in ingress and egress to beaches owned by the State and to beaches over which the prescriptive easement extends. However, it does not create a right or presumption for the public to cross the uplands landward of the vegetation line to reach to reach the beach (Eckhardt, "The Texas Open Beaches Bill," in Texas Law Institute of Coastal and Marine Resources, The Beaches: Public Rights and Private Use, Conference Proceedings, Jan. 15, 1972). This seemingly results in the anomaly that, in exercising its presumptive rights to use the beach, the public cannot get to the beach when this requires crossing the uplands over other than existing public access routes. Whether this approach works depends on the amount of access currently available to the public. Accordingly, other States considering legislative solutions to the access problem might consider incorporating presumptions for the public's right to use the uplands, as well as the dry-sand, for access purposes.

A Federal Open Beaches Bill [H.B. 1976, 94th Congress, 1st Session, 1974; the Bill is discussed in Black, "Constitutionality of the Eckhardt Open Beaches Bill," 74 Col. L.R. 439 (1974)] has been proposed in the last several years by Congressman Bob Eckhardt of Texas, and will probably be proposed again in the present session of Congress. This bill is a variant of the Texas Open Beaches Bill, but would probably be less effective in securing public access because of its deference to State property law. As currently proposed, this bill would make Federal money available to State governments involved in acquisition of beach access, and would create Federal policies supporting the public's right to use the beaches. However, inasmuch as similar provisions have already been passed as part of the Coastal Zone Management Act, it is questionable whether an Open Beaches Bill would in fact change existing Federal policy. To facilitate increased public access, the bill would authorize the Federal courts to make declaratory judgments concerning the respective rights of the public and littoral owners, meaning that Federal courts would determine title under State law. Whether or not the bill can effectively increase public access is conjectural, especially inasmuch as Federal courts will be constrained by existing State law and will be unable to initiate new approaches to property rights as has been done in some State courts [e.g., State ex rel. Thornton v. Hay, 254 Ore. 584, 462 P.2d 671 (1969); Gion v. City of Santa Cruz, 2 C.3d 29, 465 P.2d 50 (1970)].

III. Perfection and Protection of Existing Title and Access

In many coastal communities, there exist a large number of accessways which the public would have a legal right to use given requisite prior action by city and county governments. Some of these accessways are currently in use by the public for purposes of beach access. Others are not. In either case, the types of accessways under discussion involve those in which the public has title or can acquire title with relatively minimal effort. The emphasis is twofold: (1) to take effort to preserve the public's right to use, where that right currently exists, so that public access cannot in the future be withdrawn; and (2) to perfect public titlte where local governmental action is required to establish the public's right to use land for access purposes. In many situations, both perfection and

preservation techniques will be required--first to establish the public's right to use, and thereafter to maintain that right. In many situations, the same techniques will be required for both perfection and preservation.

In a beach access context, perhaps the two most useful perfection and preservation tools are the erection of signs identifying public accessways and the public maintenance of access areas.

Such actions can serve a variety of purposes. For example, the dedication of subdivision streets is contingent upon acceptance by the appropriate city or county government. Such acceptance is also required for dedicated alleyways, which may be platted or otherwise offered to local government. Although express acceptance is one method to ensure that a legal dedication has in fact occurred, withdrawal of the dedicated streets and alleyways is still possible if the local government fails to use the dedi-cated property in some active manner. Maintenance has been held not only to constitute an acceptance of an offer to dedicate by implication, but also is sufficient to defeat any efforts to withdraw dedicated land. Accordingly, where dedicated roads, rights-of-way, or alleyways can be used to afford public access to the beach, local governmental maintenance of these areas, such as marking these areas with signs and providing waste receptacles and similar litter clean-up services, will both perfect and preserve the public's right to use these areas for beach access purposes.

This makes apparent the need for detailed and accurate title searches as part of an inventory of existing and potential access areas. The emphasis should be on discovering both those areas in which the public has or may easily establish a legal right to use accessways and also those in which a legal right to public use either has not been established or can be abrogated by the acts of others. The specific tools employed to preserve and protect access will of necessity depend upon the particular defects in title. However, most defects can probably be solved by such relatively simple measures as posting signs, doing some minimal amount of maintenance, or the undertaking of similar action evidencing the public's commitment to the land in question as a recreational resource. In some instances, litigation may be required to establish public rights or enjoin private attempts to abridge those rights. All of these activities will of course involve some expenditure on the part of local government. These expenditures should be relatively low where the public either has title or can easily perfect title. In any event, these expenditures should be less than those incurred by application of virtually all of the acquisition tools which follow.

IV. Acquisition of Access

Access to beaches can be acquired in a number of ways, including purchase, donation, establishment via litigation, and application of land use control mechanisms. The various tools and techniques for acquiring access are presented in the following section. Each tool is analyzed in terms of advantages and limitations, innovative applications, and use in combination with other techniques.

Following are a number of characteristics that are inherent in all acquisition activities:

- o Access acquisition is generally expensive. As a result, governments should seek to acquire only the degree of ownership necessary for the type and quality of access desired. In many cases, this will mean acquiring less-than-fee simple ownership.

- o Acquisition of property is often a slow process for governmental agencies; and conversely, property suitable for access may be on the market for only a short period of time. Historically, private sector organizations (e.g., The Nature Conservancy) have assisted governments in making land acquisitions. These organizations can and should be used to help facilitate beach access acquisition.

- o Governmental access acquisition programs will be most effective if they are based upon clearly established objectives. These objectives should specify the types of access having highest priority in the acquisition program. Moreover, the available resources and access tools should be used to carry out these objectives.

A. Acquisition of Fee Simple

1. Purchase

a. Description

Purchase of fee simple title is the most direct means of acquiring access to beachfront recreation areas for the public. All that is involved is the purchase of property by State or local government. Unless combined with other tools, such as eminent domain, the governmental purchaser is limited to property available on the market. In addition, the governmental purchaser must compete with other potential buyers, which may have the effect of inflating market prices. As a result, purchase of fee simple title is likely to be the most expensive acquisition tool.

b. Beach Access Application

Effective use of this tool in a beach access context is dependent upon the location of land purchased. For example, purchase of a narrow strip from a roadway to the foreshore would be much less expensive than purchase of a wide strip of beachfront property. Purchase of such narrow strips would of course be dependent upon the availability of a seller. However, given availability, purchase of narrow accessways, combined with acquisition of nearby land for parking, would probably be a feasible tool in most developed beachfront areas.

Purchase of fee simple title is also applicable to the acquisition of beachfront parks. Land purchased for parks could include entire islands or portions thereof, beachfront property, or both land contiguous to beachfront property and strips of land purchased to afford access from the park to the beach.

c. Experience

The State of Oregon is currently conducting a purchase program to provide public areas for beach recreation. The Oregon program divides the coastline into discrete sections. The goal is to provide a public recreation area within each of these sections. In most instances, the recreation areas consist of a small amount of parking, scattered picnic tables, overlooks from cliffs, and access to coves and similar scenic portions of the beach. The emphasis of the Oregon program is on purchasing as much land as rapidly as possible but limiting improvements upon the land, as opposed to a strategy of purchasing only a few selected parcels of land and intensively developing these for public use.

The State of South Carolina has over the years purchased oceanfront islands or parts of islands for preservation and public recreation purposes. As a result, there currently exists along the coast a series of State parks which provides the public with both access to the beach and support facilities such as picnic areas and improved campsites. The 1976 report, Public Beach Access and Recreation in South Carolina (by Hartzog, Lader, and Richards, funded by B.O.R.), cites the need for even more publicly owned parks along the coast to meet increasing public demand. The South Carolina acquisition approach involves geographically large areas and considerable recreation improvements, in contrast to the Oregon strategy of acquiring numerous small parcels and making only minimal improvements. Such large parcel acquisitions seem particularly appropriate to a coastline like South Carolina's, which consists of numerous small islands.

Several highly developed communities in Florida, such as Boca Raton, have financed beach and uplands acquisitions by means of public bond issues. This has been positively received on the ground that if beach recreation areas are not acquired now they will be the sites of commercial development, leaving the local residents without access to use of the beach.

d. Methods of Application

(1) Neighborhood Scale

On a neighborhood scale, acquisition of fee simple title would most likely be used to provide narrow accessways from public roadways to the beach. Acquisition of land would also be an appropriate tool for providing parking areas contiguous to such accessways. Small beachfront lots might also be purchased to provide for both access and public parking. At the neighborhood level, purchase might be combined with other tools, such as condemnation and prescriptive easement, to provide public pedestrian access between privately owned tracts of land, especially in locations where such accessways are platted.

(2) Municipal Scale

At the municipal level, fee simple purchase is most appropriate for the establishment of municipal beaches. Such beaches would presumably require some degree of intensive development and periodic maintenance by municipal government. Important variables would be public demand and the expected degree of use of the facility, the resulting size requirement for the facility, and the cost of the facility in light of its location.

The establishment of municipal beaches can be used as a planning device to concentrate commercial beachfront development. Especially if beachfront property has not yet been intensively developed, combinations of public acquisition and land use management techniques like zoning can be used to plan beachfront land use, and thus help manage such common beachfront problems as dune protection, sewerage, adequacy of road and parking facilities, etc.

(3) Regional/State Scale

At this scale, purchase of fee simple title is perhaps the most appropriate means for acquiring land to be used as State parks. Examples of land purchased for this purpose would include islands, or portions of islands, or any large acreage in coastal areas which include some beachfront property. Although use of this tool might be expensive, it can be argued that fee simple acquisition is the only tool for acquiring sufficient acreage for State parks.

2. Acquisition in Fee by Gift

a. Outright Donation

Outright donation of land for public purposes has long played an important role in public resource development. As of 1960, for example, over 30 percent of the Federal, State, and county parkland in the State of New York had been acquired through donations. Outright donation is still a highly desirable method of conveying property because of its relative simplicity and because it gives the organization entrusted with the land the freedom, within reasonable limitations, to vary uses of the property to meet needs and conditions in the future. The tax savings realized from a donation of land are great. Aside from the avoidance of any further real estate taxes or estate taxes on the land value, maximum savings are obtained from Federal and State income and capital gains taxes.

The major conservatory organizations--both national and regional--have historically given assistance to governments involved in acquiring land donations. Almost all local governments are permitted to receive charitable donations of land from public-spirited citizens. Possibly the main reason charitable donations of land are not more common across the Nation is that it does not occur to public officials to ask.

When a landowner decides to donate his property to an organization or governmental agency, it is the landowner's prerogative to include restrictions in the deed of transfer. Such restrictions can ensure that the land will be managed and used according to the donor's wishes. However, the government must accept the conditions attached to the grant.

Donors who place restrictive language in the deed should be aware that the restrictions will most likely have an effect on the fair market value of the property. Through restrictions, the donor is effectively retaining some rights, and these rights have value; thus, the value of the restrictions will be considered in any appraisal of the land.

One such restriction is commonly referred to as a "reverter" clause. By including a reverter clause in the deed, will, or other instrument of transfer, the donor can specify that title to the land or interest in land conveyed will revert to its former owner or to a third party if it ceases to be used for the purposes defined in the instrument.

When a landowner gives his land to a government entity, he is generally permitted to deduct from his Federal income tax the fair market value of the property (or a lesser amount if a lesser estate is given).

b. Bargain Sale

In many cases, a landowner cannot, for some reason, simply give his land to an organization or government agency, and the alternative of purchasing the property at a bargain sale price should be explored. A bargain sale is a purchase price at less than the appraised estimate of fair market value.

If the owner of a piece of property feels that he has to receive some actual cash for his land, a bargain sale is often a very attractive alternative to the owner, especially if he has a low cost basis on the property and a big income. The long term capital gains tax which results from the sale of appreciated property can have an adverse effect on an individual's adjusted gross income. The long term capital gains tax allows the seller to put all of his original cost of the property and one-half of the profit from the sale into his pocket, without any taxes. The other half of the profit is added to the seller's adjusted gross income before deductions, and unless there are some sizable deductions to shield this additional income, the increased taxes can have an adverse effect on the seller's ordinary income. By adding one-half of the profit to his ordinary income, the seller will probably be pushed into a higher tax bracket, which adversely affects not only his profits from the sale, but also the net after tax return on his ordinary income.

A bargain sale to a governmental body at less than appraised fair market value not only gives the donor a deduction with which he can shield his adjusted gross income, but also may provide a simple way for the owner to realize fair market value without actually placing the property on the open market.

B. Acquisition of Less-than-Fee Simple

In order to understand the concept of less-than-fee, it is useful to think of the rights associated with a property as a bundle of sticks. Each of these sticks can be thought of as representing some particular property right. For instance, one stick might represent the right to exclusive possession of the land. Another might be the right to develop the land. In theory, the owner of property in fee simple holds the entire bundle of sticks, except those retained by government through police power, taxation, eminent domain, and escheat. The property owner, therefore, is free to use his property in any manner he wishes as long as it does not conflict with existing governmental rights and laws.

When property is acquired in fee simple, all of the rights associated with the property are transferred from the original owner to the acquiring party. The acquiring party thus becomes the new property title holder and is free to use the land as desired within the scope of his rights. Less-than-fee acquisition, on the other hand, involves the granting by the property owner of a limited right or set of rights to a second party. The rights granted are always less than the total bundle of rights possessed by the property owner. As a result, the property owner continues to hold the title to the land and is free to use the land in any manner which is consistent with the rights conveyed to the acquiring party.

1. Purchase of Easements

a. Description

An easement is the right to use someone else's land in some specifically designated manner. In most cases, easements involve a specific right to travel over a landowner's property. The most common situation involves a landlocked person who must travel across his neighbor's land in order to reach a road. In general, an easement is limited to a specific use by a particular person or persons. If an easement is granted to a person or a unit of government it is called an easement in gross. If granted to an adjoining landowner it is an easement appurtenant. Easements are also categorized as affirmative or negative. An affirmative easement is a right to use land, as in the right of access over land described above. Negative easement precludes some use of land, as in a scenic easement, which might prohibit a neighboring landowner from erecting a building which would block a view.

Easements may be acquired by deed, in which case the right to use another's property is generally purchased. Or they may be acquired by prescription where, if certain legal requisites have been satisfied, continued and prolonged use has given the user the right to use someone else's land. Purchase and prescription will be discussed as separate tools. Purchase of easements is described below.

Easements are generally purchased in circumstances in which it is unnecessary or infeasible to purchase the land itself--i.e., only some rights to use the land, such as the right to pass over it, are needed. In the absence of the use of such tools as eminent domain, there is no requirement for a landowner to sell an easement. Accordingly, easements are likely to be expensive, particularly when the user desires an easement on a particular piece of property. However, landowners may be persuaded to grant easements because of the tax consequences involved, including a decrease in the valuation of their property for property tax purposes in addition to the potential ability to avoid paying capital gains tax on the income derived from the sale of the easement. Generally speaking, the viability of purchase of easements as a tool for acquiring access is conditioned upon most of the variables discussed in the section regarding purchase of fee simple title.

b. Beach Access Application

Easements are most appropriate as walkways from a public road, across a landowner's property, to the beach--i.e. down to the foreshore, which is owned by the State. In many instances, this will accordingly mean a right to travel from the State-owned road to the State-owned beach. Easements are particularly useful either where (private) walkways from a road to the beach have already been designated on recorded plats, or along the lot lines of property being used for purposes not inconsistent with a public walkway to the beach. Easements may also be procured across residential beachfront property, particularly where the landowner needs the money.

The major caveat involved in acquiring access easements is that the accessway must lead to the beach from an area which is accessible to the public. This means that road capacity and probably parking facilities of some sort must be available if an access easement is to be useful to the public. In addition, as with purchase of fee simple title, purchase of access easements requires a willing seller. In the case of access easements, owners of beachfront property may be induced to sell easements if their property can be revalued for taxation purposes.

c. Methods of Application

(1) Neighborhood Scale

On the neighborhood scale, acquisition of access easement would seem to be most useful for providing local residents with access to the beach. Where beachfront subdivisions were sold with reference to a plat on which accessways were delimited, or with covenants assuring lot owners access to the beach, landowners may already have legal access. In addition, subdivision residents may have acquired the right of access to the beach via prescription. Accordingly, easement acquisition is probably not necessary in most beachfront subdivisions as a means of providing subdivision residents with access to the beach.

Using a slightly more expansive definition of neighborhood, there may be many residents of beachfront communities who lack access to the beach other than by trespass (i.e., those living in near-beach but not beachfront lots). Easement acquisition can be used to provide access for these people. Particularly if the route selected for easement acquisition is one already in use as an accessway--such as a route reserved for use by subdivision residents--and sufficient parking is available, this tool can effectively procure public access at a fairly insubstantial cost.

(2) Municipal Scale

At the municipal scale, the local government involved must decide between acquiring neighborhood access easements, as discussed above, or using easements to provide access to high-use beach facilities, such as municipal beaches, or combining the two. In the context of high-use facilities, easements could be used to provide access to the public along the commercial strip, or similarly to enable the public to reach the beach without disrupting existing beachfront land use.

(3) Regional/State Scale

At this scale, easement acquisition is perhaps most effectively used in combination with other access acquisition techniques. For example, scenic easements might be acquired over marshland property contiguous to State parks, or access easements to the marsh might be provided to enable the public to use these areas for fishing, boating, etc. Depending on the area involved, easements could also be used to afford access to the beach in situations in which the landowner might not be willing to sell fee simple title.

d. Experience

Broward County, Florida, has purchased three easements, each ten feet wide and six hundred feet long, from the coastal highway to the beach over currently undeveloped land just north of Pompano Beach. While there is no provision for parking, these easements do provide beach access to the residential communities on the landward side of the coastal highway.

Another frequent use of easements has involved scenic easements, easements which are designed to preserve the aesthetic attractiveness of an area by prohibiting unattractive land use. In the 1930s, the National Park Service began to acquire scenic easements along the Blue Ridge and Natchez Trace Parkways. Scenic easements have also been used to preserve the shoreline along Oregon's Willamette River and to protect the views along Wisconsin's Great River Road.

A different kind of easement has been used by the Fish and Wildlife Service in the "pothole" country of Minnesota and the Dakotas, where easements were purchased to protect the natural breeding habitat of ducks and other wild fowl. These easements stipulate that farmers will not burn, fill, or drain the wetlands located on their property.

Within the beach access context, easements have been acquired through the development permit process. Although this does not involve outright purchase, the governments have exchanged something just as valuable as money (the right to develop) for the easements (see the following sections dealing with trades and with required dedication of roads and alleyways). An example of this sort of transaction occurred in Malibu, California, where the builder was required to open a five-foot easement over his property so that the public could get from a nearby highway to the beach. Many other States use this technique.

2. Prescriptive Easement

a. Description

Generally speaking, prescription refers to the process by which one person obtains the right to use another's land in some specified manner. Title remains with the original landholder. However, because of continued use of the landowner's property by some other party, the law recognizes that party's right to continue that use. The landowner's land is accordingly encumbered by the easement holder's right of use.

The requirements for establishing a prescriptive easement vary from State to State. Generally speaking, the requirements include the continued use of someone else's land for a considerable number of years, such as ten or twenty. Such use must be adverse, meaning that the landowner must not give permission for the use, and usually must be notorious in the sense that the landowner could easily have discovered the use and taken steps to prevent it had he cared to do so. Once the requirements for prescription have been met, the user has acquired a right to continue his use. In other words, this use cannot be interfered with by the landowner or his successors. If the legal requirements are met, prescription approximates the common notion of squatters' rights--that is, if one squats for long enough on a piece of property, he gets to keep that property.

b. Beach Access Application

Prescription in a beach access context can refer to two distinct phenomena: (1) acquisition of the right to pass over privately held land in order to reach the beach, and (2) acquisition of the right to use the dry-sand and uplands for recreational purposes. Arguably, public rights in the foreshore will have as their practical consequence public ability to use the dry-sand but not necessarily the uplands for recreational purposes. Accordingly, the principal uses of prescription in a beach access context will be found in obtaining access to the beach and use of the uplands. Prescription may be used effectively to obtain or perfect the right to use the beach as well.

In many, perhaps most, beachfront communities, the public has regularly used certain paths to reach the beach. If such public use satisfies the requirements for prescription, primarily as to duration of the use and adverseness, then the public has acquired a right to use that particular accessway and dry-sand/uplands irrespective of the desires of the title holder of the land. It must be noted that continued or habitual use of an accessway may not necessarily result in a public easement by prescription. The public acquires an easement only when it can be shown that the use has been made by the public at large. For example, if only the residents of a particular subdivision used a particular path to the beach, and met the requirements for prescription, those subdivision residents but not the public would acquire the easement. Similarly, if a Girl Scout troop for the requisite number of years used a pathway without permission of the owner, the troop in question, or perhaps the Girl Scouts as a whole, would acquire an easement of passage or access by prescription, but the public would have acquired no such right.

While there currently may be many accessways that are legally obtainable for use by the public by means of prescription, most such routes have not been legally established. Easement by prescription, to be legally recognized, must generally be established through litigation, followed by the recordation of the encumbrance upon recorded title. Local government may wish to so establish easements by prescription as a method of obtaining access. However, documentation and litigation do involve some cost, and de facto access may be preferable to the expense of securing legally recognized access.

c. Experience

Prescription is a traditional property law concept. It can be applied to beach access contexts in the same manner that it is applied in regard to any other property. For example, the Florida Supreme Court in City of Daytona Beach v. Tona-Rama, 294 So.2d 73 (1974), applied traditional concepts of adverseness to overrule a lower court decision which had upheld the public's prescriptive acquisition of access to and use of the beach. Other courts, such as the Texas Appellate Court in Seaway Co. v.Attorney General, 375 S.W. 2d 923 (Tex. Civ. App. 1964), arguably display a willingness to find that the public has prescriptively acquired access to the beach, and accordingly construe both facts and the law in the manner more likely to result in prescription than would traditional modes of analysis.

d. Methods of Application

(1) Neighborhood Scale

Most prescriptive easements of access to the beach will be on the neighborhood scale--that is, prescriptive easements will be established over the passageways that local people use to get to the beach. Locally used accessways will also be the easiest to prove in litigation, so long as there are local people who have used or know of others using the accessway in question for the requisite number of years.

(2) Municipal Scale

Prescriptive easements for access can also be established at the municipal scale where there are beaches that local residents customarily use and have used for the requisite number of years. If such beach areas exist, the public may also be able to acquire via prescription the right to use the dry-sand and uplands areas for recreational purposes. The public may also be able to acquire by prescription the right to park vehicles in specified areas adjacent to paths leading to the beach.

(3) Regional/State Scale

Prescription is probably not a viable tool at this scale. However, if a State wishes to acquire for recreational purposes land the public has continuously used in a manner that satisfies the requirements for prescription, the State might be able to use this tool in conjunction with other tools to acquire the property more easily, and at a lower price.

3. Conservation Easements

a. Description

A conservation easement is a method by which a landowner can secure both present enjoyment of his land and future limitations on the land's use. Pursuant to authorizing this statute, the landowner conveys the easement to a governmental entity or authorized private organization. The terms of the easement preclude certain uses of the land. The owner retains title. The effect is to encumber future uses of the land, in that future owners must

take title subject to the terms of the easement. Depending upon the terms of the easement, the effect of a conservation easement may accordingly be a substantial reduction in the market value of the land. To facilitate use of this technique, tax benefits in the form of reduced property taxation valuation may accrue to the landowner so encumbering his land.

A conversation easement is thus essentially a preservation technique. It involves taxation mechanisms, such as reduction in property valuation for tax purposes, as an inducement for landowners to use this technique. In theory, conservation easements constitute the donation of proprietary rights to the public, and accordingly could constitute an important acquisition tool in any beach access strategy. However, as illustrated in the discussion below concerning beach access application, use of this tool without substantial controls can lead to increased restriction rather than increased public access.

b. Beach Access Application

In a beach access context, the most likely application for conservation easements will involve large tracts of property which have not yet been developed. The effect of conservation easements in these tracts will vary depending upon the terms of the easements. The stringent easement, such as one precluding the removal of all trees, shrubs, and other vegetation, may have the practical effect of limiting future land use to open space. If the terms are so written as to preclude roadways or pedestrian paths through the property, the use of conservation easements may effectively preclude future development, keep the beachfront property in large tract private ownership, and preclude public access over this property to the beach. In such a situation, the landowner would be reducing the market value of his land, but his efforts would also have helped insure his continued ownership and enjoyment of the land at a lesser rate of taxation. In return, the public would have received a guarantee of future open space, but not of the ability to use this open space.

A further effect of such conservation easements involves the valuation of other property along the beach. By the taking of large tracts off the market via the conservation easement mechanism, beachfront property not so encumbered would greatly appreciate in value due to what amounts to market manipulation. The consequence in terms of public access is that the public may be shut off from most beach areas and unable to pay the price for the land that is available.

The above description applies to the forms of conservation easements that have been used to date. Arguably, a variant form of conservation easement could be used to obtain public access via this mechanism. In many situations, a landowner will contract to donate his land via a conservation easement on the condition that his property is revalued for taxation purposes. Similarly, the governmental or private entity receiving the easement could condition that receipt upon provision for public access. This essentially involves negotiation, and a willingness on the part of the governmental or private entity involved not to take everything offered at first blush.

Statutes authorizing the use of conservation easements and the ability of governmental and private entities to accept them can be amended to require that the management of the proprietary rights so obtained will be consistent with certain public purposes or general welfare provisions. One of these can be the provision of public access to recreational facilities. Other similar purposes could be environmental preservation, habitat management, and so forth. Similarly, tax statutes can be written specifically for revaluations concerning conservation easements, with revaluation allowed only on the condition that such public access be provided.

c. Experience

The most prevalent use of conservation easement has been in Maine. Under Maine statutes 33-667 and 33-668, "conservation restrictions" are defined and authorized for acquisition by any governmental body having power to acquire interest in land. Section 33-668 distinguishes this mechanism from any other governmental power to acquire property, including by gift. The Maine program is administered through the Maine Coastal Heritage Trust. This organization promotes the use of conservation easements as a preservation technique, and is the principal entity in Maine acting as recipient of the rights donated in conservation easements. While this program seems to have been successful in acquiring many ecologically important areas of the Maine coast for preservation, it has been criticized on the ground that use of the conservation easement technique has not increased public utilization or access to open space and recreation areas.

d. Methods of Application

Use of this tool is limited to areas where beachfront properties still exist in large tract ownership. So long as the governmental entities involved can exact public access to the beaches from the grantor as a condition for accepting the conservation easement, this appears to be a viable tool for acquiring recreation rights as well as access rights on either the municipal or regional/State level.

4. Leaseholds

a. Description

Leaseholds are a second commonly used less-than-fee technique. Under a leasehold agreement, the owner of a parcel of land (lessor) grants an interested party (lessee) the right to use the land in a specified manner for a limited period of time. The leasehold thus creates and transfers to the lessee restricted rights, generally referred to as the leasehold estate, and reserves to the lessor all remaining property rights, known as the fee estate. At the time of lease expiration, the restricted rights revert to the lessor. Usually the lessor and lessee have contractually decided what the state of this reversion should be before the rights are initially granted.

While leases are most frequently utilized as a legal instrument for the renting of buildings and structures (e.g. apartments, stores, offices,

etc.), they can be applied to any number of other uses including the provision of farming rights, public fishing and hunting rights on private lands, and public access rights across someone's property.

Two basic variations of the standard lease are commonly used. The first involves the inclusion of a renewal clause within the contract. This simply permits the renewal of the lease at the time it expires, provided the lessor and lessee desire to use this option. The second variation, known as the option to purchase clause, allows the lessee to buy the fee estate outright prior to the expiration of the lease. Often this clause is inserted when the lessee is uncertain about the relative value or utility of a particular parcel of land. By acquiring certain affirmative rights and then exercising them for a period of time, the lessee can determine whether or not fee simple investment is desirable.

Aside from these basic characteristics, leases have a number of other general traits which must be considered before one decides whether leaseholds are particularly suitable for access purposes. These traits are presented below.

Advantages

- o Leasing is flexible relative to possible length of contract term and types of affirmative interests which can be included.
- o It is usually less expensive than purchase of fee interest.
- o Basic ownership remains with property owner.
- o In some States lessor may be exculpated from personal and property losses to those using the land for recreation.
- o Leasing is generally accepted and understood by the public and the courts.
- o Rights granted do not take away future rights to full use of property by lessor.
- o Public entry and use can be limited to specified months and purposes, permitting some continued use by lessor during other times.

Disadvantages

- o Lessor and lessee may not always be able to agree on term of lease or interests to be included therein.
- o Leasing rates are adversely affected by development pressures.
- o Lease may not necessarily reduce the owner's tax liability.
- o Responsibility for personal and property damage liability may be unclear.
- o May not solve problem (need for access) in the long run.

Advantages

- o Contractual nature of agreement helps to identify more clearly the maintenance/ enforcement roles.
- o Might be a partial solution where no other solution is possible.

b. Beach Access Application

In the beach access context, leases can be used to serve a variety of needs and factual circumstances. Immediate needs for access can be served by leasing access across developed or undeveloped land while long-term needs are being analyzed and long-term plans drafted. Leases can also be used to demonstrate to a landowner who is suspicious of the harm that might be done by the public travel across his land that the harm is minimal and fully compensated by the cash payments provided by the lessee for the lease or by reduced property taxes. If the local government or other lessee has a duty to maintain the accessway and responsibly carries out that duty, this would contribute to the creation of a positive perception by the suspicious landowner. Having made this demonstration, the lessee could urge the landowner to dedicate the accessway to the public or could negotiate lease extensions at a reduced rate of compensation. If the landowner is unfavorably impressed, the local government still has the option of eminent domain available to acquire access over the property.

C. Other Means of Acquisition

1. Eminent Domain

a. Description

Eminent domain is the process by which governmental entities can acquire proprietary interests in privately held land in exchange for compensation, regardless of the owner's willingness to sell. Generally speaking, the governmental entity may condemn whatever land it chooses so long as its actions are consistent with a public use or benefit involving the land in question. Compensation is usually fixed at fair market price, though there may be evidentiary problems in establishing exactly what this is.

b. Beach Access Application

In a beach access context, eminent domain has a variety of applications. One is to condemn property in fee, and thus to acquire land for access-related purposes such as parks, parking lots, and so forth. While eminent domain may be used effectively in some circumstances, it has the drawback of being expensive. A second and less expensive application of

eminent domain in a beach access context is to condemn easements, that is, public rights-of-way, over privately held property; title thus remains in private ownership, but is encumbered by the public easement for purposes of access.

This second application--using eminent domain to acquire access easements--can be used in a variety of contexts. In many coastal subdivisions, accessways (usually paths through the dunes) exist for use by landowners in the subdivisions. Many of these are retained in ownership by the subdivider, who simply does not sell strips between platted lots. Other such accessways may be held by littoral owners subject to a private easement in favor of the subdivision landowners, or subject to prescriptive easement. Where such accessways are recorded on plats, condemnation appears to be a particularly useful and inexpensive method of acquiring public access. The right-of-way is set out in metes and bounds; the land is already subject to use for purposes of access, so that additional use will only marginally affect property values and in fact the land may already have a limited access easement recorded against it. Easements which are recorded in littoral land deeds but are not shown on plats may be more difficult to fix by metes and bounds, but these still present the advantages of similar existing use. In such situations, it would seem that the governmental entity could condemn an access easement across the existing accessway and pay only a minimal sum because the property is already encumbered by existing easements or covenants.

In many coastal areas, there are a large number of platted accessways and possible road extensions down to the beach. Eminent domain exercised in these contexts for purposes of acquiring access easements appears to offer an inexpensive and readily available means of public access in these areas. Although some litigation may be expected contesting both valuation and the location of accessway chosen, it would seem that this use of eminent domain presents a comparatively facile method for acquiring access.

c. Experience

In the beach access context, eminent domain powers have been used almost exclusively for fee simple acquisition. As has been mentioned, the principal difficulty with fee simple acquisition is not so much a legal as a practical problem: the costs of condemning substantial areas of beachfront property are higher than most States and municipalities can afford. The problem is illustrated by three recent examples.

In the early 1970s, the County of Hawaii condemned a park site at Kalapana Black Sand Beach. In doing so, it had to confront: (1) the difficulty of surveying a piece of ocean-front property, a task complicated by special laws relating to shifting boundary lines; (2) the problems inherent in appraising unique and commercially valuable land, the value of which may be greatly inflated because of speculation; (3) the possibility of litigation with the landowner; and (4) the realities of obtaining money for compensating the landowner. [County of Hawaii v. Sotomura, 55 Hawaii 176, 517 P.2d 57 (1973), cert. denied, 419 F.Supp. 95 (D. Hawaii, 1975)].

Since 1970 the State of Florida has been using eminent domain to acquire beachfront property. Between 1970 and 1973, it acquired ten miles of beach lands at a cost of one million dollars per mile. (Miami Herald, April 22, 1973.) California, on the other hand, recently exercised eminent domain over a one-mile stretch of beach at a cost of six million dollars. (Los Angeles Times, January 31, 1971, B, p. 1, col. 6).

2. Implied Dedication and Express Dedication

a. Description

If a residential lot is sold with reference to a recorded plat on which roads or rights-of-way are designated, the purchaser has a right to use those roads and rights-of-way as an incident to title. Often such roads and rights-of-way will be expressly dedicated to the general public as well (required dedication is dealt with separately later in this chapter). In other cases, the doctrine of implied dedication enables a court to find that recordation of streets, alleyways, etc., or other acts constitute a dedication of those features to the public. An implied dedication may be found to exist whenever there is a transfer of title. It may be shown by some act or course of conduct on the part of the owner from which a reasonable inference can be drawn or which is inconsistent with any other theory than that he intended to dedicate. Therefore, it can arise from activity other than recordation. For example, if a purchaser buys land that has been used for an extended period of time by the public for access purposes, and he does not subsequently seek to prevent such use, it may be argued that the purchaser intended to donate to the public an access easement over his land. This concept has obvious ties to prescription and adverse possession, but with the concept of adverseness removed. The landowner is construed to have a donative intent--that is, he intended to give to the public the property rights in question. However, the evidence used to prove an implied dedication may be substantially similar to that used to prove prescription--i.e. continuous and uninterrupted use with the knowledge of the landowner. Implied dedication can accordingly be seen as an alternative to prescription in those circumstances in which adverse use cannot be established.

Express dedication poses no such proof problems--the dedication itself establishes public rights of use, consistent with applicable statutes and ordinances. Accordingly, where a road or right-of-way has been expressly dedicated in a beach access context, the public has acquired access.

b. Beach Access Application

In the context of residential subdivisions, implied dedication can be used to argue that subdivision roadways and alleyways have been dedicated to the public. This is especially important in those subdivisions in which alleys between beachfront lots can provide accessways from a roadway to the beach. In such circumstances, successful invocation of implied dedication will have the effect of securing a public accessway from a public road within the subdivision to the beach. In addition, in those subdivisions in which existing roads can be extended down to the beach, use of implied dedication will have the effect of securing a public accessway from a public

road within the subdivision to the beach. Also, in those subdivisions in which existing roads can be extended down to the beach, use of implied dedication to establish rights to the right-of-way can afford not only pedestrian access to the beach but also vehicular access to the beach. In either situation, the establishment of public rights in the subdivision streets should have the effect of allowing public parking along these streets, with the caveat that some improvements might have to be made if the streets are not paved or are too narrow to allow both parking and through traffic.

The non-subdivision application of implied dedication involves the establishment of public rights in existing routes that are permissively used for access purposes. Whether or not this application of dedication can be used to supplement prescription depends on the interpretation of State law, and may well not be available.

In reference to beach access, express dedication is applicable to those beachfront roads and rights-of-way that have been expressly dedicated. Such roadways already afford the public legal right of access--accordingly the emphasis in express dedication is to discover (e.g., by title search) and utilize existing dedicated roads and rights-of-way, and to encourage the express dedication of new streets and rights-of-way.

c. Experience

The doctrine of implied dedication has been used in both the Texas and California courts. In Seaway Co. v. Attorney General, 375 S.W. 2d 923 (Tex. Civ. App.), the Texas Appellate Court found that an easement for purposes of access had been dedicated to the public through implication as a result of over a century of use of the beach by the general public for recreational purposes. There had been no interference with public enjoyment of the area, and the public had never sought permission from anyone to use the beach. The court applied roadway precedents to the beach context without discussing their suitability or referring to earlier beach access decisions in other States.

In Gion v. City of Santa Cruz and Dietz v. King, 2 C.3d 29, 465 P.2d 50 (1970), the California court set forth guidelines indicating when public use of the beach and adjacent parking facilities would ripen into an implied dedication of the property in question. However, as noted in 22 Stanford Law Review 564 (1970), the criteria set forth by the court amount to use of prescription under the name of implied dedication.

d. Methods of Application

(1) Neighborhood Scale

Implied dedication would seem most applicable in the context of particular roads and accessways. These of necessity will be at the neighborhood scale, although litigation to establish public rights in these areas might be limited to locations which would afford public access to highly used (e.g. municipal) beaches. Especially within subdivisions, parking is likely to be a problem. Accordingly, planning is necessary to

ensure that the municipality seeks to establish access easements by implied dedication only in those areas where it is unnecessary to expend large amounts of money to improve roadway and parking facilities.

(2) Municipal Scale

The advantage of using implied dedication as a means of establishing the right of access in areas currently used by the public for access purposes lies in the ability to establish what amounts to a public beach, and access thereto, without the expenditure of public funds (except for litigation). This may be possible in many areas traditionally used by the public for access purposes with the landowners' permission (which, accordingly, makes prescription unavailable under most State laws).

(3) Regional/State Scale

It seems unlikely that this tool will have significant application at the regional or State scale. However, its use depends upon the factual circumstances in each case, which may make application of this tool desirable.

3. Trades

a. Description

There are two principal means by which trading can be used as a tool to acquire access. The first involves the exchange of access rights for development or use modifications or for commitments to assume maintenance responsibilities. This was the approach adopted by the City of Greensboro, North Carolina. That city amended its zoning ordinance [23-33.5 (1975)] exempting residential lots abutting open space dedications from the minimum lot size otherwise required by the ordinance. This was done in an effort to obtain open space dedications on flood plains. It is apparent that such an approach could be used in the beach access context as well. However, unless the specifics of such an approach are fully reported in advance of their implementation, there is a serious problem of abuse by the body evaluating the benefit received. This could lead to contract or spot zoning which would be overturned by the courts, to political kick-backs, and to instability in local development patterns.

The other principal use of trading involves the exchange of land. If a local government or the State owns non-beachfront property for which it has no immediate or foreseeable need, such property could be exchanged for beachfront property having similar value. Here the dangers of abuse are less, because the exchange would follow objective appraisal of both parcels.

b. Beach Access Application

Trading is most appropriate for new development proposals. When land which is desirable for access purposes is the subject of private development planning, the local or State government which owns non-beachfront, tradable land should alert the private developer of the availability of that land which it owns. For example, if beachfront property has been platted in

fifty foot wide lots, as it frequently is in residential zones, and the developer proposes to develop commercial uses, the fifty foot wide lot is not as valuable to him as a larger, non-beachfront lot would be. Therefore, if the local or State government owns non-beachfront land which has a two hundred foot frontage on the coastal highway, the private developer, in keeping with good economic sense, should be willing to trade his fifty foot wide lot for the larger parcel. Any difference in land values can be compensated for in money or in additional land or in development rights modifications.

The Federal government has often traded land in order to obtain a larger, unified parcel where it had previously held title to scattered pieces of land. This has enabled the government to establish parks and parkways which it could not otherwise have done as effectively or efficiently.

4. Implied Reservation

a. Description

Where the State has previously owned a parcel of land used by the public, it is possible to argue that the grant from the State to private parties was not unencumbered, but instead reserved for the public's use an easement allowing passage over or use of the land. The rationale underlying this tool is that the State did not intend to relinquish well-established public rights of use or access, and accordingly reserved by implication such rights for the public. This essentially involves a policy determination, inasmuch as there is likely to be no hard evidence indicating intent.

b. Beach Access Application

In a beach access context, the argument in favor of implied reservation is predicated upon State ownership of the foreshore and public use of the beaches. The argument is that the State, in selling or granting the upland and dry-sand, could not reasonably have intended to deprive the public of access to the State-owned foreshore. A right of public access to the foreshore, via reasonable ways of access, was retained. This argument could apply only in those situations where the State at one time did own the beachfront property, and subsequently transferred title to private ownership.

c. Experience

As illustrated by the Texas court's rejection of the doctrine of implied reservation in Seaway Co. v. Attorney General, 375 S.W. 2d 923 (Tex. Civ. App. 1964), the problem with this tool involves proof of an intent to retain rights in land granted away. The Hawaii courts have been willing to use this doctrine given sufficient evidentiary substantiation. See Town and Yuen, "Public Access to Beaches in Hawaii: A Social Necessity," 10 Hawaii B. J. 3 (1973).

5. Post Flood Damage Acquisition

a. Description.

The National Flood Insurance Program (administered by the U.S. Department of Housing and Urban Development) is not directly applicable to the acquisition of beach access. The program does require local governments to institute some type of subdivision controls in order to qualify for the program (Section 1910.3 of the new regulations, 41 F.R. 46976), but there is no requirement that any such regulation deal with beach access problems. Although provisions relating to beach access could certainly be made part of any such subdivision regulations, as discussed in other sections of this chapter, any such effort would be tangential to the Flood Insurance Program itself.

b. Beach Access Application

The importance of the Flood Insurance Program to beach access falls not within the implementation of the insurance program itself, but rather with the mechanics of the program once loss has been incurred. Under the National Flood Insurance Act (42 USC 4102), the Federal government is authorized to purchase properties "damaged substantially beyond repair" rather than pay the insured to reconstruct whatever was on the property before the damage occurred. In practice, this may allow for purchase whenever there is greater than 50 percent damage. The provisions of this section allow the Federal government to sell, lease, donate, or otherwise transfer the property thus acquired to any State or local agency which agrees to use the property for a minimum of forty years for whatever "sound land management" practices HUD has determined applicable. This statute and the regulations promulgated pursuant to it provide both State and local governments with an opportunity to negotiate with the Federal government for the transfer of lands which have sustained substantial flood damage. Although apparently this approach has never been tried, it could provide accessways for the public and at the same time prevent the recurrence of damage in hazardous areas. For example, if a structure built in a washover were "damaged substantially beyond repair," it could be acquired and the land cleared and used for access. Whether a State or local agency could encourage HUD to make use of this opportunity by offering to pay the difference between that which HUD would normally pay to compensate for the damage sustained and outright purchase ought to be explored.

V. Regulation - Land Use Controls

A variety of land use control techniques can be used to provide public access to beaches whenever beachfront property is being subdivided or developed. Some of these techniques involve direct requirements for the provision of access. Others may be employed to enable local governmental bodies to encourage the provision of access by developers of oceanfront property during the design of the development. Many of these tools must be used in conjunction with other tools in order to acquire access.

The techniques discussed have all been used previously. Many of them have been used in oceanside communities and have been applied in oceanfront

contexts. It should be noted that all of these techniques involve use of the police power, and hence are dependent upon the existence of adequate enabling legislation.

A. Required Pedestrian Access

1. Description

This tool simply requires that as a matter of public policy public pedestrian access to the beach be provided as part of any beachfront development. Provision may be made for the design and construction of the accessway, for whether the requirement is applicable to both subdivision and commercial development, for whether the requirement is applicable only to certain classes of development, and so forth.

The easiest method of requiring pedestrian access is through a city or county zoning ordinance. Beachfront property can be zoned as recreational/residential, with the access provision being one of the requirements of the zone. Such designation could apply to all beachfront property, commercial as well as residential uses.

2. Experience

Section 96 of the Currituck County, North Carolina, Zoning Ordinance, adopted in October, 1971, creates a Recreation Residential Zone as one of a number of zones the ordinance establishes. One requirement of the Recreation Residential Zone involves the provision of public accessways, of not less than ten feet in width, from a public roadway to a recreation area (defined to include rivers, sounds, and beaches) for each development involving more than six hundred feet of recreation resource frontage. It should be noted that development may be either commercial or residential, and that the developer is allowed to locate access anywhere on the property. The ordinance requires that the accessway connect the public recreation area--in this case the beach, meaning the foreshore--to a public roadway. This requirement may effectively make the dedication of subdivision roads to the public a necessary condition to meeting the zoning requirements; arguably, it may also require the appropriate local governmental body to accept the offer of dedication made by the subdivision developer.

B. Required Dedication of Roads to Provide Access

1. Description

This tool affords public access to beaches by requiring that roads or rights-of-way be extended to the foreshore and dedicated to the public. Application of required dedication will normally involve three distinct requirements:

(a) The extension down to the foreshore of all roads and rights-of-way not parallel to the beach.

(b) Public dedication of all such roads and rights-of-way not parallel to the beach.

(c) Required public dedication of all other roadways in beachfront subdivisions.

The purpose of this tool is to provide vehicular and/or pedestrian access either to the foreshore itself or to a point very near the foreshore, with pedestrian access down to the foreshore on a dedicated right-of-way. Although only the first two elements listed above are required in order to provide this type of access, in most instances practical considerations will mandate the third element of requiring dedication of all subdivision roads.

Although this tool is most applicable to new subdivisions, it might also be appropriate in those commercial development situations in which an existing road (perpendicular to the beach) either dead-ends at the property being developed or fails to continue across the developed property. In these situations, a requirement that the right-of-way be extended across the developed property down to the foreshore would work in a similar manner to the required dedication of subdivision roads.

2. Experience

The recreational/residential zone established in the Currituck County, North Carolina, Zoning Ordinance (October, 1971) requires the extension down to the foreshore of all roads and rights-of-way not parallel to the ocean in all developments having a minimum of six hundred foot beach frontage. This requirement applies to all developments--meaning both residential and commercial. It might be noted that while streets running parallel to the ocean are not covered by the dedication requirement, the further provisions of this zone, requiring pedestrian access from a public roadway, effectively requires dedication of parallel roads in most circumstances. The total impact of the Currituck ordinance is to require dedication of all roads and rights-of-way for those developments having sufficient beach frontage (i.e. 600 feet).

C. Water Access Lots in New Subdivisions

1. Description

As a general rule, a governmental body cannot require the dedication of a subdivision lot to public use without first paying for it. However, in beachfront subdivisions, it may be possible to effectuate this same result and provide public access to the beaches with either nominal or no cost to the governmental body involved. This result can be achieved either through use of what has been termed "water access lots" alone, or by using water access lots in conjunction with eminent domain.

Water access lots refer to strips of property fronting a public street and having beach frontage as well. Such lots are usually narrow and on the ground are probably indistinguishable from accessways. However, water access lots are platted as lots, and accordingly are not construed to be part of any roadway system.

The method of providing public access by use of water access lots involves two steps. The first is to require, by subdivision control ordinance, that in any beachfront subdivision development containing interior lots (i.e., without beach frontage), water access lot or lots must be provided for the benefit of the interior lot owners. In other words, the requirement provides for access for the entire subdivision, but not the public. The ordinance can require that each water access lot either be dedicated to the public or transferred in fee to the interior lot owners.

If dedication is made to the public, and accepted by the appropriate governmental authority, then the public has acquired the right of access across the water access lot to the beach. However, if the subdivision owner chooses to transfer title to the water access lot(s) to the interior property owners, the public at large still has no right to use that (those) lot(s) unless the land is either purchased or taken by eminent domain.

Eminent domain is well suited to use in situations where title has been transferred to the interior property owners. Because there are so many owners, the lots would be effectively inalienable; condemnation would be the only way to acquire the lots. The cost of the land taken would be the difference between the market value immediately before condemnation and the market value immediately thereafter. In the case of a water access lot which is platted as such and can be used only for that purpose and is owned and used by a large number of people already, it is arguable that allowing more people to use the lot for access decreases the market value of the property little if at all. Accordingly, acquisition of an access easement by means of condemnation would cost little if anything. Arguably, the price of eminent domain should be the taxes which the interior lot owners must pay on the water access lot, presumably capitalized over a reasonable number of years.

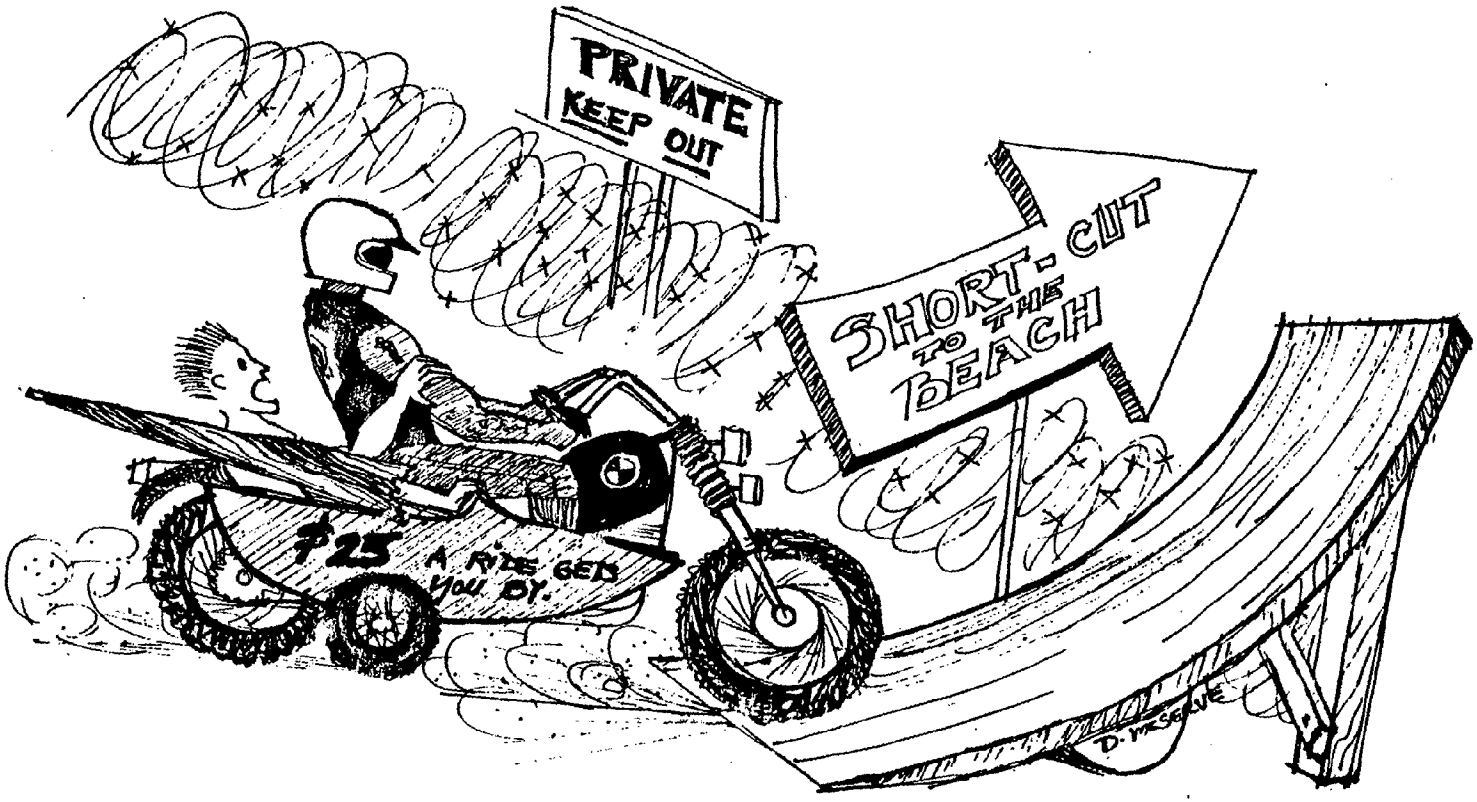
Summarizing, water access lots can be used in two ways to afford public access to the beach:

(1) by dedication of water access lots to the public, or

(2) by using eminent domain in favor of the public to acquire an access easement over the water access lots held in fee by interior lot owners.

2. Experience

Section 4.9 of the Subdivision Regulations adopted by the Town of Carolina Beach, North Carolina, on May 3, 1973, requires the provision of water access lots for any interior lot-containing subdivision adjoining the sound, the Cape Fear River, the intracoastal waterway, or the Atlantic Ocean. Water access lots must be no less than ten feet in width, and must be provided in the ratio of one lot for each 600 feet of shoreline frontage. Water access lots must adjoin a public street, which means that at least some if not all subdivision streets must be dedicated to the public. The Carolina Beach regulations provide that water access lots must either be dedicated to the public or transferred in fee to the common ownership of the interior lot owners. The town must agree to accept such dedication.


PRIVATE
KEEP OUT
SHORT-CUT TO THE BEACH
$25 A RIDE GETS YOU BY.
D. MESSINE

VIII. Urban Waterfronts

Introduction

Most people responding to terms like "shorefront" and "coastal" think immediately of the ability to savour a sea bath, soak up the sun, gather shells, build a sand castle, cast a line, launch a boat, or glimpse wave splashed rocks and glimmering waters. These perceptions, accurate as they may be, disregard waterfront images closer to home and rather mock the fact that the majority of our Nation's population lives in cities or metropolitan areas defined by coastal water. Nine of the ten largest Standard Metropolitan Statistical Areas in the Nation are coastal.

Historically, the coastal cities--the important seaports of their day and the centers of economic power and commerce--were the key links of trade and transport. Time and changing technologies have altered this pattern and left a good bit of derelict land and deteriorated waterfront in their wake. The urban waterfront, once a hub of activity, has been walled off (both literally and psychologically) from the inhabitants of most American cities.

With few exceptions, such as Chicago and San Francisco, the image of the American coastal city at the water's edge is hardly notable, in dramatic contrast to the much painted, photographed, and praised foreign counterparts to which thousands of people flock, crossing oceans to do so. Millions of people flee the cities and suburbs in this country in a mad dash, or crawl, to a shoreline miles from home to enjoy the water and its pleasures. Further millions remain behind, lacking either the means or mode to travel to the water.

Increasing opportunities for more people to enjoy water-related activities was the Congressional intent when the shorefront access planning element and the shorefront access/island preservation acquisition program were included in the 1976 amendments. The language "to provide for access to public beaches and other public areas of environmental, recreational, historical, esthetic, ecological, or cultural value, and for the preservation of islands" does not explicitly mention urban waterfronts. However, all of the above characteristics can be found in urban coastal areas, particularly historic, cultural, and the aesthetic areas. The language of regulations promulgated for the planning element is noteworthy with regard to the urban issue and access to the urban population:

> In determining access requirements, States should consider both physical and visual access. The emphasis, however, should be on the provision of increased physical access. Special attention should be given to recreational needs of urban residents for increased shorefront access. Physical access may include, but need not be limited to, footpaths, bikepaths, boardwalks, jitneys, rickshaws, parking facilities, ferry services and other public transport.

> In determining the needs for protection of public coastal areas, States should consider such factors as (a) environmental, aesthetic, or ecological preservation (including protection from overuse and mitigation of erosion or natural hazards); (b) protection for public use benefits (including recreational, historic, or cultural uses); (c) preservation of islands; and (d) such other protection as may be necessary to insure the maintenance of environmental, recreational, historic, esthetic, ecological, or cultural values of existing public shorefront attractions. Existing public shorefront attractions may be broadly construed to include, but need not be limited to: public recreation areas, scenic natural areas, threatened or endangered floral or faunal habitat, wetlands, bluffs, historic, cultural or archaelogical artifacts, and urban waterfronts.[1]

To overlook the enormous potential of a waterfront which could be used to satisfy a full city population's desire for water-related recreation, open space, and overall enjoyment is a dreadful oversight. It seems all the more wasteful in terms of both energy and land consumption when recycling vacant or forgotten areas within the city could reduce transportation costs and alleviate development pressures on the remaining non-urban natural acreage.

As merely an option on the long list of possible inclusions under "other coastal attractions," urban waterfronts are not properly underscored. The issues of reclamation and reuse of waterfront areas, plus the provision of access to and along the urban coastline, deserve special attention. This chapter will give some historical background on the urban waterfront, highlight Federal interest in the issue, and discuss waterfront access as well as the problems and potentials of this overlooked resource.

Background

From the day in 1620 when the pilgrims landed at Plymouth, and for two hundred years or more thereafter, coastal settlements were of prime importance to the Nation. Old maps show that the important cities of the day were harbor-oriented. Etchings and paintings document the busy social and commercial life of these early towns. Their ports were the gateways to the New World. Cargo from around the globe transferred between hands on their docks. Seventeenth, eighteenth, and nineteenth century structures--houses, assembly halls, churches, streets, shops, and warehouses--stand today as architectural relics of that bygone era. Some continue to be used, others are venerated as museums, still others hide beneath scars of decay.

As the Nation grew, dependence on ports as keystones of the economy diminished. The status of the city waterfronts changed from parlor to

backroom as the effects of the industrial revolution, population growth, railroad imperialism, the automotive avalanche, and the dizzying technological changes of the postwar era totally altered economic and social development.

The city expanded away from the water's edge. The harbor continued to serve the city, but in a lesser capacity. Rather than being the focal point of town life, it became only a piece of the metropolitan and regional whole. The integrated yet heterogeneous way of life was replace by a more fractionalized one. Housing and commercial uses segregated themselves and moved away from the wharves, leaving fishing, shipping, and water-reliant industries to overtake the area. Adjacent wetlands were drained and filled as more land was needed. The water lost its ability to absorb the increasing amounts of waste deposited in it. Overtaxation of its assimilative capacity resulted in pollution, loss of aquatic life, and the destruction of harbor amenities. The situation reached a point which led one observer to note:

> The common urban waterfront is hardly approachable, much less swimmable, encrusted with wharves, switching yards, sewage outfalls, and other industrial barnacles. It is the true civic outcast, the ghetto of ghettos, familiar only to longshoremen, sanitary engineers, and carp.[2]

In the waterfront area of many an American city, a rough and tumble enclave or simply a vacant area remains where once a total community thrived.

Certain technological changes in the last 20 years are responsible for the further decline of the urban waterfront. First, the shift from break-bulk to containerization in the shipping industry caused a geographic shift from the old, downtown ports to newer areas, because container operations require a change of scale. That is, there is a need for more acreage for back-up space, deeper and wider channels for the ships, and access to good transportation. Secondly, the truck and interstate system overwhelmed the railroads as the primary transportation linkage for cargo. Many industrial concerns moved away from the congested, older waterfronts to take advantage of road networks located elsewhere. Thirdly, long distance voyagers who with well-wishers in tow once flocked to the piers of ocean liners now board jets. What ocean cruising remains today is centered in warmer weather areas.[3] Fourthly, bridges spanned bays and rivers, making ferry boats obsolete.[3] The gaping slips, rotting piers, empty warehouses, carless rails, and deteriorating, vacant buildings that pockmark the coastline stand in mute testimony to these changes. "No swimming" warnings, flotillas of rubbish, debris, and murky water literally present the water pollution story. Because the waterfront has lost its prominence in the economic as well as the social lives of most American cities, the deterioration of the urban coastal shoreline has received little attention. However, the past 20 years have witnessed increasing interest in the waterfront.

Federal Interest in the Urban Waterfront

> "If the economy no longer requires so much industry or commerce on the waterfront, why cannot we consider it for more pleasurable uses? The answer is: we can. Our urban waterfronts can be treated as a new resource . . ."
>
> -- Christopher Tunnard.

In 1965, the White House Conference on Natural Beauty devoted an entire panel to "Water and Waterfronts."[4] Amidst the discussion, the panel highlighted the following four recommendations pertaining to urban waterfronts:

1. Water and waterfronts need special treatment in all city plans. Historic waterfronts, especially, should be preserved, restored, and protected--Annapolis, Savannah, New Bedford, Alexandria, Newport, Rhode Island [sic], and many others. Waterfront land and access should be gradually limited to those activities which actually require waterfront location or access.

2. To improve urban planning we recommend the establishment of Urban Waterfront Districts, somewhat along the lines of the historic and highly successful Soil Conservation Districts. Existing watershed protection programs should be modified to include multipurpose protection, not only in the agricultural areas where this now applies, but in urban areas as well. The same assistance that is extended to farmers should be extended to suburbanites and city residents.

3. New techniques for extending the use of waterfront lands to metropolitan residents should be developed. There is far too little actual water's edge available to the typical city resident. The arts of the architect and landscape architect should be coupled with the engineer's skills to open up the edge to populace. Fill and rubble should be used creatively as a resource, rather than as a waste material, to complement the urban design plan. At the same time, we acknowledge the dangers involved and strongly urge against further filling of major bodies of water unless this is done in accordance with an urban plan.

4. Urban renewal powers should be used in a comprehensive way to improve waterfronts and set them free from transportation barriers, blight, and dumps in order to realize their environmental values.[5]

No "Urban Waterfront Districts" have been forthcoming; access to the waterfront remains a universal problem, and many waterfront plans are "still stuck in the hope chests of city halls."[6] Nevertheless, something of a waterfront renaissance began and continues to emerge. In the 1960's, the fruits of urban renewal were being seen. Numerous rehabilitation and renewal projects funded by the Department of Housing and Urban Development channeled money into old waterfront areas. Over eighty cities have been identified as involved in some sort of waterfront project, whether code enforcement or full scale areawide renewal.[7]

In 1964, the Journal of Housing devoted an entire issue to waterfronts, and declared that "Renewal is Recovering the Waterfront."[8] Many cities such as Boston, Newport, and Baltimore give stunning evidence of the change, yet the subject remains as alive today as it did then. Thus Arthur Cotton Moore's comment in a 1977 issue of the same Journal that "waterfronts are one of the major chips coastal cities have when it comes to entering people back downtown again"[9] can easily be followed by this excerpt from the 1964 issue:

> "The basic human interest in the amenities and attractions of water bodies, together with the kinds of dramatic proposals which waterfront locations stimulate, results in a high degree of public excitement over waterfront development. Where this type of land is available in or close to an urban center, the most obvious re-uses are quality housing and recreation, including marinas, aquariums, restaurants, the theatres, promenades, etc. If the location is close enough to the downtown center, it might also be attractive for prestige commercial buildings."
>
> The analysis above is from Daniel Ahern, executive director, Boston Downtown Waterfront Corporation--but it could well have come from almost any of the 12 cities whose waterfront reports were received for this Journal issue. In almost all cases, cities reported a more than gratifying degree of citizen, newspaper, business, industry, and official support for proposals to concentrate renewal processes on waterfront areas. Along with the support, many indicate, came a good many suggestions and ideas about just what the best use of valuable and sought-after waterfront land might be. But even in cases where all the ideas, suggestions, and "pet projects" of the community didn't get incorporated into final waterfront renewal plans, there's been no report of any lessening of community enthusiasm and support for renewal of the waterfront areas.[10]

In the early 70s, well over thirty coastal city waterfronts were being studied or designed for through the "City Edges" and other programs funded by the National Endowment for the Arts (NEA).[11] With all this interest in waterfront areas, both the HUD and Endowment efforts were focused on the waterfronts coincidentally rather than by direct policy. However, the current NEA grant program, "Liveable Cities," underscores the issue by

citing "Waterfront Enhancement" as a possible category in its application guidelines.[12] HUD has never had nor does it have a direct waterfront restoration policy.

The thread of national concern to provide recreational and leisure areas close to home--that is, near urban centers--can be found in numerous reports as documented in Chapters Two and Three. One particular study of note is the 1969 Stratton Commission report, which recommended that increased amounts of shoreline should be made available to the public and that "priority should be given to near metropolitan areas where public areas are most urgently needed. More imaginative attempts are required to integrate recreational projects with other uses of the coastal zone such as conservation and industrial uses."[13]

In 1973, when introducing his "National Island Conservation and Recreation Act," Senator Jackson entered the following remarks for the record regarding development pressures and the recreation situation:

> These pressures to develop idle island land are particularly severe on islands near our urban centers. It is an astounding fact that, at a time when urban beaches and playgrounds are rendered nearly useless by overcrowding and when "no trespassing" signs are sprouting at an ever-more-rapid pace along shoreline once available for public use, there are situated less than 25 miles from cities of 50,000 or more persons almost 1 million acres of undeveloped or minimally developed island lands--1 million acres of beaches, fields, and woods. Our urban youngsters, indeed all of us, deserve the opportunity to escape the ever-present asphalt of the cities and to explore these "treasure islands."
>
> The failure of the administration and the Congress to act to protect our islands is particularly unfortunate at this time when pressures for development coincide with rapidly increasing demands for recreation--demands which will be even more acute in the decade ahead. A 1967 study of the Bureau of Outdoor Recreation concluded that the greatest increase in America's recreational interests would come in activities which are water based or related. It found, for example, that by 1980 swimming would be the No. 1 outdoor recreation activity, increasing 72 percent between 1965 and 1980. Yet, on the mainland virtually all the beachfront readily accessible to our urban areas has already been dedicated to one or another use--too often a use other than recreation. With careful planning and wise governmental actions, the nearby islands can and should be drawn within the recreational ambit of our urban population.[14]

While Jackson's bill was not passed, other Federal measures devoted to urban recreation are noteworthy. The National Park Service took on an urban dimension with the establishment of the Gateway National Recreation Areas

beginning in 1972. Three such areas are so designated: New York Gateway, which links several unconnected areas of parkland; Golden Gate near San Francisco; and Cuyahoga near Cleveland. More recently, in response to congressional request, the BOR conducted a Preliminary Urban Parks Study,[15] published in January 1977, in which the problem of access to waterfront amenities was repeatedly cited. This study also examined possible sites worth nominating as Federal urban parks--the majority of the handful recommended are coastal. At the same time it recommended the BOR study, Congress also considered a broader, more comprehensive urban recreation study.

In September 1976, the Land and Water Conservation Fund Act of 1965 was amended to include a section which set forth requirements for an urban recreation study to be carried out by the Bureau of Outdoor Recreation.[16] Twelve of the seventeen metropolitan areas studied are coastal. Indications from the draft reports show that waterfront potential is being singled out for attention in New York, Boston, Cleveland, Chicago, Detroit and other cities. Also noted were the problems of highway barriers, lack of access, and the popularity of urban fishing.[17] As part of its final report, the Bureau of Outdoor Recreation will surely present Congress with recommendations regarding the urban waterfront.

These more recent events, combined with the present administration's and HUD's emphasis on revitalization of the cities, bode well for the reclamation and opening up of the urban waterfront.

Waterfront Access

> A whole book could be written on American river banks alone, for they form the biggest single waste of opportunity in the whole environment. And not only rivers--some places (fishing and tourist places), even actually manage to turn their backs on the sea. Just how disintegrated can urban life get?
>
> -- Ian Nairm, The American Landscape

> Few of the world's great cities are so richly endowed with waterfront as New York. The place, in fact, is a physiographic freak, defined by ocean, bay, and sound as well as fractured by the outwash of the Hudson River. It is so wet a city; and yet, for all the water, New Yorkers this summer may well have felt a bit like Coleridge's mariner, perched not so much in the palate as in spirit. To be sure, there are beaches, but not enough to absorb the nearly sixty million bodies pressed upon the sand each summer. There are also magnificent views--from warehouse windows. And almost everywhere the waterfront townscape of New York is characterized by decaying piers, elevated highways, and cyclone fences.

> It were as if New York had turned its back upon the water to stare instead into its own behavioral sink. Aquatically, New York is but a litmus to the Nation.
>
> -- Constance Stallings

Although written over ten years ago, these comments have validity today despite the fact that many localities have indeed opened up and reclaimed their waterfronts. In many cases, they have done so "in spite of rather than because of current institutional and public policy."[18] Much has been done, but much still needs doing.

As discussed earlier, many factors account for the neglect of the waterfront. That certain themes and issues can be identified as common to waterfronts serves to point out the complexity of the situation. The commonalities are summarized as follows:

1. Cinderella syndrome: Typified by the existence of many vacant, deteriorated, obsolete, or underutilized structures, as well as by the waterfront's secondary status in comparison with the downtown or outlying portions of a metropolitan area.

2. Aesthetic and cultural potential: Of both the manmade and natural features of waterfront and water area.

3. Environmental concerns: Water and air quality, wetlands protection shoreline maintenance, erosion control, and storm and food damage control.

4. Competition of uses: Residential; recreational, parks, walks; commercial; tourist; industrial; power generation; waste disposal; marinas; ports and shipping; transportation (all modes); and land use, water-dependent uses, and water usage.

5. Legal and institutional constraints: Riparian rights, multi-level jurisdictions (state/local/regional/Federal), lack of coordination, and self-interest.

6. Economic considerations: Tax issues; kinds and amounts of funding available to plan, assemble land, redevelop and/or restore environmental quality; and money market conditions.[19]

Just as a waterfront should be considered an integral part of an entire urban and regional fabric, so should the questions of waterfront access: both physical--to and along the water's edge by various modes of transportation, including water--and visual--from the shoreline as well as from upland areas. Being part of this broad fabric makes waterfronts different from beaches or less developed areas of the coastline. In addition, the urban shoreline is normally bulkheaded in some fashion, leaving no gradual intertidal space between the land and the water.

Opening up the waterfront would enable people to gain access to the water for traditional waterscape values, such as swimming, fishing, boating,

and the like. Additionally it would permit them to enjoy skylines defined and dramatized by water and allow people to participate in, as one study summarized it, "urban/technology/industrial interpretation activities,"[20] which translates into the fun of watching port activity. Furnishing access would be futile if an area were deteriorated, trash-ridden, and polluted, or if it were clouded by the fear of crime. For these reasons, waterfront access demands--in addition to perpendicular paths or auxiliary parking--the following considerations:

1. linear pathways along the shoreline
2. parks, public open spaces, or plazas
3. visual access
4. methods of overcoming physical barriers such as freeways, major streets, barbed wire, and chain link fences
5. creation of a safe environment
6. renewal or recycling of the deteriorated and abandoned areas
7. multi-use of land and building areas.

Examples of successfully completed waterfront projects that include one or more of the above characteristics can be found around the country. In Annapolis, Maryland, the waterfront scheme includes a lively public cobblestone plaza rimmed by restaurants, bars, and shops giving ample room for people to congregate and enjoy the harbor with its many pleasure boats. Baltimore's Inner Harbor renewal area provides enough space to accommodate a citywide festival which draws thousands to the promenades and plazas. Newport, Rhode Island, transformed its once deteriorated downtown waterfront area into a site of bustling activity. Housing, shops, restaurants, service facilities, marinas, and fishing concerns fill the area. Public walkways and plazas enable people to gain access all along the very lively harbor. In Newburyport, Massachusetts, the extensive historic restoration is occurring mostly upland. However, a large public park/promenade is presently under construction along the waterfront itself. Ample parking has been put in place to help people enjoy and use the adjacent historic area and the future waterfront park.

While New York City has indeed turned its back on its miles of waterfront, the city does contain some excellent examples of using waterfront potential. The promenade on top of the East Side Highway was an early example of imaginative use of air rights to provide pedestrian access to the East River. The South Street Seaport piers show the potential these areas have for recreational enjoyment. In Brooklyn, an innovative reclamation project underway under direction of the Parks Council made, in the words of the project director, "roses bloom where ferries once docked" and transformed a small area lodged between a sugar warehouse and a molasses tank farm into a park for the benefit of the neighborhood and factory employees alike.

In Boston, an overhead freeway creates a barrier, more psychological than real, between the newly rehabilitated Quincy market and the waterfront park environs. Design, material, and lighting have been used to bridge the gap and encourage pedestrians to overcome the barrier.

Besides renewal or acquisition methods--the tools most used in the above cases--there are other ways which could be used to open up the waterfront to the public. For example, subdivision controls could require a developer to provide a promenade, plaza, or park area along the shoreline for public use. Or a public agency could lease portions of industrial properties for recreational uses like picnic areas, boat launchings, or pathways. Other less-than-fee simple tools could be used to acquire easements for access roads, paths, or walkways.

Providing a wide and varied range of access to and along a well-used waterfront would fulfill several very important objectives. For example, it would:

> Create recreational and open space areas--"bright breathing edges"--to urban dwellers, close-to-home, and thereby help satisfy this identified critical neeed and also reduce fuel consumption by providing an alternative to the long car ride. Reclaim and recycle abandoned or vacant areas which are a tax drain, a visual blight, a physical hazard, and a wasted resource. Re-use of these areas for housing, industry or commerce could stem the need for sprawl and thus save not only natural landscape acreage but also the cost of providing new infrastructures.
>
> Enhance the overall livability of cities.[21]

Coastal Zone Management Programs offer an opportunity for States and localities to take measures to meet these objectives. The urban coast, however, has received relatively low priority to date, either at the State or national level.

Urban Waterfronts and CZM

There is no direct reference to urban factors per se in the Coastal Zone Management Act; however, Section 305(b)(3) specifies that among the "elements" which must be included in the management program is an "inventory and designation of areas of particular concern within the coastal zone." Federal regulations clarify this point:

> It should be noted that geographic areas of particular concern are likely to encompass not only the more often cited areas of significant and natural value or importance, but also (a) transitional or intensely developed areas where

> reclamation, restoration, public access and other actions are especially needed; and (b) those areas especially suited for intensive use of development.[22]

Eight representative factors were spelled out which might be helpful to the States in their task of designation. Specific mention was given to "areas of urban concentrations where shoreline utilization and water uses are highly competitive."[23] Four of the other factors cited could easily relate to an urban setting:

> areas of . . . unique physical feature, historical significance, cultural value and scenic importance.
>
> areas of substantial recreational value and/or opportunity.
>
> areas where developments and facilities are dependent upon the utilization of or access to the coastal waters.
>
> areas of unique geologic or topographical significance to industrial or commercial development.[24]

In the December 1975 draft threshold papers, circulated as a follow-up to the Federal regulations, several sections dealt with the urban question. In the paper on Boundaries, five acceptable approaches were presented: (1) Biophysical, (2) Administrative, (3) Uniform, (4) Multiple, and (5) Urban or Greatly Altered Areas. The latter was elaborated on as follows:

> Urban or Greatly Altered Areas: One intent of the Act is to prevent undue disruption to natural coastal ecosystems involving both land and water areas. In many coastal areas, whether urbanized or otherwise extensively modified, natural systems relationships between land and water may be unduly complex and difficult, if not impossible, to define, or of relatively small importance. In these areas, the State may define inland boundaries on the basis of other factors relating the strong influence of waters upon the land; including, but not limited to, dependence of use upon water sites or visual relationships.[25]

The threshold paper on Geographic Areas of Particular Concern indicated that the States must consider "areas of urban concentration" in their designation process.[26] This wording leaves ample room for the urban areas to be eliminated in State programs after some "consideration." Other than those mentioned above, no direct policies have been set forth dealing with the urban issue.

However, the passage of 305(b)(7) and 315(2) provides further--though indirect--reference to the urban coast. As mentioned above, the 305(b)(7) provision and regulations addressed and recognized the need to increase access to the public shorefront particularly for urban residents and included "urban waterfronts" in the list of public coastal attractions. Therefore, a State with a highly urbanized coastal zone which fails to address the urban issue in its shorefront access planning element would not be fulfilling the congressional intent as expressed in the legislative history. In other words, a State's shorefront access planning element should include an analysis of the public beaches and other public coastal attractions within, perhaps, a fifty mile radius of its large urban areas and it also should give potential high priority, where possible, to the access areas so identified. Funds under 315(2), as available, could then be used to acquire such access areas.

FOOTNOTES

[1] U. S. Department of Commerce, N.O.A.A., "Coastal Zone Management Development Grants," Federal Register, Vol. 42, No. 83, April 29, 1977, Sec. 920.17, pp. 22044-22045.

[2] Wesley Marx, The Frail Ocean, (New York: Ballantine Books, 1969), p. 143.

[3] For fuller discussion see Mitchell Moss, "The Redevelopment of the Urban Waterfront," paper presented at A.I.P. Conference (San Antonio, Texas, 1975), pp. 9-13 or CZMJ article.

[4] U.S., White House Conference, "Beauty for America," Proceedings of the White House Conference on Natural Beauty, (Washington, D.C.: G.P.O., 1965).

[5] Ibid., p. 16.

[6] Bess Balchen and Jack Linville, "The City Waterfront: Ending an Era of Neglect," Nation's Cities, (April, 1971), unpaginated.

[7] For listing refer to Appendix in Arthur Cotton Moore, et al., Bright Breathing Edges of City Life. Planning for Amenity Benefits of the Urban Water Resources. (Springfield, Va.: N.T.I.S., 202, 808, 1971).

[8] "Renewal Is Recovering the Waterfront, Journal of Housing, No. 5, June, 1964, pp. 236-256.

[9] Edwin C. Daniel, "Norfolk Used CD Money to Leverage One Hundred Million Million Dollars for Waterfront Redevelopment, Journal of Housing, 11:76, p. 540.

[10] Daniel Ahern quoted in "Waterfront Renewal: Re-Use Plans in the Cities." Journal of Housing, No. 5, June, 1964, p. 249.

[11] Author's review of National Endowment for the Arts Draft Ten Year: Report of the Art and Architecture Program: By Design.

[12] National Endowment for the Arts, Architecture and Environmental Arts, Application Guidelines, "Livable Cities," April, 1977, p.3.

[13] U.S. Commission on Marine Science, Engineering and Resources, (Our Nation and the Sea), Panel Report, Science and Environment, Vol. III, p. III-5.

[14] Henry Jackson, Congressional Record - Senate, October 30, 1973, p. 35274.

[15] U.S. Department of the Interior, A Preliminary Urban Parks Study, (Washington, D. C., January 19, 1977).

[16] U.S. Department of the Interior Urban Study (PL 94-422) Field Study Handbook, March 1977.

[17] Author's review of sample of draft reports, July, 1977.

[18] New England River Basins Commission, Urban Waters Special Study (Boston: N.E. River Basins Commission, June 1975), p. 127.

[19] Ann Breen Comez, The Urban Coastal Zone: Its Definition and a Suggested Role for the Office of Coastal Zone Management, (Masters Thesis G. W. University, 1976), p. 59.

[20] U.S. Department of Commerce, NOAA, OCZM, The Use of Less-Than-Fee Simple Acquisition as a Land Management Tool for Coastal Programs. (Preliminary Draft), July 1977, p. 61.

[21] Arthur Cotton Moore, Bright Breathing Edges, op. cit.

[22] U.S., Department of Commerce, National Oceanic and Atmospheric Administration, "Coastal Zone Management Program Development Grants," Federal Register 38, No. 229, November 20, 1973, Sec. 920.13, p. 33046.

[23] Ibid.

[24] Ibid.

[25] U.S. Department of Commerce, National Oceanic and Atmospheric Administration, OCZM, "Threshold Paper #1: Boundaries," draft (Washington, D. C., December 8, 1975), p. 6, (typewritten).

[26] U.S. Department of Commerce, National Oceanic and Atmospheric Administration, OCZM, "Threshold Paper #3: Geographic Areas of Particular Concern," draft (Washington, D.C., December 8, 1975), p. 3 (typewritten).

IX. Island Preservation

Preface

The purposes of this chapter are to describe both the various types of coastal islands belonging to the United States and the pattern of occurrence of these island types, and to present a general description of the development and preservation status of these islands. A geologic classification has been used to divide islands into five different types. The islands of the country are then discussed on a regional basis, using the Federal Office of Coastal Zone Management's regional breakdown.

The five regions are as follows: North Atlantic, which includes Maine, New Hampshire, Massachusetts, Connecticut, New York, and New Jersey; South Atlantic, which includes Delaware, Maryland, Virginia, North Carolina, South Carolina, and Georgia; Gulf-Islands, which includes Florida, Alabama, Mississippi, Louisiana, Texas, Puerto Rico, and the U. S. Virgin Islands; Pacific, which includes California, Oregon, Washington, Alaska, Hawaii, Guam, and American Samoa; and Great Lakes, which includes Pennsylvania, Ohio, Indiana, Illinois, Michigan, Wisconsin, and Minnesota.

Because of great variation and wide geographic distribution, bedrock islands are discussed very briefly in the opening description of geologic types and then discussed in greater detail within each regional description.

Introduction

Islands have long fascinated man. Separated from the continents by surrounding waters, even a coastal island is more a part of the sea (or lake) environment than it is an extension of the mainland. Isolated, remote, homes to gulls and other coastal and marine creatures, islands are places of mystery and refuge.

In ages past, islands were often shrines or places sacred to the gods. The Isle of Anglesey, off the coast of Wales, was long sacred to the druids of ancient Britain. A smaller island, just off the southwestern shore of Anglesey, is still known as Holy Island. Delos, in the Aegean Sea, was known throughout the ancient world as the island of the Greek god Apollo. A number of Great Lake islands are called Manitou, after the deities of the Algonquian Indians who inhabited the region.

As men became seemingly more sophisticated, islands were used for other purposes, particularly military ones. Fortified islands were ideal defensive positions and defended coastlines, harbors, and shipping channels. The Pacific theater of World War II consisted of leapfrogging campaigns through the islands of the Pacific. Even today, major strategic military positions are on islands far from any continent.

Islands have served numerous unappealing functions. They have been famous prisons, such as Alcatraz; Devil's Island, a French penal colony in the Caribbean; and St. Helena and Elba, where Napoleon was exiled. A number of

small islands in harbors along the United States coast were infamous quarantine stations where European immigrants were kept in squalid ghettoes awaiting admittance to the United States. In recent times, islands have been suggested as sites for nuclear power plants or disposal areas for polluted dredge spoil from the harbors of port cities.

But the same island qualities that once instilled a sense of awe in men of the distant past are still attracting men today. The dream of finding a remote, tropical desert isle is almost universal. Sir Thomas More placed his Utopia on such an island. Austin Tappan Wright's utopia was Islandia, an island continent far from the other troubled continents of the world.

Islands are among the most popular resort areas in the world. The Bahamas, the Virgin Islands, the Hawaiian Islands, and Tahiti are but a few of the internationally known island paradises visited by millions of people. Many of the small islands are filled to capacity during periods of peak visitation and reservations for living quarters on them must be made far in advance. Even remote islands with harsh climates, such as Ecuador's Galapagos Islands and Scotland's Hebrides, are being visited by unprecedented numbers of people. The Galapagos Islands contain spectacular examples of divergent evolution in an isolated system, a frequent island characteristic which is of great interest to scientists and, apparently, to tourists. The isolation and unique qualities of island life are the attractions of the Hebrides and other islands, such as Smith and Tangier Islands in the lower Chesapeake Bay. These last two islands, which support small commercial fishing communities, have become extremely popular tourist spots.

The desire to live on an island is as strong as the desire to visit one. As Thoreau once observed:

> An island always pleases my imagination, even the smallest, as a small continent and integral part of the globe. I have a fancy for building my hut on one. Even a bare, grassy isle, which I can see entirely over at a glance, has some undefined and mysterious charm for me.

In the last 25 years, as increased prosperity and leisure time have fueled the demand for second homes, island real estate has rocketed in value. All too often island development projects are subsidized by public funds disbursed through various Federal agencies. Ironically, many of these same islands are exclusive communities closed to the public. In addition, development projects frequently destroy the same natural, scenic, and other aesthetic qualities which originally attract people. The qualities of isolation and lack of disturbance have drawn so many people to islands that many of the remaining untouched islands are fast becoming critical habitats for wildlife, as many islands support unique or rare examples of natural biological communities. Islands also play an important role in coastal and marine ecosystems, and any major disturbance on an island's land surface has a direct and frequently adverse effect on the adjacent marine or lake environment.

Wild, pristine islands are rapidly becoming a rarity in the United States. Few islands have been preserved simply because they are islands, but there is an intangible quality common to all islands which makes them a unique resource.

Some islands are suited for large scale recreational use and/or controlled development, some for only limited visitation, and some only to be preserved in their natural state. The need to protect this fragile, vulnerable, and frequently threatened natural resource has not been answered. The need to keep certain islands isolated has not been fully recognized.

Geologic Typology

The islands of the U. S. can be divided into five basic geologic types: bedrock islands, the most numerous and widespread; barrier islands and beaches, which include most of the delta islands of Atlantic and Gulf coast in addition to other coastal plain sediment islands; glacial till islands, which occur off the southern New England coast; and limestone and coral islands.

Bedrock Islands

Bedrock islands are the most abundant and widespread islands in the U. S. The greatest number of bedrock islands occurs off the coasts of Alaska and Maine.[1] Other major groups are the various Great Lakes islands, the Channel Islands off southern California, the San Juan Islands in Puget Sound, the Hawaiian Islands, the Virgin Islands, and Puerto Rico.

Many of these are offshore hilltops or ridgetops which have become islands because of post-glacial sea level rise. These are usually of the same rock type as the adjacent mainland coast. Most oceanic bedrock islands are the peaks of volcanic mountains that have reached above sea level because of enormous accumulation of lava and/or local crustal uplift.

The ecosystems found on these islands vary tremendously with climate, from arctic tundra to tropical rain forest. Most of the larger of these islands have well developed soil profiles and support forest communities or grasslands. Many of the smaller islands and some of the undisturbed larger islands are extremely important breeding grounds for many species of coastal and pelagic birds and also for a number of species of marine mammals (seals, sea lions, walruses, and sea otters).

In general, these islands are suited for limited development. They generally have soil conditions suitable for septic systems and have sufficient groundwater supplies.

Barrier Islands

Barrier islands are long, narrow, beach-dune ridges paralleling much of the Atlantic and Gulf coasts. On the Pacific coast, barrier beaches occur across the outlets of some bays and at the junctures of many of the rivers with the sea. Barrier islands and beaches are geologically recent formations of unconsolidated sediments (usually sand).[2] They frequently enclose estuaries between their landward shores and the mainland.

Barrier islands are dynamic systems in fluid equilibrium with powerful oceanic and meteorologic forces and they are constantly changing shape in response to these forces. Also, they support unique ecosystems adopted to this unstable environment. Many barrier islands have four distinct ecologic zones: beach-dune, freshwater sloughs and wetlands, maritime forests, and tidal salt marsh wetlands.[3]

The most significant ecologic function of barrier islands and beaches[4] is their enclosure and protection of a series of coastal estuaries. These areas are vital food producing and nursery grounds for over two-thirds of the commercially important fish and shellfish of the Atlantic coast.[5] In addition, the entire barrier island-estuarine ecosystems are a crucial habitat for many species of wildlife, particularly coastal birds.

Barrier islands and beaches also protect the mainland from the ravages of storms and hurricanes. The beaches and dune ridges offer little resistance to storm waves, but absorb and dissipate their tremendous force. Flooding and overwash are natural processes to which barrier island and beach ecosystems are adapted and these processes are the mechanism by which the islands migrate landward and keep abreast of the world's slowing rising sea level.[6]

For these reasons, most barrier islands and beaches are highly unsuited for development. The shifting, unstable nature of the islands and their susceptibility to flooding should be strong deterrents to building.

In addition, their youthful, very permeable, sandy soils are unsuited for septic tank drainage beds.[7] Sewage effluent can flow into the aquifer and pollute drinking water or the adjacent marine environment. Groundwater supplies are frequently inadequate for large scale usage, and the aquifers are sometimes polluted by salt water intrusion when groundwater supplies are overdrawn.[8]

Lastly, the specialized ecologic communities of the barrier islands and beaches are fragile and easily destroyed by development, which, in addition, reduces the aesthetic value of these islands.

Delta and Coastal Plain Sediment Islands

Delta and other coastal plain sediment islands (usually low, eroding islands of unconsolidated sediments) are found in the South Atlantic and Gulf regions (physiographically known as the coastal plain), and in the Great Lakes.

Delta islands are most numerous in Louisiana, where much of the coastal plain is formed by the Mississippi delta. The deltaic environment is a dynamic system, and the landforms are temporary. Delta islands are continually forming and disappearing in response to the constant processes of erosion and accretion which are powered by tidal currents, wave action, and storms.[9]

There are thousands of marsh and mangrove islands and occasional hammocks in the delta, which is an enormous and complex estuarine system of extensive tidal mudflats, tidal marshes, mangroves, and tidal creeks and bays. The entire area is low and wet with a series of parallel wooded ridges known as cheniers (relict dune ridges which were incorporated into the delta as alluvial sediments accumulated and the delta grew Gulfward). Infrequently salt domes protrude above the marshes as forested "oases."[10]

The delta islands are a vital part of Louisiana's phenomenally productive estuarine system. Yearly catches of estuarine dependent fish and shellfish in Louisiana exceed one billion pounds, a value of 60-70 million dollars for 11,000 to 12,000 fishermen.[11] The area is also a prolific habitat for many species of coastal birds, waterfowl, and other wildlife including several rare and endangered species.[12] Many of the islands are important bird breeding colonies.

The delta islands are primarily undisturbed and not subjected to any development pressure because of their low, marshy nature. However, certain islands are leased or owned by oil companies for pipeline purposes.[13]

A small but productive delta environment occurs at the mouth of the St. Claire River, near Detroit, Michigan. These wetlands are an important habitat for migratory waterfowl.

Coastal plain sediment islands occur in the Chesapeake Bay of Maryland and Virginia, and along the South Atlantic and Gulf coasts in lagoons behind barrier islands. These islands were once parts of the mainland but have become separated by a combination of erosion and rising sea level. Many are separated only by salt marsh.

These islands are ecologically similar to the adjacent mainland, having similar soils and hydrology and supporting the same vegetation and wildlife. They are frequently subject to rapid erosion which accelerates as the islands decrease in size.

Glacial Till Islands

Glacial till islands occur along the Massachusetts coast and are the dominant island type along the northeast coast south to New York City. The major islands, Martha's Vineyard, Nantucket, Block Island, and Long Island are glacial end moraines: large mounds of unconsolidated sand, silt, clay, gravel, and boulders deposited at the southernmost extent of the Wisconsin glacier about 10,000 years ago.[14] Many of the smaller islands to the north, such as the Boston Harbor Islands, are drumlins (similar to moraines but smaller and of slightly different origin) which have become islands because of post-glacial sea level rise but have been altered from their original

shapes by currents, winds, waves, and tides.[15] Dominant coastal features on these islands are high, eroding bluffs and barrier beaches enclosing salt ponds.

The larger islands support inland forest and grassland communities similar to those found on the adjacent mainland. Many of the smaller islands, such as the Elizabeth Island in Massachusetts, support maritime forest communities which, incidentally, also occur on some of the barrier beaches flanking the larger islands. Beach, dune, and salt marsh communities surround most of the islands.[16]

Salt ponds are significant coastal features which are biologically similar to estuaries. They are shallow bays, closed off from the sea by barrier beaches except for small outlets which support large beds of eel grass (Zostera marina). They are fringed by salt marsh. Salt ponds differ from estuaries because they lack a strongly defined fresh water source and their outlets are intermittently closed by littoral drift deposition.[17]

Salt pond communities, like estuaries, are vital food producing and nursery grounds for fish and shellfish. They are also important habitats for many species of waterfowl, including herons, gulls, and terns.[18]

Many of the smaller uninhabited islands and undisturbed portions of some of the larger islands are important breeding areas for coastal birds and are also superb examples of beach and dune communities. Monomoy and the sand shoal islands off Nantucket Island support the only breeding colonies of gray seals (Halichoerus grypus) in U. S. waters.[19]

Many of the larger glacial till islands, inhabited since colonial times, are extremely popular summer resorts. Further development, if within ecological constraints, is possible without severe environmental degradation. These islands are generally of sufficient elevation to be safe from flooding. Soil conditions suitable for septic systems exist, and there are good groundwater supplies.[20] However, shore erosion is a problem along the shores of these islands.

Limestone and Coral Reef Islands

A number of limestone and coral reef islands occur off the southern and western coasts of Florida. The largest group of these islands is known as the Florida Keys. The Keys are a chain of Pleistocene limestone knolls stretching 135 miles from south of Miami, Florida, westward to Key West.[21] Further west are the Marquesas Keys, which are included along with a few of the smaller islands off Key West, in the Key West National Wildlife Refuge. Approximately 47 miles west of the Marquesas are the Dry Tortugas. This isolated group of islands is now the Fort Jefferson National Monument.

The Keys are outcrops of two different limestones. The upper Keys are Key Largo limestone, an ancient reef, while the lower Keys from Big Pine Key to Key West are comprised of Miami Oolite, a marine deposited limestone precipitate. The upper and lower keys support different flora and fauna coincidental with the change from the ancient reef substrate to the limestone precipitate substrate.[22]

These islands support the only tropical ecosystems found in the continental United States. One of their major vegetation communities is the tropical hardwood hammocks. These are scattered throughout the Keys but are the dominant forest type on the northern Keys. Pinelands, of a Caribbean slash pine species, are the dominant forest type on many of the southern Keys. A number of other plant species found nowhere else in the Keys, and the endangered Florida Key deer, are associated with the pinelands. Most of these unusual woodland communities have been destroyed by clear cutting for lumber and development purposes.[23]

The cactus hammock on Big Pine Key is another small but unique botanical community. This area of approximately 100 acres contains several species of cactus found elsewhere only in Cuba and the Bahamas and one variety endemic only to the Keys.[24]

Extensive mangrove forests and tidal flats surround the Keys. These areas are vital contributors to the marine food web and serve as important habitats for many species of fish and wildlife. Many commercially important fish and shellfish are dependent on these areas. Mangrove forests are also important rookery areas for numerous coastal bird species and are important for shoreline protection and as a buffer during storms.[25]

Coral reefs are another remarkable and fragile feature of the Keys. These are the only living coral reefs in the continental United States (the Flower Garden Reefs are 100 miles off Galveston, Texas). Coral reefs are considered to be among the most biologically productive of all natural communities and support an astonishing assemblage of marine life.[26] They are important fishing grounds for both commercial and sport fishermen and are popular recreation areas for divers and boaters. They are also extremely sensitive to any type of environmental pollution or disturbance. A number of the reefs off the Keys are already under great stress, while others are completely dead.[27]

The Keys are basically unsuited for development for a number of reasons. They are a high flood-risk area because of very low elevation and local hurricane related tidal surges of 8-1/2 feet above mean sea level. Eighty-five percent of the total land area of the Keys is less than five feet above mean sea level. Statistical flood probability for the islands is estimated to be at least once every fifteen years.[28] Soil conditions all over the Keys are unsuited for septic systems because of high soil and bedrock porosity and the extremely high, tidally-influenced water table. Water pollution from sewage effluent and urban runoff has had a severe, adverse impact on the coral reefs and the marine environment as a whole.[29]

Another problem associated with development is the dredging and filling of mangroves which is done for boat access channels and to create land for development. These practices destroy and damage the mangroves and the resultant increase in turbidity and siltation in the coastal waters has a destructive effect on coral reefs and the entire coastal marine environment.[30]

Other limestone islands are scattered along the western coast of Florida between Tampa and Tallahassee. These islands are geologically and

ecologically similar to the Florida Keys. Cedar Key is the only substantially developed island in this area.

REGIONS

North Atlantic Region

The North Atlantic region has islands of three types. Bedrock islands predominate off Maine, New Hampshire, and northern Massachusetts. Glacial till islands are the major type from Boston south to New York City. Some barrier islands occur in the northern part of this region and are the sole type of island along the New Jersey coast.

The bedrock islands of this region are glaciated hilltops or ridgetops separated from the mainland by post-glacial sea level rise.[31] There are approximately 3,000 islands and barren rocks off Maine and there are also a few scattered off New Hampshire and northern Massachusetts. Some of these are the last pristine islands in the Northeast.

Glaciation accounts for the rugged and frequently spectacular scenery associated with these islands. Most vegetated islands are covered by the typical northern mixed forest found on the mainland coast. Some have inland ponds or bogs. A few rare species of arctic plants are endemic to certain Maine islands. The average nine foot tide covers a wide, rocky intertidal zone with rich seaweed and invertebrate communities. Some of the best examples of natural seaweed communities found in the U. S. occur on these islands.[32]

Many of the islands are important nesting sites for a great number of seabirds, waterfowl, and herons.[33] Two species of seabirds (razorbill auk, Alca torda, and common puffin, Fratercula arctica) nesting on these islands breed nowhere else in the United States.[34] Thirty-two islands are considered important habitat for harbor and gray seals, and eleven are breeding and whelping areas for harbor seals.[35]

The Northeast is heavily populated, containing approximately one-third of the total U. S. population.[36] All the major cities are coastal and the coast has traditionally been the major resort area. The majority of the large islands have long been resort communities, and the demand for second homes in these areas has increased steadily.

In 1970, the citizens of Martha's Vineyard, a popular resort island in Massachusetts, created the Vineyard Open Land Foundation to control rampant development and preserve land for conservation, recreation, and aesthetic reasons.[37] In 1974, the State of Massachusetts, recognizing the severity of the situation, enacted legislation to create the Martha's Vineyard Commission, a regulatory land use commission.

Similar development pressures beset the other islands of this region. It would appear that inaccessibility has been the major deterrent to development. All the islands with ferry service or bridges have been

developed to some degree (except for Plum Island, New York, which is the Department of Agriculture's Animal Disease Laboratory).

A number of islands and parts of others are preserved as National Seashores or National Wildlife Refuges. Some of these are: Fire Island National Seashore, a barrier island off Long Island, New York; Monomoy Island National Wildlife Refuge, a barrier island off Cape Cod, Massachusetts; Plum Island, Massachusetts, most of which is the Parker River National Wildlife Refuge; Isle au Haut and much of Mt. Desert Island, which comprise Acadia National Park in Maine. In addition, the Fish and Wildlife Service owns several small bird nesting islands in Maine and is in the process of surveying others.

Certain States have been active in protecting islands for recreation and conservation. Rhode Island has developed a plan to make the Narragansett Bay Islands a State park accessible only by ferry service. Massachusetts and the City of Boston have similiar plans for the Boston Harbor Islands. Common goals are the supplying of much-needed recreation areas for the urban populace and the preservation of valuable wildlife habitats.

Massachusetts has also been granted a conservation easement with first option to buy on the Elizabeth Islands. These islands are the last substantial undeveloped glacial till islands and are currently held in trust by several families.

The State of Maine's Bureau of Public Lands has developed the Coastal Islands Registry program which is investigating ownership of the Maine Islands. Islands which are in questionable ownership or unclaimed will be transferred to the State and used for recreation or conservation purposes. The State owns few islands at present.

Private conservation organizations concerned with islands have been most active in Maine because it is the last State in this region with a substantial number of islands in private ownership. The Maine Coast Heritage Trust manages conservation easements for interested private landowners. At present, there have been granted 63 easements which protect 70 islands. Another 55 easements protect portions of 19 other islands.[38] Total protected acreage is between 6,000 and 7,000 acres.

The Nature Conservancy has also been active in island preservation in this region. It owns 20 islands and has purchased or aided in the purchase of three islands which have been transferred to the National Park Service, the State of Maine's Department of Inland Fisheries and Game, and the Town of Yarmouth, Maine.[39]

South Atlantic Region

Barrier islands are the primary type of coastal island in the South Atlantic Region. Barrier islands and beaches form an almost continuous chain along the entire South Atlantic coast and enclose and protect a series of highly productive estuaries. Other islands in this region are the

coastal plain sediment islands and marsh islands both of which occur in the estuaries behind the barrier islands and in the Chesapeake Bay.

Barrier islands are unsuited for high density residential or resort development. However, this has not prevented the development of these fragile islands. Many have been heavily developed as resort communities, and the communities continue to expand. Ocean City, Maryland, a popular resort on a barrier island, has grown steadily since 1950. The number of dwelling units constructed there per year increased approximately 900 percent between 1967 and 1972, from 484 to 4,091.[40] Other barrier island resort communities in this region have experienced similar growth patterns.

Barrier islands, however, are superb recreation areas and can be used as such with minimal adverse environmental impact if the islands are managed within certain ecological constraints. Assateague Island, a barrier island off the Atlantic coast of Maryland and Virginia, is visited by over two million people a year. Visitation has increased 18 percent each year since this National Seashore was opened to the public in 1967.[41] Despite this substantial human impact, the island still functions as a vital coastal ecosystem and is crucial habitat for hundreds of species of birds and other wildlife.

The enormous demand for coastal real estate has created great development pressure on the remaining undeveloped barrier islands. For economic reasons, many of the impoverished, rural, coastal counties of this region (particularly in Georgia) are in favor of development. County tax assessors consider the "highest and best use" of the land to be high density residential development, and they assess privately owned barrier island property accordingly.[42] St. Catherine's Island was assessed at $4.5 million in 1970 and at $11.2 million in 1975 (it must be noted that some of the increase was due to changes in the State tax law). The nonprofit foundation owning the island has challenged the increases in court.[43]

Ossabaw Island, Georgia, the largest (21,000 acres) privately owned, undeveloped mainland island in the country, was assessed at $628,828 in 1970 and $1,868,644 in 1975. Ossabaw is owned by two families who say they cannot afford the sharply rising property taxes. Both owners are opposed to developing the island but would like to realize some of its value, which has been estimated to be between $8 and $20 million. The Nature Conservancy has proposed a complex arrangement which, if agreeable to all parties, will protect the island.[44]

Various Federal programs directly or indirectly encourage barrier island development by supplying funds which aid developers in overcoming certain inherent problems that complicate barrier island development. Some of these problems are inaccessibility, soil conditions inappropriate for septic tanks, flooding during storms, and limited water supply.[45]

The U. S. Coast Guard is the major agency responsible for issuing bridge permits, though at present it has no policy related to the long or short range impact of bridge construction on sensitive natural areas. St. Philips Island, South Carolina, is considered by some conservationists to be the most significant undisturbed barrier island in the South Atlantic region in terms of natural systems. However, it is facing imminent development

pending issuance of a Coast Guard bridge permit.[46] The Coast Guard is in the process of approving the enlargement of the Kiawah Island bridge at the request of the Kuwaiti owners, who plan to develop a luxury resort on the island.[47]

EPA grants, under Section 201 of the Federal Water Pollution Control Act of 1972 which deals with sewage treatment plants, have eliminated a once major development problem on barrier islands. These plants are designed for high density communities, but no consideration is given to the carrying capacity of the islands or the other problems involved with barrier island development. There are now eight islands (four in North Carolina, three in South Carolina, and one in Georgia) obtaining Federal funds under the 201 program for construction or expansion of sewage treatment facilities.[48]

The National Flood Insurance Program, administered by the Flood Insurance Administration (HUD), was designed to prevent development in flood risk areas but, unfortunately, can have the opposite effect.[49] In some cases, financing organizations are now more inclined to make loans to private individuals or corporations for development or building projects on barrier islands because of guaranteed Federal insurance money.

Most barrier islands have only limited groundwater resources which can be overdrawn; water frequently has to be piped from other sources for resort communities. In the community of Avon, on the Outer Banks of North Carolina, a new, large subdivision has caused frequent well failures. The Farmers Home Administration has approved loans totaling $375,000 to finance the construction of a six mile pipeline from Avon to another source of fresh water.[50]

The fate of most of the barrier islands in this region has been decided. Many have been significantly altered by development. Other entire islands or parts of islands are permanently protected under Federal ownership as National Seashores or National Wildlife Refuges. All the States of this region, off their respective coasts, own some of the islands in the form of State parks or wildlife refuges.

The Nature Conservancy has been the most active private organization involved in protecting the barrier islands of this region from development. The Conservancy owns or holds controlling shares of six of the Virginia barrier islands, which they intend to preserve as undisturbed, natural areas. As previously mentioned, the Conservancy was instrumental in arranging a plan for the future protection of Ossabaw Island, Georgia. The Conservancy also arranged the transfer of Cedar and Murphy Islands from private ownership to the State of South Carolina. It also has attempted to purchase St. Philips Island, South Carolina, from the owner who plans a 1,250 unit resort development. In this instance, the Conservancy has not been successful.[51]

Many significant barrier islands remain in private ownership and as such are not permanently protected. Five islands in South Carolina are immediately threatened with development.[52] These are St. Philips, Daufuskie, Dewees, Pritchard's, and Kiawah Islands. Large parts of Isle of Palms, South Carolina, and Topsail (Ashe) Island, North Carolina, face development in the future. (For a complete inventory and status report on

the barrier islands of the South Atlantic Region, see Inventory of the Barrier Islands of the Southeastern Coast, by Langdon Warner and David Strouss, 1976.)

Coastal Plain sediment islands occur in the sounds, bays, or estuaries behind barrier islands and in the Chesapeake Bay. Most are part high ground and part marsh. Many are all marsh. Some of these islands support small fishing communities, but most are in private ownership and are used for agricultural purposes, or second home sites, or are undeveloped. A few have been developed as resorts.

In general, the pressure for development is less on islands of this type than on the ocean-fronting barrier islands. Second home construction is the major form of development. Because of access problems and availability of mainland waterfront property of an identical nature, these islands are not in great demand. Large parts of many of these islands are salt marsh and are not protected by wetland laws. Rapid erosion is frequently a serious problem along the shores of many of these islands.

Preservation efforts providing permanent protection are few. Poplar Island in the Chesapeake Bay belongs to the Smithsonian Institution and is used for ecological research. The northern half of Smith Island, also in the Chesapeake, is a National Wildlife Refuge. The southern half supports three small fishing communities. Bloodsworth Island is used for target practice by the Patuxent Naval Station.

Wye Island, a coastal plain island on the eastern shore of Maryland, was the site of major controversy over development versus preservation. In 1974, a large scale community development plan for the island was firmly rejected by local county interests. The frustrated owner then held an auction to dispose of the land in parcels of sufficient size to comply with local zoning laws. Bids were so far below the owner's expectations that all were rejected. The State of Maryland has contracted to buy the major portion of the island from the would be developers for $5.3 million. The State has obtained $2.1 million from the Land and Water Conservation Fund for the purchase. The island will then be leased for farming as it has been in the past.[53]

Gulf-Islands Region

Barrier Islands

The Gulf Coast and Caribbean Islands Region contains a variety of island types. Barrier islands are the dominant coastal type, occurring along much of Florida's Atlantic and Gulf coasts and along the coasts of the other four Gulf States. Delta islands occur off the Louisiana coast, limestone and coral reef islands occur off Florida's western and southern shores, and Puerto Rico and the Virgin Islands are volcanic, bedrock islands.

The barrier islands of this region are similar to those of the South Atlantic Region, serving the same natural functions and presenting the same difficulties and problems for development. Some of the barrier islands of this region are backed by mangrove wetlands instead of salt marshes, but the biological role is the same.

In general, barrier island development pressures are not so great in this region except in Florida, where resort and second home development is extensive. Some of the Louisiana barrier islands are developed as facilities for oil and gas storage.

All the barrier islands and beaches off Florida's east coast are accessible by bridge and are developed to some extent. Seven are urban areas.[54] Development pressures are powerful on Florida's lower west coast also, but many of the barrier islands are accessible only by boat and are mostly undeveloped. In general the limiting factor for development is lack of bridge access.

Sanibel Island, an 11,000 acre barrier island on Florida's west coast, is a good example. Sanibel became a popular tourist spot in the 1950s, but could be reached by ferry only. A causeway to the island was completed in 1963, precipitating a ten year building boom which had a severe environmental impact on the island. Zoning would have allowed a population of more than 90,000 (present peak season population is 12,000). In 1974, after ten years of only partially successful efforts to control development, the citizens of Sanibel voted to incorporate the island and become a self-governing entity. Shortly thereafter the new Sanibel Planning Commission began work on a comprehensive land use plan which is now in effect.[55]

Similar development pressures confront other Florida barrier islands. Marco Island, near Naples, became the center of a controversy in 1975 when the Army Corps of Engineers refused to issue a permit to developers for the filling of 2,200 acres of wetlands. A large part of the island had already been developed by using dredge and fill techniques to create artificial ground out of mangrove wetlands. The Deltona Corporation[56] (the developer) has initiated a lawsuit challenging the Corps's decision.

At present, the majority of the Florida barrier islands are in private ownership, and many are only partially developed.

Two undeveloped islands on the west coast, accessible by boat only, belong to the State of Florida, as do two other islands and parts of five others that have bridge access and are recreation areas or State parks.[57]

A number of islands and parts of others are in Federal ownership; the majority are National Wildlife Refuges. Crooked Island is an Air Force base and parts of Perdido Key and Cape Canaveral are National Seashores. The westernmost barrier island of Florida is part of the Gulf Island National Seashore.[58]

As previously mentioned, the barrier islands of the other Gulf Coast States are generally undeveloped. Much of the island acreage is privately owned. A number of these islands are owned by oil companies, and extensive

oil and gas pipeline and storage facilities exist on some islands. A few islands are developed to some extent as resort or second home communities. Parts of three islands are urbanized. Matagorda Island, Texas, may be available for other purposes now that the Air Force has discontinued use of the island. Three of the Mississippi barrier islands, plus Chandeleur, Grand Grossin, and Breton Island in Louisiana; and most of Padre Island, Texas, are owned by the Federal government as National Seashores or National Wildlife Refuges.[59]

Delta Islands

The delta islands along Louisiana's coast are ephemeral, marshy islands, so development pressure is nonexistent. Recreational use by sport fishermen is the primary type of usage. Some dredged channels for oil and gas pipelines bisect some of these islands and pumping stations for pipelines are scattered through the area. These are usually constructed on marshy islands built up by dredge and fill or built on raised platforms set on pilings. These islands are generally flooded by high tides and as such are under State ownership, except for the few which have been sold to oil companies. A number of these islands are incorporated in State wildlife management areas.[60]

Limestone and Coral Reef Islands

The limestone and coral reef islands of Florida are unique and fragile islands which are ecologically and physically unsuited for development. However, large parts of the Keys are in private ownership and developed. Many of the undeveloped areas are held by real estate speculators and are ripe for development. In addition, present high land values and high tax assessments are sometimes forcing development of areas that should be preserved.[61]

The greatest number of these islands, the Florida Keys, have been subjected to intense development pressure, but are now an area of critical State concern under the terms of the Florida Environmental Land and Water Management Act of 1972.[62] Destruction of the Keys' unusual environment, loss of life and property from hurricanes, and corresponding expenditures of public funds for disaster relief and flood insurance are some of the reasons for the critical area designation.

Large tracts of land and many islands are under Federal protection as the Everglades National Park and the Great White Heron, Key Deer, and Key West National Wildlife Refuges. The State of Florida owns Bahia Honda Key which is a recreation area and the State also maintains the John Pennekamp Coral Reef Underwater Park off Key Largo. They recently acquired two other Keys, Lignumvitae and Shell, with the assistance of the Nature Conservancy. The Nature Conservancy, in coordination with the Fish and Wildlife Service, has also purchased Snipe Key to become part of the Great White Heron National Wildlife Refuge.[63]

The other limestone islands are scattered along Florida's west coast between Tampa and Tallahassee. These islands are small and few in number.

They are very similar to the Keys and are basically unsuited for development. Development pressures are minimal for these islands. Cedar Key is the only one of this group which has been substantially developed. It supports a small commercial and sport fishing oriented community.

A number of the other limestone islands in this area belong to paper companies which own large tracts of coastal property.[64]

The smaller islands off Cedar Key are the Cedar Key National Wildlife Refuge. The Chassahowitz and St. Marks National Wildlife Refuges also protect a number of islands. Much of the coastal zone in this area is under State protection as wildlife management area.

Puerto Rico and the U. S. Virgin Islands

Puerto Rico and the U. S. Virgin Islands are volcanic islands formed approximately 100 million years ago. The lowland, coastal plains of Puerto Rico and St. Croix (in the Virgin Islands) are areas of accumulated alluvial and marine sediments and ancient coral reefs which were deposited or formed during various eustatic fluctuations in sea level.[65]

The islands support tropical ecosystems including a number of rare and endemic species. The islands are fringed with beautiful beaches and mangrove wetlands, and offshore coral reefs. The coastal waters and islets are highly productive fishing grounds and are important habitat and breeding grounds for several endangered species, such as the hawksbill sea turtle, the brown pelican, and the humpback whale.[66]

Puerto Rico, the easternmost island of the Greater Antilles, is approximately 3,421 square miles in area and supports a total estimated population of 3.2 million.[67] Puerto Rico's economy is based on sugar cane agriculture, industry, and tourism. While much of the island is either developed or is used for agriculture, a number of significant natural areas remain though they are unprotected. The Commonwealth of Puerto Rico's Coastal Management Program includes plans to preserve important inland and coastal natural areas including small islands and coral reefs.

Two of these areas are the island of Mona and its smaller neighbor, Monito, located off the southwest shore of Puerto Rico. Mona is an approximately 13,570 acre, uninhabited limestone island which supports a dry, Caribbean coastal forest. Included in the flora and fauna of the islands are many endemic species.[68]

A number of the other small, uninhabited offshore islands are included in proposed marine sanctuaries described in the Puerto Rico Coastal Management Program.

The other major offshore islands of Puerto Rico are Vieques, 32,950 acres, and Culebra, 7,700 acres (for further information see The Culebra Segment of the Puerto Rico Coastal Zone Management Program, OCZM, Washington, D. C.). Both are inhabited by small populations supported by subsistence agriculture, fishing, and tourism. A U. S. Marine base is located on Vieques.[69]

The United States Virgin Islands are a group of three large islands and more than 60 smaller islands and "cays," approximately 40 miles east of Puerto Rico. St. John (20 square miles) is adjacent to St. Thomas (28 square miles), while St. Croix (84 square miles) is 40 miles to the south.[70]

The Virgin Islands' economy is dependent on tourism. The islands have been heavily developed as resorts since the 1950s. As a result there has been a significant, adverse environmental impact. Erosion and siltation have been the greatest problems and have severely reduced the water quality and degraded the coastal marine environment.[71] Few natural areas remain on the developed islands.

The need for land use planning, controls on building, and preservation of certain natural features of the islands is recognized in the Virgin Islands Coastal Management Program and Draft Environmental Impact Statement.

Parts of the islands are under Federal protection. The Virgin Islands National Park consists of half of St. John and much of its surrounding waters. Four other small islands are in Federal ownership also.

Twenty-eight other cays or islands are owned by the Virgin Islands government.[72] Twenty-two other islands are in private ownership.

PACIFIC REGION

The islands of the Pacific region can be divided into the West Coast islands, the Alaskan islands, and the oceanic islands. The major islands of this region are almost exclusively some type of bedrock island; they support a variety of ecosystems because of climatic differences.

There are few large islands along the coasts of California, Oregon, and Washington. The major islands are the Channel Islands off southern California and the San Juan Islands in Puget Sound, Washington. The Farallon Islands are a small group of rocky islands 25 miles west of San Francisco which are under Federal protection as a National Wildlife Refuge. Numerous sea stacks and rocky islets occur along the entire Pacific coast.

Channel Islands

The Channel Islands consist of eight large islands and numerous smaller coastal islets or rocks, located between 10 and 75 miles off the southern California coast. Geologically these islands are extensions of coastal mountain ranges and were once connected to the mainland, becoming separated during the Pleistocene period. During the millions of years that these islands were separated from the mainland, and each other, a number of distinct, endemic species evolved. These include 80 flowering plants, 15 birds, 15 mammals, 2 salamanders, 2 lizards, and 16 land molluscs. Also present are large stands of rare Torrey Pine and the largest stand of Giant Sunflower Tree (Coreopsis) remaining in the world. Six species of seals, including the rare Guadelupe fur seal (Arctochephalus philippi townsendi) and the sea otter (Aahydra lutra) and a number of coastal and sea birds are on these islands as breeding grounds and rookeries. Rich, unpolluted kelp

beds abound off many of the islands, and the waters are productive fishing grounds.[73]

The islands are also important archaeological sites. Evidence found on Santa Rosa Island proves it to be among the oldest known inhabited areas in North America. Additional studies of 50 ancient Indian villages have shown that San Miguel and Santa Rosa were inhabited during the last 10,000 years. Cabrillo, the Portuguese explorer who discovered California, died and was buried on San Miguel in 1543.[74]

Most of the land area in the Channel Islands is on the privately owned islands of Santa Catalina, Santa Rosa, and Santa Cruz. The resort town of Avalon, at the south end of Santa Catalina, and 800 more acres of land on that island are open to the public. The remaining 42,185 acres are maintained by the Santa Catalina Island Conservancy (not related to the Nature Conservancy) for educational and recreational purposes. A few other areas are developed and there are plans for limited development in the few unincorporated areas on the island.

Santa Rosa and Santa Cruz are undeveloped except for a few ranch buildings and are used for grazing livestock. At one time there were plans for a $20 million resort development on 6,000 acres of property at the eastern end of the island, but Santa Barbara County's zoning laws prevented it.[75] National Park Service acquisition plans, in 1967, for Santa Rosa and Santa Cruz have not been realized.

The other islands are under Federal ownership. Santa Barbara and Anacapa Islands are in the Channel Island National Monument. San Nicholas and San Clemente are under the jurisdiction of the Department of Defense. San Miguel is a seal sanctuary administered by the National Park Service, U.S. Navy, National Marine Fisheries Service, and the California Department of Fish and Game.

San Juan Islands

The San Juan Islands are a group of islands in Puget Sound, Washington, with a total land area of 177 square miles. In three counties, there are 457 true islands, islets, or rocks, of which 175 are named, and there are an additional 311 reefs or ledges which are inundated at high tide.[76] The largest islands (along with their sizes given in square miles) are: Orcas 57, San Juan 56, Lopez 29, Shaw 8, Blakely 7, Waldron 5, and Decatur 3.

These islands are also partially submerged mountains and have been heavily glaciated. There are 15 peaks above 1,000 feet, with the highest point being the 2,409 foot Mt. Constitution on Orcas.

The San Juans support much the same ecosystems found elsewhere in the Puget Sound area: coniferous forests, salt marshes, and freshwater marshes and lakes. However, the various undisturbed islands of this archipelago are of great value because of their pristine condition. Bald eagles, ospreys, and a number of species of seabirds and other birds use these islands as nesting areas, and the islands are also important habitat for a number of marine mammals. There are also superb intertidal and subtidal communities around some of these islands.[77]

The majority of the San Juan Islands are in private ownership. San Juan and Orcas are the most developed. Lopez is predominantly rural and used for agriculture. These three are all accessible by public ferry service from Vancouver Island in Canada and the mainland of Washington. Many of the other islands are inhabited but accessible only by private boat.

Approximately 12,500 acres (11 percent of the land) in the San Juans are publicly owned. Only 1,500 acres, or 1.2 percent, are specifically preserved as natural areas. The rest are used for parks or recreation areas. Federal and State agencies involved and the respective number of acres they own are as follows: National Park Service, 1,748.5; U. S. Coast Guard, 344.16; Fish and Wildlife Service, 232.07; Bureau of Land Management, 158; State Parks, 6,192; Washington Department of Natural Resources, 1,873; University of Washington, 1,154; and the Washington Department of Game, 171.[78]

The Nature Conservancy also owns the 273 acres which comprise Waldron Island. This organization has been the most active private conservation group involved in this area and has designated specific sites worthy of preservation.

Alaskan Islands

The 5,000 plus islands, totaling 21 million acres in Alaska,[79] are the greatest number of islands in any State in the United States. The majority are bedrock islands, but there are also barrier and delta islands. Development pressures are almost nonexistent and all but a few islands are in public ownership.

Oceanic Islands

The Hawaiian Islands are volcanic mountains with narrow fringes of sedimentary rock (alluvial and marine sediments) on some of them. The oldest islands are at the northwest end of the chain. The volcanoes have subsided in some cases, leaving coral atolls. The islands become younger to the southeast, ending with Hawaii, the youngest and largest islands. The highest peaks, Mauna Loa, 13,796 feet, and Mauna Kea, 13,677 feet, and the most active volcanoes, are on Hawaii. The eight main islands (Hawaii, Maui, Oahu, Kauai, Molokai, Lanai, Niihau, and Kahoolawae) comprise 91 percent of the total 6,425 square miles in the chain.[80]

The Hawaiian Islands support a unique and fascinating ecosystem. Over 2,500 species of higher plants as well as one entire family of birds and numerous other species of birds, mammals, and insects are endemic to Hawaii.[81] The high mountains and prevailing northeasterly winds combine to create drastically different climatic situations on these islands and there are resultant diverse, natural communities. Coral reef and tropical seaweed communities surround the islands. The offshore waters are productive fishing grounds and are an important habitat for various species of whales and other marine mammals.

Development has been intense on some of the main islands, but it has generally been limited by accessibility, water resources, and the availability of good swimming beaches and other coastal features.[82]

Kahoolawe (Island), which contains areas of significant archaeological value, is leased by the Navy and has been used as a bombing range. Public sentiment is very much against this usage, but the situation has yet to be resolved.

Lanai (Island) belongs to the Dole Pineapple Company and is used for agricultural purposes.

Niihau is owned by a single family and is being used for agricultural purposes. It contains the best example of a native Hawaiian culture, and visitation has purposely been limited to protect this situation. The State of Hawaii has long term interests in this island and may someday acquire it.[83]

The Pacific Trust Islands, Guam, and American Samoa will not be covered in this report.

GREAT LAKES REGION

The islands of the Great Lakes are almost exclusively sedimentary bedrock islands. Some delta islands occur in the extensive delta at the mouth of the St. Claire River, northeast of Detroit, Michigan. A few sand spit islands are also scattered around the Great Lakes shores.

The Great Lakes islands serve much the same function as their marine counterparts. They provide an important habitat and nesting area for many coastal birds (gulls, terns, herons) and waterfowl. Their nearshore waters are important habitat for juvenile and adult stages of many of the important commercial and sport fishes of the Great Lakes. Many of the islands are unspoiled and of great value as wilderness areas. Others have great potential as recreation areas for the large urban centers of the region.

The remoteness and inaccessibility of many of the Great Lakes islands have discouraged large scale development. All of these islands are accessible by boat only; many of the large summer resort islands are accessible by seasonal ferry service. Development pressures are increasing, however, as more people use the Great Lakes coastal zone for recreation and vacationing. A substantial number of islands are under State and Federal protection, but the majority are in private ownership. These islands will be discussed State by State.

Minnesota

A number of very small islands occur off the Lake Superior shore of Northeastern Minnesota. Twenty very small, previosuly unclaimed islands are now under the jurisdiction of the Federal Bureau of Land Management. A number of other islands adjacent to the Canadian - U.S. border are also under Federal control as the Grand Portage National Monument.

Wisconsin

The Apostle Islands and Green Bay Islands are the major islands in Wisconsin. The Apostles are located in Lake Superior approximately 50 miles east of Duluth, Minnesota. The Green Bay Islands are a chain of islands extending from Wisconsin's Door Peninsula across the mount of Green Bay to Michigan's Garden Peninsula.

The Apostle Islands are a large group (21 islands, 54,922 acres in total land area) of remote islands which were recognized in several studies, including Islands of America (1967, BOR), for their scenic and wilderness qualities. These islands were threatened with real estate development until 1970 when they became the major portion of the Apostle Islands National Lakeshore. Madeline Island, the largest in the group (15,262 acres), is still privately owned and has a substantial summer population.

Eight of the 16 Green Bay Islands are in Wisconsin. Total land area is approximately 20,480 acres. Washington, the largest island at 14,437 acres, is in private ownership and has a small permanent population in addition to a larger summer population. Three smaller islands, Gravel, Spider, and Hog, are National Wildlife Refuges. The Bay-Lake Regional Planning Commission, in Green Bay, Wisconsin, has recommended that the other islands become part of a joint Wisconsin-Michigan interstate park or protected natural area.[84]

Michigan

Michigan has far more shoreline and more islands than do the other Great Lakes States. Michigan's shores border Lakes Superior, Michigan, Huron, and Erie. Numerous islands occur along this extensive coast.

The majority of the islands are in private ownership and are only partially developed with summer residences. Others are completely undeveloped. The State of Michigan has partial ownership of many of the private islands.

A few of these islands are heavily developed and inhabited year round by at least a small population. Chief among these are Gross Ile, which is in the Detroit River and is actually a suburb of Detroit, Michigan; Mackinac Island at the western end of Lake Huron, a State historic park; and Beaver Island, in northern Lake Michigan.

Mackinac is a popular summer resort area. Congestion on the island during peak summer periods has resulted in a ban on automobiles, which had come over in the past on the ferry. Visitors now tour the island on bicycle, horse, or foot.

Beaver Island, the largest island in Lake Michigan, is half in private ownership and half State forest. This island is accessible by ferry and has been considerably developed with summer cottages.

Other partially or substantially developed islands, not in single ownership, are Sugar Island, Neebish Island, Bois Blanc Island, a few of the Les Cheneaux Islands, and parts of Drummond Island and the adjacent

Potagannissing Bay Islands. Numerous other islands, in private ownership, have only summer cottages or are completely undeveloped.[85]

Many of the undeveloped, privately owned islands are protected from large scale development under Michigan's State Shoreline Protection and Management program.[86] This strongly enforced program can protect islands of natural value from development plans which would have an adverse environmental impact.

A large amount of island acreage in Michigan is in Federal ownership. The major portion is Lake Superior's Isle Royale National Park, which totals 133,844 acres.[87] North and South Manitou Islands, in Lake Michigan near Traverse City, Michigan, are part of the Sleeping Bear Dunes National Lakeshore. A number of other islands in Lake Michigan and Lake Huron make up the Michigan Islands National Wildlife Refuge. The four Huron Islands in Lake Superior are also a National Wildlife Refuge. Four other islands in Michigan belong to the Coast Guard. Many other small, unsurveyed islands are now under the jurisdiction of the Bureau of Land Management.

Private conservation organization action has been limited in this region. The Nature Conservancy assisted the State of Michigan in transforming South Manitou Island into a Natural Area Preserve. This island is now part of the Sleeping Bear Dunes National Seashore. A small bird-nesting island in Thunder Bay, off Lake Huron, is preserved as a wildlife habitat by the Eastern Michigan Nature Association.

The Michigan delta islands, at the mouth of the St. Claire River, are an important wetland-wildlife habitat.[88] Large areas are owned by the State of Michigan as wildlife management areas. However, substantial portions at the northern ends of the islands and along the shipping channels have been developed as second home sites, using dredge and fill techniques. This area will eventually be protected from further development by Michigan's Shoreline Protection and Management Program.

Ohio

The major United States islands of Lake Erie are all in Ohio. They are Kelley's Island and the Put-in-Bay Islands, north of Sandusky, and Lucas Island, at the mouth of the Maumee River within the Toledo city limits.

Kelley's Island and the eleven Put-in-Bay Islands support small permanent populations and large summer populations, having long been popular summer resorts. The islands have been extensively developed over the years, but strong zoning laws now protect remaining open spaces.[89]

Of the 4,252 acres of land area divided among these islands, 768 acres are in public ownership.[90] Parts of the Kelley and South Bass islands are State parks. Another small parcel of South Bass, Perry's Victory and International Peace Monument, is a National Monument. Green Island (20 acres) is a National Wildlife Refuge.

New York

The major U. S. islands of Lake Ontario are in the State of New York. There are eleven substantial islands in the eastern end of the lake, west of Watertown, New York. All of these islands are privately owned and are accessible by private boat only. There is a small Coast Guard light installation on Horse Island.

Grenadler, Fox, and Stony Islands are partially developed. The other islands are undeveloped. There are no future plans for development; nor are there any restrictions or provisions to prevent development.

Little Galoo Island supports a ring-billed gull (Larus delawarensis) nesting colony which is very large. This island is one of the northernmost known nesting sites for this species. A number of other colonial nesting birds, including the black crowned night heron and the double crested cormorant, use this island.

An additional 1,800 or so islands, of varying size, occur in the St. Lawrence River. These islands are collectively known as the Thousand Islands. Second home shoreline development has been extensive on these islands. Almost all the islands are in private ownership. A few have shipping channel light installations operated by the Coast Guard.

The islands of the U.S. are an extremely valuable and threatened natural resource of national significance. Physical isolation has protected many islands from the haphazard development of the mainland, but the demand for coastal real estate has mushroomed and islands are increasingly succumbing to intense resort and second home development pressure. The natural value, carrying capacity, and, in many cases, the complete unsuitability for development of some islands are often ignored.

Islands are of great biological value as an integral part of the coastal ecosystem because of their high ratio of land-water interface. The land-water ecotone is the most biologically productive zone on Earth and it is a key to aquatic food chains. Any major disturbance on an island's land surface will have a direct and frequently adverse effect on the adjacent marine or lake environment.

Relative isolation and lack of serious disturbances have made many islands refuges and critical habitats for diverse forms of aquatic and terrestrial life. Some coastal islands are the only breeding grounds remaining in the U.S. for many species of seabirds, sea turtles, and marine mammals.

Undisturbed islands are important for research in ecology, evolutionary biology, and environmental sciences. They represent finite, functioning ecosystems in an unaltered state, and are a vital source for increased understanding of natural processes. Scenery, vegetation, and wildlife once common on the mainland occur on some islands, while others support unique, specialized communities.

Many islands, and particularly barrier islands, are of significant economic value because their shallow coastal waters and sheltered coves and bays are an important habitat for juvenile and adult stages of many commercial fishery species. Barrier islands and some other islands also serve a vital function as offshore barriers to oceanic storms. Without this protection along much of our low lying coast, hurricane damage would be far greater than it is.

ISLAND PRESERVATION PROGRAM DIRECTION

In attempting to implement any Act of Congress it is natural to turn to the legislative history of the Act to gain a complete understanding of what Congress intended in passing it. In the case of Coastal Zone Management Act amendments concerning access and islands, however, there is, for all practical purposes, no legislative history. Senator Hollings, in introducing the Bill, said, "This Bill recognizes the importance of ... the protection of islands," but that is of little importance unless one constructs a distinction between "preservation" and "protection." Thus, in addition to the language of the Act, there are only the earlier studies referred to earlier in this report to look at. It can reasonably be assumed that these reports came to the attention of Congress in its deliberations and therefore can be used to help understand, if not the words of the Act, at least the environment which led to its adoption.

The clear concensus of these earlier reports is that islands are very special places and ought to be preserved as a part of our natural heritage. There is no clear consensus on specifically how or for what purpose they should be preserved, however (see Chapter Two of this report). It would appear that what would amount to a "national policy" or "statement of national interest" can be constructed from these many reports and that one could assume that it was this policy or interest that Congress was attempting to implement when it adopted the island preservation language of Section 315(2).

Congress used the term "preservation." Webster's defines preserve as follows: "To keep or save from injury, or destruction; to guard or defend from evil; to protect; save." Current environmental jargon assigns a somewhat more rigid or rigorous definition to the term and would argue that to preserve an island would involve maintaining it in the natural state with little or no intrusion by humans. If one assumes that Congress intended the more rigorous definition, the impact of the section is minimized, since there are few pristine ecosystems to which it could apply, if any. Thus, one should probably conclude that Congress intended to use a definition corresponding roughly to Webster's.

This does not necessarily mean that no development, whatsoever, can take place. It simply means that to preserve an island, the historical uses of the island should be taken into consideration, in conjunction with future uses, and examination of these uses and their effects on the island ecosystem.

Congress limited the section further by restricting the use of grant money to "acquiring land." There are a number of techniques that could be used, but Congress restricted the use of Federal funds to this one technique. There are a number of reasons why Congress may have chosen to do this. One is that it may have felt that this technique by itself was adequate; or more probably, Congress felt it wanted a measure of permanence that land acquisition could provide. It may also have assumed that the Federal funds were going to be used to leverage other funds and other preservation techniques.

Congress clearly intended that other funds should be involved, since it established the grant as a fifty percent match. It did not, however, explicitly restrict the use of the non-Federal funds to land acquisition. The terms of the Act are "50 per cent of the cost of the project involved." The question is, does "project" refer to "preservation" or "acquisition"? If Congress had intended that "project" mean "acquisition" would have used the same word "acquisition" or a pronoun meaning, by construction, "acquisition," since that is the nearest significant term. But Congress chose a different word and, therefore, one can only assume that it intended a different meaning. Here the only other reasonable meaning is "preservation." Hence, one can reasonably assume Congress intended that the Federal funds involved in any island preservation project be spent for land acquisition, but that the "remaining cost of the project" could be derived from other types of cost by attributable to the ultimate goal of island preservation.

Thus, a reasonable interpretation of the language is that island preservation efforts funded in part by 315(2) can include the preservation and/or conservation of the island ecosystem. The preservation activities financed by Federal funds are limited to land acquisition, but the remaining part of the project may include other preservation activities. (See OMB Circular A 102.) Using an interpretation like this would give the Act a more broad and at the same time more sound result.

The Act does not require a direct link with the State management programs other than through the consistency requirement, which may be enough. Certainly, Congress would not have intended that one part of the Act operate without concern for the other parts, especially when it deliberately required through the consistency requirements of the Act that programs created by other Acts be consistent with this one. Thus, it is reasonable to assume that any island preservation project should be consistent with the State management program, and the planning for islands under that program. This need not be a complex thing, nor need it preclude the "targets of opportunity" approach to acquisition. It could, however, insure that there is a preservation policy that the specific acquisition would fit into: a network of existing Federal, State and local policies that would operate to maximize the return on the Federal investment.

In addition to the island preservation plan, a proposal should contain much of the same information required for estuarine sanctuary proposals. But, in addition, information regarding development pressures, ecological and geological characteristics, and multiple use potential will be

[54]Conservation Foundation, 1976 Barrier Island Workshop. A Reconnaissance Inventory of Barrier Islands and Beaches by Steve Gilbert and John Clarke. Draft of May 16, 1976, Washington, D. C. May, 1976.

[55]Clark, John. The Sanibel Report; Foundation of a Comprehensive Plan Based on Natural Systems. The Conservation Foundation, Washington, D. C. 1976.

[56]Moser, Donald. "A Manprove Island Saved from Bulldozers by the Army Corps of Engineers." Smithsonian. January, 1977.

[57]Supra note 54.

[58]Ibid.

[59]Ibid.

[60]Personal Communication, Paul Temlet, Program Coordinator, Coastal Resources Program, Louisiana State Planning Office, Baton Rouge, Louisiana. August 9, 1977.

[61]Supra note 21 at p. 105.

[62]Personal Communication, William Millhouser, Gulf-Islands Regional Coordinator, Office of Coastal Zone Management, NOAA, Washington, D. C.

[63]Supra note 39.

[64]Supra note 62.

[65]U. S. Department of Commerce. Puerto Rico Coastal Management Program, Office of Coastal Zone Management, NOAA, Washington, D. C. June, 1977 at p. 1-1. The Virgin Islands Coastal Management Program and Draft Environmental Impact Statement at pp. 17-21.

[66]Ibid., Virgin Islands . . ., at p. 21.

[67]Ibid., Puerto Rico . . ., at p. 1-1.

[68]Ibid., Puerto Rico . . ., at pp. 1-17,18.

[69]Ibid., Puerto Rico . . ., at pp. 1-18.

[70]Ibid., Virgin Island . . ., at pp. 17-21.

[71]Ibid., Virgin Islands . . ., at pp. 53-58.

[72]Ibid., Virgin Islands . . ., Appendix C-1.

[73]U. S. Department of the Interior. Bureau of Outdoor Recreation. "Channel Islands, California, Preliminary Study." Island Study: Bureau of Outdoor Recreation, U. S. Department of Interior, Washington, D. C. February, 1968 at pp. 25-33, 60-69.

[74]Ibid., at pp. 69-71.

[75]Ibid., at p. 34.

[76]Nature Conservancy, Northwest Office. San Juan County, Washington; Inventory of Natural Areas on Private Lands. Portland, Oregon. January, 1975 at p. 85.

[77]Ibid.

[78]Ibid.

[79]U. S. Department of Interior Bureau of Outdoor Recreation. Islands of America, Washington, D. C., Government Printing Office. 1970 at p. 16.

[80]Hawaii, University of. Atlas of Hawaii, University Press of Hawaii, Honolulu, Hawaii. 1973.

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[82]Personal Communication, Grant Dehart. Pacific Regional Coordinator, OCZM, Washington, D. C. August, 1977.

[83]Ibid.

[84]Bay Lake Regional Planning Communication.

[85]Ibid.

[86]Ibid.

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[88]Supra note 85.

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Appendix One

1. Congressional findings and general policy declarations of the Coastal Zone Management Act of 1972 — 1-2

2. Section 305(a)(1) of the Act which authorizes the Secretary of Commerce to make grants to States to develop coastal zone management programs; and Section 305(b)(7) of the Act which requires that beach access be a part of each coastal zone management program funded under the Act. — 1-4

3. Regulations issued to explain to States what they must do to comply with the Section 305(b)(7) beach access provision of the Act. — 1-5

4. Section 315(2) of the Act which authorizes the Secretary of Commerce to make grants to States to acquire land for beach access. — 1-9

5. Concept paper issued by the Office of Coastal Zone Management in preparation for the issuance of regulations which will explain how Section 315(2) will be administered. (Regulations have not yet been issued.) — 1-10

COASTAL ZONE MANAGEMENT ACT AMENDMENTS OF 1976 (P.L. 94-370)
INCORPORATED INTO THE
COASTAL ZONE MANAGEMENT ACT OF 1972 (P.L. 92-583)

AN ACT

To establish a national policy and develop a national program for the management, beneficial use, protection, and development of the land and water resources of the Nation's coastal zones, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act entitled "An Act to provide for a comprehensive, long-range, and coordinated national program in marine science, to establish a National Council on Marine Resources and Engineering Development, and a Commission on Marine Science, Engineering and Resources, and for other purposes", approved June 17, 1966 (80 Stat. 203), as amended (33 U.S.C. 1101-1124), is further amended by adding at the end thereof the following new title:

TITLE III——MANAGEMENT OF THE COASTAL ZONE

SHORT TITLE

Sec. 301. This title may be cited as the "Coastal Zone Management Act of 1972:."

CONGRESSIONAL FINDINGS

Sec. 302. The Congress finds that —

(a) There is a national interest in the effective management, beneficial use, protection, and development of the coastal zone.

(b) The coastal zone is rich in a variety of natural, commercial, recreational, ecological, industrial, and esthetic resources of immediate and potential value to the present and future well-being of the Nation.

(c) The increasing and competing demands upon the lands and waters of our coastal zone occasioned by population growth and economic development, including requirements for industry, commerce, residential development, recreation, extraction of mineral resources and fossil fuels, transportation and navigation, waste disposal, and harvesting of fish, shellfish, and other living marine resources, have resulted in the loss of living marine resources, wildlife, nutrient-rich areas, permanent and adverse changes to ecological systems, decreasing open space for public use, and shoreline erosion.

(d) The coastal zone, and the fish, shellfish, other living marine resources, and wildlife therein, are ecologically fragile and consequently extremely vulnerable to destruction by man's alterations.

(e) Important ecological, cultural, historic, and esthetic values in the coastal zone which are essential to the well-being of all citizens are being irretrievably damaged or lost.

(f) Special natural and scenic characteristics are being damaged by ill-planned development that threatens these values.

(g) In light of competing demands and the urgent need to protect and to give high priority to natural systems in the coastal zone, present state and local institutional arrangements for planning and regulating land and water uses in such areas are inadequate.

(h) The key to more effective protection and use of the land and water resources of the coastal zone is to encourage the states to exercise their full authority over the lands and waters in the coastal zone by assisting the states, in cooperation with Federal and local governments and other vitally affected interests, in developing land and water use programs for the coastal zone, including unified policies, criteria, standards, methods, and processes for dealing with land and water use decisions of more than local significance.

(i) The national objective of attaining a greater degree of energy self-sufficiency would be advanced by providing Federal financial assistance to meet state and local needs resulting from new or expanded energy activity in or affecting the coastal zone.

DECLARATION OF POLICY

Sec. 303. The Congress finds and declares that it is the national policy (a) to preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation's coastal zone for this and succeeding generations, (b) to encourage and assist the states to exercise effectively their responsibilities in the coastal zone through the development and implemention of management programs to achieve wise use of the land and water resources of the coastal zone giving full consideration to ecological, cultural, historic, and esthetic values as well as to needs for economic development, (c) for all Federal agencies engaged in programs affecting the coastal zone to cooperate and participate with state and local governments and regional agencies in effectuating the purposes of this title, and (d) to encourage the participation of the public, of Federal, state, and local governments and of regional agencies in the development of coastal zone management programs. With respect to implementation of such management programs, it is the national policy to encourage cooperation among the various state and regional agencies, including establishment of interstate and regional agreements, cooperative procedures, and joint action particularly regarding environmental programs.

* * * * * *

MANAGEMENT PROGRAM DEVELOPMENT GRANTS

Sec. 305. (a) The Secretary may make grants to any coastal state—

(1) under subsection (c) for the purpose of assisting such state in the development of a management program for the land and water resources of its coastal zone; and

* * * * * *

(b) The management program for each coastal state shall include each of the following requirements:

* * * * * *

(7) A definition of the term "beach" and a planning process for the protection of, and access to, public beaches and other public coastal areas of environmental, recreational, historical, esthetic, ecological, or cultural value.

Title 15—Commerce and Foreign Trade

CHAPTER IX—NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

*PART 920—COASTAL ZONE MANAGEMENT PROGRAM DEVELOPMENT GRANTS

Revised Regulations

AGENCY: National Oceanic and Atmospheric Administration, Commerce.

ACTION: Final Rule.

SUMMARY: These final regulations amend existing program development grant regulations to define procedures by which Coastal States can meet the new planning requirements and the requirements for preliminary approval contained in the 1976 amendments to the Coastal Zone Management Act of 1972.

EFFECTIVE DATE: May 30, 1977.

FOR FURTHER INFORMATION CONTACT:

Carol Sondheimer, Chief Program Planning, State Programs Division, Office of Coastal Zone Management, 202-634-1672.

SUPPLEMENTARY INFORMATION: Pub. L. 94-370, signed on July 26, 1976, amended the Coastal Zone Management Act of 1972, as amended. (16 U.S.C. 1451, et seq.), hereinafter referred to as the "Act." As a result of amendments made to section 305 of the Act it is necessary to issue these regulations on the new subsections 305(b) (7), (8) and (9) and new subsection 305(d), to insure that coastal States understand the new requirements for development and subsequent approval of coastal management programs.

On December 6, 1976, the National Oceanic and Atmospheric Administration (NOAA) published proposed amendments (41 FR 53418) to existing Part 920 regulations which cover requirements for the development of coastal zone management programs, pursuant to section 305 of the Act. The proposed amendments contained guidance to coastal States as to the requirements for meeting a new planning element on shorefront access and protection (subsection 305(b)(7) of the Act), a new planning element on energy facility (subsection 305(b)(8)), and a new planning element on shoreline erosion (subsection 305(b)(9)). The proposed regulations also detailed the requirements for preliminary approval (subsection 305(d)).

Written comments were requested by February 7, 1977. As of that date, substantive comments had been received from twenty-seven reviewers. Twelve reviewers addressed the shorefront access planning requirement. Twenty-one commented on the energy facility planning process, nine on the shoreline erosion planning element, and eleven on the preliminary approval process. These comments have been considered in preparing these final regulations. Major comments and NOAA responses are discussed below.

DISCUSSION OF MAJOR COMMENTS AND NOAA RESPONSE

SHOREFRONT ACCESS PLANNING

(a) *Definition of "Beach":* Two commentators felt the term "beach" was not defined sufficiently. One of these commentators felt that the term should be expanded to include dunes. The other felt the regulations should define "beach." Conversely, one commentator felt that defining "beach" in terms of physical and public characteristics was too complex and that the regulations emphasized unnecessarily the process of defining the term.

NOAA Response: NOAA feels that a definition of beach should not be part of these regulations as the physical characteristics of a beach vary widely among different geographic regions. The danger of providing a definition is in overlooking certain types of areas, or of limiting a State's ability to take a more comprehensive or creative approach than that provided for in the regulations. NOAA has revised § 920.17(b)(6) to permit States to define beach in terms of either physical or public characteristics. NOAA has added the word "dunes" to § 920.17 (b)(6) as a physical characteristic to be considered in defining beaches. It is not the intent of these regulations to emphasize the process of defining the term "beach" at the expense of developing a process for identifying and responding to shorefront access and protection needs. Accordingly, the discussion of defining the term "beach" has been de-emphasized by shifting that discussion to § 920.17(b)(6), instead of retaining that discussions as § 920.17(b)(1) as it appeared in the proposed regulations.

(b) *Definition of "Public":* Three reviewers had comments addressed to what should be considered "public" beach and other "public" shorefront areas. One commentator felt that NOAA regulations should mandate the definition of "public." Another commentator did not support the concept of "public" being considered in terms of other than public ownership, particularly as no examples were provided of what was meant by "other demonstrated public interest." Conversely, a third commentator recommended that States use a definition of "public" as comprehensive as existing State law allows.

NOAA Response: NOAA does not feel it appropriate to define, and thereby possibly to limit, the term "public," given variations among State laws. NOAA accepts the recommendation that States use as comprehensive a definition of "public" as existing State laws allow. This has been incorporated into § 920.17 (b)(6) as a minimum requirement.

NOAA believes that ownership is not the sole determinant of a beach or shorefront area being "public." Examples of "other demonstrated public interest" include, but are not limited to, easements, leases, licenses or traditional and habitual usage. These examples have been added to § 920.17(b)(6).

(c) *Definition of "other public coastal areas":* One commentator asked whether the planning process for other public coastal areas could be applied to areas inland from the shoreline but within the coastal zone. Another commentator requested discussion of what constitutes other public coastal areas and recommended inclusion of barrier islands, wetlands, bluffs, wildlife refuges and urban waterfronts.

NOAA Response: NOAA feels that the appropriate emphasis for the subsection 305(b)(7) planning process is on shorefront public coastal areas. Other public areas inland from the shoreline but in the coastal zone can be addressed under other aspects of the basic program development, in particular the requirements having to do with geographic areas of particular concern. Similarly, while § 920.17(b)(5) now includes wetlands, bluffs, etc., as examples of other public coastal areas, it is anticipated that preservation requirements for these types of areas will already have been addressed as part of basic program development, especially in addressing the requirements for areas for preservation and/or restoration. Accordingly, it is anticipated that the primary focus under this specific planning requirement will be on the need for increased access to other public coastal areas, except in the case of islands which may not have been considered for preservation or access purposes as part of previous basic program development.

(d) *Definition of "Access":* Three commentators expressed approval of the concept of "access" contained in the proposed regulations. One of these commentators was concerned, however, that "access" not be read to encourage excessive construction of highways or parking facilities. A fourth commentator suggested that recognition be given to the need for access by public transportation, especially for urban areas. This same reviewer felt the term "lateral access" was sufficiently explained. Another reviewer questioned whether a broader interpretation was intended for "access" under subsection 305(b)(7) of the Act than that intended for subsection 315(2) of the Act.

NOAA Response: NOAA does not feel that the discussion of physical access encourages construction of highways or parking facilities. If anything, the emphasis is on small scale, public access ways and transport. It should be further noted that the language of subsection 315(2) of the Act restricts the use of those funds to acquisition of lands or interest in lands and therefore can not be used for highway construction. In response to the comment that attention should be given to access needs of urban residents, language recommending this as a special consideration has been added to § 920.17(b)(2). "Lateral access" is intended to refer to areas above mean high tide, or the ordinary high water mark in the Great Lakes, which could be considered as a means for increasing

*Part 920 has been superceded by part 923 (43 Fed. Reg. 41, March 1, 1978). However, 923.25 remains nearly identical to 920.17, and the rest of the above is included here for historical purposes.

access to the shorefront only where a State does not have a reasonable amount of public shorefront areas above mean high tide or the ordinary high water mark. Finally, NOAA believes the term "access" was intended to be interpreted more broadly for planning purposes under subsection 305(b)(7) of the Act than for acquisition purposes under subsection 315(2). NOAA believes that a coastal management program, which is developed pursuant to section 305 of the Act, may consist of more than those elements which are specifically fundable pursuant to other sections of the Act.

(e) *Comments on "Development of State Policies"*: One commentator indicated that requiring "development" of state policies for access and/or protection does not take into account that existing State policies may be adequate. Conversely, another commentator suggested the proposed regulations did not provide adequate recognition for the possibility of States having to adopt additional authorities for access or preservation purposes.

NOAA Response: In response to both comments, § 920.17(a)(3) has been changed to refer to "articulation of State policies . . ."

(f) *General Comments on the Planning Process Requirements*: One commentator misinterpreted the intent of the requirements as not permitting use of section 305 funds for developing a planning process for protecting and/or providing access to other public coastal areas. This is, in fact, one of the purposes of this new section 305 planning requirement. The same commentator misunderstood that the general planning process (beyond defining the term "beach") does in fact apply to other public coastal areas as well as public beaches.

Another reviewer did not realize that the planning process required by a new subsection 305(b)(7) of the Act is a part of basic, overall coastal program development. As such, this element is subject to all the requirements for program approval as part of the overall program. Finally, one commentator was concerned that provisions for providing access not be read to apply to private individuals. There is nothing in these regulations that can be read to require private individuals to provide access. However, the matter of how best to provide additional shoreline access, if there is a need for such access, is a matter that will be decided by States in the development of their management programs. Thus, there also is nothing in these regulations to preclude States from requiring private individuals to provide shorefront access if that is an appropriate technique for assuring such access, and if State constitutions and laws do not prohibit such a requirement.

(g) *Miscellaneous Comments*: One commentator suggested that reference to "mean high tide" be expanded to read "or the ordinary high water mark in the Great Lakes." This suggestion has been accepted and is reflected in § 920.17 (b)(3) and (b)(6).

(h) *Comments beyond the Scope*: A number of comments were received which are beyond the scope of this specific planning requirement. These include:

(1) Comments addressed primarily to requirements of subsection 315(2) of the Act. These comments will be addressed at the time regulations for subsection 315(2) are promulgated;

(2) Comments suggesting any major Federal actions resulting from this planning process would be subject to the National Environmental Policy Act of 1969 (NEPA, Pub. L. 91-190, as amended).

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GENERAL BACKGROUND ON PART 920

The guidelines contained in this Part are for grants made pursuant to section 305 to develop a coastal zone management program that will meet the requirements for program approval of section 306 of the Act. These guidelines are to insure that management programs developed by participating States will meet the requirements for program approval. These latter requirements are contained in 15 CFR Part 923. The requirements contained in 15 CFR Part 920 are incorporated into and expanded upon in 15 CFR Part 923. Accordingly, the two sets of regulations should be read together to assure State coastal management programs will be developed in such a way as to meet the approval criteria of section 306. Where there are differences in the Part 920 and Part 923 regulations, the Part 923 requirements control.

In general terms, section 305 requires a management program to include (1) the boundaries of a State's coastal zone, (2) a definition of land and water uses that have direct and significant impacts on coastal waters and thereby are subject to the terms of the management program, (3) criteria for and designation of geographic areas within the coastal zone which are of particular concern to the State, (4) guidelines for priorities of uses within geographic areas of particular concern, including specifically those uses of lowest priority, (5) an identification of the means by which the State, together with other governmental entities, if appropriate, shall exert control over land and water uses subject to the management program, (6) a description of the organizational structure and intergovernmental arrangements sufficient to develop and maintain an effective and coordinated management process, (7) a planning process for the protection of and access to public beaches, including a definition of the term "beach," and other public coastal areas of environmental, recreational, historical, esthetic, ecological or cultural value, (8) a planning process that, at a minimum, provides for the anticipation and management of impacts from energy facilities likely to locate in, or which may significantly affect, the State's coastal zone, and (9) a planning process for assessing the effects of shoreline erosion and evaluating methods to mitigate the impact of such erosion and/or to restore areas adversely affected by such erosion.

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Basic to this whole process is an identification of the issues and problems that confront or will confront a State's coastal zone and, relatedly, an articulation of specific goals, objectives, policies, standards, guidelines and/or regulations to address these issues.

States may have up to four years of program development grants, pursuant to subsection 305(c) of the Act, to develop approvable coastal management programs, if the Associate Administrator for Coastal Zone Management determines at the completion of each grant that satisfactory progress is being made towards program approval. A State may submit a management program for preliminary approval, pursuant to subsection 305(d) of the Act, at any point in the program development process when the State's program is sufficiently well developed and described to allow the Associate Administrator to make a determination that the program would be fully approvable when submitted for section 306 approval.

Following consideration of comments received and other relevant information, there are adopted below revised final regulations describing the procedures for applying for program development grants pursuant to section 305 of the Act.

Dated: April 25, 1977.

T. P. GLEITER,
Assistant Administrator for Administration.

For the sake of clarity and ease of reference, the entire 15 CFR Part 920 is reprinted below. New additions made final as a result of issuance of these regulations are §§ 920.17, 920.18, 920.19, Subpart E, and §§ 920.60 and 920.61. Accordingly, 15 CFR Part 920 is revised as follows:

Subpart A—General

Sec.
920.1 Policy and objectives.
920.2 Definitions.
920.3 Applicability of air and water pollution control requirements.

Subpart B—Content of Management Programs

920.10 General.
920.11 Boundaries of the coastal zone.
920.12 Land and water uses subject to the management program.

Sec.
920.13 Geographic areas of particular concern.
920.14 Means of exerting State control over land and water uses.
920.15 Designation of priority use guidelines.
920.16 Organizational structure to implement the management program.
920.17 Shorefront access planning.
920.18 Energy facility planning.
920.19 Shoreline erosion/mitigation planning.

Subpart C—Research and Technical Support

920.20 General.

Subpart D—Public Participation

920.30 General.
920.31 Public hearings.
920.32 Additional means of public participation.

Subpart E—Preliminary Approval

920.40 General.
920.41 Eligibility for consideration.
920.42 Approval criteria.
920.43 Review/approval procedures.

Subpart F—Applications for Development Grants

920.50 General.
920.51 Administration of the program.
920.52 State responsibility.
920.53 Allocation.
920.54 Geographic segmentation.
920.55 Application for initial grant.
920.56 Approval of applications.
920.57 Amendments.
920.58 Application for second year grants.
920.59 Application for third and fourth year grants.
920.60 Application for three new planning elements.
920.61 Applications for preliminary approval.

AUTHORITY: (Sec. 305, Coastal Zone Management Act of 1972, Pub. L. 92-583, 86 Stat. 1280, as amended by Pub. L. 94-370, 90 Stat. 1013).

Subpart A—General

§ 920.1 Policy and objectives.

(a) This part establishes guidelines on the procedures to be utilized by coastal States to obtain program development grants pursuant to section 305 of the Act, sets forth policies for the development of coastal zone management programs, and sets forth criteria for preliminary approval of State management programs.

(b) Coastal management programs developed by participating States shall comply with that policy of the Act which requires States to give full consideration to ecological, cultural, historic, and esthetic values as well as to needs for economic development. As a result of consideration of these values and needs, States will identify issues and problems that confront or will confront their coastal zone and, relatedly, will articulate specific goals, objectives, policies, standards, guidelines and/or regulations to address these issues within the context provided by these regulations.

(c) *Comment.* Statutory Citation, section 303:

The Congress finds and declares that it is the national policy • • • (t)o encourage and assist the States to exercise effectively their responsibilities in the coastal zone through the development and implementation of management programs to achieve the wise use of land and water resources of the coastal zone giving full consideration to ecological, cultural, historic, and esthetic values as well as to needs for economic development.

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Subpart B—Content of Management Programs

§ 920.10 General.

(a) These guidelines for section 305 of the Act have been structured to parallel the language and sequence of requirements of the Act. This has been done to facilitate reference to the Act. It is not required that this sequence be followed in developing the management program and in carrying out the specific tasks contained therein. It is anticipated and acceptable that the approach taken for development of programs will vary. These guidelines should not be interpreted as limiting State approaches or the content of their program development grant applications.

(b) Subsection 305(b) requires the inclusion of nine elements in the development of State coastal zone management programs. These minimum requirements are set forth below with accompanying commentary that is designed to guide State response to these key provisions of the program development effort. Prior to October 1, 1978, States may seek approval for their management programs (pursuant to section 306) even if three of these elements—those relating to the planning processes for shorefront access, energy facilities, and shoreline erosion/mitigation—are not yet completed. However, such States must be able to fulfill these requirements by October 1, 1978 and submit same by that date for review and approval, as amendments to their programs. Programs submitted after October 1, 1978 must include all nine elements in order to be approved pursuant to section 306.

(c) It is anticipated that an environmental impact statement will be prepared and circulated on a State's management program prior to its approval by the Associate Administrator, in accordance with the terms of the National Environmental Policy Act of 1969, as amended. The Associate Administrator will prepare and circulate an environmental impact statement on the basis of an environmental impact assessment and other relevant data prepared and submitted by the individual States.

* * * * * *

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§ 920.17 Shorefront access planning.

(a) *Requirement.* In order to fulfill the requirements of subsection 305(b)(7) of the Act, the management program must include a planning process that can identify public shorefront areas appropriate for increased access and/or protection. This process must include:

(1) a procedure for assessing public areas requiring access or protection;

(2) a definition of the term "beach" and an identification of public areas that meet that definition;

(3) articulation of State policies pertaining to shorefront access and/or protection;

(4) a method for designation of shorefront areas as areas of particular concern (either as a class or as specific sites) for protection and/or access purposes, if appropriate;

(5) a mechanism for continuing refinement and implementation of necessary management techniques, if appropriate; and

(6) an identification of funding programs and other techniques that can be used to meet management needs.

(b) *Comment.* Statutory Citation, Subsection 305(b)(7):

The management program for each coastal state shall include • • • (a) definition of the term "beach" and a planning process for the protection of, and access to, public beaches and other public coastal areas of environmental, recreational, historical, esthetic, ecological, or cultural value.

(1) The requirements of this section should be read in conjunction with subsection 305(b)(3) of the Act, dealing with geographic areas of particular concern, the requirements for which are contained in § 920.13 and § 923.13 of this chapter. In developing a procedure for identifying access and/or protection requirements for public beaches and other public coastal areas of environmental, recreational, historical, esthetic, ecological, or cultural value, States should make use of the analyses and considerations of statewide concern developed to meet the requirements of § 920.13. It is also recommended that information contained in completed State Comprehensive Outdoor Recreation Plans be considered. If islands have not been included in the areas considered under § 920.13, then their preservation needs should be considered under this subsection. Preservation should be considered broadly, in terms of ecological, environmental, recreational, historical, esthetic or cultural values.

(2) In developing a procedure for identifying access and/or protection needs, States should take into account (a) the supply of existing public facilities and areas, (b) the anticipated demand for future use of these facilities, and (c) the capability/suitability of existing areas to support increased access. Based on these and other considerations, as appropriate, the State's planning process shall include a description of appropriate types of access and/or protection, taking into account governmental and public preferences, resource capabilities and priorities.

(3) In determining access requirements, States should consider both physical and visual access. The emphasis, however, should be on the provision of increased physical access. Special attention should be given to recreational needs of urban residents for increased shorefront access. Physical access may include, but need not be limited to, footpaths, bikepaths, boardwalks, jitneys, rick-

shaws, parking facilities, ferry services and other public transport. To the extent that the provision of perpendicular access to public shorefront areas is insufficient to meet the purposes intended by this subsection, it is appropriate for States to consider lateral access. What this means is that where a State does not have a reasonable amount of public shorefront area above mean high tide or above the ordinary high water mark in the Great Lakes, then provision of perpendicular access may not serve a sufficient range of purposes in terms of increasing or enhancing the publics' ability to get to and to enjoy shorefront amenities. In such cases, consideration of the need for areas above mean high tide, or the ordinary high water mark in the Great Lakes, is appropriate. Visual access may involve, but need not be limited to, viewpoints, setback lines, building height restrictions, and light requirements.

(4) As part of this general planning process, States should develop a procedure which will allow for the eventual identification of specific areas for which provision of access through acquisition will be appropriate during program implementation. In conjunction with developing this procedure, States shall identify local, State or Federal sources for accomplishing particular access proposals. Particular attention should be given to coordination of management objectives with funding programs pursuant to subsection 315(2) of the Act, and pursuant to the Land and Water Conservation Fund (16 U.S.C. 460 et seq.) and other statutes as may be appropriate. It should be noted that the access referred to in this subsection is broader than the types of access that may be acquired using subsection 315(2) funds which is limited to the acquisition of lands or interests in lands for purposes of providing access to public shorefront and/or for the preservation of islands.

(5) In determining the needs for protection of public coastal areas, States should consider such factors as (a) environmental, esthetic or ecological preservation (including protection from overuse and mitigation of erosion or natural hazards), (b) protection for public use benefits (including recreational, historic or cultural uses), (c) preservation of islands, and (d) such other protection as may be necessary to insure the maintenance of environmental, recreational, historic, esthetic, ecological or cultural values of existing public shorefront attractions. Existing public shorefront attractions may be broadly construed to include, but need not be limited to: public recreation areas, scenic natural areas, threatened or endangered floral or faunal habitat, wetlands, bluffs, historic, cultural or archaeological artifacts, and urban waterfronts.

(6) The purpose of defining the term "beach" is to aid in the identification of those existing public beach areas requiring further access and/or protection as a part of the State's management program. States should define "beach" in terms of characteristic physical elements (e.g., submerged lands, tidelands, foreshore, dry sand area, line of vegetation, dunes) or in terms of public characteristics (e.g., local, State or Federal ownership, or other demonstrated public interest such as easements, leases, licenses, or traditional and habitual usage). At a minimum, the definition of what constitutes a public beach shall be as broad as that allowed under existing State law or constitutional provisions. States should take into account special features such as composition (e.g., non-sand beaches), location (e.g., urban or riverine beaches), origin (e.g., manmade beaches) and fragility (e.g., areas of shifting dunes). Where access may be complicated by questions of ownership and use of the foreshore or dry sand beach, States are encouraged to define beach in terms of its component parts, especially at the mean high tide line, or the ordinary high water mark in the Great Lakes. Finally, in defining the term "beach," States shall provide a rationale explaining the relationship between the definition developed and access and protection needs.

ESTUARINE SANCTUARIES AND BEACH ACCESS

Sec. 315. The Secretary may, in accordance with this section and in accordance with such rules and regulations as the Secretary shall promulgate, make grants to any coastal state for the purpose of —

* * * * * *

(2) acquiring lands to provide for access to public beaches and other public coastal areas of environmental, recreational, historical, esthetic, ecological, or cultural value, and for the preservation of islands. The amount of any such grant shall not exceed 50 per centum of the cost of the project involved; except that, in the case of acquisition of any estuarine sanctuary, the Federal share of the cost thereof shall not exceed $2,000,000.

Section 315(2)

Shorefront Access/Island Preservation

I. Introduction

The purpose of this paper is to present the preliminary recommendations of the Office of Coastal Zone Management on the content of regulations implementing subsection 315(2). These regulations are necessary because of the addition of this new authority in the amendments to the Coastal Zone Management Act approved in 1976. Implementation of the program is subject to appropriations.

The recommendations contained here are preliminary and subject to change based on the comments received. These preliminary recommendations are based on an initial set of questions and issues identified by the Office of Coastal Zone Management as requiring resolution in the regulations and circulated for comment.

Proposed Regulations will be published in the Federal Register on or about September 30. Reviewers are encouraged to comment on both this preliminary paper and the Proposed Regulations. Interim Regulations are scheduled to be published in December 1977. The regulations implementing section 315(2) should be read in the context of the planning requirements mandated in section 305(b)(7). States are required by that subsection to develop a planning process for the protection of and provision of access to public shorefront attractions. Under section 315(2), funds are available:

(1) to acquire access to public shorefront attractions and

(2) to preserve islands.

II. Language of the Act

Section 315 of the Coastal Zone Management Act provides that:

"The Secretary may, in accordance with this section and in accordance with such rules and regulations as the Secretary shall promulgate, make grants to any coastal state for the purpose of...acquiring lands to provide for access to public beaches and other public coastal areas of environmental, recreational, historic, esthetic, ecological, or cultural value, and for the preservation of islands. The amount of any such grant shall not exceed 50 percentum of the cost of the project involved; except that, in the case of acquisition of any estuarine sanctuary, the Federal share of the cost thereof shall not exceed $2 million." (Section 315(2)).

Funding is provided in subsection 318(a)(7) which provides for sums, "not to exceed $25 million for each of the fiscal years ending

September 30, 1977; September 30, 1978; September 30, 1979; and September 30, 1980, respectively, as may be necessary for grants under section 315(2), to remain available until expended." As of July 1, 1977, no funds had been appropriated for the program.

III. Intent

The intent of Congress in adding subsection 315(2) is plainly stated in the legislative history. The House Committee Report accompanying the 1976 amendments discussed the shorefront access acquisition provision as follows:

> "This authorization complements the new requirement the Committee has added to section 305 for a beach protection and access planning process. Because time is of the essence in acquiring access, particularly in or near urban coastal areas, it was felt advisable to accompany the planning requirements with funds to carry out the plans.
>
> "The Committee does not intend to authorize the purchase of lands for beaches or other public uses. The concern is that there are areas already in public ownership on the shore which, for one reason or another, are not readily accessible to the public.
>
> "The Committee's further concern is that in providing the means of opening up this access, we do not overburden the resources. That is why this authorization is tied to the planning requirement of section 305 - the intent is to see to it that this expanded means of access fits into an overall recreational plan and that due care is given to protect areas susceptible of damage from excess use."[1]

The inclusion of the island preservation provision is clearly for a different purpose. The major aim here, legislative history makes clear, is to put into public ownership those coastal islands now relatively unspoiled before they are developed intensively. In introducing the original legislation in 1975, Senator Ernest F. Hollings stated:

> "This bill recognizes the importance of...the protection, of islands, areas which have been experiencing ever-increasing developmental and recreational pressures in recent years."

From the legislative history, the Office of Coastal Zone Management has concluded that section 315(2) is intended to provide ways of getting to areas presently in public ownership and is not for adding to those areas. Congress did not intend that funds from this section be used to add to beach areas, such as the dry sand area above the mean high tide line (or the ordinary high watermark in the Great Lakes) delineating where public ownership ends in certain states.

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[1] Coastal Zone Management Act Amendments of 1975, Report, House Committee on Merchant Marine and Fisheries, March 4, 1976, pp. 38.

Also, the word "public" appears before "beaches" and the listing of the other shorefront areas to which access might be provided. Thus, it is clear that Congress did not intend for access to be provided to privately held property. However, it would seem appropriate to provide right of access through private property to public areas.

Access must be provided according to the criteria established pursuant to the section 305(b)(7) planning process and must be sensitive to the areas involved. Thus, access to ecologically valuable areas will be markedly different from access to a public beach, for example.

The island funding provision is to preserve islands which are largely undeveloped and to keep them in that condition. Some limited public access to islands purchased under this provision may be provided.

IV. Policy and Objectives

The legislative history of this section of the Act makes it clear that its framers perceived the lack of access to public shorefront attractions, particularly beaches, as a major national problem which the Federal government must address through the vehicle of state coastal zone management programs. Congress has authorized a program which would make funds available to states for the purpose of increasing the ability of the public to gain access to coastal lands and waters which it already owns. Thus, Congress has implied a broad program objective and has indicated that section 315(2) funds are to be used to acquire lands or interest in lands as one means of achieving this objective.

Congress also recognized the intense developmental pressures on coastal islands and authorized funds to acquire these islands for the purpose of preserving their natural integrity.

V. Key Terms

Cost of Project: If one assumes that the intent of section 315(2) is to increase the ability of the public to use those shorefront attractions which it already owns, much more than simple land acquisition is involved. Although it is clear that Federal funds must be used for acquiring interests in land only, a project designed to increase shorefront access might well include capital expenditures (e.g., pavement of parking areas), transportation costs (e.g., shuttle buses) or maintenance (e.g., litter pickup, protection against vandalism, liability insurance). Thus, the non-Federal matching share may come from a variety of sources and need not be only for land acquisition purposes. The "cost of project" will apply to the overall effort designed to increase shorefront access, so long as the Federal share is for land acquisition. The same rationale will be applied to island preservation projects: those costs should be associated with a "project" designed to preserve the environmental, recreational, historical, esthetic, ecological and/or cultural value

value of islands.

Access to: The term "access" as used in this section can include both physical and visual access. In providing for physical access, this may include but need not be limited to land for walkways, roads, boardwalks, bikeways, boat-launching areas for island access, parking facilities, for example. Visual access could include but not be limited to viewpoints, scenic easements and overlooks.

Public Beach: The term "public beach" carries over directly from the shorefront planning provision in which the states are required to define the term "beach" and as stated in the 305(b)(7) Regulations:

> "The purpose of defining the term "beach" is to aid in the identification of those existing public beach areas requiring further access and/or protection as a part of the State's management program. States should define "beach" in terms of characteristic physical elements (e.g., submerged lands, tidelands, foreshore, dry sand area, line of vegetation, dunes) or in terms of public characteristics (e.g., local, State or Federal ownership, or other demonstrated public interest such as easements, leases, licenses, or traditional and habitual usage). At a minimum, the definition of what constitutes a public beach shall be as broad as that allowed under existing state law or Constitutional provisions. States should take into account special features such as composition (e.g., non-sand beaches), location (e.g., urban or riverine beaches), origin (e.g., man-made beaches) and fragility (e.g., areas of shifting dunes). Where access may be complicated by questions of ownership and use of the foreshore or dry sand beach, states are encouraged to define beach in terms of its component parts, especially at the mean high tide line, or the ordinary high watermark in the Great Lakes. Finally, in defining the term "beach", states shall provide a rationale explaining the relationship between the definition developed and access and protection needs."

Other public coastal areas of environmental, recreational, historical, ecological or cultural value. These public shorefront attractions, as stated in the 305(b)(7) Regulations. . ." may be broadly construed to include, but need not be limited to: public recreation areas, scenic natural areas, threatened or endangered floral or faunal habitats, wetlands, bluffs, historic, cultural or archaeological artifacts, and urban waterfronts" and applies to this subsection of the Act as well.

Preservation of Islands: This phrase means protecting the environmental, recreational, esthetic, ecological, cultural and/or historic values of islands, or parts thereof.

VI. Eligibility Requirements

The legislative history states "Although not stipulated in H.R. 3981, it is understood that states must have substantially completed the public area protection and access planning process required under Section 305(b)(7) before being eligible to receive grants under Section 315(2)."* OCZM proposes the following two alternatives in order to be eligible for planning process.

1. Completion of the 305(b)(7) planning requirement in the event funding becomes available in FY 78.

2. Program approval under Section 306 if funding becomes available in FY 79. In the event funding becomes available in FY 78, OCZM must be in position to move quickly and allocate the funds during that year. Completion of the 305(b)(7) planning process, but not program approval under Section 306, will allow more states access to grant monies. The question becomes moot if funding becomes available in FY 79, since the great majority of states are scheduled to have their programs approved under Section 306 by then.

VII. Allocation of Funds

In order to make the Section 315(2) Program viable, and to insure continued funding in subsequent fiscal years, OCZM favors an allocation methodology that at least in the initial years of funding will ensure that all appropriated acquisition funds are spent, preferably on innovative projects having a relatively high degree of visibility. Therefore, OCZM proposes that all funds allocated under Section 315(2) not be arbitrarily apportioned between shorefront access or island preservation projects. Within this initial framework OCZM has considered a number of different methods for allocating funds among proposed projects. In evaluating the respective merits of these alternative methods, OCZM suggests that reviewers consider the following factors:

A. The procedure for project funding should not be so burdensome or time-consuming as to foreclose acquisition opportunities that become available to the states.

B. Administrative delay should be minimized.

C. Acquisition should be well underway shortly after obligation by OCZM of funds for a given project, hence time is a critical factor.

*Legislative History of the Coastal Zone Management Act of 1972, as amended in 1974 and 1976 with a section-by-section index, Dec. 1976, p.949.

D. Funding available for §315(2) acquisitions will be quite limited, especially given the total number of potential projects that will be eligible for funding within all 34 coastal states and territories.

E. Funding alternatives that stress geographical equity will eliminate certain types of land acquisitions. For example, if $10 million were appropriated, and each region were to be allocated $2 million the purchase of an island costing $3 million would not be possible.

F. Some projects may take longer to plan than others. It is possible that allocation methods heavily stressing geographical equity may inadvertantly favor mediocre projects which can be proposed more quickly than complex but more innovative ones.

OCZM is considering four alternate methods for allocating §315(2) funds. The following alternatives are proposed in the context of one method of funding for shorefront access and island projects. However, if desired, one alternative might apply to shorefront access and another to island preservation (e.g., Alternative #3 apply to allocation of funds for beach access, and Alternative #4 for island's).

Alternative #1

Funds will be allocated directly to the coastal states and territories using the §305 grants allocation formula. Under this formula, 1% of the appropriated funds will be given to each eligible state. Of the remaining funds, 40% will be allocated on the basis of coastal population; 40% will be allocated on the basis of miles of shoreline; and 20% will be allocated for projects having national significance, at OCZM's discretion. No state will be allowed to receive more than 10% of the total amount appropriated in any fiscal year.

Considerations

A. States would select projects based upon state, rather than national, criteria. Except for the 20% discretionary funds, there would be little reflection of national needs and priorities.

B. Funds would potentially be available to all eligible states in each fiscal year. States unable to provide matching money to develop projects would have their funds reallocated to other states.

C. Most states would receive relatively small amounts of money - perhaps too small for the acquisition of islands or substantial access projects.

Alternative #2

Funds will be allocated equally to all five OCZM coastal zone management regions. State proposals will be judged on the basis of criteria to be set forth in regulations, and funded from the money available in the applicable state's region. In the event that projects funded within any region in the first nine months of the fiscal year do not exhaust the available funds, the unused funds can be transferred to projects in other regions, at OCZM's discretion.

Considerations

A. This method would roughly balance only the geographical distribution of projects funded each fiscal year and not consider other factors.

B. Each individual state is not assured of having projects funded.

C. If all or most of a region's allocation had already been committed, unexpected acquisition opportunities could not be acted upon.

Alternative #3

Using the §305 grant allocation formula, the funds for each state will be aggregated by region. Once aggregated at the regional level funds would be allocated to the states based not on any allocating formula, but instead on criteria which are discussed in this paper. This alternative method would be similar to Alternative #2, with the exception that the funds for each region would not be uniform.

Considerations

A. Instead of geographical balance, this method would emphasize distribution based upon population and amount of coastline.

B. The constraints on project funding discussed for Alternative #2 above would also apply.

Alternative #4

States will submit project proposals, and funds will be allocated among these proposals on the basis of criteria to be contained in regulations and discussed in this paper. There will be only one national pool of funds, from which all projects will be funded.

Considerations

A. This method provides maximum flexibility to fund those projects nation-wide which OCZM believes will meet the most critical shorefront access and island preservation needs.

B. This method would allow OCZM to take advantage of unexpected, innovative, or highly visible acquisition opportunities, especially island purchases which in some instance might require larger amounts of money.

C. In any given year, funds might be concentrated in some areas, to the exclusion of others. Selection criteria might accordingly need to ensure that over a number of fiscal years, projects funded under §315(2) approximate some geographical or other distributional standards.

VIII. Criteria for Selection

Under allocation Alternative #1, only very broad criteria would be needed for individual projects. The assumption here is that the states will set priorities among projects in the 305(b)(7) planning process. Under the other three alternatives OCZM would be in the position of allocating limited funds among competing project proposals. Selection criteria would emphasize equitable distribution of funds to the extent practicable with minimal administrative delay.

To the extent that OCZM is involved in project selection (Alternatives #2, 3, and 4, and the discretionary portion of Alternative #1), grant proposals will be reviewed and judged on the basis of criteria to be contained in regulations. OCZM proposes to use the set of criteria set forth below. Although some criteria will differ depending upon whether a project is classified under shorefront access or island preservation, there are a number of common factors that can be considered by OCZM in reviewing all project proposals. OCZM proposes that these general criteria include:

1. A showing that the proposed project is consistent with the goals and priorities established by the §305(b)(7) planning process. This would consist of coordination with existing/ proposed state and local land use and recreation plans, and transportation plans and systems.

2. A showing of the need for the particular project.

3. An evaluation of the environmental impact of the project. Environmental assessments will accompany all project proposals, and environmental impact statements will subsequently be required if warranted.

4. A demonstration that state and local agencies have sufficient legal authority to acquire and manage the property for which funding is sought.

Additional proposed criteria for evaluating proposed shorefront access projects would include:

1. Proximity to population centers.

2. Use of innovative acquisition techniques - e.g., less than fee simple purchase.

3. Local support for the project.

Additional proposed criteria for evaluating the proposed acquisition of islands or portions of islands would include:

1. Assessment of the ecological role of the island.

2. Evaluation of the social benefits (e.g., wildlife refuge, storm barrier, visual amenity, etc.) that would result from acquisition.

3. The threat of impending development or alteration of the island's ecosystem.

While the states must submit sufficiently detailed information to enable OCZM to meaningfully evaluate the relative benefits of proposed projects, OCZM is concerned that the application process for individual projects be relatively simple. It is anticipated that most of the detailed information required in the §315(2) regulations can be generated in the §305(b)(7) planning process, and that time delays will be minimal in those states which have addressed acquisition issues in their §305(b)(7) plans.

Appendix Two. Other Federal Programs Related to Beach Access

In this Appendix, Federal programs that may have some relevance to a beach access program are described. The beach access provisions of the Coastal Zone Management Act have been described in Appendix One and are not repeated here.

There is a wide variety of programs described. Some are acquisition programs, many are not. Some will have immediate application, others will be useful only under peculiar circumstances, some, perhaps, will never be useful. They are all listed, however, because it was felt that each one might be of help.

In some instances, the programs are cross-referenced by means of code numbers taken from the Catalog of Federal Domestic Assistance, an excellent reference point for further information on specific programs. Other sources are the BNA Environment Reporter and Housing and Development Register, which usually contain the relevant statutes and regulations.

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Department of the Interior
Bureau of Outdoor Recreation
Land and Water Conservation Fund

Probably the most significant support for coastal recreation comes through the Land and Water Conservation Fund Act of 1965 (LAWCON). BOR administers LAWCON as a program of financial assistance grants to States for facilitating outdoor recreation planning, acquisition, and development activities; and the fund also provides for the acquisition of National recreation lands by the Federal government. Since 1965, Federal grants of over $1 billion have been made to the States, territories, and the District of Columbia under LAWCON. Well over half of these funds have benefitted water-oriented recreation projects (including but not limited to access projects). A major portion of the water-oriented projects have been in the four coastal areas, but the fund encompasses all water areas.

Authorization

P.L. 88-578; 78 Stat. 897, as amended through enactment of P.L. 95-42, (____ Sta ____.) as of June 10, 1977. 16 U.S.C. 4601, et seq.

Coastal/Recreational Responsibilities and Uses
Tools and Techniques

LAWCON provides for:

(1) acquisition of lands for Federally administered parks, wildlife refuges, and recreation areas; and
(2) matching Project Grants for State recreation planning, and State and local land acquisition and development.

Under the "Federal side" (not less than 40 percent of the total fund), money is provided only for the acquisition of national recreation and conservation lands (See Acquisition Authority below). Under the "State side" (about 60 percent of the total fund), grants are provided to States and their political subdivisions for acquisition and development of public outdoor recreation areas and facilities. These project grants must be matched by not less than an equal amount of non-Federal funds.

Acquisition Authority, Purposes

On the "Federal side," acquisition programs must be approved by Congress. Recreation resources which may be acquired by the Federal government include National parks, seashores, lakeshores, forests, wild and scenic rivers, trails, national recreation areas, historic areas, wildlife refuges, and natural and wilderness areas.

On the "State side," acquisition and development grants may be used for projects such as picnic areas, inner city parks, campgrounds, tennis courts, boat launching ramps, bike trails, outdoor swimming pools, and support and access facilities such as roads, water supply, etc. There are several restrictions on the types of projects that may be funded:

(1) Facilities must be open to the general public and not limited to special groups. (Assistance is available only for public projects.)
(2) Development of basic rather than elaborate facilities is favored.
(3) Priority consideration generally is given to projects serving urban populations.

Organizational Structure
Operations and Management

On the "Federal side," it is important to note that BOR does not manage any lands. Under LAWCON, management of the national recreation lands is divided between the Department of Interior's National Park Service, Fish and Wildlife Service, and Bureau of Land Management, and the Department of Agriculture's Forest Service.

On the "State side," fund monies are not available for the operation and maintenance of facilities. The sponsoring agency must permanently dedicate the project to outdoor recreation and assume responsibility for operation and maintenance.

Funding and Assistance

Sources of revenue

(1) Sale of Federal surplus real porperty;
(2) Federal motorboat fuels tax;
(3) Outer Continental Shelf mineral receipts.

Obligations (project grants)

FY 75 $165,107,948
FY 76 175,840,000
FY 77 est.175,516,000

Range and Average of Financial Assistance (project grants)

$150 to $5,450,000; $68,178

At the beginning of FY 1976, nearly 14,500 State and local projects had been approved for funding. Approximately 46 percent of the money obligated was for use by State agencies, 13 percent for counties, and 41 percent for cities. (Remember, this is all included in the 60 percent of the Fund appropriation that is for assistance to States; the remaining 40 percent is for Federal land acquisition.)

Under certain conditions, all or part of the project sponsor's matching share may be from certain other Federal assistance programs, such as Title I Community Development Funds. Funds are available for obligation during the fiscal year in which appropriated and for the two following fiscal years. Complex projects may be broken down into stages.

Coordination

Related Programs (Numbers are code numbers found in the "Catalog of Federal Domestic Assistance.")

-Public Land for Recreation, Public Purposes and Historic Monuments	15.202
-Outdoor Recreation Technical Assistance	15.402
-Disposal of Federal Surplus Real Property	39.002

As noted above, lands acquired by BOR under LAWCON are administered by the National Park Service, Fish and Wildlife Service Bureau of Land management, and the Forest Service.

Eligibility

Only the State agency formally designated as responsible for the preparation and maintenance of the Statewide Comprehensive Outdoor Recreation Plan (SCORP) is eligible to apply for planning grants. For a State or its political subdivisions to receive grants, it must develop a SCORP and update and refine it on a continuing basis. The Fund provides matching planning grants and technical assistance to States for such purposes.

The State-designated agency may apply for assistance for itself or on behalf of other State agencies or political subdivisions such as cities, counties, and park districts. Treated as States are the District of Columbia, Puerto Rico, The Virgin Islands, American Samoa and Guam. Indian tribes which are organized to govern themselves and perform as municipal governments also qualify for assistance. Individuals and private organizations are not eligible.

Application Procedures and Requirements

Project proposals are submitted to BOR through the State Liaison Officer designated by the Governor. The SLO has the initial prerogative of determining acquisition and development project eligibility, priority need, and order of fund assistance within the State. He must furnish assurance that each project meets high priority recreation needs shown in the action program portion of the plan.

Applications are to undergo A95 review. The applicant is to furnish basic environmental information or evaluation, and BOR will determine if an environmental impact statement must be prepared.

BOR estimates, rather optimistically it would seem, approval/disapproval time to be approximately 20 days for acquisition and development projects, and approximately 60 days for planning projects.

Relationship Between LAWCON and 315 (2)

References

1. The Land and Water Conservation Fund Act of 1965, As Amended (through Enactment of P.L. 94-422, September 28, 1976). 16 U.S.C. § 4601-4, et seq. (See Appendix A)

2. Executive Office of the President; Office of Management and Budget, Catalog of Federal Domestic Assistance, Government Printing Office, Washington, D.C. 20402, p. 463 (15.400).

3. The Federal Ocean Program, Report of the President to the Congress on the Nation's Efforts to Comprehend, Conserve, and Use the Sea, Government Printing Office, Washington, D.C. 20402.

4. "Programs," Environment Reporter, Volume of Federal Laws, The Bureau of National Affairs, Inc., 1231 25th Street, N.W., Washington, D.C. 20037, pp. 51-4361--51-4364.

5. U.S. Department of Interior, Bureau of Recreation Grants-in-Aid Manual, Section 460.

6. U.S. Department of Interior, Bureau of Outdoor Recreation, Land and Water Conservation Fund (pamphlet).

Department of the Interior
Bureau of Outdoor Recreation
Outdoor Recreation Technical Assistance

A. Informational Aspect

One focus of BOR's Technical Assistance Program is to provide advisory services and counseling and dissemination of technical information to other Federal agencies, governmental units, and private interests in order to increase the number and quality of public recreation areas, facilities, and opportunities.

Authorization

Bureau of Outdoor Recreation Organic Act; P.L. 88-29; 77 Stat. 49; 16 U.S.C. 1-3. Act of June 23, 1936; 49 Stat. 1894.

Coastal/Recreational Responsibilities and Uses Tools and Techniques

The informational source of the Technical Assistance Program is BOR's Outdoor Recreation Information Clearinghouse which contains over 8,500 references. BOR applies technical information useful in planning, developing, financing, and managing outdoor recreation programs and related research and educational activities. Technical assistance is also given to State and local governments relating to applications for Federal surplus property for public parks and recreation, and Historic Monument purposes in cooperation with GSA's Disposal of Federal Surplus Real Property program.

Acquisition Authority

This segment of the Technical Assistance Program is not an acquisition program.

Operations and Management

Technical assistance is available under this program with regard to the operations and management of outdoor recreation areas.

Funding Assistance

No funds are provided to any public or private entities under this program.

Coordination

Consultation is available to other Federal agencies assisting States or localities or private entities in providing outdoor recreation opportunities. As noted above, assistance is also given to States and localities relating to applications for GSA's Dispersal of Federal Surplus Real Property Program.

Eligibility

Anyone engaging in conducting outdoor recreation programs may receive assistance or information.

Application Procedures and Requirements

Informal request addressed to the Bureau of Outdoor Recreation's regional offices.

Related Programs

-Land and Water Conservation Fund 15.400
-Outdoor Recreation Technical Assistance 15.906
-GSA Surplus Property Program

Information Contacts

James W. Cook (202) 343-7962
Division of Cooperative Services
Bureau of Outdoor Recreation
Department of the Interior
Washington, D.C. 20240

References

1. Executive Office of the President; Office of Management and Budget, Catalog of Federal Domestic Assistance, Government Printing Office, Washington, D.C. 20402, p. 464 (15.402).

2. U.S. Department of Commerce, Bureau of Outdoor Recreation, A Technical Assistance Program (pamphlet).

B. Public-Private Partnership

The second focus of the Technical Assistance Program is working with State and local governments and private interests in order to obtain private contributions of land or money and support for public outdoor recreation areas, facilities, and programs.

Authorization

Bureau of Outdoor Recreation Organic Act; P.L. 88-29; 77 Stat. 49; 16 U.S.C. 1-3. Act of June 23, 1936; 49 Stat. 1844.

Costal/Recreational Responsibilities and Uses--Tools and Techniques

The program employs two approaches. One is locating a land resource in any region with outstanding public recreation potential land and then in cooperation with local officials, developing an acquisition program which is suitable for private contributions. Contributions may include donations of cash, land, facilities, leases, and easements, or bargain sales.

The second approach is to identify private interests with potential recreation resources and then to develop programs to make their resources available to the public in a variety of ways ranging from outright donation of the resources to a public agency, to opening the area for public agency. Below are three brief examples of cooperative efforts by Federal, State, and local governments and the private sector to meet the recreation needs of urban areas.

The Dolese Company/Kerr Foundation

In 1976, the Dolese Company decided to make available to Oklahoma City a 157-acre tract of land (formerly used as a sandpit mine), for a city park to be known as the Oklahoma City Youth Park. The Company donated 89 acres and the city purchased 69 acres. The value of the 89-acre donation was estimated at $1,400,000.

This project received a broadbase support from several philanthropic and civic organizations. The Kerr Foundation pledged $1,000,000 and other civic organizations pledged an additional $1,500,000 for the development of the park complex which will include bike, hiking, and jogging trails, picnic and day camping accommodations, a small lake, playgrounds, sports fields, and support facilities. BOR provided an initial $700,000 for the acquisition of the 69 acres.

Wisconsin Electric Power Co. R.O.W.

The Bureau assisted Wisconsin Electric Power Company by assessing the recreation potential of its Rights-Of-Way, informing local recreation departments of its availability, and providing technical assistance for trail development on the rightsofway.

Wisconsin Electric owns over 100 miles of electric utility R.O.W. radiating from Milwaukee and has a policy to encourage the use of these lands for public recreation. Four county recreation departments have developed and presently administer approximately 20 miles of bicycle-hiking trails on these R.O.W. and many more miles are planned for development as local funds permit.

St. Joe Minerals Corporation

In 1975, the St. Joe Minerals Corporation donated an 8,500 acre tract of land, located 60 miles south of St. Louis, near Farmington, to the State of Missouri for development as a State park. The 8,500 acre tract, valued at over $2,000,000, was no longer needed for mining purposes by the corporation.

Acquisition Authority

Under this program, the State or local government is the recipient of the land. BOR has no acquisition authority. If BOR considers it to be desirable for land to be held in escrow, so to speak, for a recipient, an arrangement with the Nature Conservancy is often worked out.

Operations and Management

The recipient of the land is responsible for its operation and management. In some cases ownership of the land is retained by the donor, and it is operated by the recipient under a management agreement.

Funding and Assistance

Since the Legacy of Parks Program was initiated, land valued at $213 million has been transferred to State and local governments for park and recreation purposes. During Fiscal Year 1976, 137,077 acres and 75 miles of trail, valued at over $25 million, were added to the public outdoor recreation estate. Of this, 62,483 acres and all of the trails, valued at over $13.5 million, were acquired at little or no cost to the recipient public agency. The Technical Assistance Program is designed to add to the public outdoor recreation estate with a minimum of Federal expenditures. At the current level of effort, over $20 worth of public recreation property is obtained for every Federal dollar expended on this program.

Coordination

Many of the private interest actions under the Technical Assistance Program interface with the Land and Water Conservation Fund and further its objectives. Private donations are frequently utilized for matching fund grants to help State and local agencies take full advantage of available recreation resources.

Eligibility Requirements

There are no specific eligibility requirements for potential State and local government recipients unless Federal funds are used in the project. Thus, a project does not necessarily have to conform to a State's SCORP.

necessary. The following list indicates the type of information project proposals should contain:

1. Description and map.

2. Classification by type of island.

3. Description of major physical, geographical, biological, and hydrological characteristics.

4. An assessment of ecological uniqueness of the island and surrounding waters.

5. An assessment of the ecological representativeness of the island and surrounding waters.

6. Discusson of any special historical, archeological, cultural, or other aspect of the island and surrounding waters.

7. Identification of ownership.

8. Description of planned or anticipated land and water uses and controls for contiguous areas.

9. An assessment of existing development pressures.

10. Description of existing and potential uses, and conflicts that can be anticipated if the area is not acquired for preservation purposes. Description of potential uses, use restrictions, and conflicts anticipated if the island is acquired for preservation purposes. Description of potential uses, use restrictions, and conflicts anticipated if the island is acquired for preservation.

11. Descriptions of benefits of acquisition, including leveraging of other programs or funds.

12. Assessment of the environmental and socio-economic impacts of acquisition, including the economic impact on the surrounding community (particularly if only part of an island is to be acquired).

13. Demonstration of authority to acquire and manage.

14. Description of proposed management techniques, managing agency, and budgeting.

15. Discussion, including cost and feasibility, of alternative methods for acquisition, control, and protection of the island that would not involve OCZM funding.

The above information should be used as the basis for an Island Preservation project proposal for the island in question. This proposal

should be prepared by the State to fit within its coastal zone plans regarding islands and should detail how the island will be managed once it is acquired.

These ideas have been discussed in the concept paper and the State responses to that paper. Based on the assumption that funding will be limited and that continued and/or increased funding is dependent, at least in part, on the impact of the program, it would appear that an approach which would give maximum impact in terms of the purpose of 315(2) would be desirable. Assuming that funding will be limited, and that each project is going to be expensive (if it is going to have any chance of succeeding) only a limited number of projects will be funded each year. This means that there will be some sort of stated or unstated competition. Proposals will compete with each other for the limited funds available in an overt or covert contest. An open contest would have the advantage, in theory at least, of encouraging the contestant States to put forward their very best proposal, with the result being that only the very best projects in the country would be funded each year. To carry the notion of a competition one step further, a panel could be commissioned to evaluate the proposals in much the same way that other agencies evaluate proposals. Of course, OCZM would have to establish criteria to be used in the evaluation process, whether it is done by panel or by staff.

These criteria should be predicated on OCZM's programmatic focus (e.g. ecosystem preservation and/or multiple use involving recreation). Specific factors used by the National Park Service to determine whether a particular site is nationally significant include the existence of:

1. Outstanding geological formations or features significantly illustrating geologic processes.

2. Significant fossil evidence of the development of life on Earth.

3. An ecological community significantly illustrating characteristics of a physiographic province or a biome.

4. A biota of relative stability maintaining itself under prevailing natural conditions, such as a climatic climax community.

5. An ecological community significantly illustrating the process of succession and restoration to natural condition following disruptive change.

6. A habitat supporting a vanishing, rare, or restricted species.

7. A relict flora or fauna persisting from an earlier period.

8. A seasonal haven for concentrations of native animals, or a vantage point for observing concentrated populations, such as a constricted migration route.

9. A site containing significant evidence illustrating important scientific discoveries.

10. Examples of the scenic grandeur of our natural heritage.

Additional factors may include:

1. The extent to which OCZM investment in the project will leverage other money from other programs.

2. The extent to which funding from other sources is available.

3. Projected usership of the island for purposes consistent with the Island Preservation Plan/Program.

4. Transportation parameters relating to island use.

5. Unique characteristics. This may include the fact that a particular island is the only one left for preservation or recreation acquisition by the State.

6. Cost, including the possibility of phased acquisitions.

7. Development pressures.

8. Alternate projects that could give substantially the same preservation results.

Even if 315 (2) is not funded, there may be some merit in urging the States to think in terms of island preservation as a part of their management programs. Both Congress and the President have indicated their interest in islands, and the Barrier Island Workshop and the Barrier Island Coalition may well add fuel to this fire. It would seem only proper for OCZM to play some sort of role in the effort to attain this goal and the State management programs may be a means. Also it would seem to be in the States' interest to do so. 315(2) may or may not be funded, but there is probably going to be some sort of program directed at islands, and the States with adequate island programs already developed would be in a position to take advantage of any opportunities that arise.

Islands are superb recreation areas. They have a strong aesthetic and romantic appeal which can be impaired or destroyed by insensitive development projects. In addition, large parts of many developed resort islands are permanently closed to the general public. Comparatively few of the total number of islands in the continental United States are permanently protected from real estate speculation and unrestricted development.

Wild, unspoiled islands are a unique part of this country's natural heritage. There are certain intangible qualities common to all islands which cannot be experienced in any other physical setting. Islands should be preserved to invoke these feelings of wonder, adventure, peace, or seclusion in future generations as they have in past generations.

FOOTNOTES

[1]Islands of America. Government Printing Office, Washington, D.C. 1970 at pp. 16 and 18.

[2]Neuhauser, Hans. "The Wildlife Resources of Barrier Islands" from "Barrier Islands and Beaches" Technical Proceedings of the 1976 Barrier Island Workshop. Annapolis, Maryland, May 17-18. Conservation Foundation Technical Sponsor Office of Coastal Zone Management, NOAA Washington, D.C. 1976 at p. 37.

[3]Warren, Langdon, The Status of the Barrier Islands of the Southeastern Coast. Open Space Institute. New York New York, November 1976 at p. 2.

[4]LaRoe, Edward T., "Barrier Islands as Significant Ecosystems." from Barrier Islands and Beaches at p. 3.

[5]Clark, John, "The National Interest in Barrier Islands and Beaches: Natural Resource Values." from Barrier Islands and Beaches at pp. 47-48.

[6]Godfrey, Paul J., "Comparative Ecology of East Coast Barrier Islands, Hydrology, Soil, Vegetation." from Barrier Islands and Beaches, at pp. 5-6.

[7]LaRoe, supra note 4, at p. 2.

[8]Ibid.

[9]Louisiana Advisory Commission on Coastal and Marine Resources. Louisiana Government and the Coastal Zone, 1972. Louisiana, March, 1972, at p. 21.

[10]Louisiana State Planning Office, Unique Ecological Features of the Louisiana Coast. By Buck and Associates, for Coastal Resources Program, Louisiana State Planning Office. Baton Rouge, Louisiana. June 1976 at pp. 33-35.

[11]Louisiana Advisory Commission on Coastal and Marine Resources, supra note 9, at p. 19.

[12]Louisiana State Planning Office, supra note 10, at p. 1.

[13]Personal Communication, Paul Templet, Program Coordinator Coastal Resources Program, Louisiana State Planning Office, Baton Rouge, Louisiana, August 1977.

[14]Massachusetts Coastal Zone Management Program. Ecosystems and Resources of the Massachusetts Coast. By Carl Colozzi, et. al. Institute for Man and Environment. Boston, Massachusetts. 1977 at p. 5.

[15]Ibid.

[16]Ibid., at p. 41.

[17]Ibid., at pp. 26-27.

[18]Ibid., at p. 28.

[19]Maine Department of Marine Resources, "Critical Marine Mammals Habitats--Gulf of Maine," by David Richardson, West Boothbay Harbor, Maine. February, 1974.

[20]New York State Water Resource Commission, Summary Appraisal, Developing and Managing the Water Resources of New York State. New York State Water Resources Commission, New York, Division of Water Resources, New York State Conservation Department, Albany, New York. 1967 at pp. 28-29.

[21]Florida Department of Natural Resources - Coastal Coordinating Council. Florida Keys Coastal Zone Management Study, (Executive Summary and Atlas), Tallahassee, Florida. June, 1974 at p. 105.

[22]Ibid., at p. 105.

[23]Ibid.

[24]Ibid.

[25]Ibid., at p. 106.

[26]Ibid.

[27]Ibid., at p. 107.

[28]Ibid., at p. 7.

[29]Ibid., at p. 107.

[30]Ibid., at p. 108.

[31]Personal Communication, Barbara Cottrel, Coast Islands Registry, Bureau of Public Lands, Maine. Department of Conservation, June 28, 1977.

[32]Personal Communication, Hank Tyler, Maine State Planning Office, Augusta, Maine. June 30, 1977.

[33]From series of reports for the Maine State Planning Office, Augusta, Maine. Cowger, Joel. Alcid Nesting Habitation on the Maine Coast and Its Relevance to the Critical Areas Program. September 20, 1976. The Nesting Habitat of the Leach's Petrel and Its Relevance to the Maine Critical Areas Program. September 20, 1976. Fefer, Stuart S. The American Fider in Maine and Its Relevance to the Critical Areas Program. March 1, 1977. Tyler, Henry. Wading Birds in Maine and Their Relevance to the Critical Areas Program. March 17, 1977.

[34]Ibid., Alcid Nesting Habitation . . . at p. 1.

[35]Marine Department of Marine Resources. "Critical Marine Mammals Habitats - Gulf of Maine," by David Richardson. West Boothbay Harbor, Maine. February 14, 1975.

[36]U. S. Department of Commerce, Social and Economic Statistics, Bureau of the Census. Statistical Abstract of the United States, 1974. Government Printing Office, Washington, D. C. 1974.

[37]Vineyard Open Land Foundation. Looking at the Vineyard. Vineyard Open Land Foundation, West Tisbury, Massachusetts. 1973 at p. ii.

[38]Personal Communication, Janet Blank. Maine Coast Heritage Trust, Bar Harbor, Maine. June 30, 1977.

[39]Nature Conservancy, The Nature Conservancy Preserve Directory. The Nature Conservancy, Arlington, Virginia. 1974.

[40]Personal Communication, William Hoover. Ocean City Planning and Zoning Administration, Ocean City, Maryland. July 14, 1977.

[41]MacFarland, J. W., Lade, K. P., and Shope, J. H. Virginia Coast Reserve Study: Volume III. The Nature Conservancy, Arlington, Virginia at p. 133.

[42]Warren, Langdon. The Status of the Barrier Islands of the Southeastern Coast. Open Space Institute, New York, New York. November, 1976 at p. 17.

[43]Ibid., at p. 16.

[44]Warren, Langdon. An Inventory of the Barrier Islands of the Southeastern Coast. Open Space Institute, New York, New York. October, 1976 at pp. 253-254.

[45]Supra note 42 at p. 10.

[46]Ibid., at pp. 13-14.

[47]Ibid.

[48]Ibid., at p. 12.

[49]Miller, H. Crane. "The National Flood Insurance Program: A Quest for Effective Coastal Floodplain Management." Environmental Comment, June, 1977 at p. 5.

[50]Supra note 42 at p. 14.

[51]Ibid., at p. 19.

[52]Ibid., at pp. 17-20.

[53]Gibbons, Boyd. Wye Island, Baltimore and Landen: The Johns Hopkins University Press, 1977.

Application Procedure

A State or local government with particular recreational needs may contact the Bureau in order to locate a donor, but frequently a project is initiated by the donor.

Information Contacts

James W. Cook (202) 343-7962
Division of Cooperative Services
Bureau of Outdoor Recreation
Department of the Interior
Washington, D.C. 20240

References

1. Executive Office of the President; Office of Management and Budget, Catalog of Federal Domestic Assistance, Government Printing Office, Washington, D.C. 20402, p. 464 (15,402).

2. U.S. Department of the Interior, Bureau of Outdoor Recreation, A Technical Assistance Program (pamphlet).

Relationship with 315(2)

The Technical Assistance Program could be used as a valuable adjunct to the program that is developed under 315(2). This program is normally used for the acquisition of large tracts of land to be used as recreation areas, but is also used for acquiring access, especially water access in the Southeast and Great Lakes regions. In either case, the two programs could be combined, where feasible, to mutial benefit. Private donations could also be used by State and local governments to match 315(2) grants.

Department of the Interior
Bureau of Outdoor Recreation
Outdoor Recreation Resource Area Studies

BOR undertakes studies of the suitability of areas for designation as national parks or recreation areas, and wild and scenic rivers or trails. Designation of wild and scenic rivers has been a major effort of this program under recent years. The major importance of this program to 315(2) beach access is its study of coastal barrier islands. President Carter directed the Secretary of the Interior and the Secretary of Commerce to study these islands, and this office represents the central thrust of Interior's efforts.

Information Contact

Department of the Interior
Bureau of Outdoor Recreation
Office of Resource Area Studies
Washington, D.C. 20402

(202) 343-4793
Robert Eastman
William Rennebohm

Department of the Interior
Bureau of Outdoor Recreation
Water Resources Planning Program

The Outdoor Recreation Water Resources Planning Program has two major purposes: first, to protect outdoor recreational resources from the ravages of development, and second, to ascertain the outdoor recreational resource development potential of a particular water resource development according to each State's SCORP. The Bureau accomplishes these purposes through participation in the formulation of comprehensive basin studies and proposals for water (and related land) resources under the aegis of the Water Resources Council, and study of proposed water resource developments and reports by various Federal agencies (Bureau of Land Management, Soil Conservation Service, Army Corps of Engineers). The Bureau also reviews Federal Power Commission license applications and environmental impact statements with regard to outdoor recreation resources in power projects. Technical assistance is provided to private utility companies for planning recreational development at hydroelectric and nuclear power projects.

Information Contact

William Lawson (202) 343-7668
Outdoor Recreation Water Resources
Planning Program
Bureau of Outdoor Recreation
Department of the Interior
Washington, D.C. 20240

Related Program

Water Resources Council Planning Program 65.001

While this is in no way an acquisition program, a 315(2) access program might in some instances be able to complement coastal recreation proposals developed or reviewed under Water Resources Planning. Some exchange of information between the Water Resources Planning office at BOR and OCZM would, therefore, be in order.

Department of the Interior
Bureau of Outdoor Recreation
Surplus Property for Parks Program

General Services Administration

The Secretary of the Interior may transfer to eligible applicants, including States and their political subdivisions, land surplus to the needs of the Federal government for public park and recreation purposes. The responsibility for administering the program has been delegated to BOR.

Authorization

The disposal of surplus Federal real property is authorized by Section 203 of the Federal Property and Administrative Services Act of 1949. 63 Stat. 385, as amended, 40 US.C. 484, and is administered by the General Services Administration (GSA). Surplus real property may be conveyed for purposes other than recreation. The conveyance for public park and recreation purposes specifically is authorized by Section 203(K)(2) of the Act (40 U.S.C. 484(K)(2).

Tools and Techniques

Surplus property may be conveyed for public park and recreational use at discounts up to 100 percent. The law required that deeds of conveyance to State or local governments of surplus property provide that the property transferred by used and maintained for public park and/or recreation uses in perpetuity, and that if the property ceases to be so used, it shall revert to the United States. Specific deed restrictions to protect the interest of the Federal government are placed on the property.

Acquisition Authority

Normally BOR merely assists GSA in the transfer of the surplus property to the buyer. BOR has no acquisition or management authority for itself.

Organizational Structure

When any Federal agency determines that real property under its control is not required by that agency, it is reported to the GSA, which notifies other executive agencies of the availability of the property. If within 30 days no agencies have notified GSA of their interest, the property becomes "surplus." "Notices of Availability" are transmitted to appropriate State and local governments by BOR and GSA. Upon receipt of an acceptable application, BOR may request assignment of the surplus property from GSA. When the property is so assigned, BOR initiates actions for property conveyance. Surplus property which is not deeded to public bodies may be offered for sale to the public on a competitive bid basis by GSA.

Operations and Management

The acquiring agency is responsible for the operation and management of the property conveyed to it.

Funding and Assistance

As of July 13, 1977, over 683 properties, comprising 84,594 acres and valued at over $265 million, have been added to the Nation's recreation estate by the Surplus Property for Parks Program.

Coordination

BOR and GSA cooperate in the implementing of the Surplus Property for Parks Program.

Related Programs

-Public Land for Recreation, Public Purposes and Historic Monuments — 15.202
Bureau of Land Management

-Surplus Property for Wildlife Conservation
U.S. Fish and Wildlife Service

-Surplus Property for Historic Monument Purposes — 39.002
BOR and GSA

Eligibility

Any State, county, city, town, municipality, or instrumentality is eligible to apply. The prospective applicant must be able to attest that the property is suitable for public park and recreation purposes; and that, when developed, it will meet recreation needs identified in the State Comprehensive Outdoor Recreation Plan (SCORP). The applicant must also set forth a schedule of development and a financial plan which will result in orderly, early development of the property for public use. The approved plan is referenced in the deed of conveyance, and any amendments must be submitted for secretarial approval.

Application Procedure

Assistance in applying for surplus property may be obtained at any of BOR's regional offices. Range of approval/disapproval time is 3 to 6 months.

Information Contacts

Charles Montgomery (202) 343-7962
BOR Surplus property Program
Bureau of Outdoor Recreation
Department of the Interior
Washington, D.C. 20240

References

1. Executive Office of the President; Office of Management and Budget, Catalog of Federal Domestic Assistance, Government Printing Office, Washington, D.C. 20402, p. 637 (39.002).

2. U.S. Department of the Interior, Bureau of Outdoor Recreation, Surplus Property for Parks and Recreation (pamphlet).

3. General Services Administration, Disposal of Surplus Real Property (pamphlet).

Relationship with 315(2)

Theoretically, 315(2) could be combined with the Surplus Property for Parks Program where a State or local agency requires surplus property in a coastal area and needs to acquire access or improved access to the property. A large portion of the surplus property offered to State and local governments are obsolete defense sites, a few of which are in coastal areas, particulary in Texas. Several old Nike sites near urban centers have been or will be available.

Property under the Surplus Property for Parks Program is, to repeat, available to State and local governments at discounts up to 100 percent, while the Federal share of 315(2) acquisition is limited to 50 percent.

Department of the Interior
Bureau of Land Management
Public Land for Recreation, Public Purposes, and Historic Monuments

Almost one-third of the Nation's land is owned by the Federal government. BLM manages about 60 percent of the Federal land estate, and thus, a staggering 20 percent of the land in the United States. In some western states, about 90 percent of the land is Federally owned. BLM supports recreation that is compatible with its view of its land stewardship objective, and has recently taken a more active role in meeting outdoor recreational needs.

Under the Recreation and Public Act of June 14, 1926, as amended; 43 U.S.C. 869, 8694; qualified Federal, State and local government agencies, and also nonprofit associations and corporations may lease or purchase available BLM land for recreation, historical monuments, and "public purposes." (Assistance is not available in the original thirteen States, Hawaii, Kentucky, Tennessee, Texas or West Virginia.) The significance of BLM's recreational activities is limited by the distribution of its holdings. BLM lands are located almost entirely in the western States, and a great preponderance of the lands are inland. So, while BLM occasionally engages in coastal recreational activities (most notably in King Range National Conservation Area in California), the availability of this limitation, however, should make it easy for OCZM to monitor BLM's costal activities.

References

1. Ditton, Robert B. and Stephens, Mark, Coastal Recreation: A Handbook for Planners and Managers, OCZM/NOAA U.S. Department of Commerce, January, 1976, pp. 216 217.

2. Executive Office of the President; Office of Management and Budget, Catalog of Federal Director Assistance, Government Printing Office, Washington, D.C. 20102, p. 452 (15.202).

Department of the Interior
National Park Service

The National Park Service is an important land management agency throughout the country, including the coastal zone. Its domain consists of about 300 units (located in 47 States, the District of Columbia, Puerto Rico, and the Virgin Islands),comprised of national parks, monuments, historic sites, recreation areas, lakeshores, seashores, preserves, natural landmarks, battlefields, and military parks.

Ditton and Stephens have described some of the responsibilities of the National Park Service (Ditton, Robert B. and Stephens, Mark, Coastal Recreation: A Handbook for Planners and Managers, OCZM/NOAA, U.S. Department of Commerce, January, 1976):

> The Park Service is charged with a dual, at times conflicting, mission of: (1) preserving the Nation's natural, cultural, and scenic wonders, while simultaneously (2) providing for public enjoyment derived through recreational use of these resources. NPS administered areas are generally established only where resources meet stringent requirements for uniqueness and national significance, and as a consequence they are seldom located where public needs are most intense. In addition, NPS policies deemphasizing facility development in many types of park system units, and focusing greater attention upon preservation efforts have evolved in response to increasing use pressures and resultant resource degradation at heavily visited sites.
>
> NPS has, however, undertaken projects in recent years that are distinctly oriented toward satisfying urban recreational needs. The Gateway and Golden Gate National Recreation Areas established in the New York and San Francisco metropolitan regions during 1972 represent the foremost examples of National Park Service units established for urban recreational users in a coastal setting.
>
> A 1935 National Park Service survey of undeveloped seashore areas recommended that 12 major sites, with a combined shoreline frontage of 439 miles, be preserved as national seashores. This investigation led to the creation of Cape Hatteras National Seashore in 1937. NPS conducted another survey in 1954 to determine the remaining opportunities to preserve outstanding stretches of the Atlantic and Gulf Coasts. Subsequently, nine national seashores and four national lakeshores distributed throughout the country's ocean and Great Lakes coastline have been established. These units have been complemented by the designation of several national parks, monuments, and other units with coastal frontages...
>
> The establishment of national parks, seashores, and lakeshores requires special legislation to provide for purchasing privately held lands. This requirement complicates planning for the creation of new areas due to the uncertainties inherent in dependence upon enabling legislation from the Congress...

The Natural Landmarks Program, also administered by NPS, was created to facilitate identification and registration of national landmarks, and to encourage the preservation of nationally significant properties, regardless of ownership. NPS has conducted an inventory of the country's natural areas in conjunction with this program. The system of natural landmarks is designed to illustrate the diversity of the Nation's natural environment.

Following NPS evaluation, sites which appear to qualify for inclusion are submitted to the Advisory Board on National Parks, Historic Sites, Buildings and Monuments for its recommendations to the Secretary of the Interior concerning their eligibility for registration.

In requesting registration, property owners agree to comply with basic management and protection practices prescribed by the program. (pp. 211 to 214; footnotes omitted)

National seashores are natural coastal areas set aside for the preservation and public recreation use of their naturally significant scenic, scientific, historic, or recreational values, or a combination of those values. They usually contain fairly extensive acreage.

National Recreation Areas, such as the Gateway and Golden Gate areas mentioned above, are of special interest because of the criteria NPS uses to evaluate the suitability of sites to be National Recreation Areas. These are reproduced below.

National Recreation Areas: The following criteria are established for the evaluation and selection of areas proposed for Congressional designation as National Recreation areas in the National Park System. These criteria modify those issued in the Recreation Advisory Council's Policy Circular No. 1 of March 26, 1963.

The following criteria are to be applied to all proposals:

-National Recreation Areas should be spacious areas containing outstanding natural and/or historic features and providing significant recreation opportunities.

-National Recreation Areas should be located and designed to achieve comparatively heavy recreation use and should usually be located where they can contribute significantly to the recreation needs of urban populations.

-National Recreation Areas should provide recreation opportunities significant enough to assure national, as well as regional, visitation.

-The scale of investment, development, and operational responsibility should be sufficiently high to require either direct Federal involvement or substantial Federal participation to assure optimum public benefit.

-Within the National Recreation Area, outdoor recreation shall be recognized as a primary management purpose; however, such management shall be compatible with the protection of the natural and historic resources.

Information Contact

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Planning and Development Division
National Park Service
Department of the Interior
Washington, D.C. 20402

References

1. Ditton, Robert B. and Stephens, Mark, Coastal Recreation: A Handbook For Planners and Managers, OCZM/NOAA, U.S. Department of Commerce, January, 1976, pp. 2-11 2-14.

2. United States Department of the Interior, National Park Service, Criteria for Parklands (pamphlet).

Department of the Interior
National Park Service
Park and Recreation Technical Assistance

The National Park Service provides technical assistance to State and local agencies in planning, developing, and managing their park and recreation areas.

Authorization

Park, Parkway, and Recreation Area Act of June 23, 1936; P.L. 74-770; 16 U.S.C. 17.

Tools and Techniques

Assistance consists of technical and advisory services on such matters as agency organization, operation, and maintenance of park systems, personnel training, historical and archaeological programs, and general development planning. Reimbursement is usually required if planning is accomplished by the National Park Service.

Acquisition Authority

This program has no acquisition authority.

Operations and Management

As stated above, technical assistance is available under this program with regard to the operations and maintenance of park systems.

Funding Assistance

As stated above, technical assistance is available under this program with regard to the operations and maintenance of park systems.

Funding Assistance

No funds are provided to public agencies under this program.

Relationship to 315(2)

States and other grantees under 315(2) could take advantage of the assistance offered by this program.

During 1975, about 6,000 inquiries for technical information were answered and 350 State and local agencies and Indian tribes were provided with technical assistance.

Coordination - Related Programs

-Outdoor Recreation Technical Assistance 15.402

-Park Practice Program 15.907

-Training Institute for Park and Recreation Management 15.911

Eligibility and Application Procedure

States and local units of government and Indian tribes may apply for assistance under this program. A letter to the appropriate regional director explaining the need for assistance is required.

Information Contact

Chief. Division of Federal, State, and Private Liaison (202) 523-5169
National Park Service
U.S. Department of the Interior
Washington, D.C. 20240

Reference

1. Executive Office of the President; Office of Management and Budget, Catalog of Federal Domestic Assistance, Government Printing Office, Washington, D.C. 20402, p. 483 (15.906)

Department of the Interior General Services Administration
U.S. Fish and Wildlife Service
Surplus Property for Wildlife Conservation

The Secretary of the Interior may transfer to States land surplus to the needs of the Federal government for Wildlife conservation purposes. Hence, this program may be related to coastal access and island preservation efforts. The responsibility for administering the program has been delegated to USFWS.

Authorization

The overall disposal surplus of Federal real property is operated by the General Services Administration (GSA) under the authority of Section 203 of the Federal Property and Administrative Services Act of 1949; 63 Stat. 385, as amended, 40 U.S.C. 484. Surplus real property for wildlife conservation is specifically covered by P.S. 537; 16 U.S.C. 667b-d.

Tools and Techniques

Surplus property for wildlife conservation is conveyed to States for wildlife conservation purposes at no cost to the States. The law requires that deeds of conveyance to States provide that the property transferred be used and maintained for wildlife conservation purposes in perpetuity, and that if the property ceases to be so used, it shall revert to the United States.

Acquisition Authority

Under this particular act, the U.S. Fish and Wildlife Service has no acquisition authority. Normally BOR assists GSA in the transfer of the surplus property to the State.

Organization Structure

When any Federal agency determines that real property under its control is not required by that agency, it is reported to the GSA, which notifies other executive agencies of the availability of the property. (When the land is available to Federal agencies as "excess," USFWS may acquire it under the Migratory Bird Conservation Act.) If within 30 days no agencies have notified GSA of their interest, the property becomes "surplus." "Notices of availability" are transmitted to appropriate State and local governments by USFWS and GSA. Upon receipt of an acceptable application, USFWS may request assignment of the surplus property from GSA. When the property is so assigned, USFWS initiates actions for property conveyance. Surplus property which is not deeded to public bodies is generally offered for sale to the public on a competitive bid basis.

Operations and Management

The acquiring agency is responsible for the operation and management of the property conveyed to it.

Funding and Assistance

Examples of properties recently transferred under this program include Fishermen's Island, Plum Tree Island, and Wallops Island (a former NASA installation), all in Virginia, and Amagansett Light Station in New York.

Coordination

BOR and GSA cooperate in the operation of the Surplus Property for Parks Program.

Related Programs

-National Migratory Bird Program

-Surplus Property for Parks
Bureau of Outdoor Recreation

Eligibility

Only States are eligible to receive surplus property for wildlife conservation purposes.

Information Contact

Richard E. Corthell (202) 343-6649
U.S. Fish and Wildlife Service
Department of the Interior
1717 H Street - Matomic Building
Washington, D.C.

Relationship with 315(2)

While the Surplus Property for Wildlife Conservation Program is certainly no substitute for island preservation under 315(2), it could, in some instances, achieve a similar purpose.

Department of Agriculture
Watershed Protection and Flood Prevention Loans
Farmers Home Administration
and
Watershed Protection and Flood Prevention
(Small Watershed Program)
Soil Conservation Service

The Watershed and Flood Prevention Operations Program in the Department of Agriculture includes three basic activities:

Watershed Operations - Cooperation in establishing works of improvement to reduce erosion, flood water, and sediment damage. The development of recreational facilities may be a by-product of these operations.

Flood Prevention Operations - Establishment of works of improvement for flood prevention may also include the development of recreational facilites.

Loans - Loans are made to help finance the local share of the cost of implementing watershed and flood prevention works of improvement.

Authorization

The Watershed Protection and Flood Prevention Act, P.S. 83-566. 68 Stat. 666, 16 U.S.C. 1001. et seq., as amended, provides for cooperation between the Federal government and the States and their political subdivisions in a program to prevent erosion, floodwater, and sediment damages in the watersheds of rivers and streams; to further the conservation, development, utilization, and disposal of water; and to further the conservation and proper utilization of land.

Coastal Recreational Responsibilities and Uses
Tools and Techniques

The Act provides for technical and financial assistance for the installation of works of improvement, usually either land treatment measures or structural measures. Structural measures such as floodwater retarding structures, stream channel improvements, stabilizing and sediment control structures, water storage structures, and others may enhance or encourage recreational development. The Federal government will provide a share of the cost of installing improvements for agricultural water management, fish and wildlife, and recreational development. (The latter includes the cost of minimum basic facilities for public health and safety and access to recreational areas.) Local organizations must pay all costs of improvements for other purposes.

Watershed Protection and Flood Prevention Loans are available to local organizations to finance the local share of costs of installing planned works of improvement. Loans are administered by the Farmers Home Administration.

Acquisition Authority

This is not an acquisition program. Local organizations must acquire water rights and furnish land, easements, and rights-of-way for all structural measures. However, up to one-half the cost of land, easements, and rights-of-way allocated to public fish and wildlife and recreational developments may be paid with Federal funds.

Organizational Structure

The Farmers Home Administration is responsible for making loans to sponsors of projects. No loan may be made until the Soil Conservation Service and the local organization have agreed on a plan for works of improvement and the project is approved for operations.

Operations and Management

Local sponsoring organizations are responsible for operating and maintaining completed works of improvement on non-Federal lands and reservoirs and recreation areas.

Funding

Range and average of financial assistance (SCS)

$20,000 to $14,000,000; $2,000,000

In FY 1975 a total of 473 projects were in some stage in construction and 396 had been completed. At this time we are unable to determine what proportion of these include recreational uses.

Range and average of financial assistance (FmHA; loans)

$7,230 to $5,000,000; $300,000

Loans Made

FY 1975	$20,175,000	25 loans
FY 1976	23,400,000 est.	29 loans est.
FY 1977	23,400,000 est.	27 loans est.

Coordination

All projects must undergo A95 review. (See also Organization Structure)

Related Programs

-Irrigation, Drainage, and Other Soil and Water Conservation Loans 10.409

-Soil and Water Loans 10.416

-Resource Conservation and Development 10.901

-Soil and Water Conservation 10.902

-River Basin Surveys and Investigations 10.906

-Flood Plain Management 12.104

Eligibility

Any State agency, county or groups of counties, municipality, town or township, soil and water conservation district, flood prevention or flood control district, or any other nonprofit agency with authority under State law to carry out, maintain, and operate watershed works of improvement may apply for assistance from SCS. To qualify for the FmHA loan, the agency must also have authority under State law to obtain, give security for, and raise revenues to repay the loan and to operate and maintain the facilities to be financed with the loan.

Application Procedure

Application to SCS may be made through the State field offices of SCS. An environmental impact statement for a project is frequently, but not always, required. An environmental impact statement is required for the loan program. Loan applications are filed with county FmHA offices. After an application has been reviewed by the County Supervisor and the County committee, it is referred to the State Director who has approval authority.

These Agricultural programs are not exclusively coastal or recreational. but it is interesting to note that Federal money can be used to provide a share of the cost of recreational development and access to that development. In the context of watershed development, it would generally be more appropriate to use this program to provide access, because we usually will not be talking about beaches, but about reservoirs. Occasionally, however, it is possible that beach access will be part of watershed development.

References

1. Executive Office of the President; Office of Management and Budget, Catalog of Federal Domestic Assistance, Government Printing Office, Washington, D.C. 20402, pp. 31, 64 (10.419, 10.904).

2. "Programs," Environment Reporter, Volume of Federal Laws, The Bureau of National Affairs, Inc., 1231 25th Street, N.W., Washington, D.C. 20037, pp 51-0241 - 51-0245.

Department of Housing and Urban Development
Open Space Land Program

This program must be spoken about in the past tense, because HUD's categorical grant programs, such as open space and urban beautification, have been replaced by community development block grants. It might be informative, however, to summarize what the Open Space Program, established in 1961, did do. It authorized matching grants of up to 50 percent to States and local agencies for acquisition and limited development of, among other things, open space for park and recreational purposes. Proposed projects had to be in areas of "urban character" (which included suburbs). High priority was not given to the preservation of scenic or ecologically significant areas, which would seem to afford a low priority to beach acquisition. However, one commentator noted that "the most pressing needs for water-oriented recreation opportunities are in urban areas where they can be made available to less mobile, lower income groups" (Ducsik, see below, p. 143).

In its prime, the Open Space Program served many non-recreational objectives. Now, under community development block grants, localities have much greater discretion over how grant funds are to be spent. Although open space remains a valid purpose for community development funds, it appears that most recipient communities have what they consider to be more critical needs for the funds.

References

1. Ditton, Robert B. and Stephens, Mark, Coastal Recreation: A Handbook for Planners and Managers, OCZM/NOAA, U.S. Department of Commerce, January, 1976, p. 2-26.

2. Ducsik, Dennis W., A Handbook of Social, Economic, and Legal Considerations Regarding Public Recreational Use of the Nation's Coastal Shoreline, MIT Sea Grant Program, 1974, pp. 142-3.

3. Executive Office of the President; Office of Management and Budget, Catalog of Federal Domestic Assistance, Government Printing Office, Washington, D.C. 20402, p. 425 (14.218).

Department of Housing and Urban Development
Federal Flood Insurance Program
42 U.S.C. 4102, et seq.
National Flood Insurance Act P.S. 90-448

The Flood Insurance Program itself is not directly applicable to the acquisition of beach access. Regulations do require local governments to institute some type of subdivision controls in order to qualify for the program, but there is no requirement that any such controls pertain to beach access. Provisions relating to beach access could be developed, but any such effort would be tangential to the Flood Insurance Program itself.

The importance of the Flood Insurance Program to beach access falls with the mechanics of compensation once loss has been incurred. Once a flood disaster, probably a hurricane, has occurred, Section 1362 of the Act (42 U.S.C. 4103) authorizes the Federal government to purchase insured properties "damaged substantially beyond repair" rather than pay the insured to reconstruct whatever was on the property before the disaster occured. Section 1362 then allows the Federal government to sell, lease, donate, or otherwise transfer the property to any State or local agency which agrees to use the property for purposes "consistent with sound land management and use" for at least forty years. Thus, State and local governments are provided with the opportunity to acquire lands which have sustained substantial hurricane damage.

The major difficulty with Section 1362 is that as of June, 1977, funds have never been appropriated to implement it. However, administrators are studying the feasibility of implementing this section as both a valuable floodplain management tool and as a means of insurance recovery. A policy on Section 1362 may emerge in 1978.

Another possible access-related use of the National Flood Insurance Act arises from regulations which will require local governments in identified erosion-prone areas (yet to be determined) to establish a setback for all new development from the ocean, lake, bay, riverfront, or other body of water in order to create a safety buffer of natural vegetation which will be appropriate for wildlife habitats and open space purposes such as recreation. Program administrators are presently developing prototype base maps to delineate erosion-prone areas along the barrier islands, beaches, and the Great Lakes. Hence this aspect of the Act could prove beneficial to both beach access and island preservation.

References

1. Brower, David J., Dreyfoos, William W., and Stroud, Nancy E., The Beach Access Problem: Or, Why You Can't Go Swimming Even If You Own the Beach (Draft), Center for Urban and Regional Studies, University of North Carolina at Chapel Hill, May, 1977, p. 97.

2. "Floodplain Management," Environmental Comment, June, 1977, The Urban Land Institute, 1200 18th Street, N.W., Washington, D.C. 20036.

Department of Defense
Department of the Army,
Office of the Chief of Engineers
(Army Corps of Engineers)
Small Beach Erosion Control Projects

Section 102 of the 1962 River and Harbors Act, as amended; P.L. 87-874, 33 U.S.C. 426g; authorizes the Corp of Engineers to aid State and local agencies in controlling beach and shore erosion of public shores. The Corps designs and constructs each project. This is not a large program; for instance, in 1974 only three projects were under construction, and the Federal cost limit per project is $1,000,000 or 70 percent of the cost of the project, whichever is lower.

Under this program the non-Federal sponsoring agency must agree to "provide and maintain" necessary access roads, parking areas and other public use facilities. This includes the possibility that beach access facilities be provided.

Reference

1. Executive Office of the President; Office of Management and Budget, Catalog of Federal Domestic Assistance, Government Printing Office, Washington, D.C. 20402, p. 111 (12.101).

Department of Transportation
Federal Highway Administration
Highway Research, Planning and Construction
(Federal-Aid Highway Program)
Federal-Aid Highway Act of 1973;
93-87; Title 23 U.S. Code
as amended; Federal-Aid Highway
Amendments of 1974; P.L. 93-643

A portion of the enormous Federal-Aid Highway Program may be directed to roadside beautification, recreation (including access roads to recreation areas), bikeways, pedestrian walkways, fringe and corridor parking areas and rest areas. Since grants to State and local agencies under this program are estimated at over $6 billion for FY 1977, even a very small fraction of this can be significant to a particular project. DOT funds, it would seem, can be used for coastal highways and parkways, rest areas including water access, and bicycle trails. It might be appropriate for this liaison to take place on the State level.

References

1. Executive Office of the President; Office of Management and Budget, Catalog of Federal Domestic Assistance, Government Printing Office, Washington, D.C. 20402, p. 563 (20.205).

2. The Federal Ocean Program, Report of the President to Congress on the Nation's Efforts to Comprehend, Conserve, and Use the Sea, Government Printing Office, Washington, D.C. 20402, p. 56.

Department of Transportation
Federal Aviation Administration
Airport Planning and Development

The FAA provides technical and financial assistance to public agencies for the planning and development of airports under its Airport Development Aid Program (ADAP) and Airport Planning Grant Program (PGP). The FAA also coordinates its airport planning with the Department of Housing and Urban Development and with local planning departments so that consideration is given to the use of land surrounding airports for park and recreation facilities. The FAA encourages such consideration because recreational uses are among the few uses compatible with airport operations.

References

1. Executive Office of the President; Office of Management and Budget, Catalog of Federal Domestic Assistance, Government Printing Office, Washington, D.C. 20402.
   -Airport Development Aid Program (ADAP) 20.102, p. 560
   -Airport Planning Grant Program (PGP) 20.103, p. 561.

2. Massachusetts Department of Environmental Management, Office of Planning, Massachusetts Outdoors - Statewide Comprehensive Outdoor Recreation Plan, December 1976, p. 56.

Appendix Three

State Work Programs

Section 305(b)(7) of the Coastal Zone Management Act requires that each coastal State management program include a definition of the term 'beach' as well as a plan for identifying access and/or protection needs of public beaches and other coastal areas of environmental, recreational, historic, aesthetic, ecological or cultural value.

Of the thirty coastal States and three territories, thus far (October 1977) sixteen have submitted complete work programs.

The following table summarizes the current status of each State's work program. The States are listed alphabetically within their coastal region. A 'Yes' response in the program column indicates that the State has submitted a work program to the Office of Coastal Zone Management which, if carried out, will meet the requirements of Section 305(b)(7). An 'Incomplete' indicates that the State has failed to provide a detailed work program or that the submitted program lacks specific information pertaining to funding or time necessary for completion of the task. A blank in this column indicates that no program at all has been received.

The third column ($) is the State's projected budget figure for the completion of 305(b)(7) requirements. In most cases, the reader can examine the State's work program for a breakdown of State and Federal share. Copies of the work programs follow the table.

The final column, 'work program,' provides more specific information with respect to each State program. In most cases, the reader is referred to a copy of the pertinent section of the work program.

The cost of the work programs vary a great deal. Rhode Island's program is expected to cost $2,147. Oregon's will cost $55,000. Time requirements differ, too, ranging from a low of four months to a full year.

SHOREFRONT ACCESS WORK PROGRAMS

North Atlantic Region

State	Program	$	Work Program
Connecticut	Yes	7,500	see attachment
Maine	Yes	11,370	see attachment
Massachusetts	Incomplete		see attachment
New Hampshire	Yes	16,900	see attachment
New Jersey			
New York	Incomplete		see attachment
Rhode Island	Yes	2,147	see attachment

South Atlantic Region

State	Program	$	Work Program
Delaware			
Georgia	Incomplete	9,300	see attachment--awaiting rules and regulations
Maryland			
North Carolina	Incomplete		see attachment
South Carolina			
Virginia	Incomplete		see attachment

Gulf/Islands Region

State	Program	$	Work Program
Alabama	Yes	5,200	see attachment
Florida			
Louisiana	Yes	17,165	see attachment
Mississippi	Yes	15,000	see attachment
Puerto Rico	Yes	45,482	see attachment

Texas	Yes	47,053	see attachment
Virgin Islands	Yes	15,151	see attachment

Great Lakes Region

State	Program	$	Work Program
Illinois			
Indiana	Yes	15,000	see attachment
Michigan	Yes	15,735	see attachment
Minnesota			
Ohio	Yes	10,000	see attachment
Pennsylvania			
Wisconsin	Yes	4,400	see attachment

Pacific Region

State	Program	$	Work Program
Alaska			
California			
Guam			
Hawaii	Incomplete	14,400	see attachment
Oregon	Yes	55,000	see attachment
Washington	Yes	50,902	see attachment
	16 yes	$357,705	

10. Shorefront Access

Objective:

The State must develop a planning process that can identify public shorefront areas appropriate for protection and/or increased access. The term "beach" must be defined to aid in the identification of those areas that will be included under this work element and to provide a rationale explaining the relationship between the definition of "beach" and access and protection needs. Access and protection needs must be evaluated to determine requirements of the State program to meet Federal regulations.

Method:

The following tasks must be undertaken to provide the technical background for this work element:

a. The term "beach" must be defined as it applies to the Shorefront Access requirements of the Federal Regulations. After the definition is established those areas classified as "beach" must be identified and portrayed on suitable maps.

b. A procedure must be developed for assessing the access and protection requirements of the beach areas.

These two work items will form technical basis for developing policies pertaining to access and/or protection, for developing a method of designating shorefront areas as CAPCs, and for identification of existing programs that can be applied to management needs. The policy work will not be undertaken as a part of this grant period but will be undertaken in the following year.

Manpower Requirements:

One man-month of CAB staff time will be applied principally to supervise contractual work. The major work will be undertaken by the Marine Environmental Sciences Consortium, the Department of Conservation and Natural Resources, the South Alabama Regional Planning Commission, or another suitable contractor.

Time Schedule:

The detailed time schedule is given in the following chart:

WORK ITEM	MONTHS											
	1	2	3	4	5	6	7	8	9	10	11	12
1. Definition of "Beach" and Identification of Areas												
2. Develop Procedure for Assessing Areas and Protection Requirements												

Funds:

$2,200 for CAB staff and $3,000 for contractual work.

Total: $5,200

3. Objective: To investigate various methods of improving public access to water based recreational activities.

During the second year an inventory of shoreline recreational areas, points of public access, and marinas was initiated. In light of recent amendments to the Coastal Zone Management Act of 1972, work on this inventory will be continued. In addition, methods of improving public access will be investigated including public acquisition and multiple use incentives. A planning process for protecting and improving public access will be initiated in conjunction with the Statewide Comprehensive Outdoor Recreation Plan (SCORP).

Product: Written report with inventory and recommendations for future action.

Task 7-4: Beach Access:

A task description will be developed for this planning element upon publication of final Rules and Regulations promulgated under the Coastal Zone Management Act of 1976

Program Component Objective:

To identify, develop, and adopt policies, plans, and programs to address the problems and concerns evidenced in Hawaii's coastal areas.

FY 1977-78 Work Program Component:

A. Description of Major Tasks:

1. Develop guidelines as appropriate to further specify the objectives and policies of the program for consideration by the 1978 Hawaii State Legislature, utilizing to the extent applicable the comprehensive coastal resource and regulatory network inventories developed as part of the first through third-year work programs.

2. Prepare criteria for shoreline management area boundary amendments for compliance with the objectives and policies of the Hawaii CZM Program as required by Act 188, SLH 1977.

3. Continue identifying geographic-specific problem areas as a basis for specifying potential areas of particular concern and develop appropriate policy and criteria for the designation thereof. Existing statutes provide processes for future designations of potential areas of particular concern. These will be properly identified in the "306 submission."

4. Formulate and integrate the shoreline access, shoreline erosion, and energy facility siting elements into Hawaii CZM Program as required by the 1976 amendments to the National Coastal Zone Management Act of 1972; and

5. Prepare revisions to the 306 submission document and environmental impact assessment as appropriate.

B. Participants:

DPED; University of Hawaii; Federal-State-County governmental agencies; and the several CZM Advisory Committees.

C. Products:

1. Appropriate reports on the findings and recommendations resulting from the completion of Federal and State planning and management requirements

2. Designation of additional areas of particular concern and applicable designation criteria;

Continued

C. Products:

3. A revised 306 OCZM submission document to include an Environmental Impact Assessment; and

4. Appropriate technical planning supporting documents.

D. Costs and Man-Month Estimates and Master Contract Workload Allocations:

A. 1.	$ 8,000	--	3	man-months	--	Contract No. 1
A. 2.	$10,800	--	8	man-months	--	Contract Nos. 1-4
A. 3.	$ 7,000	--	6	man-months	--	Contract No. 1
A. 4.	$14,400	--	12	man-months	--	Contract Nos. 1-4
A. 5.	$10,400	--	8.5	man-months	--	Contract Nos. 1-4

E. Progress, Problems, and Opportunities:

The major thrust of the first and second-year work programs under this component involved two major phases: data and resources inventories and problem analyses. This work provided the prime technical basis for the specification of an overall policies framework and implementation structure for carrying out the Hawaii CZM Program.

Under the data and inventory efforts conducted during FY 1974-75 and FY 1975-76, nine management purposes were identified for which coastal zone management might be undertaken. In addition, as an initial step under the data inventory and analysis efforts conducted during FY 1974-75 and 1975-76 of this work effort, four prototype areas were selected on the basis of interviews with County planning officials and technical investigations on the area's representativeness as a prime example of the coastal physiography, hydrography, near-shore processes, and economic conditions common to many areas of the State's shoreline. One area on each of the four Counties was identified for the purpose of conducting the analyses of inland boundary alternatives. A preliminary examination of biophysical factors and current and anticipated land use impacts on coastal waters in each of the study areas suggested several criteria for locating inland boundaries, areas of particular concern, data requirements and needs, and impediments to achieving each management purpose. The application of U-2 imagery and remote sensing provided added information on the wetlands of the State and Kauai's sand resources, vegetation, reefs, estuaries, and other characteristics. Various information systems were also explored as to feasibility of application. In addition and as a basis for determining and assessing direct and significant impacts of land and water uses on the coastal zone environment, statewide mapping or resource claims and claimants was also initiated.

57.0 Shorefront Access Planning

Purpose:

To identify public shorefront areas of environmental, recreational, historical, esthetic, ecological, or cultural value appropriate for increased access and/or protection and provide for proper management to satisfy access/protection needs.

Work Elements:

.1 Define the term "beach" (utilizing the definition derived in work element 221.8) and identify public areas that fit the definition.

.2 Identify and assess other public coastal areas besides beaches for environmental, recreational, historical, esthetic, ecological, or cultural value. The majority of the inventory was completed during the first year so these data will be utilized in this task.

.3 Determine the access and/or protection requirements of identified areas.

4 Articulate State policies pertaining to shorefront access and/or protection indicating how the State's management program will address access and/or protection requirements.

.5 Coordinate with adjacent states in developing this element.

.6 Obtain advisory committee input throughout the development of this work element.

Product:

A statement of state policy regarding shorefront access and protection. Inclusion of appropriate access information into a model established to assist decision-making.

Schedule:

April 1, 1978 - October 31, 1978

Budget:

	Federal	Non-Federal	TOTAL
In-house	$ 4,250	$ 2,750	$ 7,000
Contractual	8,000	---	8,000
			$15,000

(SPSA and Regions 1A & 2)

SPSA Man-months: 4

Shorefront Access Planning

Document recreational opportunities and constraints of barrier islands, beaches and other potential recreational areas in order to provide coastal parishes with suggested means for furnishing public access to desirable areas not currently being utilized for recreational purposes. Address new recreational access requirements of the 1976 Amendments to the National Coastal Zone Management Act. The work will be closely coordinated with Tasks II-E and X.

Task VIII-A. Burk & Associates In-house 1/4 M/M	$3,000	Review past work of coastal zone management agency and others to identify public and quasi public beaches, shorefronts and other areas of shorefront recreational value.
Task VIII-B. Burk & Associates In-house 1/4 M/M	$5,000	Develop list of possible areas for acquisition under 315 (2) funding with approximate size, facilities and cost requirements.
Task VIII-C. Burk & Associates In-house 1/4 M/M	$5,000	Explore other possible sources of funding for list B above with explanation of availability or nonavailability of each source. Prepare maps of each parish or parish base at 1:125,000 showing information developed above.
Task VIII-D. Burk & Associates In-house 1/4 M/M	$2,000	Develop suggested policies and management techniques for each item on list B above.
TOTAL TASK VIII IN-HOUSE 1 M/M	$2,165	

	77						78								
	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
VIII-A.						FP									
VIII-B.									D	M	D	FP			
VIII-C.													FP		
VIII-D.														FP	

TASK 5.01

PREPARATION OF RECOMMENDATIONS ON IMPROVING OPPORTUNITIES FOR PUBLIC ACCESS TO THE MAINE COAST FROM A LEGAL PERSPECTIVE

Objectives: To determine if any changes in the existing laws affecting access are desirable and if so, what the changes should be.

Description: This project will determine if any changes in the existing laws are desirable and conduct the legal research required to identify ways to update existing law so as to provide increased access to marine and other public waters in the Coastal Area, if such changes are felt to be desirable.

Data and Studies Available: Henry, Harriett P. and Halperin, D.J., "Maine Law Affecting Marine Resources" University of Maine School of Law, 4 Vols. 1969-70.

Henry, Harriet P. "Coastal Zone Management in Maine: A Legal Perspective" Maine State Planning Office, 1973.

Delogue, Olando E. and Gregory, D.D., "Planning and Law in Maine" Maine Agricultural Experiment Station, University of Maine, Orono, 4 Parts, Bulletin Numbers 653-1967; 654-1969; 660-1968; 675-1969.

Implementation: This task will be performed by the Maine Attorney General's Office.

Time Schedule: Quarters 1 through 4 of the grant period.

Federal Cost and Value of State and Local Contributed Services:

$11,370

TASK 7 - PLANNING FOR 1976 COASTAL ZONE MANAGEMENT ACT AMENDMENTS

A.- Objective

The aim of this work task is to plan a strategy for Massachusetts' use of new funds available from the 1976 Coastal Zone Management Act Amendments.

B.- Approach and Techniques

Assuming commercially recoverable resources are discovered on Georges Bank, the facilities likely to locate in Massachusetts are service bases, pipeline landfalls, terminal, and gas processing plants. Depending on factors aside from Georges Bank operations, industry has not excluded the possibility of platform fabrication yards, pipecoating yards, and refineries in New England. The benefits of these facilities could be increased regional employment and tax revenues to municipalities. Problems may accrue to smaller, less densely populated towns, in terms of requiring expenditures for housing, water, sewerage, and social services, which, because of the rapid and temporary nature of such activities, may not be covered in the form of tax revenues.

The 1976 Coastal Zone Management Act Amendments authorizes $ 1.2 billion for assuaging these potential problems. Rules, regulations, and funds are likely to flow in the next 6-12 months. The Lt. Governor's Office of Federal-State Relations will hire a legislative coordinator and an assistant to keep track of regulations and funding levels related to the Amendments as they evolve. The coordinator will also work with Massachusetts agencies to determine the terms and conditions under which Massachusetts can use funds under the Amendments to the fullest extent.

C.- Work Elements/Products

1.- Review and analyze the legislation and regulations to ascertain:

   a) The quantity of funds likely to be made available to Massachusetts;

   b) The timing of the availability of the funds;

   c) For what purposes.

2. Outline work items for which the funds might be used, including a timetable for discussion and lead agencies; examples of topics are:

   a) Developing criteria and a process for dispersing funds to localities;

   b) Identifying work items for inter-state coordination.

3.- Monitor further Congressional action on the Amendments.

PERSON MONTHS = 12

SUB-TASK B.6. Amendments

Description: Develop a planning process that can identify public shorefront areas appropriate for increased access and/or protection. Develop a planning process that can manage the impacts from energy facilities in or affecting Michigan's coastal area.

Product: Reports on Michigan's energy and access planning processes.

Percent of Task B Costs. 40%

Estimated Man Months: 39.2

Percent of Sub-task to be Completed: 100%.

COST ESTIMATES BY TASK - PROGRAM YEAR 1978

Tasks and Sub-Tasks*	No. of Staff Assigned	Man Months	Estimated Direct Costs (Salaries & Fringe)	Estimated Indirect Costs	Estimated Contractual Costs	Estimated Total Costs
A. "305" Program Deficiencies	8	21.3	39,842	6,522	-	46,364
1. National interest - 5%	2	1.1				
2. Organization & authorities - 40%	4	8.5				
3. Federal consistency - 50%	4	10.6				
4. Areas of particular concern - 5%	2	1.1				
B. Coastal Program Administration & Mgt.	20	155.1	290,120	47,493	5,900	343,513
1. Grant administration - 6%	5	9.8				
2. Technical assistance - 13%	7	19.6				
3. Coordination - 6%	6	9.8				
4. Public information & education - 5%	10	7.8				
5. APC process - 3%	2	4.9				
6. CZM Act amendments - 25%	6	39.2				
7. Audit - 1%	2	2.0				
8. Interstate coordination - 1%	3	2.0				
9. Implementation of State Shorelands Act - 39%	8	60.0				
C. Supportive Program Activities	7	19.6	36,663	6,002	196,000	238,665
1. Sand Dune Act implementation - 19%	2	3.7				
2. Improvement of permit processes - 43%	3	8.5				
3. Wetlands value study - 8%	2	1.6				
4. Marina site location inventory - 13%	2	2.5				
5. St. Clair Flats inspection - 2%	2	0.3				
6. Aerial photography - 15%	2	3.0				
D. Local/Regional Programs	(covered in Task B-3)	-	-	-	190,208	190,208
TOTAL ESTIMATED COSTS			366,625	60,017	392,108	818,750

TASK D

LOCAL/REGIONAL PROGRAMS

Following is a description of tasks to be conducted during the duration of this grant application by local and regional agencies. Under the heading "TASK D. Local/Regional Programs", Coastal Program specific concerns, goals and objectives are described as they relate to each of the five broad sub-task descriptions. Subgrants to Michigan's coastal regional planning and development agencies to conduct activities relative to some or all of the five sub-tasks are listed separately at the conclusion of the overall TASK D program descriptions. Details of contractual arrangements with the sub-grantees will be concluded within two months of this grant award.

SUB-TASK 0.5. Amendments

* energy
* access

Specific Concerns: Michigan's Coastal Program must encourage and provide for use activities which are compatible with coastal resources, neighboring activities and have a tolerable impact on the environment in its broadest context.

The Coastal Program must combine implementation and planning as authorized in the incentive, police, proprietary and spending programs provided in existing legislation.

Goals: Help coordinate the operation of federal, state, regional and local programs that influence activity in Michigan's coastal area.

Protect coastal land, water and air resources from detrimental uses and activities for the public health, safety and welfare.

Encourage and support local units of government to carry out coastal management responsibilities in an effective and efficient manner.

Objectives: Prepare an inventory of federal, state, regional and local agencies that operate in or impact upon the coastal area.

Identify the respective roles and relationships between programs and agencies.

Develop effective working relationships with agencies to assure consistency with the goals of Michigan's Coastal Program.

Michigan

Investigate the natural suitability of coastal lands for human habitation, industrial, commercial or recreational activity.

Review and evaluate projects which may cause irreversible damage to coastal resources.

Involve the full range of authorities in preventing destructive coastal activities and in restoring resources damaged by past activities.

Support the enforcement of state and federal standards for air and water quality to assure sustained and improving environmental quality.

Support and assist coastal governmental units in planning, regulatory and development programs.

Develop and distribute technical information and reference documents on coastal problems and issues.

Assist local governmental units in dealing with the federal government on coastal manners.

Description: Inventory existing and planned energy facilities; identify and assess associated impacts; assess site suitability for such facilities; identify legal and other techniques for coastal management of facilities and/or impacts. Assess and designate public areas requiring access or protection; identify legal and other techniques, and funding programs to provide for access or protection; develop mechanism for refinement and implementation of necessary management techniques; provide public information on recreational resources, activities and location

TASK E-3. Shore Front Access Planning

Description: Present a strategy for the development of a planning process that can be used to identify public shorefront areas appropriate for increased access and/or protection. Included will be consideration of:

1. A procedure for assessing public recreation areas requiring access or protection.
2. A definition of the term "beach" and an identification of public areas that meet that definition.
3. Articulation of state policies pertaining to shorefront access and/or protection.
4. A method for designation of shorefront areas as Areas of Particular Concern (either as a class or as specific sites) for protection and/or access purposes, if appropriate.
5. A mechanism for refinement and implementation of necessary management techniques if appropriate.
6. An identification of funding programs and other technique that can be used to meet management needs.

Prepare a report on Michigan's strategy for meeting these requirements.

State: This task will be the responsibility of the state during the Extension Period.

Regions: No involvement.

Contracts: None.

Documents: A Report on Michigan's Strategy for Shorefront Access Planning.

Subgrants to Michigan's Coastal Regional Planning and Development Agencies

Contractors/Costs

Region 1	Southeast Michigan Council of Governments	$29,000
Region 4	Southwestern Michigan Regional Planning Commission	$ 5,000
Region 7	East Central Michigan Planning and Development Regional Commission	$34,500
Region 8	West Michigan Regional Planning Commission	$ 6,500
Region 9	Northeast Michigan Council of Governments	$25,000
Region 10	Northwest Michigan Regional Planning and Development Commission	$15,400
Region 11	Eastern Upper Peninsula Regional Planning and Development Commission	$29,808
Region 12	Central Upper Peninsula Planning and Development Regional Commission	$15,000
Region 13	Western Upper Peninsula Regional Planning Commission	$25,000
Region 14	West Michigan Shoreline Regional Development Commission	$ 5,000

Estimated Total Cost: $190,208

Product: Work programs and products relating to sub-task items D.1 through D.5 above.

Estimated Man Months: 7.9

Estimated Costs: $15,735

Percent of Task to be Completed: 100%

MISSISSIPPI COASTAL ZONE MANAGEMENT
SUPPLEMENTAL WORK PROGRAM
THIRD YEAR GRANT

Provided in this part is the work program which will be accomplished during the three-month supplemental grant period.

Four major tasks are outlined that will address the additional Section 305 elements of the Coastal Zone Act Amendments of 1976. Most of the work activities are scheduled to be supplied by contract with various planning agencies and research institutions. The tasks are:

1. Shorefront Access Planning

   Activities within this task are grouped into two categories: the first is a legal assessment of beaches; the second addresses beach planning needs.

   A. Beach Legal Assessment

      An analysis will be made of the Mississippi Code of 1972 and relevant judicial decisions to determine the existing laws and state policies, if any, which govern Mississippi's beaches. This investigation shall consider but not be limited to the following topics:

      (1) existing legal definition of the term "beach"
      (2) rights of the public to access to beaches
      (3) rights and responsibilities of riparian rights owners
      (4) responsibility of owners re: taxes, etc.
      (5) responsibility for maintenance of beaches
      (6) responsibility for funding of maintenance
      (7) authority to create beaches
      (8) protection of shoreline by bulkheads, groins, breakwaters, etc.

B. Shorefront Planning

Physical access to the beaches of the Mississippi Sound is not a major problem in two of the three coastal counties of the state. Within these counties there are over 20 miles of open beach of the state's 69 miles of coastline.

Since beach access problems are similar in Hancock and Harrison County but different in Jackson County, this task will be developed separately. An investigation will be made of Harrison and Hancock County that will address such user demands as parking, recreational amenities, including sun shelters, restrooms, fishing piers, and other features needed by the user. Consideration will also be given to Cat and Deer Islands.

In addition of addressing those "Out Front" demands, attention will be given to the Back Bay of Biloxi and St. Louis Bay.

Access problems in the areas need to be identified along with recommendations for increased usage of these waters by local residents. This may include but will not be limited to the need of additional boat ramps, water parks, piers, and shelters.

Jackson County's requirements differs from those of the western counties, in that access is very limited in the central portion of the county. Both of the county's communities of Ocean Springs and Pascagoula have public beaches; however, no assessments have been made that addresses both existing and anticipated user demands and the capability or suitability of the beaches.

Additional assessment will be made of access to the Jackson County portion of the Back Bay of Biloxi, the bayous of the county, and the

Pascagoula River system. This assessment will be similar to those proposed for Hancock and Harrison Counties.

SHOREFRONT ACCESS PLANNING

Cost and Support:

1. Beach Legal Assessment

   (To be supplied by the Sea Grant Legal Program; no cost to the program.)

2. Shorefront Planning

   Hancock and Harrison Counties $9,000

   This specific task will be developed by contract with Gulf Regional Planning Commission (GRPC)

   Jackson County $6,000

   This specific task will be developed by contract with the Jackson County Planning Commission

   TIME: September 1, 1977 - November 30, 1977

COASTAL ZONE MANAGEMENT WORK PROGRAM

PROGRAM CATEGORY NO. 3 Shorefront Access

WORK ELEMENT NO. A Shorefront Access Procedures/Mechanisms (New)

ESTIMATED COMPLETION TIME: June 1978 FEDERAL GUIDELINE REF.: 923.18

Description of Tasks and Work Products

S-RRC - Defines "Beach" and identifies area subject to definition; identifies public areas of environmental, recreational, historic, aesthetic or cultural importance requiring access and/or protection; relates data to previous inventory and designation work on APCs; recommends specific measures to protect or acquire these areas; identifies existing programs which could be used for management purposes. Work Product: Written report with above data.

OCP - Develops state policies on access and protection of public shorefront areas; identifies mechanisms to implement management techniques. Work Product: Portion of management program.

AGENCY	ESTIMATED FUNDING FY 78
OCP	6,900
S-RRC	10,000
TOTAL FUNDING:	16,900

MANPOWER DATA

Total Man Months Allocated from OCP Staff:	FY 78
Professional	3
Clerical	1

Remarks:

Task 2.5 - Public Access Planning Process.

- prepare a definition of what constitutes a "beach" and "public access" for purposes of the Coastal Management Program.

- locate existing public access sites and recognized areas of visual importance and identify need for improvement of existing access sites and/or desirability for protection.

- determine need for additional access and identify potential for additional public and visual access.

- examine present public land holdings and identify shore access needs in relation to uses and centers of population.

- investigate the opportunity for multiple use - joint development of coastal dependent sites with specific regard to provision of public access.

- identify areas of fragile resources where public access should be limited or conditionally restricted.

- consider the need to designate some major existing or potential public or visual access sites as areas of particular concern.

- develop a management program for public and visual access including coordination of existing acquisition programs and recommendations for new programs and policy guidelines for the private role in the access program.

Task 2.6 - Recreation Resources.

- summarize and update the Statewide Comprehensive Recreation Plan and other inventories of coastal recreational resources and estimates of use and future demands.

- analyze existing and proposed recreation development in the coastal area with regard to sponsor, type, adequacy and need for provision of additional recreational opportunities.

- identify areas of potential recreational opportunity or development that could be made available by future water quality improvement.

- identify areas with strong pressures for development of seasonal homes and investigate effects on the opportunity of public recreational experiences in the coastal area.

- develop policies and management programs for public recreational resources in the coastal zone, including beach, water dependent activities and necessary transportation facilities.

3. Addressing Three New Planning Elements - The three new planning elements that have been added to those originally within the FCZMA will be addressed in Fiscal Year 1977-78. These are coastal access, energy facilities siting, and shoreline erosion. Each of these elements must be studied and a plan for each must be developed and written into the Management Plan by October, 1978. This process is just beginning and the specifics have not yet been determined. We are requesting contractual funds to address these planning elements with the understanding that CZM approval will be required before any contracts can be initiated.

3-4.1 BEACH ACCESS

Purpose: To develop a planning process that can identify public shorefront areas appropriate for protection and/or increased access.

Method: Pursuant to 1976 Amendments to the Coastal Zone Management Act, the Division of Water will define the term "beach", and will develop a planning process for the protection of, and access to, public beaches and other public coastal areas of environmental, recreational, historical, aesthetic, ecological, or cultural value. This process will be coordinated with shoreline municipalities and park districts, and with related divisions of the Ohio Department of Nautral Resources.

End Product: A work paper summarizing recommendations.

Work Steps:

- Establish coordination with other agencies.
- Define the term "beach" and identify public areas subject to the definition.
- Formulate a procedure for assessing public areas requiring access and/or protection.
- Develop State policies pertaining to shorefront access and/or protection.
- Formulate a method for designation, if appropriate, or shorefront areas as areas of particular concern for protection and/or access purposes.
- Prepare a mechanism for continuing refinement and implementation of necessary management techniques.
- Identify existing programs that can be applied to meet beach access and/or protection needs.
- Coordinate analysis with other agencies.
- Prepare work paper.
- Present work paper to appropriate parties for review and discussion.

Budget: Division of Water $10,000

Schedule: 9/30/77 - 3/31/78

GRANT WORK PROGRAM

Public Shorefront Access and Protection

Objective: To provide information and methods to assist local governments and state agencies in determining access and protection needs for existing public coastal shorelands; to describe and improve, as necessary, processes for addressing those needs through comprehensive planning (Goals 5, 8, 16, 17, 18, and 19) and other public programs for management of public lands (e.g. Department of Transportation (DOT), Parks Division, State Parks and Beach Access Programs; Department of Fish and Wildlife, Angler Access program; Division of State Lands (DSL) and State Board of Forestry access policy; and local and federal programs); and to describe state policy toward shorefront access and protection.

Task 1: Describe existing shorefront access and protection programs of local government and state and federal agencies. Describe the planning process for those programs. Determine whether each process meets state goal requirements; meets local, state and federal needs for access to and protection of public lands; and is adequately coordinated with the local comprehensive planning program.

Develop criteria with coastal cities and counties and state and federal agencies for determining and incorporating public land access and protection needs in comprehensive plans.

Where improved planning processes or coordination are called for work with applicable public agencies to complete improvements.

	$11,000 Grant - DOT
	2,000 Grant - DLCD
	10,000 Match - DOT, IN-KIND
TOTAL	$23,000

Task 2: Prepare a comprehensive inventory of public lands within the coastal shoreland planning area defined in Goal 17. Inventory all local, state and federal lands from county inventories or records. Determine the purpose of existing public ownership and any special public values associated with the land. Determine the extent of public use of the land. Determine what access or protection, if any, exists for each parcel.

The product of this task will be county by county index maps of all public coastal shorelands and a catalog to go along with each map of the information gathered on each ownership. The catalog will be prepared so that it can be easily expanded, updated and information is readily retrievable. This inventory will provide information for comprehensive plans and public access programs and will provide a complete record of public shorelands which potentially could be traded for private lands as a means of providing access.

	$30,000	Grant - CONTRACT
	1,000	Grant - DLCD
	2,000	Match - IN-KIND
TOTAL	$33,000	
Grant Total for 305 b(7)		Grant - $44,000
		Match - $12,000

Puerto Rico	SCHEDULE	ALLOCATION	COSTS
12. SHOREFRONT ACCESS PLANNING In order to satisfy the requirements of 923.18, DNR will undertake additional study to develop "... a planning process that can identify public shorefront areas appropriate for protection and/or increased access." Third-year work has identified a number of aspects where additional work, including research, inventory and legal clarification, is needed in order to develop such a process. This task will begin during the second half of the fourth year and will continue into the first year of 306 work. Development of the shorefront access planning process will involve 3 general types of work--inventory and field work, planning, and legal work.	Nov. 1 - June 30	DNR - Major responsibility for conducting inventory, field work, topping, and preparation of draft access plan. PB - support role RMFA - Support role in preparation of inventory form and review of staff outputs, particularly as related to meeting federal requirements.	Total - $45,482 DNR - 38,838 PI.B. - 861 RMFA - 5,783
12-1. Development of an inventory form to be utilized in surveying the current access situation. The inventory will first be utilized on a test basis for the northeast and/or southwest coasts. Maps will be prepared reflecting the data collected, including areas deemed accessible and inaccessible.	Nov. 1 - Dec. 30		
12-2. The data and maps will be reviewed (a) to determine if modiciation of the inventory procedure is needed, and (b) to analyze the current and potential types of access in the test area(s). Following modification, if necessary, field work and inventory will continue for other parts of the coast as time allows. Review and planning for additional areas will continue as results of field work are available. Output will be sectional summaries and accompanying maps.	Jan. 1 - April 30		

	SCHEDULE	ALLOCATION	COSTS
12-3. A draft access plan using the sectional summaries and maps, will be developed which can assess public areas requiring access and/or protection as APC's and other means to ensure continued access, including acquisition. The draft plan will include an evaluation of the need for Commonwealth purchase of additional accessways and identification of high priority areas and an analysis of sources available for acquisition. Output of Task 12 will be a draft access plan which includes policy statements and implementation measures. Note: It is anticipated that during the first-year 306 work, the draft plan will be revised following legal clarification of a number of specific issues which will affect implementation.	May 1 - June 30		

2) Shorefront and Beach Protection and Access Planning Process

Article I, Section 17 of the Rhode Island state constitution declares: "The people shall continue to enjoy and fully exercise all the rights of fishery and the privileges of the shore." During the past 20 years, the state has taken the following steps to protect this constitutional mandate:

a) In may, 1956, the Rhode Island General Assembly passed a resolution creating a Special Commission to Discover Public Rights of Way to Water Areas of the State. In 1958, upon the recommendation of the Special Commission, the General Assembly permanently established the Commission on Discovery and Utilization of Public Rights-of-Way which, in 1970, published the State of Rhode Island Public Rights-of-Way to the Shore identifying 148 public rights-of-way in twelve cities and towns along the state's coastline. These rights-of-way were located by the use of aerial photographs, and are being marked by the state Department of Natural Resources in cooperation with abutting property owners. Fifty-three of the 148 have been determined appropriate for supplemental development for recreational use based on evaluation of their terrain, access, location, and zoning of the surrounding area. All 148 have been denoted on a state map (scale 1 ince = 8,888 feet) published in 1973.

b) The Rhode Island Coastal Resources Management Council was legislatively created in 1971, and is granted authority over any development or operation within, above, or beneath the tidal water below the mean high water mark (G.L. R.I. 1956, 46-23-6(B)), and over shoreline protection and physiographic features (G.L. R.I. 1956, 46-23-6(B(d)). Coastal physiographic features are defined as those natural geologic features above mean high water that are presently being

shaped and modified by tidal waters. These include but are not limited to, beaches, barrier beaches, sand spits, bluffs, cliffs, and scarps directly inland of the mean high water mark or a beach, or a coastal wetland (State of Rhode Island Coastal Resources Management Council Plan Policies and Regulations, 15-4-2). The Council recognizes the value of the coastal region for recreation activities and shall permit recreational development in those instances which makes the best use of scarce shorelines, which does not interfere with the public right of access to the shore, and which does not damage valuable natural areas scenic vistas (State of Rhode Island Coastal Resources Management Council Plan Policies and Regulations, 12-5).

c) Technical Paper Number 21, Protection and Control of the Saltwater Shore Area, prepared by the Statewide Planning Program and a consultant and published in May, 1972, explores methods of protecting and modulating use of the land area immediately adjoining the salt water shoreline. An area extending along the state's entire saltwater shoreline, including islands, coves, peninsulas, tidal rivers and reaches and salt ponds, was defined through the application of seventeen criteria reflecting both natural and man-made characteristics.

d) Public Shore Privileges in Rhode Island by the Yale Legislative Services, published in March, 1973, contains legal citations providing background for the creative use of Article I, Section 17, and put specific content into and defines some of the rights and privileges to the shore.

e) The "Final Report of the Chairman" of the Rights-of-Way to the Shore Commission, published in March 1976, recommends the termination of the Commission mandate and transfer of the remaining phases of the Commission's work to the State Properties Committee, the Statewide Planning Program, and the State Department of Natural Resources.

f) The Coastal Resources Center two volume study, Marine Technical Report No. 4, Rhode Island's Barrier Beaches, has inventoried, mapped and described the characteristics of all of the state's barrier beaches, and reports on the options for sound management of the resource.

g) Report Number 28, Plan for Recreation, Conservation, and Open Space (SCORP), published January, 1976, by the Statewide Planning Program as part of the State Guide Plan, inventories and maps at 1:24,000 (USGS quadrangle sheets), the state's entire salt beach frontage, as defined by use, by federal, state, local and private ownership. The SCORP identifies 23 miles of beach on the 419 total miles of coastline. It is estimated that 59 percent of the state's beaches are held in public ownership.

h) The draft State of Rhode Island Coastal Resources Management Program, Spring, 1976, describes the state's coastal management program and process, and is being revised according to comments obtained from OCZM during an intensive pre-submission review. "Appendix A: Coastal Resources Inventory and Assessment" describes under transitional systems, boulder beaches, high energy sand beaches and dunes, and low energy sand beaches.

i) The Bay Islands Park: A Marine Recreation Plan, August, 1976, proposes the development of an island park recreational system in Narragansett Bay, utilizing surplused federal holdings, state-owned properties, and state acquisition of selected privately owned properties.

j) Rhode Island's Coastal Natural Areas: Priorities for Protection and Management, University of Rhode Island Marine Technical Report No. 43 identifies 28 sites along the state's coastline selected as having the natural qualities highest in value to the state. These areas are suggested for incorporation into the Coastal Resources Management Council Plan, Policies and Regulations. Of the areas listed, most can be categorized as salt marshes, coastal pond complexes or scenic cliff/rock outcrops.

2) SHOREFRONT AND BEACH PROTECTION AND ACCESS PLANNING PROCESS

CRC — a) Define the term beach and identify public areas subject to the definition

CRC
DNR — b) Develop a procedure for assessing public areas requiring access and/or protection as part of the process for identifying geogrphic areas of particular concern.

CRMC
DNR
CRC — c) Develop state policies pertaining to shorefront access and/or protection.

CRC
DNR — d) Develop a methodology for designating shorefront areas as areas of particular concern for protection and/or access purposes.

CPMC
DNR — e) Develop a mechanism for continuing refinement and implementation of necessary management techniques.

DNR
CRC — f) Identify existing programs that can be applied to management needs.

DNR — g) Coordinate the planning process with the State Comprehensive Outdoor Recreation Plan (SCORP).

CRC — h) Identify specific areas for which access through acquisition, including funding under the provisions of section 315(2) of the CZM Act, will be appropriate during the program implementation.

DNR — i) Research rights-of-way to the shore in communities previously not surveyed by the Public Rights-of-Way to the Shore Commission.

The purpose of this task is to inventory beaches currently open to the public, estimate current and projected use demands, identify issues not adequately addressed by present state policy, and identify or recommend a planning process that can meet management needs pertaining to shorefront access. Specific issues considered will include the environmental and safety aspects of vehicle traffic and the adequacy of parking facilities.

This task will be conducted by the staff of the General Land Office and supervised by a special steering committee composed of the Land Commissioner, the Chairman of the Parks and Wildlife Commission, and Senator A. R. Schwartz, Chairman of the TCMC. This steering committee is needed because the responsibilities for protection and development of recreational shorefront along the state's coast are divided between the General Land Office and the Parks and Wildlife Department, and the legislature has, during the tenure and at the behest of Senator Schwartz, taken an active role in beach and coastal policy and development. Use of this steering committee to direct and coordinate this task assure the relevance of the work to the programs being administered by the Parks and Wildlife Department and by the General Land Office, and it will further assure that the work products are timely and in point for use by the Senate Interim Beach Study Committee chaired by Senator Schwartz. Recommendations will be made by June 1, 1978 and presented to the legislature, the Senate Interim Beach Study Committee, and the Natural Resources Council.

Sub-Task 1: The technical staff will propose a definition of "beach" for the purposes of the Coastal Zone Management Act and on the basis of currently available maps of state, federal, and locally owned lands, determine currently accessible beaches.

Sub-Task 2: The Texas Outdoor Recreation Plan and other documents, such as the studies which preceded passage of the Open Beaches Act, will be reviewed for access demand projections and recommendations. Updated information

from state, regional, and local agencies will be sought, and public involvement will be solicited. Issues to be considered include areas of desirable (demanded) access, areas of currently restricted access, areas of congestion due to excessive demand, and areas of use conflict (parking, public encroachment on private land, dune areas suffering because of beach access, waste control problems, traffic and security problems, offroad vehicle problems, concession problems).

Sub-Task 3: Legal and Institutional Analysis. Among the issues examined will be the enforcement of open beaches laws, the capability of cities and counties in beach planning, and Corps of Engineers authority and programs in beach protection and nourishment.

Sub-Task 4: Integration of Island Access and Hazard Policy. Improved island/beachfront access may increase the number of lives and the amounts of property risked to coastal hazards such as hurricanes. Consideration must be given to means to limit risk while affording maximum use of recreational waterfront.

Sub-Task 5: Formulation and Selection of Recommendations. Shorefront access is in some states severely limited by topography and the patterns and rights of waterfront ownership. The situation is somewhat different in Texas, where wetlands and other valuable natural areas may need the protection of inaccessibility; and enjoyment of the miles of accessible Gulf beaches may require limitation of longitudinal access by motor vehicles. In sum, conflicting policy interests must be considered. The recommendations of this task will

deal with the adequacy of state policy in substantive policy areas--such as means to provide lateral and/or perpendicular beach access, needed state purchase of land or access, improved highway access--and with issues concerning the establishment of an improved management process for shorefront access if the present system appears inadequate. The CMP Advisory Committee will play an important role in developing the final recommendations.

508 SHOREFRONT ACCESS

508.1 INVENTORY AND ANALYSIS

Beach sites. Potential, suitable, and planned beach sites will be identified.

Public access. Issues and problems with respect to public access will be described, and a summary of existing public access conditions will be prepared.

508.2 PLANNING

Guidelines. Guidelines to assist local governments in planning for beach sites will be prepared.

Programs for access. Programs and methods for establishing public access will be identified and proposed, including guidelines for local governments.

SHOREFRONT ACCESS

Office of Commerce and Resources	$ 1,651
Virginia Institute of Marine Science	8,022
Commission of Outdoor Recreation	14,723
	$ 24,396

101. Shorefront Access (Section 305(b) (7))

This requirement will be treated either as a separate work element scheduled for completion following the 306 submission, or it will be integrated into the 306 document. If the latter course of action is necessary, the shorefront access issues will be included in the various program elements, particularly those elements dealing with permissible use, geographic areas of particular concern, and implementation authorities. Regardless of the approach, the substance of the process will be the same, resulting in "a definition of the term beach and a planning process for the protection of, and access to, public beaches and other coastal areas of environmental, historical, aesthetic, ecological procultural value."

A. Approach and Techniques

1. A definition of the term "beach" will be developed. The definition will be in terms of physical components (line of vegetation, foreshore area, etc.), and use patterns.
2. A procedure will be developed for identifying public beaches and other public coastal areas of environmental, recreational, historical, aesthetic, ecological or cultural value that require protection or access. "Public areas" will be defined in terms of customary use, as well as governmental or non-profit ownership.

   In assessing these public areas, special attention will be directed toward identifying the attributed and resource potentials of the various offshore islands and cays. This effort will be conducted in conjunction with the Department of Conservation and Cultural Affairs.

3. The criteria in this assessment will be integrated into the APC designation process.
4. A procedure will be developed which will identify specific areas which will require the acquisition of access rights.
5. An inventory will be developed identifying existing funding programs (federal and territorial) which may be utilized for access and/or protection purposes.
6. Development of policies and program which will insure protection/access for public areas will be instituted. Special attention will be given to utilizing legal doctrines such as customary use and implied dedication as a means of protecting public access rights.

   Additionally, the feasibility of using other techniques, such as requiring public access guarantees as a condition for coastal zone permit approval, will be investigated.
7. Development of a mechanism for continuing refinement and implementation of necessary management techniques will be undertaken.

B. Plans, Products, Studies to be Produced

The completion of the Shorefront Access element will result in the incorporation of this analysis into the existing APC, permissible use and authorities elements, and as the land and water use designations. Maps will be produced indicating the location and extent of shorefront areas of environmental, historical, aesthetic, and ecological value. These maps will supplement the resource inventory maps initiated in the first grant year. The assessment of the offshore islands and cays will culminate in the

publication of an atlas which details the analysis and recommendations for future use.

C. Data

The preponderance of data to be used in completing this element will be from inventories of the land ownership, value, location, etc. legal and resource analyses, and public and governmental input from the first and second year programs. The assessment of offshore islands and cays will be completed in conjunction with an analysis presently being conducted by the Department of Conservation and Cultural Affairs.

D. Manpower Requirements

No.	Position
1	Director, Bureau of fish and Wildlife (C & CA)
1	Assistant Director of Planning
1	Landscape Architect
2	Associate Planners
2	Planning Assistants
1	Draftsman
1	Administrative Secretary
1	Clerk Typist
1	Administrative Officer

E. Time Schedule

In House Staff	6 man-months
Time Period	2 months

F. Cost

Consultant Fee	$1,000	
Federal		$12,122
Non-Federal		3,029
Total		$15,151

Introduction

Among the Amendments of 1976, (P.L. 94-370) incorporated into the Coastal Zone Management Act of 1972 (P.L. 92-583) were three new planning requirements added to Section 305(b) Management Program Development Grants. They are as follows:

> "(7) A definition of the term "beach" and a planning process for the protection of, and access to, public beaches and other public coastal areas of environmental, recreational, historical, esthetic, ecological, or cultural value.
>
> "(8) A planning process for energy facilities likely to be located in, or which may significantly affect, the coastal zone, including, but not limited to, a process for anticipating and managing the impacts from such facilities.
>
> "(9) A planning process for (A) assessing the effects of shoreline erosion (however caused), and (B) studying and evaluating ways to control, or lessen the impact of, such erosion, and to restore areas adversely affected by such erosion.
>
> "No management program is required to meet the requirements in paragraphs (7), (8) and (9) before October 1, 1978."

This supplement to the third year Section 305 grant includes the necessary activities to meet these three requirements. This supplement also requests a time extension for one of the work elements of the third year grant, development of a clearinghouse model.

Current Status of Wisconsin Coastal Management Program

Wisconsin's Governor has submitted for approval under Section 305 the Wisconsin Coastal Management Program (see Appendix C.). The Governor was sent a letter indicating preliminery approval on September 12, 1977, from the Acting Administrator of the Office of Coastal Zone Management, U.S. Department of Commerce (see Appendix D.). The Wisconsin Coastal Management Program will now undergo an extensive federal review under the National Environmental Policy Act, leading to implementation of the Section 306 Program in mid-1978. Wisconsin will complete the new Section 305(b) (7, 8 and 9) requirements under this supplemental grant by the October 1978 deadline and submit them as an amendment to the approved Section 306 Program. (See also Part C: Calendar of Future Events).

Shorefront Access Planning Process

The Wisconsin Department of Natural Resources (DNR) will document Wisconsin's compliance with Section 305(b)(7). Because of past DNR and Coastal Management Program efforts, the work will only take an estimated four months, October 1977 to February 1978, at a cost of $4,400 ($3,520 federal funds with $880 state match). The funds will support the salary ($2900) and fringe benefits ($620, 22%) of a limited term planning analyst. The DNR will provide the match in the form of supervision and agency review of the resulting document.

The objective is to develop a procedure to identify access requirements and a means to coordinate the acquisition and protection of shorefront areas with the present institutional apparatus. The work to be completed includes:

1. An updating and analysis of public access work completed in 1974/1975 under the Coastal Management Development Program;

2. Review and coordination with LAWCON Plans developed by local governments and the State Comprehensive Outdoor Recreation Plan (SCORP); and,

3. A review of the current means for shorefront access identification and acquisition and suggestions for its modification to meet the requirements of the State Coastal Management Program.

Project	Agency	Federal Funding	State Match	Total
Shorefront Access Planning Process	Dept. of Natural Resources	$ 3,520	$ 880	$ 4,400

MEMORANDUM

DATE: July 19, 1977

TO: File

FROM: Chris Dillon

SUBJECT: Washington Application for 3 New Planning Elements

Per telephone conversation today with Mike Kirk of the grantee's staff, estimated task costs and man-months per task are as follows:

Task One - Beach Access	$50,902	6MM
Task Two - Energy Facility Siting	$62,397	3MM
Task Three - Erosion	$10,451	3MM

Mr. Kirk also informed me that the A-95 review period for this application had ended and no additional comments were received.

With his concurrence revisions were made to idems 3., 12. and 13. of the SF-424.

He indicated that the Western Regional Office of Audits would probably audit this grant.

SECTION 305 GRANT REQUEST
(REVISIONS)

PROBLEM STATEMENTS

A. BEACH ACCESS:

Washington's marine shoreline is mostly in private ownership thus making publicly owned areas extremely valuable for public recreation. Approximately 60% of the saltwater tidelands in the State were sold by the State to the adjacent upland owners between statehood in 1889 and 1971 when the legislature decreed an end to this practice. About 1,160 miles of marine tideland remain th State ownership today, but much of this is generally inaccessible to the public, except by boat, due to the fact that the upland property abutting the beach is in private ownership. Another complicating factor is that approximately 25% of the publicly owned beach areas cannot be used for recreational purposes since they are leased for various types of aquaculture. Still more complicating factors are that the topography of the Puget Sound region (which contains the bulk of the State's population) contains a substantial percentage of high bank or bluff topography which is not conducive for access to beach areas, a substantial portion of marine shoreline is contained in islands which are accessible only by boat (including some publicly owned land) and there has been only partial success in establishing public access areas in private developments.

From the above it is apparent that although Washington State is especially well endowed with marine shorelines, the areas available to the public are relatively few in number. The planning process to be developed for beach access will attempt to expand the areas available to the public in order to disperse the extreme pressure exerted on those areas that are currently available.

TASK DESCRIPTIONS

The following are the revised task description based on the requirements contained within the revised regulations for Coastal Zone Management Program Development Grants in the April 29, 1977, Federal Register.

TASK ONE - BEACH ACCESS

A planning process will be developed which will include:

1. a procedure for assessing public areas requiring access or protection;

2. a definition of the term "beach" and an identification of public areas which meet that definition;

3. articulation of State policies pertaining to shorefront access and/or protection; and

4. an identification of funding programs and other techniques that can be used to meet management needs.

Point one and the second part of point two will be carried out by a contractor. The contract amount will not exceed $21,946. The first part of point two and parts three and four will be carried out by Department staff.

The methodology to be employed in development of this planning process will, in part, involve the following:

A. Development of a definition for the term "beach":

The Department will form an ad hoc advisory team to assist in developing a definition for the term "beach". This team will include members from federal, state and local government agencies. The definition to be developed will be comprehensive enough to encompass the wide range of beach morphologies existent in the State of Washington which are suitable for some form of public recreation.

B. Development of procedure for assessing public areas requiring access or protection:

Department staff, selected staff from other agencies and the Department's contractor will develop a procedure for assissing public areas requiring access or protection. The ad hoc advisory committee will oversee the selection of the criteria used in the assessment.

The procedure will likely involve:

1. analysis of the location and extent of existing public ownership of shorefornt and tideland areas;

2. analysis of existing plans for acquisition of additional shorefront areas by public agencies as stated in the Statewide Comprehensive

Outdoor Recreation Plan, local government park and recreation plans, acquisition programs of State and Federal fish and wildlife agencies etc.;

3. analysis of the distribution of existing public access points in-relation to the population distribution within the State;

4. development of a system for identifying shorefront areas requiring protective measures as opposed to public access; and

5. development of criteria regarding the suitability of potential public access areas including such considerations as compatibility of adjacent uses, physical characteristics of the site, proximity to population concentrations and environmental characteristics.

C. Identification of public areas which meet the definition of the term "beach":

Based on the definition of the term "beach" the Department's contractor will inventory the marine shoreline areas of the State and identify those areas which meet this definition. The contractor will then prioritize those seleced stretches of mareine shoreline in terms of their suitability

B above. Specific parcels will not be identified in order to avoid speculative investiment, but rather shoreline segments will be delineated which contain parcels or areas which meet the general criteria for acquisition.

Appendix Four: Source Materials

1. Excerpts from A Report on a Seashore Recreation Area Survey. NPS. DOI. 1955, pp. 7-13. 4-2

2. Our Vanishing Shoreline. NPS. DOI. 1966 (excerpts). 4-8

3. Shoreline Recreation Resources of the United States. ORRRC Study Report 4. Washington: George Washington University, 1962. Excerpts, pp. 3-5, 28-31. 4-13

4. Report on the National Shoreline Study. DOD. U.S. Corps. 1971. Excerpt, p. 13. 4-21

5. From Sea to Shining Sea. A Report on the American Environment--Our National Heritage. President's Council on Recreation and National Beauty. Washington: GPO, 1968. Excerpts, pp. 174-179. 4-22

6. Memorandum to Richard Gardner from Dick Rigby concerning the legislative history of the beach access and island preservation provisions of the CZMA. Memorandum includes a copy of "Staff on the Issue of Beach Access Section of H.R. 3981"--Committee Print. 4-28

7. U.S. Commission on Marine Science, Engineering, and Resource's (Stratton Commission's) Panel Report, Vol. III. Science and Environment. Excerpts, pp. III-5, III-15-17). 4-40

8. Stratton Commission. Our Nation and the Sea. Excerpts, pp. 52-53. 4-42

9. Excerpts from Senate Report 94-277 and House Report 94-878 from the Legislative History of the Coastal Zone Management Act of 1972, as Amended in 1974 and 1976 With a Section-by-Section Index. Washington: GPO, 1976. pp. 755-56, 918-19, 923-24, 949. 4-44

10. Funding Authorizations for National Seashores (Table) from "A Review of the Acquisition Costs of National Seashores." Congressional Research Services, 1977. 4-48

1. Excerpts from A Report on a Seashore Recreation Area Survey. NPS. DOI. 1955. pp. 7-13.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

Of the 3,700 miles of general shoreline constituting the Atlantic and Gulf coasts, there are 240 miles, or 6½ percent, in Federal and State ownership for public recreation purposes.

Within these 240 miles there are 39 areas: 2 national parks, 1 national seashore recreation area and 36 State seashores. There are in addition 4 national wildlife refuges with ocean beaches which are not primarily utilized for public recreation.

Over 50 percent of the 240 miles is contained in the Cape Hatteras National Seashore Recreation Area and in Acadia and Everglades National Parks. However, neither Acadia nor Everglades National Park contains much beach frontage suitable for seashore recreation activities.

The 1955 seashore survey identified and reported upon 126 undeveloped areas. Of this total 72 were eliminated from further consideration because they lacked recreation potentialities or were unavailable for public use.

The remaining 54 areas were believed to be of interest to local, State or Federal agencies as possible public seashores. These 54 areas, which contain about 640 miles of beach and comprise 17 percent of the shoreline of the Atlantic and Gulf coasts, constitute the major remaining opportunities for conservation of seashore resources.

Of the 54 areas most suitable for public seashore recreation, 6 of the areas and one-third of the total beach mileage are in one State - Texas; two of the 54 areas were considered to be superior to all the others. (Twenty-eight areas were judged to be of exceptional importance and the respective States are negotiating for 8 of these.)

There was a striking parallel between this recreation survey and the two-year inventory of the wetlands of the United States, conducted by the Fish and Wildlife Service. Of the 54 most desirable areas listed by this survey, all but 6 had been rated in the wetlands inventory as possessing high or moderate value of birdlife.

Within the most densely populated section of the seashore, between Massachusetts and Delaware, there are 18 undeveloped areas containing 118 miles of coastline. The extreme importance of acquiring additional seashore in this region is vividly emphasized by

the conclusion of the recent Yale University City Planning Survey: that the entire 600-mile area of the eastern seaboard from Portland, Maine, to Norfolk, Virginia, can be designated as a single, linear city containing one-fifth of the Nation's population.

In 1935 a survey of undeveloped seashore areas conducted by the National Park Service recommended that 12 major undeveloped areas with a total shoreline of 439 miles be preserved as national seashores. Only one of the 12 areas--Cape Hatteras--was set aside for this purpose, and 10 of the 11 areas which were recommended for preservation in 1935 are now in various stages of private or commercial development.

The movement to buy up seashore property for commercial and private use has had its greatest impetus since 1945, and an economic boom in seashore property is a phenomenon of the entire coast. Extensive and costly developments now line mile after mile of seashore which before World War II was uninhabited.

One of the areas recommended as a national seashore in 1935 was 30 miles long and could have been purchased for $260,000. Less than 9 miles remain undeveloped today, and the cost of purchasing the land now would be more then $1,000,000--an increase in value of 1200 percent in 20 years.

A second area selected in 1935 was--and is--accessible only by boat. Despite this handicap, the island has been subdivided and a majority of the 5,000 lots sold--with no access in sight. The price has skyrocketed from $26 an acre to $65 a front foot.

Every factor exerting influence on the pattern of use of the seashore will tend to make conditions far worse in coming years. Outdoor recreation is fast becoming a major industry. More and more persons and interests will be competing for less and less available beach.

The Census Bureau estimates that in 20 years--by 1975--the population of the United States will jump to over 200,000,000. The fact that the population will nearly double in 50 years does not mean the number of visitors to the beach will merely double.

From 1934 to 1954 the number of visitors to the national parks increased from 6,000,000 to 48,000,000. In 40 years, the ratio of visitors to the national parks to total population has increased from 1 in 300 to 1 in 3. Within the 20-year period, 1934-1954, visitation to New York State Park beaches has increased from 5,000,000 persons to 61,000,000.

1. Report on Seashore Recreation Area Survey.

Considering these facts, it is recommended:

That at least 15 percent of the general shoreline of the Atlantic and Gulf coasts be acquired for public recreation purposes. If public agencies acquire half of the suitable undeveloped seashore land remaining, they would then have, including their existing areas, the recommended 15 percent.

That highest priority be given to the acquisition of the following 16 areas:

Great Beach, Cape Cod, Massachusetts
Cumberland Island, Georgia
Fire Island, New York
Shinnecock Inlet, New York
Padre Island, Texas
Smith Island, North Carolina
Bogue Banks, North Carolina
St. Joseph Spit, Florida
Mosquito Lagoon, Florida
Parramore Island, Virginia
Kiawah Island, South Carolina
Marco Beach, Florida
Debidue Island, South Carolina
Popham-St. John, Maine
Crescent Area, Maine
Brazos Island, Texas

That prompt action be taken to acquire available beach sites before the best of the remaining areas are acquired for private or commercial development. The attention of all persons and organizations in a position to give aid should be solicited.

That the acquisition of areas be related as directly as possible to the distribution of tributary population, excepting those areas that are of such outstanding quality that the need for their preservation justifies acquisition regardless of location.

That ample quantities of hinterlands of marsh and swamp, which provide a valuable habitat for a large and interesting variety of bird and animal life, be acquired in connection with acquisition of beach property.

That biotic communities of great scientific interest found along the seashore be acquired and preserved regardless of the desirability of the adjoining beach, and that consideration be given to biotic communities at present in a modified condition but which might return to a more natural condition if permitted to remain undisturbed.

That more detailed studies be made of selected coastal areas of unusual importance, giving consideration to proper boundaries and long range planning for best utilization of recreation values.

1. Report on Seashore Recreation Area Survey.

THE REMAINING OPPORTUNITIES

The survey group inspected and reported upon 126 undeveloped areas in the 18 States along the Atlantic and Gulf coasts. A brief description and evaluation of each is contained in the following pages. The 54 most outstanding areas are grouped below and listed from north to south, and the 16 areas judged to be of highest priority for acquisition and conservation by a public agency are underscored.

Maine:

Roque Island
Castine
Popham-St. John
Pemaquid
Prouts Neck-Scarboro
Crescent
Crescent Surf

Massachusetts:

Plum Island
Duxbury Beach
Great Beach (Outer arm, Cape Cod)
Sandy Neck
Monomoy Island
Nantucket Island
Marthas Vineyard
Washburn Island
Naushon Island
Horseneck

Rhode Island:

Charlestown Beach

New York:

Gardiners Island
Shinnecock Inlet
Fire Island

New Jersey:

Little Egg Harbor
Seven Mile Beach

Delaware:

Rehoboth Beach North

1. Report on Seashore Recreation Area Survey.

Maryland:

Assateague Island

Virginia:

Assateague Island
Parramore Island
Hog Island

North Carolina:

Core Banks
Shackleford Banks
Bogue Banks
Onslow Beach
Federal Point
Smith Island

South Carolina:

Waiter Island
Debidue Island
Kiawah Island

Georgia:

Ossabaw Island
St. Catherines Island
Sapelo Island
Cumberland Island

Florida:

Melbourne Beach-Vero Beach
Mosquito Lagoon
Keys (Big Pine, Summerland, Cudjoe, Ramrod, No-Name, Big Torch, Middle Torch)
Marco Beach
St. Joseph Spit

Mississippi:

Horn Island
Ship Island

Louisiana:

Grande Terre Island

1. Report on Seashore Recreation Area Survey.

Texas:

East Coast
Galveston Island
Stephen Austin Island
Matagorda Peninsula
Padre Island
Brazos Island

2. Our Vanishing Shoreline. NPS. DOI. 1966 (excerpts).

what the survey found out

Foreboding is the only word that adequately describes the situation so clearly pictured by the survey.

In summary, the findings show that almost every attractive seashore area from Maine to Mexico that is accessible by road has been developed, has been acquired for development purposes, or is being considered for its development possibilities.

The few accessible and undeveloped beach sites left are scattered sparsely along the coast. They are small—and they are going fast. Inaccessible beach sites, including offshore islands, are almost the only hope for preservation today. Even many of these are being purchased by real estate interests for subdivision purposes.

A few statistics sharpen up the picture:

1. Of the 3,700 miles of general shoreline constituting the Atlantic and Gulf coasts, only 6½ percent, or 240 miles, are in Federal and State ownership for public recreation uses.

2. Within these 240 miles are 39 areas in 14 States: two national parks, one national seashore recreation area, and 36 State seashores. In addition there are eight national wildlife refuges, plus a few small keys and islands, with ocean beaches that are not primarily used for public recreation. A few counties and municipalities own and operate public beaches.

3. More than half of the 240 miles is contained in the Cape Hatteras National Seashore Recreational Area (North Carolina) and in Acadia and Everglades National Parks (Maine and Florida). Neither of the national parks contains much beach frontage suitable for seashore recreation.

4. The seashore survey identified and reported on 126 undeveloped areas. Of this total 72 were eliminated from present consideration because they lack recreation potentialities or are unavailable for public use.

5. The remaining 54 areas are believed to be of interest to local, State, or Federal agencies as possible public seashores. These 54 areas, containing about 640 miles of beach and comprising 17 percent of the shoreline of the Atlantic and Gulf coasts, constitute the major remaining opportunities for conservation of seashore resources. (Happily, States

are already negotiating for portions of eight of the 54 areas.)

6. There is a striking parallel between this recreation survey and the two-year inventory of the wetlands of the United States conducted by the Fish and Wildlife Service. Of the 54 most desirable areas listed by the recreation survey, all but six had been rated in the wetlands inventory as possessing high or moderate value for birdlife.

7. Of the 54 areas most suitable for public seashore recreation, six of the areas and one-third of the total beach mileage are in Texas.

8. Within the most densely populated section of the seashore, between Massachusetts and Delaware, lie 18 undeveloped areas containing 118 miles of coastline. The extreme importance of acquiring additional seashore in this region is vividly emphasized by the conclusion of the recent Yale University City Planning Survey: that the entire 600-mile area of the eastern seaboard from Portland, Maine to Norfolk, Virginia, can be designated as a single, linear city containing one-fifth of the Nation's population.

9. The 54 undeveloped stretches of seashore selected by the survey range in size from one mile long to 100 miles. Some are located within three hours driving time of our greatest population centers. All are within one-day travel distance of hundreds of thousands of people.

10. At least two and possibly five of the areas may be of significance to all the people of our Nation for seashore recreation. Five of the areas are of considerable historical importance, and four more may be of national significance for wildlife conservation purposes.

Within this small booklet it would not be possible to review the details of all the shoreline locations found by the survey to be desirable for public use. Several areas, however, are specially suitable; a brief picture of three of these will add flesh and blood to the statistical bones we have just considered.

1. Cumberland Island in southeast Georgia is considered by the survey to be the best of its type — the low-lying lands separated from the mainland by stretches of marsh and rivers or estuaries.

This "sea island" is thought to contain practically all the desirable features for public enjoyment. It is sufficiently large to maintain community conditions of its plant and animal life. Most of the beach is exceptionally attractive. It has fresh-water ponds. The dunes are splendid, and fairly well under control by vegetation. The ocean waters are warm with normally dramatic surf effect.

Considering that much timber cutting has been done on the island, the forest is in excellent condition. Fine live oaks, with rich fern growth on trunks and limbs, and hung with Spanish moss, are abundant. Sea and shore birds abound; the island contains a good variety of animals. Fishing in the adjacent waters is excellent. With a climate sim-

ilar to Florida but somewhat less extreme in summer, there are few places on the Atlantic coast where more days in the year favor being out of doors.

This and similar sea-islands along the coast played a thrilling role in the New World Adventure. Here France and Spain vied with each other for the friendship of the Indians: along this coast Spanish and English colonizers fought each other. A Spanish armada of 50 ships and 2,000 soldiers sailed from Havana in 1742 and attacked the British fortification on the island. Archeological exploration may well uncover here facts of considerable historical meaning.

The possibilities of developing Cumberland Island for public recreation and cultural enjoyment are considered to be exceptional.

2. The south shore of Long Island, New York is the most convenient seashore recreation area for the largest population center of the United States. Within a small geographical radius are grouped not less than nine million people. The State, of course, has done much to provide facilities for satisfying the yearning for a day at the ocean edge, but already overloaded conditions are to be observed at such places as Jones Beach, Gilgo and Captree State Parks. The western end of Fire Island is occupied by Fire Island State Park, but the opportunity exists, according to the survey, to make public use of that part of the magnificent 32-mile barrier beach that is still relatively undeveloped.

The Fire Island area is a long, narrow stretch of sand reef, varying from several hundred yards to a mile wide. The beach is wide, clean, and gently sloping, insuring safe and enjoyable swimming in most places. The dunes are imposing and usually well stabilized by vegetation. Only at the unique Sunken Forest is there any considerable growth of trees, but this forest is a gem of its kind: dominated by American holly trees, some several hundred years old, with an accompaniment of sassafras, shadbush, red cedar, and pitch pine.

Elsewhere the vegetation consists of beach grass, bayberry, beach plum, winged sumac, reindeer moss, and some pitch pine. In places along the bay there is a fairly good growth of eelgrass, providing food for wildfowl.

Because of the tempering influence of the Atlantic Ocean, the climate of Fire Island is mild for its northern position. It is one of the few beach areas on the Atlantic which face the sun throughout the day.

The extent of this seashore makes it well-suited for concentrations of pleasure seekers, and also for those who delight in a degree of isolation. Historically, the whole stretch of coast here is rich in sea adventure.

3. When Gosnold, in 1602, cruised along the outer arm of the peninsula we now call Cape Cod and named it for the vast schools of fish he encountered in those waters, he landed on what he described as a "white, sandy and very bold shore." The French explorer Champlain saw it later and called it Cape Blanc for its gleaming sand dunes. Finally, on a November day in 1620, the Pilgrims of the Mayflower turned back into a harbor, now Provincetown, fearing the dangerous breakers and shoals, and later found what seemed a better haven at Plymouth.

None of these adventurers were seeking fine beaches and a shoreline for recreational purposes. Three hundred years and more were to pass before the survey party was to speak of this strip of 30-odd miles in these terms:

> "There is no longer any comparable area in the New England region that exhibits all the outstanding values desirable and suitable for excessive seashore recreation. For these reasons alone, the Great Beach area of Cape Cod merits preservation as a major public seashore of the North Atlantic coast."

Here is an area not more than 300 miles distant by highway from all six capitals of the New England States and metropolitan New York.

Great Beach contains, in its shoreline and the adjacent land, practically every feature desirable for preservation for ordinary recreational purposes and for the additional use of historical and nature study. In spite of its ready accessibility, it has the priceless feeling of remoteness. It is the longest stretch of beach in the New England shoreline.

Along the northern part of Great Beach the surf is occasionally too powerful and the slopes too abrupt for the best swimming. But other sections with long gradual slopes provide bathing for those who do not find the water too cold.

Along parts of the shore, cliffs rise as high as 150 feet; behind them spread forests and shrubs with many fresh-water lakes. Dunes on the north end are spectacular, some more than 60 feet high.

Sea, shore, and land birds, together with an interesting community of animals, offer a perpetual source of delight to lovers of the wild.

Cape Cod is noted as one of the ten most popular salt-water sport-fishing locations in the United States. Occasionally whales are seen off shore. Many of the city dwellers of New England and New York who have suffered under the humid blanket of a "hot spell" are familiar with the refreshing sea breeze of this shore.

There is little opportunity along the New England coast for exploring undisturbed or remote areas of beach, dunes, and forests in search of enjoyments other than physically recreational. If the Great Beach area had the status of a major public seashore, it would unquestionably attract increasingly large numbers of people from the Country at large and from Canada, besides those who would come from New England and metropolitan New York. At the same time it would preserve a representative part of a unique land-and-sea-scape.

recommendations for action

As a result of the survey, the National Park Service makes these six recommendations:

1. That at least *15 percent* of the general shoreline of the Atlantic and Gulf coasts be acquired for public recreation purposes to be administered by Federal, State, and local agencies. If the public agencies acquire *half* of the suitable undeveloped seashore land remaining, they would then have, including their existing areas, the recommended 15 percent.

2. That *prompt* action be taken to acquire available beach sites before the best of such areas are acquired for private or commercial development. The critical situation deserves the attention of all persons and organizations in a position to give aid—womens' clubs, chambers of commerce, historical societies, service clubs, universities, conservation groups, etc.

3. That the acquisition of areas should be related as directly as possible to the distribution of population except where biological, historical, or other values supersede.

4. That ample quantities of hinterland of marsh and swamp, which provide a valuable habitat for a large and interesting variety of bird and animal life, be acquired in connection with beach property. Where such areas can provide a fresh-water habitat the variety will be greatly enhanced.

5. That plant-animal communities of great ecological interest found along the seashore be acquired and preserved regardless of the desirability of the adjoining beach; and that consideration be given to such communities now in a modified condition which might return to a more natural condition if permitted to remain undisturbed.

6. That further land use studies be made of selected coastal areas of unusual importance, giving consideration to proper boundaries and long range planning for the best use of recreation values.

3. *ORRRC Study Report 4* (Excerpts, pp. 3-5, 28-31)

Shoreline Recreation Resources of the United States

Report to the Outdoor Recreation Resources Review Commission by The George Washington University

Washington, D. C. 1962

CHAPTER ONE

WHAT ARE THE SHORELINE RECREATION WANTS AND NEEDS OF THE AMERICAN PEOPLE NOW, AND WHAT WILL THEY BE IN THE YEARS 1976 AND 2000?

Answers to the questions of present and future needs will be discussed separately. It is first necessary to understand what measures of present needs can logically be made before it is possible to project these into the future. In general no real distinction will be made between 1976 and 2000, except to point out that some situations have greater immediacy than others.

Present Shoreline Recreation Needs

Behind the "wants" and "needs" of people for shoreline recreation, or any type of outdoor recreation, is the contemporary public attitude toward recreation itself as a legitimate activity. Americans believe now, as they always have, that "the devil guides idle hands." The growing fund of leisure time in this country has made Americans keenly aware of the problems leisure can present. We need to be kept busy. Americans are basically "doers;" they are action-minded; they will not be satisfied with activities which place them in observer roles.

Significance of outdoor recreation

The very traits which have given our society much of its dynamism and spirit are those which can, unharnessed, produce increased crime rates, social delinquency, higher rates of insanity, and suicide, to mention but a few social evils. There is a direct relationship between the increase in leisure time in the last decade and the increase in the need for "substitute" activities which will keep Americans busy and occupied. Perhaps Americans need to be even more active "off the job" than "on the job." It is just as important to plan for full employment of leisure energies as it is to plan for full employment of economically productive energies, and the primary outlet for these inherent American energies should be some form of outdoor recreation.

Indicators of outdoor recreation demand

Youth Survey.—In a study to determine what young people in the National Capital Area do with their spare time, the answers of over 60,000 young people in the 9th through 12th grades suggest that a "large and unfulfilled demand" exists "for most of the outdoor sports..". 1/ The study revealed comparatively little difference between neighborhoods in the expressed desire for sports, but very great differences in the extent to which young people actually participate. The greatest need for recreation opportunities is among the lower income urbanites.

Delaware Basin Study.—A study of the Delaware River Basin, prepared for the National Park Service by the Gallup organization, indicates that all classes of people share the desire for a great participation in outdoor recreation. Sixty percent of the people queried preferred a rural setting for day outings, and 42 percent preferred the outdoors for weekend vacations. 2/

Water and outdoor recreation

A National Park Service report published in 1960 states, in part, that "...probably the major portion of outdoor recreation is associated with water areas..." 3/ The sales of outboard motors, over half a million annually for the past several years, are testimony to the great number of persons who participate in recreational boating, estimated to be as many as 40 million. 4/ In any survey of outdoor sports, swimming is sure to be one of the most popular, and water skiing is rapidly gaining in popularity. All such evidence emphasizes the importance of water features in American forms of outdoor recreation.

Popularity of shoreline recreation

Of the many outdoor recreation "environments," mountains, seacoasts, deserts, and woodlands, the shoreline appears to have an unusually strong appeal for Americans. In the Gallup study mentioned above, a marked preference was shown for the seashore. The New Jersey seashore was the first choice for 48 percent of the respondents, and second choice for 21 percent when asked about their preferred area for a day outing. In contrast, the Pocono Mountains were the first choice of 23 percent and the second choice of 24 percent. For weekend outings, the figures were 43 and 21 percent for the seashore and 30 and 23 percent for the Poconos. Seventy-seven percent of the people questioned had been to the New Jersey seashore at some time, while 35 percent had been to

1/ Edward B. Olds, "What Young People Do and Want To Do in Their Spare Time," Health and Welfare Council of the National Capital Area, Washington, D.C., 1960.

2/ "Summary of Outdoor Recreation Activities in Preference of the Population Living in the Region of the Delaware River Basin," prepared by the National Park Service from a report prepared by Audience Research, Inc., Princeton, N.J., January 1958.

3/ "Water Recreation Needs in the United States, 1960-2000," U.S. Senate Select Committee on National Water Resources, May 1960.

4/ "Boating," National Association of Engine and Boat Manufacturers, New York, N.Y., 1960.

the Pocono Mountains. 5/ These two recreation sites were the two most popular discovered by the survey. They are equally accessible to the people living in the Delaware River Basin.

In the year preceding the interviews upon which the Gallup study was based, 24 percent of the population of the area, constituting 45 percent of the vacationers, spent at least some of their time at the New Jersey shore.

Popularity of the shoreline is no accident. Coastal areas provide opportunity for a wide variety of active or passive pleasures such as:

Activities exclusively "coastal"—
- Surf-riding.
- Skindiving (spearfishing, underwater exploration).
- Beachcombing.
- Coastal hunting and fishing.

Activities associated with water bodies—
- Swimming.
- Boating (motorboating, sailing, canoeing).
- Water skiing.
- Fishing.

Activities not limited to coasts or water bodies—
- Hiking and walking.
- Sunning.
- Bird watching.
- Horseback riding.
- Picnicking.
- Camping.
- Photographing, sketching, painting.
- Sightseeing (scenic, scientific, historical).
- Nature study (biological, geologic, botanical).

Shorelines afford easy, active forms of recreation. Going into the surf is fun whether one swims or not. It isn't necessary to be a mountain climber to take walks along the beach, and beachcombing is an activity that appeals to everyone from toddler to octogenarian.

While all of the shoreline has some recreation value, and the entire shoreline constitutes a recreation resource, not all of the shoreline is equally sought out for outdoor recreation. Of the three categories of shoreline—marsh, bluff, and beach—the latter is by far the most popular kind of shoreline in present patterns of outdoor recreation activities.

Here, land and water are easily accessible; the violence of breaking surf and the warm safety of relaxing sands are but a step apart; the stimulation of the foreign environment of the water and the relaxation of sunbathing are nowhere else so easy of choice. Physical sport and mental relaxation are equally available.

Shoreline recreation target areas

Some shorelines are almost never used, either for recreation or for any other activity. Others are so overused that their recreation values are greatly reduced. The important shoreline recreation targets are those which have the characteristics of (1) accessibility and (2) availability. Accessible shorelines are those which are close enough to large using populations for day and/or overnight use. Available shorelines are those whose use is not restricted by the nature of ownership, high fees, or some other inhibiting factor.

Both characteristics are essential in any assessments of the wants and needs of the American people for recreation shorelines and in any evaluation of the ability of our resources to fill those needs. In some large metropolitan areas the per capita amount of accessible and available shoreline is extremely limited. Shorelines accessible to less densely settled parts of the country may be used by only a few people. Thus, shoreline recreation demands are highly concentrated, geographically.

Accessibility.—People who seek outdoor recreation do so within very definite time patterns; these are usually described as day outings, weekend or overnight trips, and vacations. The most important of these, in terms of its impact upon outdoor recreation resources, is the day outing. The Gallup study cited earlier indicated that, of the 71 percent of the people questioned who had been on any day outing during the past 12-month period, one-half had been on at least 10 day outings during that period. Of the 47 percent who had been on overnight or weekend trips, half had been on at least three such trips.

Fifty-four percent of the people questioned had been away from home on a vacation during the preceding 12 months.

The day outing is the basic unit of outdoor recreation at present. The Delaware Basin people queried drove a median one-way distance of 63 miles on day outings, or a driving time of about 2 hours. This is not necessarily the pattern everywhere. Data published by the National Park Service in 1941 showed considerable differences in average day outing distances from one part of the country to another. This is borne out by the recently published California Public Outdoor Recreation Plan 6/ which reported an average one-way distance of 35 miles for day outings and an average distance of 75 miles for overnight trips. The authors of this report are inclined to believe that at the present time people will drive one way about 2 hours, a distance that may vary from 30 miles to as much as 90 miles, for such outstanding recreation sites as ocean beaches provide.

Of course, when beaches are closer than this, they will be used more heavily. About three-quarters of the people in California live within an hour's drive of a beach, accounting in part for beach popularity in that State. The following table shows how long people spent en route to three public beaches in the metropolitan New York area on a summer Sunday in 1959.

New York City's beaches are so accessible that eight beaches had an estimated total attendance in 1959 of 65,595,204, according to that city's reply to the municipal facilities questionnaire. Unquestionably accessibility is a key factor in use—and in planning for the future. The Massachusetts report, "Public

5/ "Summary of Outdoor Recreation Activities—of the Delaware River Basin," op. cit.

6/ Part I, Mar. 25, 1960, Sacramento, Calif., p. 26.

Table 1. Estimated range and average traveltime of users of three beaches in the metropolitan New York region, summer 1959 1/ 2/

One-way traveltime (range in minutes)	Jones Beach (percent of travelers)	Orchard Beach (percent of travelers)	Great Kills Beach (percent of travelers)
0-15	17.0	69.2	46.8
0-30	34.7	75.2	65.3
0-45	71.2	100.0	84.8
Less than 1 hour	83.9	100.0	94.7
Over 1 hour...	16.1	....	5.3
Average one-way traveltime in minutes.....	40.2	23.5	27.5

1/Adapted from "The Race for Open Space," final report of the Park, Recreation and Open Space Project of the Tri-State New York Metropolitan Region, Regional Plan Association, Inc., New York, September 1960, table 17, p. 34.

2/Traveltime is a weighted average based on the distance from each county's population center to each park, via major roads at normal speeds.

Outdoor Recreation," had this to say about public beaches:

> Massachusetts is fortunate in having a system of public beaches the estimated peak capacity of which is 385,000 people—8.5 percent of the population.
>
> However, 80 percent of the ocean beach capacity lies within the Metropolitan Parks District, where 2 million people, more than 40 percent of the State's population live. Within this district, where the beaches can accommodate 15 percent of the resident population, use on peak days taxes their capacity heavily. 7/

Availability.—In general, the only beaches widely available to the public are public beaches, and even some of these are restricted. For example, some municipal beaches admit only bona fide citizens of the municipality. Others practice some form of segregation or other restriction. The use of private beaches is normally under the control of the owners, although in some States access may be gained to the foreshore—the area below high tide—through public thoroughfares. Because of time and fund limitations, it was impossible to make an inventory of restrictive policies of either private or public beaches. The authors have assumed that public beaches are usually available to anyone. However, it may be that the extent of adjacent parking areas is the greatest single factor restricting the availability of accessible public beaches.

7/"Public Outdoor Recreation," Department of Natural Resources, The Commonwealth of Massachusetts, 1954.

Summary of Shoreline Recreation Needs

There seems to be little question that the role of the American shoreline in satisfying outdoor recreation needs is becoming more important every year. However, the usefulness of shoreline to satisfy recreation needs varies with the:

1. Type of shoreline.
2. Accessibility of the shoreline.
3. Availability of the accessible shoreline.

Accessible and available beaches

The greatest recreational use pressure is on public beaches not more than 60-90 miles away, depending upon the highways, or about 2-hours automobile traveltime, from metropolitan areas of a half million or more people. Within this range the heaviest demands are normally placed on beaches within 30 miles or less than 1-hour traveltime of metropolitan areas. The 19 metropolitan areas which presently have more than 500,000 people are shown on figure 1. Circles of 30 and 90 miles radius respectively, have been drawn around these metropolitan areas. These are the crucial beach recreation targets. The inner circles are the "bull's-eyes." Where the impact areas of a number of metropolitan areas overlap, use pressure is extremely high.

Inaccessible nonbeach shoreline

The other side of the coin is extreme nonuse. The least use pressure on recreational shoreline is on marsh or bluff coast with no beach areas and distant from metropolitan centers. While recreation use of these areas is slight at present, they are often important as superlative examples of bluff or marsh shoreline, as unique natural phenomena or as wildlife habitat.

Intermediate shoreline

In between these two extremes of use and nonuse are intermediate pressures on recreational shoreline, depending upon such matters as extent of overnight and vacation demand for shoreline, relative qualities of the available shoreline, and the effects of land management decisions on availability for recreation.

The authors of both the California plan and the Gallup study agree that the median distance traveled to an outdoor recreation site for overnight or weekend vacations is about 90 to 125 miles. This does not really produce any great change in beach recreation targets except to widen them a bit in some cases and to increase the potential use in many others. That is to say, people in the Delaware Basin who go to the New Jersey shore for day outings may also go there for weekends and for their vacations.

Vacation users may travel farther than day outing and weekend users, thus considerably extending the area from which use pressure originates.

While shoreline probably serves a much smaller proportion of the public for long vacations than it does for day and weekend outings, vacation use is important because of the amount of the resource

needed to support vacation use. Vacation users, along with weekend outing users, require housing and associated services that are not required by day outing users. In this case, the nature of the use tends to spread people more thinly over the resource than does day outing use.

CHAPTER FOUR

WHAT POLICIES AND PROGRAMS WILL ENSURE THAT PRESENT AND FUTURE RECREATION NEEDS ARE ADEQUATELY AND EFFICIENTLY MET?

Basic to any policies and programs recommended for wise and efficient use of the shoreline recreational resource is an understanding of the extremely significant role this resource-activity relationship plays in American life. Outdoor recreation should be recognized as a necessity in American life. It should be widely encouraged for all American citizens, without regard to economic or social levels. In other words, it should be a public responsibility to recognize, to encourage, and where necessary, to provide the means for, outdoor recreation. Outdoor recreation should become a more important part of the pattern of the lives of all Americans.

A National Policy for the Shoreline

The shoreline is a unique resource in many ways. For the most part, it forms a national boundary. For a single resource, a shoreline has unusually high recreational qualities. It is limited in extent. Improper use, pollution, or erosion can decrease its extent and value. All of these factors can be controlled to preserve recreational values if proper steps are taken. Shoreline is a dynamic resource physically, a system of related checks and balances which do not recognize political boundaries. It is, in other words, a national resource.

As a national resource, shoreline merits a national policy. That policy should serve three purposes: (1) it should state the public purpose in the recognition and encouragement of, as well as the provision of the means for, outdoor recreation; (2) it should define the roles of the various levels of government by which this purpose is realized; and (3) it should relate recreation use of the shoreline to other valid uses.

The public purpose

Public agencies should recognize the present and future significance of outdoor recreation in American life; they should encourage broad participation; and they should help provide the facilities for participation.

Recognition of Significance.—All levels of government should have adequate statutory powers and administrative organizations to assess outdoor recreation wants and needs and to develop and implement coordinated programs which will effectively meet those needs.

Encouragement of Outdoor Recreation.—All levels of government should encourage an increased public awareness of the advantages and benefits of participation in outdoor recreation as an essential activity.

Provision of Means.—All levels of government should, when necessary to meet recreation needs, use public funds to provide outdoor recreation facilities that are in no sense restricted to the use of local residents.

The roles of the various levels of government

In achieving these purposes, the various levels of government have different responsibilities; they share the necessity, however, of the fullest cooperation in effectively planned utilization of a national resource.

Federal Responsibilities.—The Federal Government should be responsible for the following program.

1. Acquiring, developing, and operating shorelines of national significance for recreation, scenic beauty, wildlife habitat, or biotic communities.
2. Optimizing shoreline recreation possibilities on Federal lands including defense lands.
3. Assisting State and local governments where other financial and technical resources are not adequate to meet State and local shoreline recreation needs, especially in areas of high recreation impact by:
   (a) providing financial assistance for planning, acquisition, and development of shoreline recreation areas.
   (b) providing technical assistance for planning, acquisition, and development of shoreline recreation areas.
   (c) specifying program standards as a condition of Federal assistance, including review and coordination of State and plans.

State Responsibilities.—The State governments should be responsible for the following program.

1. Acquisition, development, and operation of shoreline areas as part of State outdoor recreation plans, including:
   (a) shorelines of more than local and less than national significance.
   (b) shorelines serving more than local areas.
2. Maximization of shoreline recreation opportunities on existing State land.
3. Designing a shoreline plan and arranging development and operation of shoreline recreation areas, including:
   (a) cooperation with local governments and coordination of local plans.
   (b) cooperation with Federal planning and assistance programs.
   (c) cooperation with other States in regional programs.

4. Assistance to local governments to meet local shoreline recreation needs by:
   (a) financial aid.
   (b) technical help.
   (c) specification of standards, including review and coordination in State plan.

Local Responsibilities.—The local governments should be responsible for the following program.

1. Planning, acquisition, development, and operation of locally important shoreline recreation areas as part of a comprehensive local recreation plan.
2. Cooperation with State and Federal programs of financial and technical assistance.
3. Coordination of shoreline plans with State plans.

Local governments particularly must recognize the need for systems of regulation and control of competing shoreline uses which fully recognize recreation as a legal claimant to its appropriate portion of the shoreline.

Recreation Use Vis-a-vis Other Uses of the Shoreline

In terms of total mileage, the chief forms of land use on most of the American shoreline are probably recreation and agriculture, with the third largest use perhaps being defense, i.e., shoreline areas held by the Federal Government in the interests of the national defense in some sense. Transportation and industry use a negligible proportion of the total shoreline: these are concentrated uses which cannot be expected to occupy very large shoreline areas even in the year 2000 if present trends continue.

The recreational land is largely in private ownership—for summer homes, to an important extent. Agriculture exists where there is no real competition for use of the shoreline, because agriculture simply could not compete with most of the other uses.

For the most part, the shoreline is better suited for outdoor recreation than it is for the most other uses. It should be recognized, then, that the shoreline constitutes a primary outdoor recreation resource of this Nation, and that the greater part of it will eventually be needed for recreation; its present use should either be for recreation or for some use which either complements certain kinds of recreation (wildlife preserves, plant or animal community preservation) or does not destroy its recreational qualities. It is undoubtedly the case that in the long run the major competition for the greater part of the American shoreline will not be among differing forms of use but between private versus public ownership for recreation. In the final analysis public agencies will have to face the problem of providing more and more recreational shoreline, thereby changing the balance of ownership from private to public, because private use is restrictive.

Metropolitan areas

Large urban concentrations present unusual and "special" cases of shoreline use. In these areas considerable proportions of the shoreline may be devoted to transportation and industry and even to residential use. Here also there are problems of water pollution and general destruction of natural recreation values because of unsightly and hazardous structures, smoke, noise, and the like. Since metropolitan areas are also the areas in which the demands for shoreline recreation are greatest, special policies need to be applied, rather than the general ones described in the foregoing paragraphs. The uses which may dominate metropolitan areas may not only be destructive of recreational values, but they are highly competitive. Once industrial and transportational shoreline sites have been established it is in any practical sense impossible to displace them for recreational use except with overwhelming popular support and exceptional funding. A reasonable attitude is that these uses are so essential to the people who live in these great population concentrations that they cannot and should not be excluded. On the other hand, they should not be permitted to destroy the recreational value of adjacent shoreline: the nuisance they tend to generate should be subject to public control. At the same time, metropolitan recreational demand is so great and so fundamentally important that new private residential building projects ought not to be permitted to compete successfully with public provision of recreational shoreline. Where recreational demands for the shore are great, as is the case in most metropolitan areas, the public policy should be to provide as much recreational shoreline as possible without putting impossible restrictions on vital competing uses.

Programs Recommended to Implement Suggested Policies

It would be possible to recommend an entire galaxy of public programs designed to meet the needs of 1960 immediately and to establish a timetable of acquisition and development for the projected needs of the year 2000. However, such a statement would be more idealistic than pragmatic. Some very basic preliminary programs are needed now to make possible intelligent planning for the future.

Shoreline use and inventory data

One of the greatest stumbling blocks in evaluating recreational use of the American shoreline is a lack of precise information: data on both users and the resource are badly needed. How many people use the shoreline now, and for what purposes? How much do they spend on various kinds of recreation? How far do they travel? How often do they visit specific areas of the shore? What are the specific qualities and traits, mile-by-mile, of the total shoreline, and what potentials for recreational use do these represent? It is not possible to plan the intelligent and balanced use of this precious and limited resource without knowing a great deal more about the nature of both demand and supply.

Delineation of basic natural planning units

It has been pointed out that the shoreline environment is a dynamic one that does not respect political boundaries. Useful planning for recreational and other uses of this resource requires knowledge of the extent

to which development in one area will affect some other area. What are the basic components of this system? What areas constitute "domains" within which planning must take place? Classifying the shoreline in these terms will be one of the first applications of the information gained through a detailed shoreline inventory.

Experiments in recreation use

The recreational potential of bluff and marsh shores has hardly been recognized in the overwhelming preference shown for beach shoreline. It is necessary to know the recreational potential of all types of shoreline if imaginative and creative development of this potential is to result in optimum use. One of the best possible ways to develop an understanding of the shoreline-recreation complex is the operational approach—to experiment in shoreline recreation development, to use new ideas and designs, to create new programs and to see how well these work out. The Newport Bay and Mission Bay developments in southern California are examples of the possibilities of this approach.

An analysis of administrative arrangements and intergovernmental relationships

Most existing administrative organizations are not capable of planning for or managing the future recreational shoreline. There is need for administrative innovation if Nation, State, and community are to be jointly responsible for the wise use of the shore. Realistic planning must take into account the dynamic "domains" of the shoreline which cut across and encompass many governmental jurisdictions. The possibilities of cooperative arrangements, interstate compacts, Federal-State commissions, and regional authorities are many and diverse. It is essential that studies be undertaken to determine how to establish effective programs without arousing the jealousies and animosities that can be associated with intergovernmental problems.

A study of management of the recreation shoreline in target areas

Metropolitan, high-impact beaches represent one of the knottiest problems of shoreline recreation. Where public beach can be extended, it cannot be extended indefinitely; there is a limit to both the resource and the radius of accessibility. This does not mean that the problem cannot be solved. It may be necessary to introduce totally new concepts into the use of recreational shoreline in high impact areas. Perhaps the beach area per person ratio can be changed by permitting only alternate day use in some fashion, or by staggering working hours or days in the beach season. Perhaps some of the shoreline demand can be diverted by the development of lake beaches or by increasing the number of swimming pools. Perhaps beaches can be made where they do not now exist. The present system of managing public city beaches needs to be investigated with the objective of increasing the number of people who can be served without destroying the natural qualities which people seek at beaches. Optimum effective management will be necessary long before the year 2000.

Conclusions

There is a crisis in shoreline outdoor recreation. The shoreline is vanishing in the sense that private ownership is inhibiting public use. There is a need for action now, if the public is to develop a real understanding of its shoreline outdoor recreation needs and how these can best be met. But there is need for coordinated, planned action—based on adequate information and upon clear statements of public policy—so that the action is continuing, not sporadic. The public must:

- Know the importance and value of outdoor recreation.
- Know what this Nation's outdoor recreation resources are.
- Understand that policy formulation must precede planning.
- Know that planning can only be implemented by coordination.
- Understand that coordination depends in large part upon administrative structures.

4. Report on the National Shoreline Study. DOA, U.S. Corps. 1971 (Excerpt) p. 13.

recreation area, a valuable natural resource. Counts of users of good beaches less than one-half mile long show hundreds of thousands of visitors each year. Considering all the beaches of the United States, there are many hundred million beach visits each year. For example, annual attendance at the major public beaches on Long Island totals more than 70,000,000. The most intensive use area is at Jones Beach State Park, which has an annual attendance of about 13,000,000 equivalent to 6,000,000 per mile for the developed area. On the outer part of the island, at Robert Moses Park, the annual attendance of 2,000,000 would indicate an intensity of one-half million per mile. Obviously, beach loses affect a considerable percentage of our population. The population expansion and increased leisure time cause rapidly increasing demands for beach areas. Because the quantity of beaches is limited, continued loss of beach areas will increase in importance and economic value. This is of particular significance near large population centers.

Shore Use and Related Factors.

Probably most significant and important with respect to erosion is the loss of beach

Residential use of the shore is attracting increasing portions of our population. With limited zoning and regulation in eroding areas and in areas subject to flood and wave damage, such privately owned property is particularly vulnerable. At many locations it is impractical for an individual owner to protect his property from flanking by waves or development.

5. From Sea to Shining Sea. A Report on the American Environment— Our National Heritage. President's Council on Recreation and National Beauty. Washington: GPO, 1968. (Excerpts, pp. 174-179).

Easements that permit access to shorelines in private ownership could allow more people to enjoy unspoiled beaches.

SHORELINES AND ISLANDS

The encounter between man and sea offers one of the most rewarding of all human experiences. Standing at the edge of the continent, confronting the ocean, each man may be his own Ulysses or Balboa.

The edge of the sea has special meanings for the beachcomber who walks the tideline, watching for the flotsam; for the bather who absorbs the sun's relaxing warmth; for the surfer who pits his skill against the white charging combers; for the skindiver who explores unearthly undersea beauty.

Similar experiences may be found along the shorelines of the larger lakes, including stretches along the Great Lakes where wind and water have created towering dunes and cliffs in the millenia since the great glaciers scooped out these hollows at midcontinent.

Natural islands, whether surrounded by fresh or salt water, offer in addition a special sense of detachment, a memorable apartness from the pressures and routine of everyday living.

Unfortunately, opportunities to know and enjoy shorelines and islands are steadily diminishing. Natural shorelines increasingly are being fenced, bulldozed, paved, and built upon. Increasingly, scenic stretches of tidelands, beaches, dunes, and seacliffs are covered with shacks and chalets, hamburger emporiums and parking lots, highways and billboards, powerplants and even oil derricks.

It is time to proclaim the principle that all Americans—of present and future generations—have a right to enjoy the shoreline experience, and that ocean and lake shoreline with high-quality scenic and recreation values are natural resources to be conserved and not destroyed.

Instead of ribbon development sprawling along the water's edge, shoreline conservation calls for concentration of commercial and residential development in

5. From Sea to Shining Sea.

Islands are a national resource of great potential, and their protection requires the attention of concerned public officials and private citizens in joint cooperative efforts.

limited areas. It requires both Jones Beaches for mass use in metropolitan areas and Olympic Peninsula Beaches for enjoyment of pristine coasts. It requires that large sections of each type of shoreline be retained in their natural state—the headlands and coves of New England; the flat expanses of sand and salt marsh along the Southeastern coastal plain; the dunes and cliffs of the Great Lakes; the sand dunes, estuaries, and seacliffs of the Pacific Coast; and the varied shorelines of islands from the Washington San Juans to the Florida Keys, from Maine's spruce-covered rock isles to the Channel Islands of southern California and the lava cones of Hawaii.

As each shoreline is different, each also is a part of an interrelated natural system; change in one part affects other parts. Thus, many shoreline problems are interstate problems. Those in Chesapeake Bay or Long Island Sound, for example, require interstate action and coordination. Today, however, unless acquired for public use by some level of government, shoreline protection depends primarily on use of State and local government authority to control land use. There is not effective use of this authority along shorelines in most States at this time.

Despite this, the Nation is showing steadily increasing awareness of the many values concentrated along its coastal strips.

• In 1934, a National Park Service survey identified those reaches of undeveloped ocean shoreline with highest value for public recreation and recommended State or Federal acquisition. But few areas were acquired by the States. And into the 1950's the National Park System included only one National Seashore, at Cape Hatteras, N.C.

• During the 1950's the National Park Service again inventoried significant remaining undeveloped stretches of Atlantic, Gulf, Pacific, and Great Lakes shoreline with high recreation and scenic value. These studies showed that many of the best opportunities identified

One of the problems in administering shoreline recreation areas is the threat of overuse destroying the natural quality of the area.

20 years before were already lost, and provided a solid basis for a "save-our-shorelines" program.

• In 1962, the Outdoor Recreation Resources Review Commission reported that of some 60,000 miles of ocean and Great Lakes shoreline in the 48 contiguous States, about a third was particularly well suited for public recreation and scenic enjoyment. Of these recreation shorelines, the Commission estimated that only 1,209 miles—2 percent of the total—was in public ownership for recreation use. It called on State and Federal agencies to act promptly to preserve for public use the remaining magnificent stretches of unspoiled coastline. "The need is critical," the Commission said, "Opportunity to place these areas in public ownership is fading each year as other uses encroach." The amount acquired for public recreation use since 1962 is not known, but it can be conservatively estimated in 1968 that less than 5 percent is in public ownership for recreational purposes. This includes eight new National Seashores or Lakeshores added to the national estate since 1961: Cape Cod, Mass., Point Reyes, Calif., Padre Island, Tex., Fire Island, N.Y., Indiana Dunes, Ind., Assateague Island in Maryland and Virginia, Pictured Rocks in Michigan, and Cape Lookout in North Carolina.

• In 1963, the U.S. Study Commission, Southeast River Basins, recommended protection of all coastline recreational values and the public acquisition of four of five large islands off the coast of South Carolina and Georgia for recreational purposes.

• In 1965, the White House Conference on Natural Beauty recommended that public or private protection be extended to all remaining natural shorelines.

Recent actions include:

• In 1965, Connecticut's statewide outdoor recreation plan called for investment of $7.8 million for a five-year program of coastline acquisition.

• In 1966, Wisconsin's Legislature provided for mandatory zoning of lands fronting on rivers and lakes, to preserve beauty and ecological values and prevent water pollution; the State Department of Resource Development was directed to help counties draw up shoreline zoning ordinances, and to adopt State zoning where counties do not adopt effective controls. In Maine, at a

symposium on the future of the State's coastline, a coastal preservation system of interrelated scenic and recreation areas was proposed.

• In 1966, the President directed the Secretary of the Interior to inventory American inland and offshore islands, to suggest principles for island conservation, and to propose by 1969 action recommendations for conserving island resources with highest natural, scenic, and recreational values. The Bureau of Outdoor Recreation is conducting this study in cooperation with other Federal agencies and the States.

• In 1966, in the Marine Resources and Engineering Development Act, the Congress called for development of a comprehensive, long-range, and coordinated national program in marine science. The Act established the National Council on Marine Resources and Engineering Development, and an advisory Commission on Marine Science, Engineering, and Resources. The Council has established a committee on multiple uses of ocean shoreline, but is not authorized to exercise continuing coordination of an overall coastal shoreline protection program.

• In 1967, California's Legislature established a State Advisory Commission on Marine and Coastal Resources to define the public interest in the coastline and to recommend legislation to protect it. Oregon's Legislature recognized public rights to ocean shores between high and low tide. Michigan began inventorying its Great Lakes shoreline and islands. Washington authorized a State Seashore Conservation Area along the State's coastline.

• In 1967, Federal-interstate river basin commissions were established to plan and coordinate planning for water resources and "related land resources" in three regions with ocean and Great Lakes shoreline: The Pacific Northwest, the Great Lakes, and New England. Other such commissions will be established. These com-

Industry shares the Great Lakes shoreline with natural areas now being preserved for the recreation use.

missions, established under the aegis of the Water Resources Council, have an opportunity to concern themselves with shorelines—ocean and lake, as well as river. Their effectiveness as vehicles for ocean and lake shoreline preservation will depend in part on whether the individual commissions give this a high priority; their attention may be preempted by problems more directly associated with rivers. To be effective in this field the commissions will have to represent the many public and private interests concerned with protection of shoreline natural beauty and recreation values. Some may decide to set up advisory units and task forces for this purpose. In 1967, the Water Resources Council adopted a policy urging river basin commissions to fully consider shoreline resources and approved the use of funds available under Title III of the Water Resources Planning Act for such planning.

At the Federal level, the Administration has asked the Congress to authorize two new national lakeshores: Sleeping Bear Dunes, Mich., and Apostle Islands, Wis.

Where shoreline conservation is not effective the establishment of special State and interstate shoreline commissions should be considered. Such innovative State-sponsored efforts as the San Francisco Bay Conservation and Development Commission and New York's Hudson River Valley Commission, and such new kinds of Federal-interstate institutions as those being considered to conserve the Hudson and Potomac rivers and their settings may provide new patterns for cooperative action. The feasibility of establishing a national coastal scenic preservation system also should be considered.

The Council urges full consideration of the natural beauty values of ocean and lake shoreline by river basin commissions, and by other Federal, interstate, and State institutions, and urges State and local governments to protect shoreline values through regulation, tax incentives, and purchase.

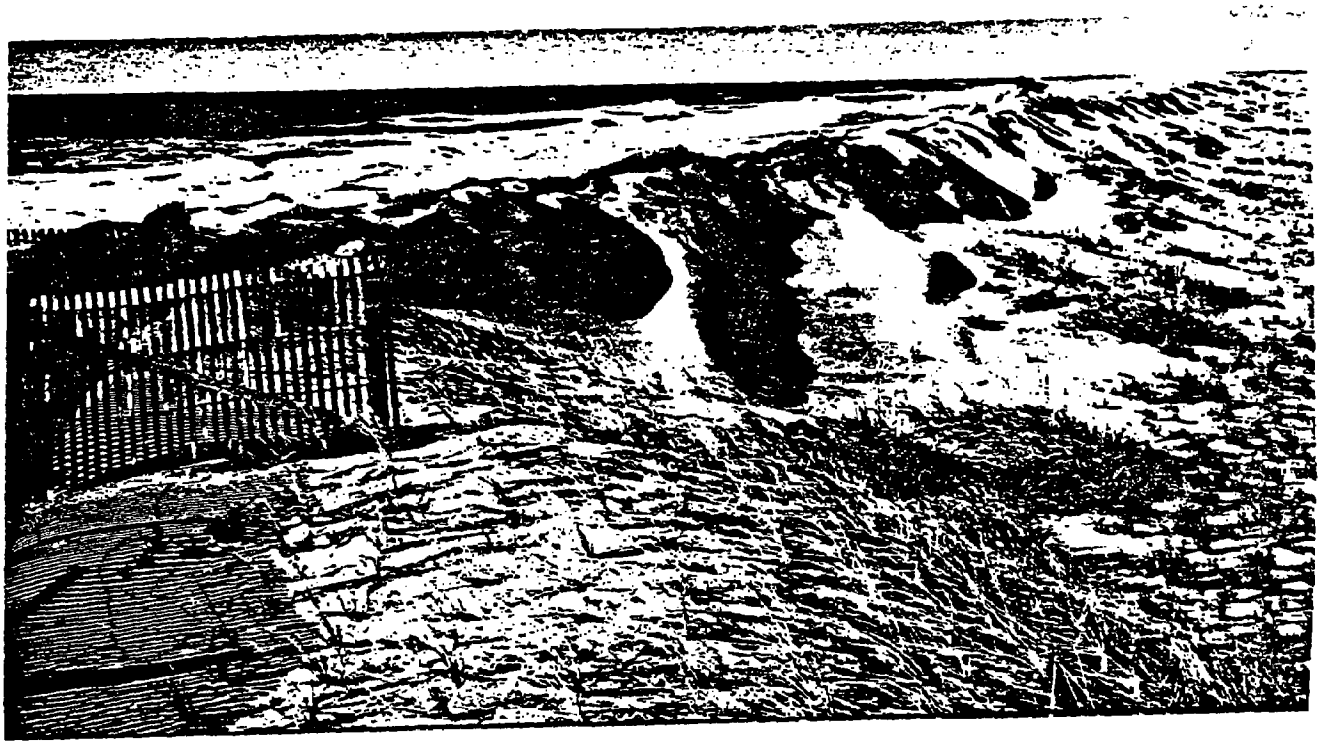
Regardless of which institutions take the lead, there is an urgent need for up-to-date knowledge upon which comprehensive and systematic efforts can be based.

The federally sponsored nationwide study of islands is scheduled for completion in 1968. And the Congress is considering legislation calling for an inventory and study of the Nation's estuarine resources. (See page 171.)

There also is need for a comprehensive nationwide inventory and survey of the best remaining opportunities for conservation of natural beauty and recreation resources of ocean and lake shoreline—in addition to those directly associated with island and estuarine areas. Such a study would be a logical followup to the National

5. From Sea to Shining Sea.

Planting dune grass helps to control the erosion of beaches by natural processes.



Park Service inventories of a decade ago; it should determine current status of shoreline preservation efforts, identify conservation opportunities for the various levels of government, and focus renewed public attention on this vanishing resource.

A national shoreline conservation survey would provide an informed basis for action to protect not only the water's edge but the total shoreline setting. It could do this by developing model protective standards for State and local land-use controls, and guides for coordination of planning for public acquisition and appropriate development of critical areas; for coordination of programs of technical and financial assistance through the concerned States; and for technical assistance and incentives to private landowners to conserve remaining natural shoreline environments along lines consistent with today's natural beauty goals.

The Council recommends that increased public and private efforts be made to develop comprehensive plans and balanced programs for use of the Nation's ocean and lake shorelines, islands, estuaries, and adjoining wetlands that include appropriate provision for protection and enhancement of their natural, scenic, recreation, and economic values through:

(1) *full consideration of shoreline problems and potentials in comprehensive studies by appropriate governmental institutions with responsibilities for planning for shoreline resources;*

(2) *State, county, and local zoning or other land use regulation; and*

(3) *establishment of State or interstate management commissions, where appropriate.*

6. Memorandum to Richard Gardner from Dick Rigby concerning the legislative history of the beach access and island preservation provisions of the CZMA. Memorandum includes a copy of "Staff on the Issue of Beach Access Section of H. R. 3981"--Committee Print.

This report is organized as follows: the inclusion of the "beach access" provision is traced chronologically from its origin in the Senate to the revision in the House and final incorporation in the conference report. At each stage, whatever background or detail that seems appropriate is developed.

Senate

The motivation for including a beach access provision in the initial version of S. 586 introduced February 5, 1975, was the enlargement and enhancement of the coastal zone program. The National Ocean Policy

6. Rigby to Gardner memo.

Study staff in the Senate, an outgrowth of the Commerce Committee Oceans and Atmosphere Subcommittee headed by Senator Ernest Hollings (D - S.C.) was, during 1974, concerned about the viability of the program. Threats to it were seen from the land use planning legislation then on the Administration's agenda, from legislation amending the Outer Continental Shelf legislation and from an Administration proposal dealing with energy facility siting.[1]

The major rival was perceived to be the Senate Interior Committee. It was, in 1974 pushing both land use planning legislation which at one time would have subsumed the coastal program and OCS reforms, including a "Coastal States Fund." Pending before the committee were two bills introduced in 1973 by the chairman, Senator Henry Jackson (D-Wash.). These were S. 2621, providing a Federal declaration that the public has the right of access to all beaches, and S. 2622 which provided for the protection and management of islands which possessed environmental, recreational, cultural or historic values.

John Hussey, staff director of NOPS, saw the coastal management law as an "umbrella" act for all major Federal programs dealing with the coasts. The converse of this was to see proposals such as those of Senator Jackson as threats to the success of the coastal management effort by diluting the Federal effort, providing rival funds and a focus outside of the National Oceanic and Atmospheric Administration.

At Hussey's insistence, beach and island access and protection were added to S. 586. Opposition to this was voiced by the coastal zone office which was cooperating with Hussey in preparation of the proposed amendments to the original act.

Because the concepts were borrowed from the Senate Interior Committee and because the NOPS staff knew one of the Senate Interior staff (Steve Quarles) was particularly interested in the island preservation provision, an apparently deliberate effort to obscure the provision of funds for beach access and island preservation was made. The original version of S. 586, in fact, contains a confusing authorization which amends an incorrect section of the original act and is worded incorrectly.

The original S. 586 in part 7 includes the following:

"Section 306(c)(9) of such Act (16 U.S.C. 1461), as redesignated by this Act (306 is not redesignated) is amended by (1) inserting after

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1 See Kitsos-Rigby history of S. 586, in progress, for detailed treatment of the background leading to initial introduction of S. 586. The analysis here is based on interviews with John Hussey November 5, Bob Lane November 12 and Robert Knecht November 5.

6. Rigby to Gardner memo.

";Beaches and Islands" after "Estuarine Sanctuaries" (this is backwards), in the title thereof; (2) deleting the period at the end of the first sentence thereof and inserting in lieu thereof ", and grants of up to 50 percentum of the costs of acquisition of lands to provide for protection of and access to public beaches and preservation of islands.' "

Fifty million is authorized for fiscal years 1975 through 1980 for these purposes.

The other related provisions in the original S. 586 added "recreational" to the coastal values being endangered in the findings section, inserted "islands" in two portions of the definition section (304) and added a definition of beach, namely what the states determine in the new program requirement of section 305, which was to provide a "general plan for the protection of access to public beaches and other coastal areas of environmental, recreational, historical, esthetic, ecological and cultural value. Such plan shall include a definition of the term 'beach'."

One thing to note at this early stage is, first, that the essential elements, if in somewhat confused form, of what was finally enacted are in place and, two, that a conflict between protection and provision of access is included. Whereas the specific authorization talks about providing for "protection of and access to public beaches and preservation of islands," the additional program element in section 305 calls for a plan for the "protection of access" and has no requirement for island preservation.

One of the few comments on the record before Senate adoption of the beach access provision, in remodeled form, is the introductory statement on February 5 by Senator Hollings. In this, the emphasis is on the energy crisis, the Outer Continental Shelf resources and the burdens to be placed on coastal communities. In discussing the other provisions of of S. 586, Senator Hollings mentions as the last item the "importance assuring the protection of and access to public beaches and the protection of islands," noting they were under increasing development pressures.

The statement continues:

"What is needed -- and what this amendment provides -- is a requirement that each State coastal zone management program include as a prerequisite to receiving management grants under section 306, measures to facilitate protection and access to public beaches for recreational, historic or esthetic purposes, and to assure protection of coastal islands."

Senator Hollings went on to state that the problem with previous bills on beach access is that they raised constitutional questions. (See below discussion of Congressman Eckhardt's legislation.) Because states are confronted with difficulties in paying condemnation costs for assuring

6. Rigby to Gardner memo.

access to beaches and island preservation, Senator Hollings went on, $50 million a year is authorized.

In the version of S. 586 adopted by the Senate on July 16, 1975, access and island provision is relocated to the authorization section. The findings definition and new program requirements remained essentially the same. All the legislation said at this stage was that $50 million was authorized a year, until 1985, "for the acquisition of lands to provide for the protection of, and access to, public beaches and for the preservation of islands under section 306(d)(2). . ."

The section 306 reference was merely an attempt to anchor the authorization to something in the original bill. The subsection chosen is that which requires a state program to demonstrate there exists authority to acquire land.

Those looking for supporting evidence of the justification for the provision, or an explanation, in either the committee report accompanying the bill or in the floor debate will be disappointed.

The floor debate did not touch the subject. The committee report (No. 94-277) contains approximately one page of justification under the "key provisions" section. The argument is basically that property values in the coast are increasing and the time to act to provide access and to protect islands is now. Four letters from state coastal zone management officials to Senator Hollings in support of the provision, states which had identified beach access and/or island preservation is critical problems are cited. The states are Maryland, Florida, California and Guam. The letters came in response to a request from the coastal zone office for supportive comments on S. 586 which could be used, as was the case here, in making the case for passage.

Letters to Senator Hollings were used because the hearing record established by NOPS both in 1974 and 1975 dealt with the offshore petroleum issue almost exclusively.

House

There does exist in the House a legislative record of sorts on the question of beach access. Since 1969 Congressman Bob Eckhardt (D-Tex.) has introduced "open beaches" legislation. In 1973 the bill, H. R. 10394, reached the hearing stage. On October 25 and 26, Congressman Eckhardt served as chariman of the Subcommittee on Fisheries and Wildlife, Conservation and the Environment of the House Merchant Marine and Fisheries Committee.

The hearing record (serial No. 93-25) constitutes the only thorough discussion of the beach access question. However, the two days were devoted in large measure as the constitutionality of a Federal declaration

6. Rigby to Gardner memo.

of the public's presumptive right to have access to beaches. The bill is also important because it is acknowledged to be the model for Senator Jackson's beach access legislation which, as discussed above, inspired the inclusion of a provision of this name in S. 586.

The definition of "beach" in H. R. 10394 may be instructive. It is first declared to be "the area along the shore of the sea affected by wave action directly from the open sea." The definition goes on to say that typically sandy beaches are those below the vegetation line to the sea. In the case of beaches without vegetation lines, the beach is up to 200 feet inland from the mean higher high tide.

The importance of this definition is that Congressman Eckhardt's bill would have Congress declare that the beaches are "impressed with a national interest and that the public shall have free and unrestricted right to use them as a common. . ." mindful of private property rights.

Congressman Eckhardt took as his example a state law in Texas he was instrumental in passing as well as a statute in Oregon of a similar nature. Most witnesses, including the Department of Interior, were negative and raised serious questions about the legality of the Federal Government attempting to make a nationwide policy in an area with distinct state approaches to shoreline property rights.

Many of the comments made singled out the Coastal Zone Management Act of 1972 as the proper vehicle for accomplishing the objectives of the legislation. Typical was this comment filed by Nathaniel P. Reed for the Department of the Interior:

"We believe the objective of H. R. 10894 can be accomplished under current authority provided in the Coastal Zone Management Act of 1972 (P. L. 92-583). Through effective management and efficacious use of their land use regulatory authority as contemplated in that Act, the states will be able to provide protection against further encroachment and to meet the need for preservation of our Nation's beaches as part of the comprehensive land use planning processes for the coastal zone."

The hearing record did establish the relatively small amount of coastline of the country in public ownership and the growing demand for access to beach areas.

The original H. R. 3981, the House version of S. 586, was in fact a direct copy of the original S. 586. It was introduced on February 27, 1975, well in advance of the time the Senate perfected its bill. What happened post the Senate passage is that the Oceanography Subcommittee Chariman, Congressman John Murphy (D-N.Y.), requested the Library of Congress' Congressional Research Service to prepare a revised bill. This was done and H. R. 3981 was reintroduced on September 29.

The cleaned up version of H. R. 3981 kept the definition and findings sections changes from S. 586.

6. Rigby to Gardner memo.

In section 305, the language of subsection (b)(7) was revised to make reference to a "planning process" for the protection of and access to, public beaches and other coastal areas of varied vlues.

The specific authorization for beach access funding was moved from its very obscure location in S. 586, only in the funding section, to the estuarine sanctuary portion of the original act. However, it was included under the "Coastal Research and Technical Assistance" part of H. R. 3981 and was missed by many readers of the bill.

The revised H. R. 3981 renamed the estuarine sanctuary section to add "and beach access" to the title, as the original S. 586 attempted to do. H. R. 3981 divided the subsection into two components, the first for estuarine sanctuaries and the second for 50 percent grants (as with the sanctuary program) for the costs of acquisition of "access to public beaches and other coastal areas of environmental, recreational, historical, esthetic, ecological and cultural value." This language is identical to the new program development requirement in section 305.

The authorization was cut to $25 million per year for five years. The lowered amount was a gesture to the opposition to the section voiced by some of the staff involved and in an attempt to make it less vulnerable. A reason for separating the sanctuary section into two subparts was to make the beach access provision easily cut if necessary, without killing the entire section.

The House did hold hearings directly on the proposed amendments to the coastal law. They too were dominated by the energy impact fund question.

In fact, only one witness spoke favorably about the beach access provision and one witness was questioned on the subject. William Marks, Chief, Water Development Services Division in the Michigan Department of Natural Resources, testified:

"In Michigan, were nearly 80 percent of the shoreland is in private ownership, the establishment of adequate public access to beaches, and the preservation of island and beach areas of environmental, recreational, and esthetic value is an ever-increasing problem." He also testified to the need to acquire many of the state's undeveloped islands in order to protect them, although this authorization was not included in H. R. 3981 at this stage.

Robert Knecht was asked specifically his opinion of the beach access provision and responded it was premature. "I think it is a little early to say that that particular dimension needs to be added to the program," he concluded.

The first real scrutiny of the provision came during the markup sessions in the Oceanography Subcommittee on October 7 and 8. The issue was raised by Congressman Philip Ruppe (R-Mich.) who, however, failed to clearly state his objection and succeeded in clouding the issue for members and staff.

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A successful amendment did develop out of the discussion, namely the suggestion of Congressman Gerry Studds (D-Mass.) that the language be made clear that access was to be provided only to publicly-held beaches and other public attractions, avoiding the specter that public access would be provided for privately-held coastal property.

As it was, Congressman Ruppe's motion to delete the provision failed by one vote, with Chairman Murphy casting four negative votes by proxy.

Congressman Ruppe's initial line of attack was that access to private beaches was contemplated. Congressman DuPont (R-Del.) supported the elimination on the grounds it would attract opposition when the bill came to the House floor. Chairman Murphy opposed, pointing out access to public beaches had always been "implied" in the Coastal Zone Management Act and that the purpose of the new provision was to make sure of its inclusion.

At one point Mr. Ruppe stated that the provision "gets into land use planning" which would draw opposition on the floor. Congressman Charles Mosher (R-Ohio) later stated that coastal zone management involved land use planning. "All of this is land use planning, and I do not think we should have that as an evil catch-phrase, even though the public may look upon it, some of them, that way," Mr. Mosher stated. He cast the lone Republican vote against the Ruppe amendment, which was the margin by which it was defeated.

During the discussion, a staff paper on the issue was brought into the record. It is attached. It attempts to find what it can in the record to support the inclusion of the beach access provision, reaching as far back as the 1969 Stratton Commission report.

During the floor consideration, only Congressman Ruppe addressed the beach access provision. He stated that he supported the new planning requirement in section 305 but thought it premature to include funding until the program development process was complete. He did not call for a vote on the question.

The House report accompanying the bill (No. 94-878) contains a number of discussions about the several provisions pertinent to the beach access provision. The report makes the point in several places that the acquisition funds authorized in section 315 are to be used only pursuant to the overall plan called for in section 305 program development.

"The Committee position is that action is needed now to help provide the needed access, especially in urban areas, and that to wait will only mean additional expense to the taxpayers. The key again is that the purchase of such access, as is provided in section 315 be tied to a

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comprehensive plan. That is the intent of the new requirement under section 305 program development -- that all such purchases fit into an overall program for each state," the report states. Later, the requirement that states be substantially completed in their program development work in section 305 before being eligible for funding under section 315(b) is made explicit.

Conference

Almost all of the record of the conference deliberations is not available. It consisted of extensive staff negotiations which included for much of the time representatives of the Administration. The Administration's position was that the beach access provision was at the head of its list of negatives among the non-energy impact fund items in the legislation. It was understood by all that the bill would not be vetoed over the beach access authorization if an acceptable compromise was worked out on the impact fund.

On the occasion when the Administration representatives first raised a question about the beach access provision, the inquiry was understood to be about how there was no precedent for such matching assistance. The House staff responded with a number of specific precedents, most notably the Land and Water Conservation Fund. However, the Administration spokesman probably meant to state their opposition was on the grounds of the precedent this provision would establish within the coastal zone program.

Since both House and Senate bills included a beach access provision, it had to be in the final bill, according to the House rules. The conference committee report contains a single paragraph describing the final version of the beach access provision. The paragraph simply states that the final language follows the House provision authorizing 50 percent matching grants and includes the Senate provision for grants for island preservation. The final version adopted the form of the House bill in making the authorization a part of the estuarine sanctuary provision, as its second part.

The floor debate on the conference report, brief in both House and Senate, barely contains references to the beach access/island preservation provision.

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STAFF COMMENTS ON THE ISSUE OF BEACH ACCESS SECTION OF H.R. 3981 - COMMITTEE PRINT

The need for planning for access to the areas mentioned in Section 315 (as redesignated) and obtaining rights of way, easements and other land acquisitions to provide necessary access is discussed here in connection with the Subcommittee's discussion on October 7, and Representative Ruppe's proposed amendment to delete those provisions from the Committee Print of H.R. 3981.

This discussion pertains to the background, or legislative history, of the CZM Act with respect to addressing the subject of access to these areas.

This Committee's Report on the CZM Act in 1972, emphasized that the state programs were intended to cover areas of importance to the coastal zone although not specifically enumerated (pg. 17). The Committee said "Those (other areas) to be considered for coverage should certainly include recreation, transportation protective requirements for . . . open space and esthetic values."

Of course, as noted in the Committee Report on the CZM Act (pg. 18), the reported bill and the CZM Act requires that the state have necessary land acquisition authority in order to be able to implement its program (section 306(d)(2) of the CZM Act).

6. Rigby to Gardner memo.

The Report of the Stratton Commission was relied upon and cited (pg. 9 of the Committee Report) by this Committee in developing the original CZM Act.

Among other things the Stratton Commission Report states, "The Commission recommends that provision be made for public recreation and public access to the water in urban areas be included in the planning. . .Federal funds should be conditioned upon the provision of such public recreation and access. . . ."

One of the Panel Reports from which the Stratton Commission Report was consolidated (Volume 3) relates, "it is often not necessary to buy all the rights to open land in order for the public to enjoy its benefits. Only the rights needed should be purchased, such as the right of access. . ." Such lands, of course, would include those of recreational, cultural, environmental or historic significance.

The primary Panel Report leading to the Stratton Commission Report as to "Coastal Zone Management" was Volume 1. It is stated there in discussing options to meet recreational pressures for access to coastal areas, "Foremost among these options are easements and acquisitions. Least costly, the

former is preferred when it can serve an explicit purpose as protecting aesthetic and cultural values" (pg. 111-153). Note, acquisition of access in H.R. 3981 includes the acquisition of interests in lands such as obtaining easements or rights of ways and the Secretary will assure that the state has selected the most reasonable available access device. This Panel recommended a 2/3 Federal, 1/3 State cost sharing program for coastal access (pg. 111-154).

The Panel included in its list of coastal recreational pursuits, nature walks, sightseeing and swimming (pg. 111-17).

The Report of the Senate Commerce Committee with respect to the original CZM Act is quoted in its Report with respect to S.586: "The Committee's report on the CZM Act of 1972 provided suggestions on possible ingredients of a state CZM Program, without limitation. We specifically mentioned 'ecology. . . recreation including beaches. . . open space, including educational and natural preserves, scenic beauty and public access to the coastline and coastal and estuarine areas both visual and physical'".

Of course, the present Act specifically refers to the recreational and aesthetic resources of the coastal zone which should be protected and provided for. It also now refers to "important ecological, cultural, historic and

6. Rigby to Gardner memo.

aesthetic values in the coastal zone which are essential to the well being of all citizens. . . ."

In summary, it should be made clear that this Section does not authorize or allow the purchase of beaches or other coastal areas. It only authorizes the acquisition of access to these areas. Also, as noted above, such access need not be in the form of a fee simple interest, but can be in the nature of an easement or right-of-way.

7. U.S. Commission on Marine Science, Engineering, and Resource's (Stratton Commission's) Panel Report, Vol. III. Science and Environment. (excerpts, pp. III-5, III-15-17).

5. The amount of shoreline available for public use should be doubled over the next 10 years. Priority should be given to near metropolitan areas where public areas are most urgently needed. More imaginative attempts are required to integrate recreational projects with other uses of the coastal zone such as conservation and industrial uses.

IV. RECREATION—BEACHES AND PARKS

Competition for land and water is sharpest precisely where the need for water-based recreation is greatest—near metropolitan areas. The

problem involves not so much the water's physical amount as its quality and accessibility.

Outdoor recreational facilities are most urgently needed near metropolitan areas. As a result of continued urbanization, three-quarters of the U.S. population will live in these areas by the turn of the century, and they will have the greatest requirement for outdoor recreation.

Table 4

REGIONAL SHORELINE ALLOCATION

Shoreline location	Detailed shoreline (statute miles)	Recreation shoreline (statute miles)	Public recreation shoreline (statute miles)
Atlantic Ocean.....	28,377	9,961	336
Gulf of Mexico....	17,437	4,319	121
Pacific Ocean.....	7,863	3,175	296
Great Lakes.....	5,480	4,269	456
U.S. total..	59,157	21,724	1,209

The competition for land use poses both a challenge and an opportunity for those metropolitan areas situated near the coasts and the Great Lakes. Although such areas may not be able to reserve facilities for the complete range of water-associated recreational activities, the potential to secure some is shared by all.

Population pressures on public and outdoor recreation facilities are exceeding previous expectations by wide margins. A 1965 survey conducted by the Bureau of Outdoor Recreation,[7] indicated that visits to beaches and seashores in 1980 would total nearly 10 billion, more than double the same estimate made in 1960. Projected visits in the year 2000 would be nearly 17 billion, four times the 1960 estimate.

Based on the 1965 survey the most popular summertime activities ranked in order are: walking for pleasure, swimming, driving for pleasure, playing outdoor sports, bicycling, sightseeing, picnicking, fishing, attending outdoor sports events, boating, nature walks, and camping. Projections for the year 2000 indicate some changes in ranking with the following the top eight activities: swimming, playing outdoor sports, walking for pleasure, driving for pleasure, sightseeing, picnicking, and boating.

The present shoreline given to recreation is shown in Tables 4 and 5.[8] At present about 6½ per cent of the total recreational shoreline is in public ownership. To meet demands it is considered essential that about 15 per cent be available for public use.[9]

Private enterprise plays an important role in outdoor recreation in coastal areas, a role not always recognized. The enormous private investments in such resort cities as Atlantic City, Miami Beach, and their numerous but smaller counterparts provide services and facilities for people seeking a variety of outdoor recreation experience ranging from big-game fishing to lounging on the patio of a luxury hotel with a seascape as background.

The technical relationships between recreation and other uses are complex. Partially treated domestic sewage may render water unfit for swimming or drinking but may act as a fertilizer for fish production. Some recreational uses are incompatible with others, e.g., water skiing and fishing. What share of the salmon supply should be allocated for food and what for recreation? Rarely will the answer be all or none; more likely it will be a rational balance of values. On the other hand, certain rare environments like the Indiana dunes must be reserved intact or lost completely.

Perhaps more than in any other coastal application new concepts of engineering and technology can assist or join with other uses. For example, large new offshore port complexes also could serve as public recreational sites. Shorelines can be lengthened by dredging new harbors and spoil can be used to create islands and peninsulas.

[7] Department of the Interior, *Outdoor Recreation Trends*, April 1967.

[8] *Shoreline Recreation Resources of the United States*, Outdoor Recreation Resources Review Commission Report No. 4, 1962.

[9] *Our Vanishing Shoreline*, 1966.

8. Stratton Commission. Our Nation and the Sea. (excerpts, pp. 52-53).

Intensification of Coastal Zone Usage

The most intensive uses of the coastal zone occur at the water's edge. Seaward the problems become fewer if not simpler, and at the edge of the continental shelf, problems of conflicting uses are the exception today. But—and this is a point the Commission must stress—problems of multiple uses of the coastal zone are moving seaward. The Panel Report on Management and Development of the Coastal Zone identifies many areas where the uses of the coastal zone are increasing. As use of offshore lands is intensified, the need for better management practices will become more urgent.

Shoreline Development

Patterns of shoreline development vary widely from area to area depending upon local topography and economic interests. Across the Nation and throughout the developed countries of the world, the pressures on shoreline space have mounted dramatically over the past 20 years and are certain to increase.

The reasons are clear: the shift of the population from rural areas to the cities (the Nation's seven largest metropolitan areas are on the Great Lakes or the sea coast), the spread of suburban development into coastal areas, and the increased affluence and leisure time of a large part of our population.

Theoretically, the Nation's shoreline could be increased almost without limit, and the construction of artificial islands and new harbors and the use of similar techniques to create shoreline will continue in those areas where demand warrants these actions. In San Diego harbor, for example, pressures for additional shoreline space have been partially satisfied by construction of two artificial islands from channel-dredging spoil.

Theoretically the Nation's shoreline could be increased almost without limit. For example, a study by the Department of Housing and Urban Development has established the engineering feasibility of multilevel, floating coastal cities.

Private housing has exercised and will continue to exercise the greatest demand for shore property; for example, the Boca Ciega Bay area off the west coast of Florida has been completely transformed by housing developments in the past 20 years. But there are other needs that must be met; heavy industry, traditionally located on the water's edge, seeks a cheap source of industrial water, a simple solution to waste disposal problems, and ready access to raw material. Pollution abatement requirements have lessened somewhat the desirability of a waterfront industrial location, but recent trends in shipping have increased the demand for deep water frontage. Deep water access will be essential to the future competitiveness of steel and other U.S. industries which process large

volumes of heavy raw materials. Any plan for the use of the coastal zone must seek to accommodate heavy industry.

Future shoreline development also must provide for additional transportation and power generating facilities. From the Civil War through World War II, a vast network of piers, warehouses, and railroads was constructed about the perimeters of the Nation's ports. Today, these facilities are being replaced slowly by freeways, airports, specialized bulk cargo and container loading facilities, and housing. The transition is extraordinarily difficult and will require planning and coordination of public and private activities on a wholly new scale.

Electrical power production has doubled during every decade of this century. An increasing percentage of new power plants will use nuclear fuel, and the disposition of waste heat is an increasing problem. It is estimated that by 1980 the power industry will use for cooling one-fifth of the total fresh water runoff of the United States. An increasing number of plants will be located along the shoreline, competing for valuable land, warming the local waters, and posing major threats to the regional ecological balance.

A decent concern for preserving life's amenities as well as economic considerations demands that more adequate provisions be made for recreational use along the Nation's crowded shoreline. Today, marine recreation ranks high in economic importance (Table 3-1); according to the Bureau of Outdoor Recreation, by the year 2000, marine recreation in terms of user-days will quadruple.

Access to the shoreline for the populations that increasingly are concentrated in urban areas along the coasts and the Great Lakes will present a major coastal zone problem. Of all the uses of the costal zone, recreation uses are the most diversified and pose some of the greatest challenges to any coastal management system.

Table 3-1 A Comparative Summary of Recreational Activity in Coastal and Offshore Areas

Type of recreation	Participants, millions		Annual expenditures, millions of dollars	
	1964	1975	1964	1975
Swimming	33.0	40.0	$1,500	$2,000
Surfing	1.0	4.0	50	200
Skin Diving	1.0	3.0	300	900
Pleasure Boating	9.6	14.0	650	1,000
Sport Fishing	8.2	16.0	760	1,300
Total	52.8	77.0	$3,260	$5,400

SOURCE: Battelle Memorial Institute, *A Study of the U.S. Coast and Geodetic Survey's Products and Services as Related to Economic Activity in the U.S. Continental-Shelf Regions*, April 1966.

9. Excerpts from Senate Report 94-277 and House Report 94-878 from the Legislative History of the Coastal Zone Management Act of 1972, as Amended in 1974 and 1976 With a Section-by-Section Index. Washington: GPO, 1976. pp. 755-56, 918-19, 923-24, 949.

6. *Funds for Public Access to Beaches and Preservation of Islands*

In recent years—both before and after passage of the Coastal Zone Management Act—coastal States have realized the increasing difficulty of assuring public access to and protection of beaches and islands in the coastal zone. Time is of the essence, since property values are rising steeply and quickly on waterfront property.

The committee is persuaded that providing assistance to the States for the acquisitions of lands for these purposes is amply justified and in the national interest. With population and leisure trends pointing to increased demands on limited public waterfronts, it is imperative to protect these properties. To wait longer would mean the public will have to pay higher prices for the property needed for enjoyment of public beaches.

A number of States have cited beach access problems as critical in correspondence with the committee. Maryland reports that only 3 percent of the Chesapeake Bay shorelands are publicly owned. In its correspondence with Senator Hollings, the State notes:

> The beach provisions of S. 586 would provide a planning element to Maryland's fledgling public beach access program, and would double the purchasing power of limited State funds that are already committed to purchasing beach lands. This increased funding could provide impetus for extending our beach access program to the Chesapeake Bay shoreline.

Similarly, the Florida Coastal Coordinating Council wrote to Senator Hollings:

> This section will enable Florida to contend with development pressures that are threatening to close off public access to Florida's numerous beaches; this is a problem which, up to the present, Florida has had substantial difficulty in dealing with.

The California Coastal Zone Conservation Commission endorsed the beach and island provision of S. 586 and reported that:

> Strong efforts to increase public access to the ocean coast are contained in the preliminary coastal plan that is now the subject of 20 public hearings in California.

The director of planning for Guam stated:

> The Guam Legislature has recognized the serious access problems its citizens face, and has passed legislation relative to this problem. Having Federal funds available to help implement their efforts will improve our effectiveness.

The other two new 305 program requirements are to provide a planning process to provide access to and protection for public beaches and other public coastal areas, and to control the effects of shoreline erosion in states where this is a major problem.

Access to public beaches and other attractions in public ownership in the coasts has come to be identified as one of the critical problems facing local and state governments. As William Marks, Chief, Water Development Services Division, Bureau of Water Management, Department of Natural Resources, State of Michigan, stated to the Committee:

> The inclusion of a greater emphasis on the importance of islands and beaches, and the concomitant availability of additional funding for such purposes, is commendable.
>
> In Michigan, where nearly 80 percent of the shoreland is in private ownership, the establishment of adequate public access to beaches, and the preservation of island and beach areas of environmental, recreational, and esthetic value, is an ever-increasing problem.

The Committee position is that action is needed now to help provide the needed access, especially in urban areas, and that to wait will only mean additional expense to the taxpayers. The key again is that the purchase of such access, as is provided in the addition to section 315 (redesignated) be tied to a comprehensive plan. That is the intent of this new requirement under 305 program development—that all such purchases fit into an overall program for each state.

f. The Committee has made two alterations to the newly designated section 315 (former 312).

First, the title and coverage of the section is enlarged to become "Estuarine Sanctuaries and Beach Access," the latter provisions being new. The new subsection (b) authorizes the Secretary to make grants up to 50 percent to acquire access to such public areas in the coastal zone as beaches, plus areas of environmental, historic, esthetic, ecological or cultural value.

This authorization complements the new requirement the Committee has added to section 305 for a beach protection and access planning process. Because time is of the essence in acquiring access, particularly in urban coastal areas, it was felt advisable at this time to accompany the planning requirement with the funds to carry out the plans.

The Committee does not intend to authorize purchase of lands for beaches or other public uses. The concern is that there are areas already in public ownership on the short which, for one reason or another, are not readily accessible to the public.

The Committee's further concern is that in providing the means of opening up this access, we do not overburden the resource. That is why the authorization for funds is tied to the planning requirement of section 305—the intent is to see to it that this expanded means of access fits into an overall recreational plan and that due care is given to protect areas susceptible of damage from excess use. The Committee believes that incorporating the expanded access authorization with a comprehensive program that includes designation of areas of critical concern offers this assurance.

Beach access provision

(19) This section makes a major addition to the estuarine sanctuary provision of the original Act. This is accomplished first by renaming the section "Estuarine Sanctuaries and Beach Access" rather than referring only to the sanctuaries.

Subsection (b) authorizes the Secretary to make 50 percent matching grants, the same percentage as with grants to acquire estuarine sanctuaries, for the purchase of means of access to public beaches and other publicly-held attractions along the coast.

This provision is in response to the needs identified by a number of states for early action to protect the public's access to areas already in public ownership but in danger of being blocked from ready use by property development nearby.

In addition to beach properties for which access would be provided, access to other public areas of interest could be purchased. These areas include those of environmental, recreational, historical, esthetic, ecological, and cultural value. These are the identical areas which state programs must include in the new planning requirement added to the development of state management programs under section 305.

In the case of public areas of ecological or esthetic interest, for example, the access which would be permitted by the use of matching funds under this subsection would naturally be limited. The Committee understands that access to such precious areas will be strictly limited according to the sound management principles which state management programs are to include.

Although not stipulated in H.R. 3981, it is understood that states must have substantially completed the public area protection and access planning process required under section 305(b)(7) before being eligible to receive grants under subsection 315(b). This is to insure that purchases made pursuant to this subsection are in harmony with the overall state management program and that they are in keeping with the balanced approach contemplated in subsection 305(b)(7). The planning process mandated there is to provide both protection of and access to public areas; the purchase of means of access to these same public areas should conform to this process.

10. Funding Authorizations for National Seashores (Table) from "A Review of the Acquisition Costs of National Seashores," Congressional Research Services, 1977.

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TABLE 1

FUNDING AUTHORIZATIONS FOR NATIONAL SEASHORES

Seashore	Date Authorized	Appropriations	Subsequent Appropriation Date	Amount of Acquisition Increase	Reason for Increase
Cape Cod, Mass.	Aug. 1961	$16,000,000	May 1970	$17,500,000	Original cost estimates too low; land price escalation
Point Reyes, Cal.	Sept. 1962	$14,000,000	Oct. 1968	$ 5,135,000	Original cost estimates too low; land price escalation; a land exchange provision failed; and more lands were added to the unit (about 26,000 acres).
			Apr. 1970	$38,365,000	
Padre Island, Texas	Sept. 1962	$ 5,000,000	Oct. 1968	$ 6,810,380*	To satisfy claims awarded following condemnation suits.
			July 1969	$ 4,129,829*	
Fire Island, New York	Sept. 1964	$16,000,000			
Assateague Island, Md.	Sept. 1965	$16,250,000	March 1972	$ 4,800,000	To satisfy claims awarded following condemnation suits.
Gulf Islands, Miss., Fla.	Jan. 1971	$ 3,120,000	Apr. 1972	$ 342,000	Size of unit increased by 100 acres.
Cumberland Is., Ga.	Oct. 1972	$10,500,000			
Cape Canavaral, Fla.	Jan. 1975	$ 7,941,000			
Subtotal		$78,811,000		$78,276,943	

* interest. Final cost was $12,134,943.

10. Funding Authorizations.

TABLE 1

FUNDING AUTHORIZATIONS FOR NATIONAL SEASHORES (CONT'D).

Seashore	Date Authorized	Appropriations	Subsequent Appropriation Date	Amount of Acquisition Increase	Reason for Increase
Cape Hatteras, N.C.***	Aug. 1937	None	Aug. 1956	$ 250,000	Federal funding of land acquisition approved.
			June 1968	$ 2,500,000	To satisfy claims awarded following condemnation suits.
Cape Lookout, N.C.***	Mar. 1966	$ 3,200,000**	Oct. 1974	$ 4,703,000	Size of unit increased.
TOTAL		$82,011,000		$85,729,943	

** For Development as well as acquisition.

*** Units with significant land donations.

1. Sources for figures are the several public laws originally authorizing the national seashores or those subsequently amending the authorizations.

2. The reasons for increase in cost are derived from review of the public laws, committee reports and hearings on the various seashores.

APPENDIX FIVE: ANALYSIS OF THE GEOGRAPHIC FOCUS OF THE LAND AND WATER CONSERVATION FUND

Formulae used:

$$\frac{TA_{cc}}{T_{cc\ A+C}} = \frac{\text{Total Acquisitions for Coastal Counties in dollars}}{\text{Total for Coastal Counties with Acquisition and Combination (Acquisition + Development) grants in dollars}}$$

$$\frac{TC_{cc}}{T_{cc\ A+C}} = \frac{\text{Total Combination grants for Coastal Counties in dollars}}{\text{Total for Coastal Counties with Acquisition and Combination grants in dollars}}$$

$$\frac{TA_{cc}}{ST_{A}} = \frac{\text{Total Acquisitions for Coastal Counties in dollars}}{\text{Total State Acquisitions in dollars}}$$

$$\frac{TC_{cc}}{ST_{C}} = \frac{\text{Total Combination grants for Coastal Counties (count)}}{\text{Total State Combination grants (count)}}$$

	$\frac{TA_{cc}\ (\$)}{T_{cc}\ A+C\ (\$)}$	$\frac{TC_{cc}\ (\$)}{T_{cc}\ A+C\ (\$)}$	$\frac{TA_{cc}\ (\$)}{ST_{A}\ (\$)}$	$\frac{TC_{cc}}{ST_{C}}$
REGION I				
ALASKA	$\frac{4013,575}{10,404,016.46} = .385$	$\frac{2,607,379.36}{10.404.016.46} = .25$	$\frac{4,013,575}{5,431,424.50} = .738$	$\frac{14}{14} = 1$
OREGON	$\frac{3,237,536.6}{8,343,401.76} = .38$	$\frac{10,250}{8,343,401.76} = .0012$	$\frac{3,237,536.6}{14,569,812.77} = .22...$	$\frac{2}{12} = .166...$
WASHINGTON	$\frac{7,987,953.46}{14,452,741.44} = .55$	$\frac{421,923.46}{14,452,741.44} = .03$	$\frac{7,987,953.46}{12,541,425.73} = .64$	$\frac{2}{4} = .50$
REGION II				
CALIFORNIA	$\frac{43,651,484.23}{71,759,832.99} = .67$		$\frac{48,651,484.23}{64,092,765.87} = .76$	
HAWAII	$\frac{7,417,963.95}{12,547,806.36} = .60$	$\frac{660,304.18.1}{12,547,806.36} = .53$	$\frac{2,417,963.95}{7,956,322.95} = .93$	$\frac{2}{2} = 1$
AMERICAN SAMOA			$\frac{67,650}{67,650} = 1$	$\frac{2}{2} =$

	$\frac{TA_{cc}\ (\$)}{T_{cc\ A+C}\ (\$)}$	$\frac{TC_{cc}\ (\$)}{T_{cc\ A+C}\ (\$)}$	$\frac{TA_{cc}\ (\$)}{ST_{A}\ (\$)}$	$\frac{TC_{cc}}{ST_{C}}$
GUAM			$\frac{15,000}{79,000}$ = .19	$\frac{1}{1}$ = 1
REGION III (No Coastal Counties)				
REGION IV				
ILLINOIS	$\frac{21,298,551.78}{22,701,447.56}$ = .94		$\frac{21,298,551.78}{48,284,595.19}$ = .44	
INDIANA	$\frac{360,234.85}{2,351,609.2}$ = .15	$\frac{792,316.41}{2,351,609.2}$ = .34	$\frac{360,234.85}{8,114,770.27}$ = .044	$\frac{2}{40}$ = .05
MICHIGAN	$\frac{9,510,374.34}{22,567,113.42}$ = .42	$\frac{546,335}{22,567,113.42}$ = .024	$\frac{9,510,374.34}{18,218,671}$ = .52	$\frac{8}{36}$ = .22...
MINNESOTA	$\frac{298,592}{1,470,279.32}$ = .203	$\frac{2,008.5}{1,470,279.32}$ = .0013	$\frac{298,592}{16,118,140.69}$ = .02	$\frac{1}{39}$ = .025

	$\frac{TA_{cc}\ (\$)}{T_{cc}\ A+C\ (\$)}$	$\frac{TC_{cc}\ (\$)}{T_{cc}\ A+C\ (\$)}$	$\frac{TA_{cc}\ (\$)}{ST_A\ (\$)}$	$\frac{TC_{cc}}{ST_C}$
OHIO	$\frac{12,177,163.56}{15,225,785.41} = .80$	$\frac{153,700}{15,225,785.41} = .01009$	$\frac{12,177,163.56}{29,045,565.5} = .42$	$\frac{1}{19} = .0526$
WISCONSIN	$\frac{4,070,620.86}{7,760,025.68} = .52$	$\frac{264,285.91}{7,760,025.68} = .034$	$\frac{4,070,620.86}{16,413,422.33} = .25$	$\frac{6}{29} = .21$
REGION V				
ALABAMA	$\frac{333,079.12}{3,494,052.13} = .1$	$\frac{622,734.04}{3,494,052.13} = .178$	$\frac{333,079.12}{3,020,289.45} = .110$	$\frac{5}{48} = .104$
FLORIDA	$\frac{23,858,009.45}{29,784,478.45} = .80$	$\frac{314,550}{29,784,478.45} = .0105$	$\frac{23,858,009.45}{29,327,216} = .813$	$\frac{1}{1} = 1$
GEORGIA	$\frac{436,500}{1,404,526.67} = .31$		$\frac{436,500}{10,409,070.23} = .04$	
MISSISSIPPI	$\frac{74,542}{832,965.5} = .089$	$\frac{50,000}{832,965.5} = .06$	$\frac{74,542}{2,193,803.49} = .034$	$\frac{1}{18} = .05...$

	$\frac{TA_{cc}\ (\$)}{T_{cc\ A+C}\ (\$)}$	$\frac{TC_{cc}\ (\$)}{T_{cc\ A+C}\ (\$)}$	$\frac{TA_{cc}\ (\$)}{ST_{A}\ (\$)}$	$\frac{TC_{cc}}{ST_{C}}$
NORTH CAROLINA	$\frac{2,444,779.54}{3,185,577.16} =$ .76	$\frac{94,637.19}{3,185.577.16} =$ .03	$\frac{2,414,779.54}{10,729,165.45} =$ .227	$\frac{4}{79} =$ .05
SOUTH CAROLINA	$\frac{2,779,777.97}{5,576,134.63} =$ .50	$\frac{1,458,714.48}{5,576,134.63} =$ .26	$\frac{2,779,777.97}{7,394,460.22} =$ .376	$\frac{13}{60} =$ .216...
PUERTO RICO			$\frac{367,985}{480,969} =$ .765	$\frac{2}{2} =$ 1
VIRGIN ISLANDS			$\frac{253,740.25}{818,984.11} =$ .31	
REGION VI				
CONNECTICUT	$\frac{13,992,301.28}{15,766,643.09} =$ .88		$\frac{13,992,301.28}{19,054,021.41} =$ .73	
DELAWARE	$\frac{9,454,260.88}{12,226,368.94} =$ .77	$\frac{200,000}{12,226,368.94} =$ .016	$\frac{9,454,260.88}{9,554,260.88} =$ .989	$\frac{1}{1} =$ 1

	$\frac{TA_{cc}\ (\$)}{T_{cc}\ A+C\ (\$)}$	$\frac{TC_{cc}\ (\$)}{T_{cc}\ A+C\ (\$)}$	$\frac{TA_{cc}\ (\$)}{ST_{A}\ (\$)}$	$\frac{TC_{cc}}{ST_{C}}$
MAINE	$\frac{3,362,578.47}{6,779,050.29} = .496$	$\frac{1,346,977.56}{6,779,050.29} = .198$	$\frac{3,362,578.47}{6,783,782.02} = .49$	$\frac{14}{28} = .50$
MARYLAND	$\frac{11,850,059.49}{15,871,815.05} = .746$	$\frac{236,351.71}{15,871,815.05} = .015$	$\frac{11,850,059.49}{19,843,281.91} = .60$	$\frac{5}{7} = .71$
MASSACHUSETTS	$\frac{4,708,339.47}{22,310,223.07} = .21$	$\frac{6,478,071}{22,310,223.07} = .30$	$\frac{4,708,339.47}{15,078,365.02} = .31$	$\frac{15}{18} = .833...$
NEW HAMPSHIRE	$\frac{94,139.25}{2,439,226.56} = .038$	$\frac{211,536.73}{2,439,226.56} = .30$	$\frac{94,139.25}{3,642,023.97} = .025$	$\frac{5}{14} = .357$
NEW JERSEY	$\frac{6,021,381.42}{14,008,542.66} = .475$		$\frac{6,021,381.42}{14,008,542.66} = .43$	
NEW YORK	$\frac{10,925,448.98}{51,267,834.19} = .213$	$\frac{1,965,147}{51,267,834.19} = .038$	$\frac{10,925,448.98}{17,280,443.5} = .63$	$\frac{9}{17} = .53$
PENNSYLVANIA	$\frac{850,759.97}{8,456,986.18} = .10$	$\frac{350,000}{8,456,986.18} = .04$	$\frac{850,759.97}{7,644,322.85} = .11$	$\frac{2}{6} = .33...$

	$\frac{TA_{cc}\ (\$)}{T_{cc\ A+C}\ (\$)}$	$\frac{TC_{cc}\ (\$)}{T_{cc\ A+C}\ (\$)}$	$\frac{TA_{cc}\ (\$)}{ST_{A}\ (\$)}$	$\frac{TC_{cc}}{ST_{C}}$
RHODE ISLAND	$\frac{3,131,186.47}{23,509,820.9} =$ .13	$\frac{93,176.06}{23,509,820.9} =$ .004	$\frac{3,131,186.47}{3,181,922.47} =$ .98	$\frac{4}{4} =$ 1
VIRGINIA	$\frac{6,741,546.26}{12,598,969.11} =$ .53	$\frac{5,454,059.47}{12,598,969.11} =$ .43	$\frac{6,741,546.26}{21,106,484.17} =$ .32	$\frac{11}{24} =$ .458
REGION VII				
LOUISIANA	$\frac{2,783,450.21}{17,719,512.47} =$ .44	$\frac{1,748,563.74}{17,719,512.47} =$ .10	$\frac{2,783,450.21}{12,236,407.79} =$ .63	$\frac{17}{29} =$ .58
TEXAS	$\frac{6,837,268.55}{15,697,092.41} =$ .435	$\frac{1,872,014.07}{15,697,092.41} =$ .11	$\frac{6,837,268.55}{17,096,254.97} =$ .40	$\frac{9}{71} =$ .126

$$\frac{TA}{NT}_{A} = \frac{\text{Total Acquisitions for all Coastal Counties in dollars}}{\text{Total National Acquisitions for Coastal States in dollars}}$$

$$\frac{TC}{NT}_{C} = \frac{\text{Total Combination grants for all Coastal Counties (count)}}{\text{Total National Combination grants for Coastal States (count)}}$$

$\frac{TA}{NT}_{A}$		$\frac{TC}{NT}_{C}$	
$\frac{238,377,834.66}{471,817,638.37}$	=	$\frac{159}{625}$	=
.505		.25	

$\frac{TA}{ST_G}$ = $\frac{\text{Total Acquisitions for all Coastal Counties in dollars}}{\text{Total State Grants (Acquisition, Planning, Development) in dollars}}$

$\frac{TC}{ST_G}$ = $\frac{\text{Total Combination grants for all Coastal Counties (count)}}{\text{Total State Grants (Acquisition, Planning, Development) (count)}}$

$\frac{TA}{NT_A}$ = $\frac{\text{Total Acquisitions for all Coastal Counties in dollars}}{\text{Total National Acquisitions for Coastal States in dollars}}$

$\frac{TC}{NT_C}$ = $\frac{\text{Total Combination grants for all Coastal Counties (count)}}{\text{Total National Combination grants for Coastal States (count)}}$

$\frac{TA}{ST_G}$	$\frac{TC}{ST_G}$	$\frac{TA}{NT_A}$	$\frac{TC}{NT_C}$
$\frac{238,377,834.66}{1,012,666,625.4}$ =	$\frac{159}{1,316}$ =	$\frac{238,377,834.66}{471,817,638.37}$ =	$\frac{159}{625}$ =
.235	.12	.505	.25

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