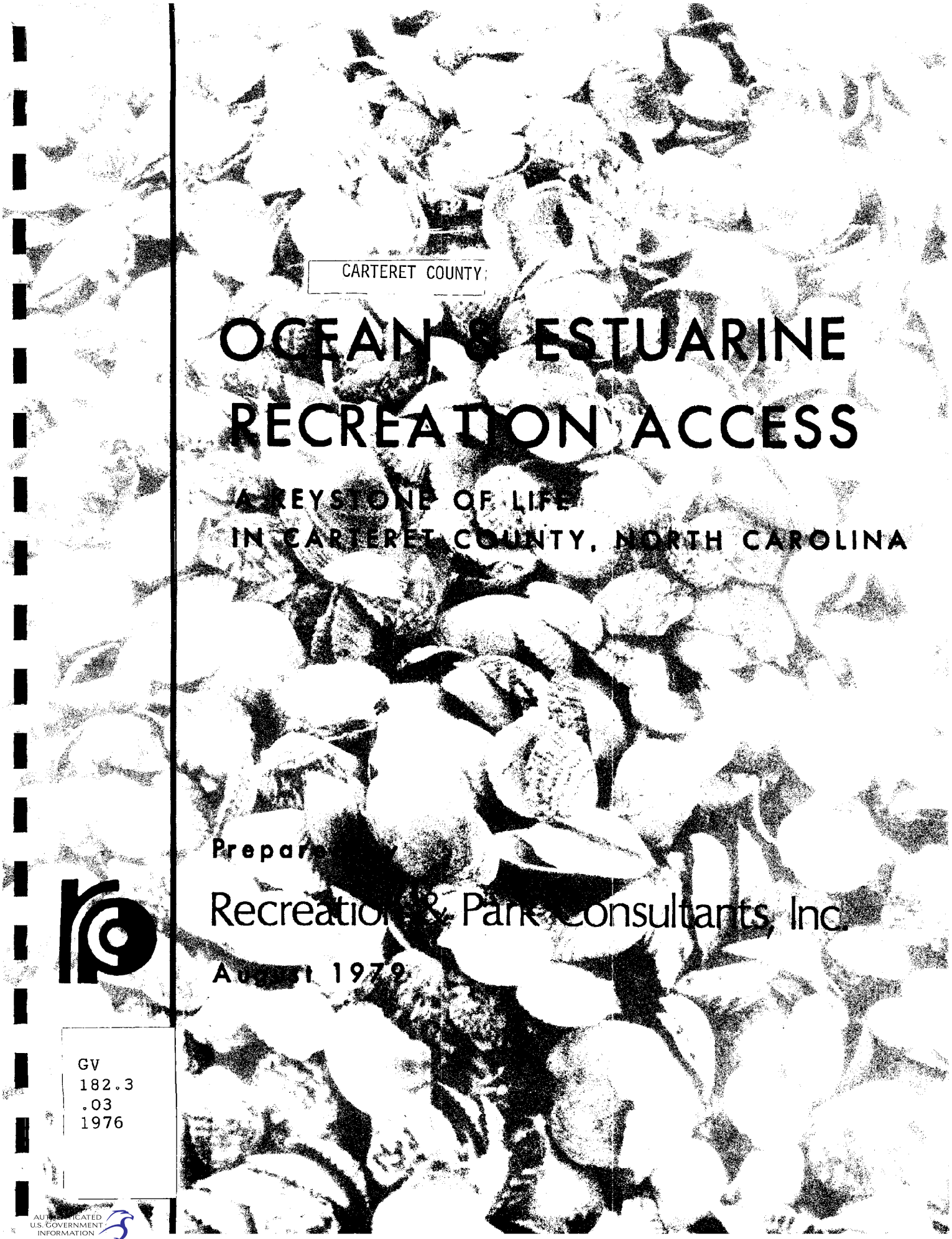

CARTERET COUNTY

OCEAN & ESTUARINE RECREATION ACCESS

A KEYSTONE OF LIFE IN CARTERET COUNTY, NORTH CAROLINA

Prepar

Recreation & Park Consultants, Inc.

August 1979

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OCEAN & ESTUARINE RECREATION ACCESS

A KEYSTONE OF LIFE IN CARTERET COUNTY, NORTH CAROLINA

U.S. DEPARTMENT OF COMMERCE NOAA
COASTAL SERVICES CENTER
2234 SOUTH HOBSON AVENUE
CHARLESTON, SC 29405-2413

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August 1979

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PREFACE AND ACKNOWLEDGEMENTS

One of the pleasant benefits of work in Carteret County is the friendly accommodation received from those whose help is requested. More than 150 personal contacts were made by the study team in search of information and opinions. All were very cordial.

County officials and staff were very accommodating, as were those in State of North Carolina and federal offices. Neal Lewis, County Park and Recreation Director, and his secretary, Tressa Jones, were particularly helpful. Drafting technicians in the tax office provided friendly, valuable assistance.

Business people and average citizens willingly gave their time to help. Beth Taylor and the West Carteret High School students in her Enyironmental Studies Program provided a sounding board and beneficial survey assistance.

It is hoped that those who helped, along with others, will be interested in working with the County Commissioners and staff to react to the report in a way that will assist in crystallizing goals for the future and implementing local initiatives aimed at continuation of the pleasant life in Carteret County.

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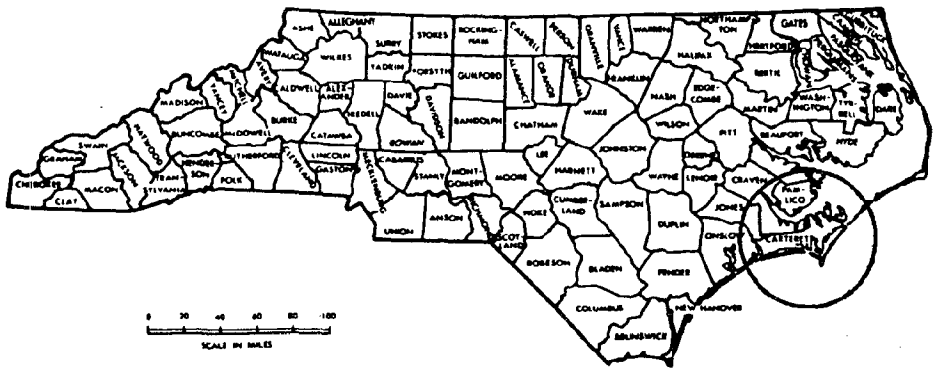
SECTION I

INTRODUCTION

"The encounter between man and the sea offers one of the most rewarding of all human experiences. The edge of the sea has a special meaning to the beachcomber who walks the tideline, for the bather who absorbs the sun's relaxing warmth, for the surfer who pits his skill against charging waves."

Neuse River Council of Governments,
Open Space Plan



Location Map

The Carteret County Board of Commissioners, on January 8, 1979, executed a contract with the State of North Carolina Department of Natural Resources and Community Development, identifying interest of the County in the Coastal Planning and Management Grant Program. The County agreed to undertake an "Ocean/Estuarine Recreational Access Study for Carteret County" in response to the State's invitation to provide partial funding for the Study, with funds provided by the Federal Coastal Zone Management Act of 1972 (P.L. 92-583), as amended by P.L. 94-370.

It was the hope of Wm. Neal Lewis, Carteret County Recreation Director, that the study commitment would be a positive response to the Coastal Area Management Act implementation, responsibly setting the example among coastal counties for recreation access to ocean and estuarine waters

"Access," as defined in the 1977 edition of Webster's New Collegiate Dictionary, includes "permission, liberty or ability to enter. . .freedom to make use of. . .the action of going to or reaching. . .a way or means of access". For the purpose of this report, "access" refers to the above definitions in relation to recreation uses of ocean and estuarine waters. This ranges from opportunities one has to launch a boat, go swimming, enjoy the vista of the ocean or sounds and all other forms of water-related recreations on coastal waters. It includes, superficially at least, the problem of the traveler in driving into and out of Carteret County. It includes the problem of moving the short distance from public roadways to public beaches.

A View of Carteret County

"We've been discovered, and need to do the best job we can in achieving an orderly growth." These words of Joe Barbour of Barbour's Boat Works in Beaufort capsulize the problems of Carteret County. Informal estimates place up to 100,000 people in the County on a summer weekend, enough to qualify as a Standard Metropolitan Statistical Area (SMSA) if the population were permanent. For the 37,000 year around residents, the influx of summer vacationers has caused a change in the way of life for most, and has created an urban area beyond the city.

In spite of the linear urban area developing, commercial fishing goes on almost in its midst, the "down east" fishing communities survive, the waters are relatively unpolluted, wilderness is still just a short step away in the marshes, woods and uninhabited beaches, and life is pleasant. Summertime requires an adjustment for many. The boat ramps are crowded, traffic throughout the County is heavy, "the beach" (at Atlantic Beach) is packed, cultural and social values are tested and life styles are threatened.

With improved transportation and communication systems, settlement patterns in the United States have changed. Long strips of urban area are now located along the coasts, the Gulf and the Great Lakes. "Smaller settlements will undergo a major spurt of growth in all sorts of now-isolated places where the natural amenities are attractive."[1] Cost-reducing improvements to transportation and communications systems accelerate development of these previously out-of-the-way places. An energy crisis, of sufficient depth to prohibit the moderately affluent to travel, will likely reverse this trend.

Bogue Banks and mainland areas in close proximity have experienced intense development pressures. A modest number of retirees and other newcomers have settled permanently, but most development has been oriented toward vacation homes. These generally attract urban North Carolina residents. The Director of the Carteret County Economic Development Commission feels that most of the visitors to the County are from the Raleigh area.[2]

Carteret County, then, already has an interaction and integration of small town and metropolitan area residents. The common element among them is their love for the coastal area. However, those engaged in commercial fishing, boating, shipping and related industry may see recreational uses as competitive. The finding of a common interest toward preservation of the coastal scene may serve to dissolve differences that may exist.

Long time residents have, in relatively few years, been catapulted into a society of a much different kind and scale than they were used to, at least

---

1 Melvin M. Webber, "The Post City Age," Daedalus, Journal of the American Academy of Arts and Sciences, Fall 1968.

2 Personal conversation with Roy Stevens, Director of Carteret County Economic Development Council, 3/6/79.

during the summer seasons. Most can, will or have adjusted to the change, and some will provide the leadership to assure that local values are not lost in accommodating newcomers and tourists to the County. It will be difficult to formulate goals which will satisfy existing attitudes and interests; goals may necessarily be somewhat competitive without mutually reinforcing programs. The range of attitudes among people living now in Carteret County includes those who want maximum promotion of industry and tourism, and those who wish they could take a step back to a time of lesser population, an intermediate technology and slower pace.

> Tourism is based on enjoyment of a clean environment, where it is still available, by people from urban areas whose environment has been degraded. But the industry that attracts these tourists is self-defeating, since it builds, for example, cities on the beach to accommodate them. While tourists help give a monetary value to the conservation of rare wild species or historic monuments, too many hordes of them visiting national parks or famous sites can endanger protected areas.
>
> The tourist industry is accused of ignoring the fragility of the local social structure that must adjust to tourists. Social relations are less resilient than natural ecosystems. As major economic benefits of tourism escape the poorer, local population, the people can become hostile or servile to visitors.[3]

The Recreation Problem/Challenge

It is important that recreation goals be established which will guide efforts to provide for continued, and perhaps improved, availability of a menu of leisure opportunities, including access to public waters. Value judgments on recreation-related issues, like other public issues, often become political decisions based on estimates of the greatest benefits at the least cost. Several questions regarding recreation and leisure opportunities need to be addressed by the people of the County and judgments made:

(1) Is it important to extend the time that access to the ocean and its estuaries is no less available than it is now?

(2) Are there methods to control access and unregulated uses at the same time absorbing more and more people as summer residents and tourists? Can additional access be provided to permanent residents while continuing to accommodate visitors?

(3) Should the State of North Carolina be requested to assume a larger share of responsibility for providing ocean access for the users who reside outside the County?

(4) To what extent should the County assume responsibility to serve non-residents with ocean and estuarine access, recognizing the importance of tourism to the economic health of the County?

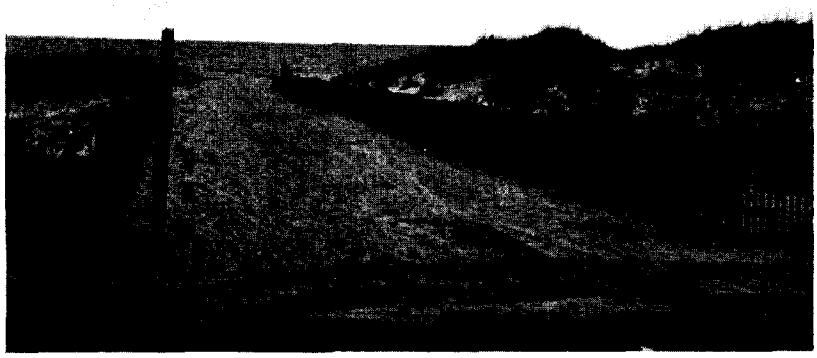
---

3 Dominique Larre, "Environment and World Tourism," EPA Journal, June 1979.

(5) To what extent should this be financed by the users and those benefiting financially most directly?

(6) Will the naturalness of the coastal environment be lost in the process of accommodating increasing demands for access and use of coastal waters and adjacent lands?

(7) What should be provided as public policy on these issues by and for Carteret County?



Black Skimmer Road, Emerald Isle

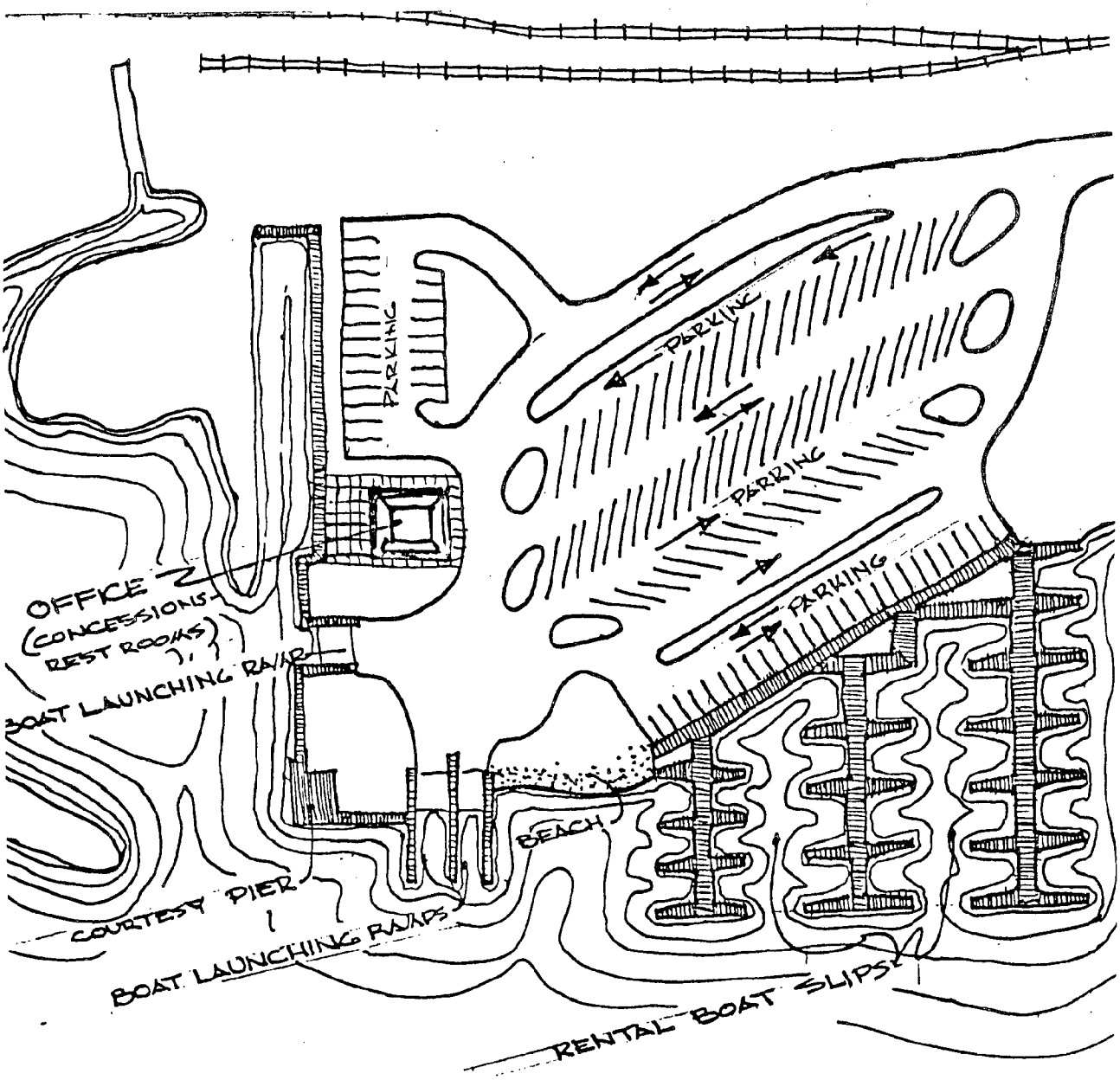
Morehead City Wildlife Resources Commission Ramp 7/4/79

Airport Marina, July 4, 1979

SECTION II

PLANNING OBJECTIVES

AND SCOPE OF THE STUDY



Section of Sketch Plan of Airport Marina

Consultant Retained

Carteret County, in subcontracting for the access study asked that the following be accomplished:

(1) inventory of present recreation access resources;

(2) statement of assessed recreation access needs;

(3) guidelines for implementation of plans to meet needs;

(4) documentation/publication of all findings, recommendations; and

(5) presentation of document to public.

The study is to cover both ocean and estuarine waters, covering all leisure use aspects. It was requested that the study include significant input from public and private groups and private individuals; a public meeting was to be held.

Objectives have been defined as follows:

(1) using the existing Coastal Resources Commission inventory, confirm and add to the listing of ocean beach and estuarine recreation access facilities, both public and commercial;

(2) review previous studies and other background information;

(3) discuss the responsibility for providing access, local and regional issues regarding access and environmental aspects of recreation access and use;

(4) assess demand for recreation access, particularly as it relates to county residents;

(5) analyze needs, comparing supply of access resources to the anticipated demand, again relating this primarily to local needs;

(6) identify funding sources for assistance in improving access resources;

(7) make recommendations on access improvement and provide an implementation guideline;

(8) provide appropriate access area management recommendations;

(9) review recommendations at a public meeting in the county; and

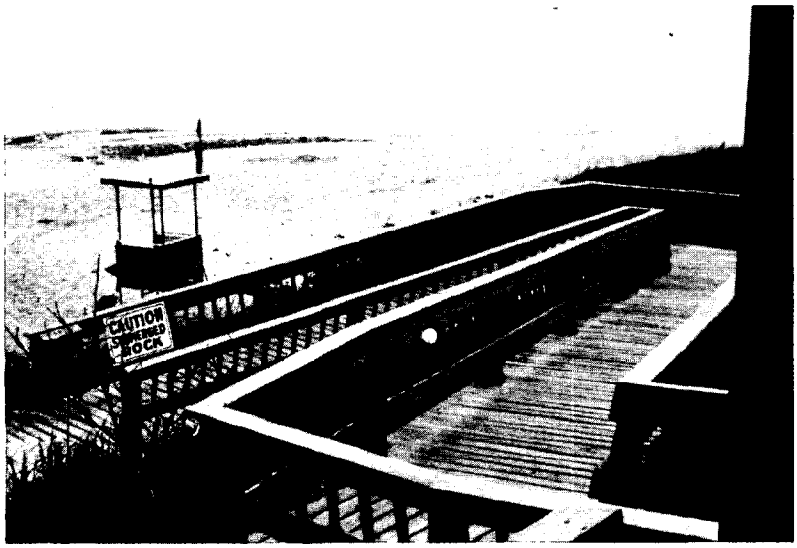
(10) prepare and publish a report, submitting ten copies and a reproducible copy.

SECTION III

BACKGROUND INFORMATION

"In its broadest sense, the access question extends beyond physical presence and participation in recreational activities--it encompasses visual, legal, social and economic access. . ."

R. B. Ditton and Mark Stephens, Coastal Recreation: A Handbook for Planners and Managers, U.S. Dept. of Commerce, NOAA, OCZM, Washington, D.C., 1976.



Boca Raton, Florida, Beach Access

Background Information - Federal Actions

Several federal agencies have programs which directly relate to coastal management, or which have domestic assistance programs which could theoretically be used in local area improvements. For example, the U.S. Army Corps of Engineers provides navigation, flood control and beach erosion control projects. Development grants are available from a variety of agencies: Economic Development Administration, Coastal Plains Regional Commission, Department of Interior Heritage Conservation and Recreation Service, and the Department of Housing and Urban Development. These may not relate directly to coastal access, but can be used by states and local governments located in coastal areas to enhance access opportunities.

The Federal Coastal Zone Management Act of 1972 (P.L. 92-533) as amended (P.L. 94-370), authorized grants to states to develop coastal zone management programs, and identified the National Oceanic and Atmospheric Administration (NOAA) in the U.S. Department of Commerce as the agency to promulgate and administer program regulations. Section 305(b)(7) of the Act requires that shorefront access be a part of each coastal management program funded under the Act; this with energy facility and shoreline erosion planning constituted the 1976 amendments. Section 315(2) authorizes the following:

> . . .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 the project involved; except that, in the case of acquisition of any estuarine sanctuary, the Federal share of the cost shall not exceed $2,000,000.[1]
> (These funds have not been appropriated, however.)

NOAA rules and regulations apply to those states receiving grants for development of coastal zone management programs; those applying to shorefront access planning follow:

(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;

1 Federal Register, Volume 42, No. 83, April 29, 1977, p. 22044.

(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.[2]

Advisory comments to the regulations significantly identify recreation concerns and needs, and also imply rather directly that insufficient beach access exists.

> 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 Section 920.13 (Areas of Particular Concern). 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 Section 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.
>
> 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.
>
> 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. . . .[3]

---

2 Federal Register, Volume 42, No. 83, April 29, 1977, Section 920.17, p. 22044.
3 Ibid.

State of North Carolina Actions

State level counterparts of federal agencies also provide services and programs related to coastal management. Significant actions by the North Carolina Legislature include the State Lands Act of 1959, proclaiming that submerged lands are to be preserved for use of all the people. This established ownership of ocean beaches up to the elevation of mean high tide and secured for the state ownership of most estuarine waters, including marshes.

Passage of the state Coastal Area Management Act in the 1974 Session of the General Assembly, was motivated primarily by State issues and concerns, and proceeded largely independent of federal coastal management efforts. CAMA is seen primarily as an environmental act protecting coastal resources, but identifies that local planning is an important feature in its implementation. CAMA was and remains somewhat controversial in some coastal counties, Carteret included.

Drafting of the North Carolina Coastal Management Plan followed, in accordance with CAMA and federal guidelines.[4] Shorefront access planning, energy facility planning, and shoreline erosion concerns were "not required at this time" by OCZM requirements for program approval. Elements were included, however, discussing tourism and recreation issues in "beach access". Related issues briefly discussed growth, management problems, transportation and environmental issues. The state was required to prepare a plan including access, energy facilities and shoreline erosion by October, 1978. Extensions appear to have been granted, with the plan amending the Environmental Impact Statement anticipated to be released in the summer of 1979. (This was released.)[5]

The original Coastal Management Program and Draft Environmental Impact Statement did identify 308 miles of North Carolina coast with ocean beaches; 148 miles of this was shown in public ownership, with public access. The plan reported that public access in the remaining 160 miles is not as favorable as that in public ownership. It reported few areas where access is denied to the public. This was countered, however, with a statement that "in many areas, access has never been a problem and no provisions have been made to insure that it will not be a problem in the future. . . however, increased development in and use of the shoreline may cause beach access to become a problem in the future."[6] The report also identified conflicts between beach users and landowners and indicate that these conflicts "often result in the restriction of public access by private landowners and in the implementation of local laws to restrict the full use of the public beach". [7]

4 U.S. Dept. of Commerce, NOAA, Office of Coastal Zone Management, State of North Carolina Coastal Management Program and Draft Environmental Impact Statement, n.d.

5 U.S. Dept. of Commerce, NOAA, OCZM, Draft Environmental Impact Statement Prepared on Amendments to the North Carolina Coastal Management Program, Washington, D.C., January, 1979.

6 Op.cit., p. 81.

7 Ibid.

Discussion on the issue ended with a statement indicating the coastal management Program "must address the issue of how to insure adequate access to the public beaches in coastal waters in a manner which is not detrimental to the delicate beach environment. . .".[8]

In other parts of the report, the Coastal Management Program was charged with addressing wetland preservation issues attempting to minimize destruction without denying reasonable access to coastal waters for water dependent uses. They identified the problem of how to allocate planning and management functions to local governments while retaining enough responsibility at the state level to assure that legitimate regional, state and national interests are taken into consideration in any local planning activities.

Federal land holdings within coastal North Carolina were not included within the state "coastal zone". The state recognized these "greater-than-local interests which may require priority given to national interests, but which also require federal agencies' compliance with the state management plan "to the greatest extent practicable". Federal consistency policies confirm the desire to be consistent with the coastal states' management program. An Executive Order by Governor Hunt requires executive agencies to also be consistent in their actions.

Regional Benefits - State Actions

The Federal Coastal Zone Management Act requires that the State Coastal Management Plan provide a method for assuring that local land and water regulations "do not unreasonably restrict or exclude land and water uses of regional benefit". In response to this requirement, the State of North Carolina has listed several "uses" perceived to relate to regional supply:

"(1) public recreational facilities of a regional or statewide significance;

(2) major energy transmission for generating facilities;

(3) major transportation facilities such as interstate highways, ports, airports, and important navigational projects;

(4) regional water and waste water treatment facilities; and

(5) major public facilities such as multi-purpose reservoirs, state and federal prisons, hospitals, and universities."[9]

These uses generally refer to what is described as "key facilities".

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8 Ibid., p. 81.

9 State of North Carolina Coastal Management Program and Draft Environmental Impact Statement, p. 223.

Continuing to quote from the Coastal Management Program;

> North Carolina will rely on two techniques to insure that an adequate amount of specific sites are set aside to meet a projection of reasonable and foreseeable demand for uses of regional benefit. The first technique is state acquisition of sites as the need arises for particular uses of regional benefit and the second technique is the designation of 'areas which are or may be impacted by key facilities' (G.S. 113A-113) as areas of environmental concern. Both methods can ensure that local regulations do not unreasonably restrict uses of regional benefit.[10]

The Coastal Management Program identifies a number of state policies relating to recreation, tourism, and beach access. Those seen to have a rather direct relationship are included in Appendix A of this report. As state policies, these imply direct actions by the state; some propose to promote tourism, others protect environmental resources, and preserve cultural resources. Growth management, transportation, coastal industries, energy policies, and others are included in the list of policies included in the Coastal Management Program. Beach access policies identify a 75 foot estuarine shoreline Area of Environmental Concern with high priority of land use allocation to water access proposals; and permit structural access ways to the beach on or seaward of frontal dunes providing no damage results.

Beach Access

Chapter 7B, .0320 of the North Carolina Administrative Code defines ocean beach as follows: "land areas without vegetation covering, consisting of unconsolidated soil material that extends landward from the mean low tide to a point where anyone or a combination of the following occur: (1) vegetation, or (2) a distinct change in predominant soil particle size, or (3) a change in slope or elevation which alters the physiographic land form."[11]

Administrative procedures of state agencies appear to be available upon request. These identify to the public the procedure and identification of actions and policies of administrative departments. Chapter 7 of these policies applies to the Coastal Resources Commission, the agency charged with the administration of CAMA. Section .0301 of this chapter, a declaration of general policy on shorefront access policies reads as follows:

> It is hereby declared to be the policy of the State of North Carolina to foster, protect, improve and ensure optimum access to recreational opportunities at beach areas consistent with

---

10 Ibid., p. 223.
11 Ibid., Appendix B, p. 82.

public rights, rights of private property owners and the need to protect natural resources from overuse. These policies reflect the position that in areas other than State parks, the responsibility of providing adequate beach access rests primarily with local units of government. Thus, the following policies are intended to supplement and strengthen any local efforts.[12]

Section .0302 defines the term "beach" in generally the same context as that which is found in the Coastal Management Program (quoted from Chapter 7B, Section .0302), but adds the possibility that the beach may extend to the point where the riparian owners have specifically and legally restricted access above the Mean High Water line. "This definition is intended to describe those shorefront areas historically used by the public. Whether or not the public has rights in the defined areas above the MHW mark can only be answered by the courts. The public does have clear rights below the MHW mark. The following policies recognize public use rights in the beach areas as defined but do not in any way require private property owners to provide public access to the beach."[13]

The Coastal Resources Commission, as a followup to its responsibility to develop shorefront access policies, held a public hearing January 12, 1979, for the purpose of considering several policies including eight policy statements on shorefront access:

(a) Development shall not interfere with the public's right of access to the shorefront where acquired through public acquisition, dedication, or customary use as established by the courts.

(b) The responsibility of insuring that the public can obtain adequate access to public trust resources or the ocean, sounds, rivers and tributaries is primarily that of local governments to be shared and assisted by state and federal government.

(c) Public beach area projects funded by the state and federal government will not receive initial or additional funds unless provisions are made for adequate public access. This must include access rights, adequate identification and adequate parking.

(d) Policies regarding State and Federal properties with shorefront areas intended to be used by the public must encourage, permit and provide public access and adequate parking so as to achieve maximum public use and benefit of these areas consistent with establishing legislation.

(e) State and Federal funds for beach access will be provided only to localities that also provide protection of the frontal dunes.

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12 North Carolina Administrative Code, Chapter 7B
13 Ibid.

(f) The state should continue in its efforts to supplement and improve highway, bridge and ferry access to and within the twenty county coastal area consistent with the approved local land use plans. Further, the state should wherever practical work to add public fishing catwalks to appropriate highway bridges and should incorporate catwalks in all plans for new construction and for remodeling bridges. It is the policy of the state to seek repeal or ordinances preventing fishing from bridges except where public safety would be comprised.

(g) In order to avoid weakening the protective nature of frontal dunes, no development will be permitted which would involve the removal or relocation of frontal dune sand or frontal dune vegetation. (15 NCAC .7H.0306 (c).) The sands held in the frontal dune are recognized as vital for the nourishment and protection of ocean beaches.

(h) All land use plans and state actions to provide additional shorefront access must recognize the need of providing access to all socio-economic groups.[14]

David Brower begins his excellent publication, Access to the Nation's Beaches: Legal and Planning Prospectives, with the statement, "the problem of insufficient public access to the nation's coastal beaches has been recognized nationally for at least forty years". He quotes from a 1954 National Park Service Study which recommended that Smith Island (Bald Head) and Bogue Banks be acquired for public recreational purposes "before the best of the remaining areas are acquired for private or commercial development".[15] Bogue Banks is now listed as "developed".[16]

David Owens, who collaborated with Brower on the book, is now an attorney with the Coastal Management staff of the State Department of Natural Resources and Community Development. Paraphrasing a statement of Owens, "There may be a public use right above the high tide line, but the North Carolina Courts have never addressed the issue. When someone is stopped by a property owner from crossing an area or going under a fishing pier, and that action is challenged in court, we will probably get a clearer picture of public use rights, but it will depend upon specific occurrences and the attitude of the court."[17] Brower thoroughly discusses the ownership of coastal areas including comments on the Public Trust Doctrine where public trust lands (generally navigable waters and associated tidelands, and in North Carolina and other states wet sand beaches) are held in trust for the people and subject to the interests of the public.[18]

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14 Ibid.

15 Brower, David, et al, Access to the Nation's Beaches: Legal and Planning Perspectives, UNC Sea Grant Pub. SG-77-18, Raleigh, N.C., 1978, p. 1.

16 U.S. Dept. of Interior, "Report of the Barrier Island Work Group," Dec. 1978, p. 10.

17 Conversation with David Owens, N.C. Office of Coastal Management, 5-18-79.

18 Op.cit., p. 21.

Brower quotes the U.S. Supreme Court which "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". Brower also discusses the concept of implied dedication where an owner, by not preventing public use of the beach implies from his conduct intent to give the land to the public by public use of the beach. In effect the public accepts dedication through implication.[19] The Doctrine of "Customary Rights" proposes that where there has been "very long and common use of a defined area, that use becomes legally established for that area".[20] "Prescriptive easements" are another related type of public right, with use adverse to the interests of the owner, but where owners "cannot do anything on it that would reduce the public's established rights to use it".[21] This may begin as a trespass without the owner seeking redress; historical use may be continued but additional types of uses cannot be established.

In addition, Brower discusses a New Jersey case where the State Legislature enabled cities to charge user fees to defray costs. A neighboring inland city sued a beach community because it was charging a non-resident rate. The court found that, although user fees could be charged, they could not charge more because of a user's non-resident status.[22]

North Carolina Comprehensive Recreation Planning

The Statewide Comprehensive Outdoor Recreation Plan (SCORP), last published in 1973 or 1974, included several sections relating to coastal recreation. Consistency with SCORP is required for the awarding of Land and Water Conservation Fund Grants administered by the U.S. Department of Interior Heritage Conservation and Recreation Service. The North Carolina SCORP recommends, in response to an identified "lack of sufficient quantity and variety of state-administered outdoor recreation areas. . ." that the State "Acquire, develop and administer public water access areas at intervals on the coast and other places in the coastal area."[23] The study leading to the publication of SCORP considered the potential for further recreation usage of the North Carolina coast, and concluded generally, that recreational uses of ocean beaches can be increased without damage to the beach itself, that the major demand will be for family beaches which do not require intensive development or heavy use, that there may be some constraints due to associated services needed to reach "optimum" use of family beaches, and that shorelines of sounds, with the exception of the Morehead City - Beaufort area, had experienced only light pressure for recreation development.[24]

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19 Ibid., p. 23.
20 Ibid., p. 28.
21 Ibid., p. 31.
22 Ibid., p. 22.
23 N.C. Dept. of Natural & Economic Resources, Statewide Comprehensive Outdoor Recreation Plan, n.d.
24 Ibid., Section 53-100.

SCORP comments, reporting on a study of island resources, concluded:

> Islands can help fill the recreation need only if the burgeoning urbanization that gives them a new recreation value does not overwhelm them with the kind of development that makes public recreation impossible. Like all natural islands they are endangered by over-development and can serve public needs only if they are protected and developed under active programs of conservation.[25]

All publications and programs reviewed, relating to water-based recreation, tie social benefits to conservation and preservation of natural resources; damage to the resource will reduce opportunities for recreation.

The current updating of NCSCORP is expected to be available in fall 1979. Included in the objectives and planned actions of early drafts was the objective of securing sufficient public access to beach areas and facilities. Several tasks were identified to meet this objective:

Task a Determine the long term beach access needs based on the current supply of access areas and the projected demands of access based on population projections.

Task b Develop State position on beach access through comprehensive policy statements.

Task c Establish funding source for land acquisition and construction of access facilities.

Task d Establish grant procedure for local governments to apply for beach access funds.

Task e Develop planning guidelines as part of the CAMA planning process to assist local governments in acquiring and managing public access areas.

Task f Institute a uniform system of identifying public access areas.

"Task c" above was proposed to be handled by the N.C. Division of Parks and Recreation. "Task b" was assigned to the Coastal Resources Commission. All other items identified the N.C. Office of Coastal Management as the Lead agency. These were proposed to be completed during the State's Fiscal Year 1978-1979, but reportedly were not funded. The amendment to the North Carolina Coastal Management Program and Environmental Impact Statement will address many of these elements. It is reported that the Governor's letter transmitting SCORP to the Heritage, Conservation and Recreation Service is more supportive than in the past, and commits the State to solve its recreation problems and provide for balanced growth

25 Ibid., Section 53-8.40.

and a higher quality of life for residents and visitors to the State. Reaction to the recent park land acquisition budget proposal, in legislative action, does not evidence the same priority, for no funds were appropriated for park acquisition for Fiscal Year 1979-1980, and only $250,000 for Fiscal Year 1980-1981; this for all park acquisition by the State.

North Carolina Water Resources Planning

The North Carolina Water Resources Framework Study is presently being updated by the staff of the Division of Environmental Management in the Department of Natural Resources and Community Development. The draft of the report is generally supportive and reiterates aspects of SCORP, the Coastal Management Program and others, and identifies policies proposed for water management including water based recreation, navigation, water supply, fish and wildlife resources, the North Carolina balanced growth policy, and a variety of other issues related to water resource planning. Recreation is treated rather comprehensively, with identification of recreation issues related to almost every topic discussed. Recommendations include a variety of alternatives in development measures, and the following general recommendation: "that the State and local governments increase public access to its waters and related land resources by increasing the number of: (1) additional boating and fishing access areas; (2) new State Parks and recreation areas around large and small reservoirs; (3) scenic trails, rivers and greenways, and (4) ocean and shoreline beaches". Another recommendation proposed that the State and its political subdivisions acquire more outdoor recreation sites in the vicinity of the growth centers identified in the State growth policy.[26] The State Planning Office has identified the Morehead City area as one of these growth centers with Beaufort a satellite.

Carteret County Access-Related Actions

"Local recreational needs and opportunities have not been given adequate consideration in the past. As a result, those coastal areas of statewide, regional, and/or national interest have received a greater part of the financial aid available to the state."[27]

Carteret County, in seeking a consultant for the access study, stated its desire to identify recreation access to the waterways surrounding Carteret County, identify future access improvements desired and related elements. At the pre-study public meeting, the Director of Parks and Recreation indicated that present access to Carteret County waters is inadequate, this rounding out the full scale of federal, state and now local feelings that there is inadequate access for coastal recreation.

The County has acted on issues related to access and preservation of natural resources related to coastal and estuarine resources. The County zoning

26 Department of Natural Resources and Community Development, N.C. Water Resources Framework Study, review draft, n.d.

27 N.C. Coastal Management Program, p. 249.

ordinance, for example, requires preservation of primary dunes, major secondary dunes in marsh area (Section 73-A.2 and 76-A.2(j)). The ordinance allows pedestrian walkways and bicycle riding ways in Residential Resort Districts (RR) but requires a 25 foot minimum setback from any street or highway (Article 73-A.3). Marina requirements are provided for residential resort districts, and marina business districts. The County Outer Banks Land Protection Ordinance, administered by a Shoreline Protection Officer, imposes restrictions on all coastal areas whether incorporated or not. The County has also adopted a Dunes Vehicle Control Ordinance as have some of the municipalities in the County. A surfing Ordinance has been adopted which does not allow surfing within 500 feet of fishing piers when a 500 foot marker buoy is in place.

Carteret County was the subject of a report authored by the State Department of Local Affairs, Division of Community Planning: Carteret County, North Carolina, Community Facilities Plan and Public Improvements Program, dated July, 1969. This report, among many other recommendations, recommended that the County "acquire and develop water access areas (2-5 acres each) to allow residents and visitors to utilize the County's waters. These sites should contain boat ramps, parking, and picnic areas".[28] Small access areas were proposed to be located at Cedar Point, on the White Oak River, east of Bogue Field, east of Broad Creek on the sound, at Pine Knoll Shores, on the Newport River west of Beaufort, north of Beaufort, southeast of Newport, one at the north end of North River, one east of Merrimon on the South River, one at the west end of Harker's Island, and one each at Straits, Gloucester, Marshallberg, Sea Level, Atlantic, and Cedar Island.

The report also proposed three roadside parks adjacent to major highways for use by visitors to the County. These would be provided with picnicking, camping, and public toilet facilities, and were proposed on U.S. 70 east of Davis, and two sites in the Croatan National Forest on the U.S. 70 by-pass at Newport and on the north side of N.C. Highway 24 west of Broad Creek.

Three other significant recommendations were made relating to access.

(1) Instigate a program of land and resource conservation designed to assure the protection of Carteret County's water bodies and state and Federal parks. This program should include:

   (a) zoning the access points to the National Seashore to prevent deleterious commercial and residential developments from detracting from the beauty of this national park;

   (b) prevent total strangulation of public access to the seashore by direct purchase, acquisition of development rights, or long term leases from private owners to assure sufficient public swimming and fishing areas; and

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28 N.C. Department of Local Affairs, Carteret County, North Carolina, Community Facilities Plan and Public Improvements Program, Raleigh, North Carolina, 1969.

(c) support and participate in all efforts to prevent the pollution of Carteret County's streams and sounds.

(2) Consider the possibility of developing waterfront parks along the county's streams and water bodies. If acquired, this would result in a scenic system of parks and related activities, a pollution prevention measure, and prevent development in areas susceptible to periodic inundation.

(3) Acquire and develop large (over 200 acres) county parks at the western tip of Bogue Banks and another on Adams Creek south of Merrimon. These parks should provide facilities for active recreation, boat docking and launching facilities, camping grounds, washrooms and public toilets, and shower rooms.[29]

The last proposal to develop the sizeable park at the western tip of Bogue Banks also appeared in "A Plan for Parks and Recreation in Carteret County," prepared by the previous Recreation Director in 1974. However, only a 50 acre park was proposed, this specifically in order to provide residents of Carteret County greater access to the ocean.

Carteret County Land Use Plan

The North Carolina Coastal Resources Commission and Office of Coastal Management prepared the County Land Use Plan in response to requirements of the Coastal Area Management Act. Although the plan has been adopted by the North Carolina Coastal Resources Commission, to date, it has not been acknowledged officially by the County, but the County is obliged to generally follow its guidelines. The plan has not had wide distribution. The Land Use Map associated with the report is not available in the county.

It is likely that people in the County will accept the information, objectives, standards, and comments contained in the plan, for it appears that the plan is developed consistent with the majority of thinking in the County. Selected objectives and standards which have a relationship to beach access issues are repeated below:

(1) Cultural and Historical Objectives

(a) Preservation of meaningful local traditions and local culture through:

1. Land use regulations that emphasize the value of the local traditions within each township. In particular, community development throughout the County has been indicated as desirable and should be preserved.

29 Ibid.

2. Land use regulations and policies that will encourage commercial and industrial development to fit in with existing development. Proper buffer areas should be emphasized.

(2) Land Development Objectives

(a) Encourage major residential and commercial growth to occur near municipalities to prevent leapfrog development patterns, and to facilitate the extensions of existing water and sewer facilities. This objective can be accomplished through the establishment of water and sewer extension policies by municipalities which will locate these developments close to their existing boundaries. Location of development near towns will aid towns in future annexation proceedings.

(b) Preserve the rural nature of the County outside the municipalities. When land is developed in rural areas of the County, it should be developed in basically a low density residential character. Without the provision of water and sewer services, most of the development will be at lower densities. Also, through large lot zoning, the rural character may be somewhat preserved.

(c) Encourage the preservation of the County's natural resources. All development should consider the potential effect it has on the County's natural resources and insure maximum effective utilization of public facilities and services. Some resources that should be considered include: (1) wetlands, (2) estuarine waters, (3) frontal dunes, (4) water supply and (5) flood hazard areas. These land development objectives can be achieved through:

Emphasizing the importance of County land use regulations (zoning ordinance, subdivision regulation, group housing ordinance, Outer Banks land protection ordinance, and mobile home park ordinance and flood plain regulation). These regulations should be developed and adopted in accordance with the stated objectives of this land development plan.

(3) Economic Objectives

To develop an effective program to provide better job opportunities, and increase personal income for all citizens of Carteret County, without significantly affecting the "traditional" way of life so important to the citizens of Carteret County. It is hoped this objective can be achieved by:

(a) Continued emphasis on tourism as a major source of income for Carteret County. It should be noted that efforts should be closely coordinated with all local governments and organizations within the County involved in tourist related activities. These interests include:

1. Sport fishing,

2. hotel and motel services,

3. restaurants

4. retail stores relying basically on tourist business, and

5. other retail interests and services that help support these interests and other tourist related business (for example the construction industry).

(b) Development of plans identifying areas to accommodate retail trade and services for the expanding population of Carteret County, and those who visit Carteret County. Land use regulations should be coordinated with the municipalities so as to assure proper development of retail trade and services.

(c) Emphasize and encourage improved transportation facilities. This includes highways and roads, the Beaufort-Morehead Airport, and freight services within the County.

(d) Encourage and assist in providing improved navigational channels in the County. This includes the Intracoastal Waterway, the "Deep Water Channel" for the port, and other service channels where economically justified. This will improve all economic activities in the County including commercial and industrial activities in general, and in particular, the tourist industry.

(e) Encourage and promote the commercial fishing industry within the County through:

1. Land management that will help preserve the productivity of the estuarine waters within Carteret County.

(4) Service Objectives

Provide those services desired by the citizens of Carteret County so as to improve the living conditions of all citizens of the County.

(a) Encourage the development of a regional water and sewer plan and its implementation.

(b) Encourage and strive for the development and improvement of recreational opportunities and facilities for citizens of all ages. This can be done through close attention to the Carteret County Recreational Plan and its proper implementation.

(c) To provide for the protection of the County's dunes system on Bogue Banks. This is to be done by providing adequate

> crossovers for access to beach areas. Where feasible, the County, in cooperation with the towns, will attempt to provide parking facilities at selected areas along Bogue Banks with crossovers provided nearby. Crossovers are inexpensive means of protecting the valuable dunes system which protects the mainland during storm surges.[30]

It is noted that the plan does not directly address access issues. Recreation aspects are based on the 1974 County Park and Recreation Plan which generally addresses traditional park and recreation problems but does not show access to coastal waters as a significant issue. This may be a function of the direction and/or constraints under which the plan was prepared, and is not intended as a critical reflection.

Land use plans have been prepared for incorporated coastal communities. Many of these communities have a variety of ordinances which may either provide access or restrict access to residents. The ordinances, land use plans and State Coastal Management Program identify existing conditions, restrictions and potential opportunities for access related services and facilities. These publications along with Brower's Access to the Nation's Beaches provide legal and background information basic to beach access issues.

Responsibility for Providing Access

> It shall be a proper function of the State of North Carolina. . . to. . .preserve park, recreational and scenic areas, to control . . .pollution of our area and water. . .and in every other appropriate way to preserve as a part of the heritage of this State its forests, wetlands, estuaries, beaches. . .[31]

Many agencies within state government in North Carolina have recreation-related responsibilities, an indication that the state long ago assumed responsibility for improvement of the general quality of life of its residents and the provision of leisure opportunities. Section 160A-351 of the North Carolina General Statutes includes the statement, "the General Assembly therefore declares that the public good and the general welfare of the citizens of this state require adequate recreation programs, that the creation, establishment, and operation of parks and recreation programs is a proper governmental function, and that it is the policy of North Carolina to forever encourage, foster, and provide these facilities and programs for all its citizens".[32]

The above, a part of the Recreation Enabling Law, authorizes and enables, rather than requires, this state and subordinate units of government to engage in park and recreation functions.

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30 Ibid.
31 1973 Amendment to the North Carolina Constitution.
32 GS 160A-351 of North Carolina General Statutes.

The state has evidenced commitment to beach access by its acquisition of the Core Banks for transfer to the U.S. Government for use as a National Seashore. Certainly much broader goals than merely beach access were involved in this action. The state earlier accepted Fort Macon and adjacent property as a gift from the U.S. Government; and accepted from the North Carolina Education Association, Bear Island, now known as Hammocks Beach State Park. Boat access areas are provided by the Wildlife Resources Commission; and both the Hampton Mariners Museum and Marine Resources Centers provide interpretive services related to coastal waters and provide water-based recreation services to some extent. With minor exception, the state has not acquired coastal lands by purchase; gifts have directed the acquisition policy of the state.

The state, administering several federal programs, provides grants available for use in a variety of applications which can be related to coastal water-based recreations. State and federally funded bridge projects which link Bogue Banks to the mainland, certainly enhance regional access and use of coastal waters. Access to Cape Lookout National Seashore will be provided by the federal government.

The Airport Marina in Beaufort is owned by Carteret County. Until July, 1979, the County leased the marina to a private operator. Except for the marina and a few water-based recreation activities of the County Park and Recreation Department, the county has not evidenced a serious concern toward beach access. Termination of the lease on the airport marina is seen as an attempt by the county to responsibly meet its commitment to the U.S. Army Corps of Engineers for the provision of a public wharf at this location; recreation developments are a desired adjunct. The recreation element of the Carteret County Community Facilities Plan of 1969 has, in general, not been implemented regarding facilities proposed. Certainly the commitment by the county to undertake and partially fund a coastal recreation access study indicates interest at the present time.

Except for the Town of Atlantic Beach, communities on Bogue Banks have generally not seen the responsibility to provide beach or estuarine access except to its own residents. The same is generally true of mainland communities, except as access is provided through commercial facilities. It is assumed that the Beaufort and Morehead City boat ramps, both constructed by the Jaycees, were designed to satisfy needs of local residents, and that they were turned over to the Wildlife Resources Commission when it became apparent that local residents were not usually gaining benefits desired during the peak tourist season. The Wildlife Resources Commission assumed responsibility for the operation and maintenance of the Morehead City ramp in 1971 and the Beaufort ramp in 1978.

Commercial establishments have assumed the responsibility of providing a majority of ocean and estuarine access in Carteret County. Related to this

is the real estate enterprise in the county, with most beach homes being sold as recreational second homes, thus providing private access to those who can afford it.

Federal, state, county and local governments, as well as commercial and private enterprise have a role to play in the provision of recreation opportunity. Governments, generally, do not participate in proprietary activities with a profit making motive. The typical local government attempts to provide services to its own people. State and federal governments get involved with those elements seen to be significant to them. Obviously there is some overlapping, generally without conflict. Each level produces rules, regulations, ordinances, statutes which are intended to protect those features seen to be important to the respective clientele.

One unique feature of coastal communities is that recreation facilities provided, whether public or commercial, have inclined to be of a scope which will respond to the regional demand; this a likely spinoff of the need for tourism dollars to support local economies. This is a legitimate action, but should not be done at the expense of local residents who lose access to the tourists. Unfortunately, SCORP shows beach access type facilities to exist in excess of need in Carteret County. Five Hundred seventy-seven acres exist with a need shown for only 291 acres. It is obvious that during the summer season facilities are overtaxed in most instances with permanent residents rather disadvantaged by the tremendous influx of non-resident users and the pressure applied to existing public facilities. (See Appendix B.)

In attempting to resolve this problem, it was learned that North Carolina Division of Parks and Recreation, in the SCORP planning process, is directed not to propose gross needs for non-resident populations. It was reported that non-resident and tourism concerns were the responsibility of the Division of Travel and Tourism Development in the State Department of Commerce. The Division of Travel and Tourism Development reports that theirs is a responsibility for promoting travel and for promoting tourism; they do not have an assigned responsibility of promoting facilities.[33] As a result, there is a void in this area of responsibility at the state level, and local people do lose a considerable portion of their recreational access during the tourist season.

Private Landowner Responsibility

Landowners who allow free recreation access uses are immune from tort liability in accordance with the following:

33 Conversation with William Arnold, Director of Travel and Tourism Development.

A LAW RELATING TO THE LIABILITY OF LANDOWNERS
TO HUNTERS, FISHERMEN, TRAPPERS, CAMPERS,
HIKERS AND OTHER RECREATION USERS

Section 1. Chapter 113, General Statutes of North Carolina, is hereby amended by adding, following Article 10A thereof, a new Article, to be designated Article 10B, and to read as follows:

> Article 10B - Liability of Landowners to Authorized Users. Sec. 113-120.5. Except as provided in Section 113-120.6, an owner, lessee, occupant or person in control of premises who gives permission to another to hunt, fish, trap, camp, hike, or for other recreational use upon such premises does not thereby extend any assurance that the premises are safe for such purpose, or that a duty of care is owed or that he assumes responsibility for or incurs liability for any injury to person or property caused by an act of persons to whom the permission is granted, nor to any person or persons who enter without permission: Provided, that nothing contained in this Section or Article shall be construed as limiting or nullifying the doctrine of attractive nuisance as the same prevails in this jurisdiction.
>
> Sec. 113-120.6. This Article does not affect the liability which would otherwise exist for failure to guard, or to warn against a dangerous condition, use, structure or activity; or for injury suffered in any case where permission to hunt, fish, trap, camp, hike or for other recreational use was granted for a consideration other than the consideration, if any, paid to said landowner by the State or paid by other governmental unit; or for injury caused, by acts of persons to whom permission to hunt, fish, trap, camp, hike, or for other recreational use was granted, or to other persons as to whom the person granting permission, or the owner, lessee, occupant, or person in control of the premises, owed a duty to keep the premises safe or to warn of danger.
>
> Sec. 113-120.8. As used in this section the word 'premises' includes lands, waters, and private ways and any buildings and structures on such lands, waters, and private ways.

Section 2. All laws and clauses of laws in conflict with the provisions of this Act are hereby repealed.

Section 3. This Act shall be in full force and effect from and after its ratification. The legislation, as printed, became law April 26, 1963.[34]

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34 Reprint from North Carolina Recreation Review, Volume 8, Number 2.

The Draft Environmental Impact Statement Prepared on Amendments to the North Carolina Coastal Management Program, the North Carolina State Comprehensive Outdoor Recreation Plan, and the North Carolina Water Resources Framework Study all identify state policies regarding the provision of adequate public beach access. In addition, the State of North Carolina Coastal Management Program and draft Environmental Impact Statement identified state policies on recreation and tourism, including beach access and the following state policy: "(5) to plan and promote recreational developments in these areas, with emphasis upon making the seashore areas of North Carolina attractive to permanent residents".[35] However, "it is state policy that the responsibility of insuring that the public can obtain adequate access to public trust resources for the ocean, sounds, rivers and tributaries is primarily that of local governments to be shared and assisted by State and Federal Government."[36] Coastal counties with relatively small populations are not accommodated by this policy.

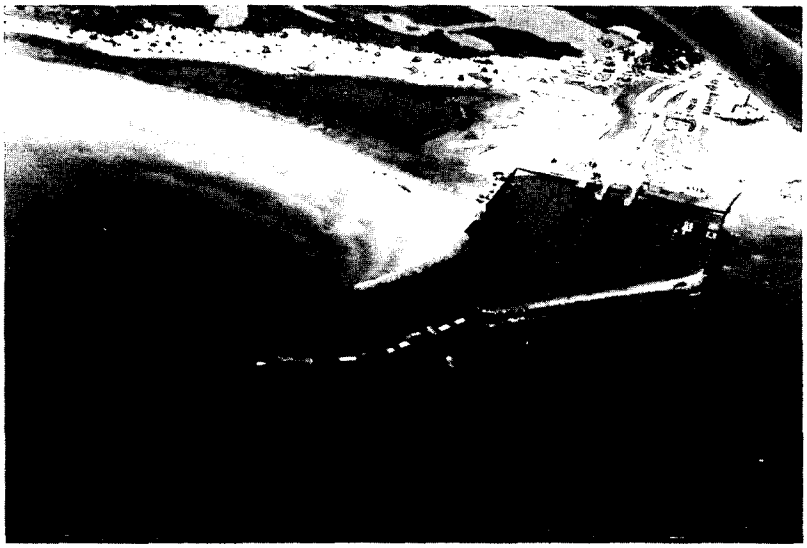
In spite of the conflict in interest and gap in responsibility in state programs, that ocean beach and estuarine waters are located in Carteret County requires Carteret County to recognize its responsibility in attempting to protect its very finite supply of beach area. Much of this has been acquired by the State of North Carolina and Federal Government as Cape Lookout National Seashore, recognizing a federal interest and federal need and not seen to be within the need to be supplied by Carteret County. With the exception of Cape Lookout National Seashore, all state parks and natural areas within the coastal counties have been acquired in response to gifts from the federal government or private agency or individual. Planning, preservation and provision of recreation facilities has been after the fact.

Carteret County, with the exception of the Airport Marina which was leased for operation, does not own or operate any areas with access to water. It would seem the county should exercise responsibility for improving access to its residents, particularly those who live away from beach areas and those who live in unincorporated beach areas. It would appear also that the county, as a tourist area, should assume some responsibility to assist in preserving and allocating other beach and water access areas for use by other residents of North Carolina and the United States.

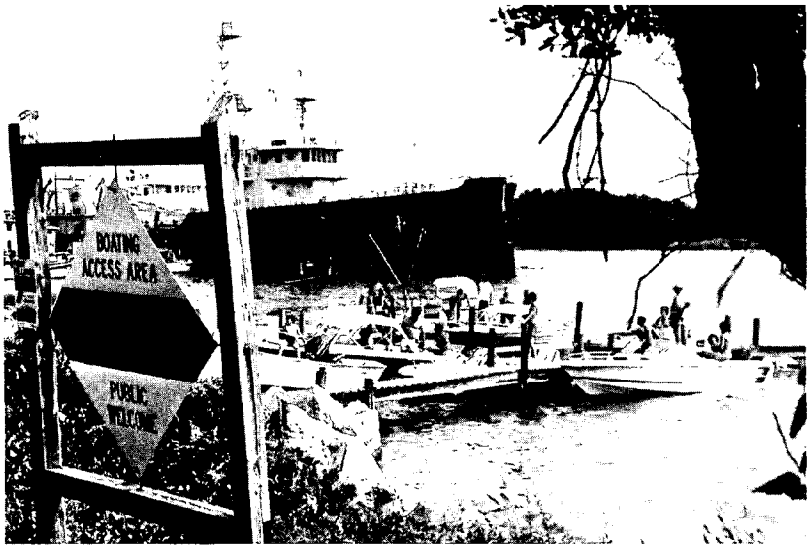
35 U.S. Department of Commerce NOAA Office of Coastal Zone Management, State of N.C. Coastal Management Program and Draft Environmental Impact Statement, p. 110.

36 U.S. Department of Commerce NOAA Office of Coastal Zone Management, Draft Environmental Impact Statement Prepared on Amendments to the N.C. Coastal Management Program, Washington, D.C., Jan. 1979, pp. 18 and 19.

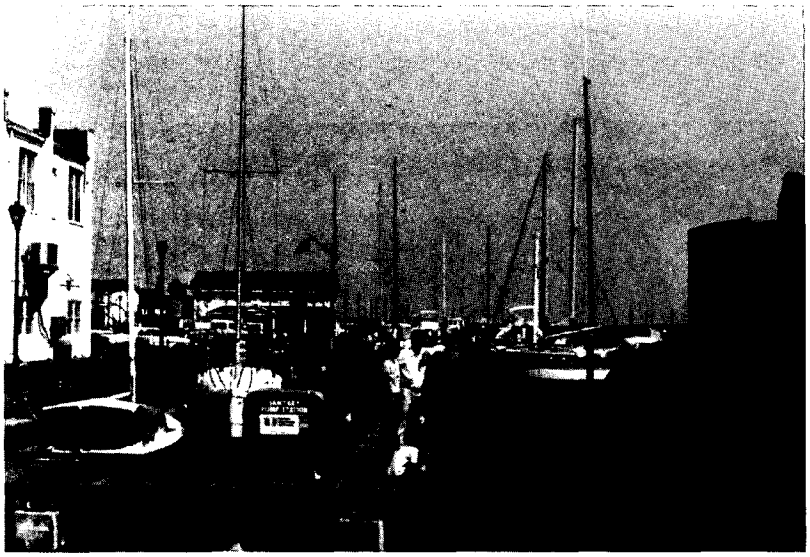
Bogue Pier



State Ferry Landing, Cedar Island



Jaycee Park, Beaufort



Beaufort Waterfront

SECTION IV

ACCESS - RELATED LOCAL ISSUES

Promoting Tourism

People on vacation are looking for new places, new experiences, new perspectives. All this, and more, can be found here.

This holds true for those who come here for the first time as well as for those who continue to return year after year to spend time here in their vacation home.

This is the attraction of Carteret County. It offers beaches — crowded or uncrowded — all types of saltwater recreation, hunting, golf and tennis and unique cultural authenticity found in the people, their heritage and their habits.

Tourism is the county's largest business. The spiraling tourist dollar effects every business in the county, directly or indirectly.

But our commitment to tourism, or to developing it, is being questioned. Bill Arnold, state director of travel and tourism who was in Morehead City last week to speak at a meeting of the Travel Council of North Carolina's new Region IIA, said this county is lagging behind Wilmington and possibly the Outer Banks area in developing its tourist trade because of "some schizophrenia about whether tourism is wanted."

He said that most of the opposition to tourism here seems to come from people who have moved to an attractive area and do not want it to change. He said the attitude of Wilmington is that if they don't take the intitiative in developing tourism, an outsider will do it in a way they don't like.

Carteret residents should make a commitment to tourism if they favor it, he said. If they oppose it, they should enact zoning ordinances and other restrictions to prevent undesirable development. "They should get it the way they want, or take steps to prevent it," he said.

Mr. Arnold's observation has been an undercurrent in this county for some time. This county has a lot to offer in its sun and sand, giving it undeniable appeal. But to what degree should it — the county and its appeal — be exploited? Once an area decides to attract tourists, it implicitly concedes the right to be exploited.

This issue has already been addressed to some degree in the defeat of the 1976 convention center bond referendum and in the recent defeat of the mixed drink referendum. And it poses a paradox for us. We say we want industry. But do we? It has already been shown that we don't want heavy industry, industry that might pollute. "Light," non-polluting industry is fine. Does tourism qualify?

By its very appeal, this county has a natural wealth. Some of it has been tapped. We must now decide whether the social and ecological costs of tourism can be balanced by the benefits of economic prosperity that the industry may bring. If we agree that it should, the political question of how can then be addressed.

Reprinted from April 30, 1979, Carteret County News-Times

Local Issues

In discussing Carteret County environment, it is important that the human environment serve as the base; the physical environment, the natural scene, is related to social and economic aspects. Primary concern of this study is to serve local residents. To serve them best is to retain pleasant living conditions; the natural character of the coastal environment is the principal amenity; the rich history and cultural traditions appear to run a close second. Although most enjoy life in the County, several issues have been verbalized by residents. It seems that the impact of tourism is felt more than any other access issue. A variety of comments have been heard as follows:

> "Our family stays away from "the beach" (Atlantic Beach) during the summer."
>
> "After Labor Day we get our beach back."
>
> "On weekends I can't launch my boat because so many outsiders come in."
>
> "Because there is limited opportunity for industrial development, we need to promote tourism as much as we can."
>
> "The best thing you could propose is to blow up the bridges leading into Carteret County."
>
> "I live in Pine Knoll Shores and can't get out on the road from Friday night until Sunday night."

A local voluntary committee, the "Citizens Action and Awareness Group," has drafted and is discussing a "Quality of Life Statement" which identifies local concerns:

> The present life style in Carteret County is highly regarded by the majority of citizens. There is concern that unbridled commercialization, development, industrialization, population growth and other factors may be proposed, or accepted as accomplished to constituents unprepared to assess long term benefits vs. adverse effects. While change is as natural as life itself, an informed citizenry is obligated to be aware of arbitrarily imposed actions which may produce side effects unsatisfactory to a large segment of the present population. Proposed changes must be examined critically if there is real or suspected threat to safety, health, clean environment, water supply, land, wetlands, beaches, natural resources, and to economic stability, or if there is concern that elected officials, their appointees, and the laws, regulations and ordinances which constitute their guidelines are failing to provide the required safeguards. Full support should be given changes achieved through careful evalua-

> tions if legally sound, and which offer every chance of enriching the lifestyle of the majority, affording greater prosperity, more and better jobs, improved living conditions and social benefits.[1]

It is feared that the quality of life is threatened, the friendliness of small town life, ability to find a job, rear a family and enjoy life close to the sea.

It is readily apparent that all desires relating to recreation access cannot be accommodated. It is also apparent that maximum promotion of tourism will further damage recreation opportunities for local residents. Many people in the county, however, do not realize the extent to which tourism is important for the economic health of the county. Continued access for residents to waters within and surrounding the county needs to be maintained in order that coastal waters continue to enhance leisure time life in the county, for both residents and tourists.

Additional public and private or commercial developments of a major scale will generate additional tourism, and will further constrain or limit local uses. Increases in local populations and summer residents will also result in more use. Transportation facilities into the county and to Bogue Banks will be further overloaded as well. Increases in the local economy will result, but some will benefit more directly than others.

Many feel present law enforcement systems are not adequately able to handle summer crowds. Many feel that emergency evacuation opportunities, the reverse of access, are not presently adequate to allow cautious people to obtain safety away from coastal areas in the event of quickly developing severe storms.

Instances have been cited of public-private incompatibility in coastal areas. At times of high tide, it is possible that people walking along the beaches are trespassing on private property, yet there are many cases where landowners allow access over their private property. "If lenient landowners change their attitude about access across their property, things would be considerably worse," was the comment of a local resident. Local young people desiring to seek access for surfing or swimming or for other purposes have learned of the locations of paths over the dunes where they will not be challenged by landowners for trespassing. Many of the fishing piers allow access to view the ocean or for using ocean beaches, without strictly enforcing parking for pier patrons only. Some pier owners do not seek enforcement of the county ordinance prohibiting surfers from within 500 feet of the piers. Others have reportedly been much more severe in action against those who have "invaded their space". Occasionally surfers, surf fisherman, and swimmers compete for the same space. At times large numbers of fishing boats in the Morehead harbor are seen to be a potential problem to shipping and other boating activity. There is need on both sides for respecting the rights of others in order that court battles do not ensue.

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1 "Discussion Outline, 1-23-79 Meeting, 7:30 P.M., Beaufort, N.C.", Citizens Action and Awareness Group.

There are many other examples of conflicts, many between different types of users; sailing interferes with water skiing; commercial fishing and sport-fishing are seen to be competitors by some. Four wheel drive vehicles are seen by many as being inappropriate for beach areas; heavy use times such as on Easter and Memorial Day weekends prior to the June 1 prohibition of ORV's produces the most complaints.

In general, it appears that local issues revolve around three topics:

(1) Economic - how to maximize economic benefits;

(2) Social - how to maintain the present way of life;

(3) Environmental - how to enhance cultural and natural resources.

Environmental Protection Issues

Environmental quality in Carteret County is seen to be presently of quite high quality. A current study by the U.S. Fish and Wildlife Service compares chemical content of black crowned night heron eggs with those collected from an area on the Rhode Island coast considered to be relatively polluted. About 350,000 acres of estuarine waters in the State are closed to shell fishing, but at last count only 5,387 acres of County estuarine waters was closed, this of an estimated 296,050 acres of estuarine waters in the County.

Mr. Robert Benton of the N.C. Department of Human Resources, speaking at an Environmental Resources Commission meeting in Beaufort on May 3, 1979, reported several instances where pollutants are being introduced to county waters from a variety of sources, including waste water treatment plants, inadequate septic systems, agricultural runoff, fish houses, and some boat discharges.

A "Capacity Use Area" has been identified in the eastern part of the county as a generalized condition of water depletion associated with phosphate mining further north. William Jeter, hydrologist with the Natural Resources and Community Development field office in Washington, North Carolina, indicates, however, that the Carteret County area is not affected by this condition, that the capacity use area boundary defined earlier may have been too broad. Mr. A. D. Fulford, County Sanitarian, has indicated that some problem does exist in water supply with water level dropping in some wells. Others have reported that water pressure in Atlantic Beach is very low on heavy use weekends.

Heavy influxes of people strain utility systems. Should there be salt water intrusion into wells as a result of excessive pumpage, or if the sounds become polluted and damage the nursery grounds for fin fish and shellfish

or create other undesirable conditions, many recreational uses would be adversely affected. Ground water supplies are seen to be adequate to accommodate needs in the foreseeable future, but a regional water supply system may improve conditions assuring a continued supply to beach areas. Some feel that no more tourism or visitation to the area should be promoted until waste water treatment capacity has improved. Dr. Dan Okun in the Department of Environmental Sciences at the University of North Carolina is conducting a coastal water management study expected to be completed by the summer of 1979, which studied Dare and Carteret Counties for waste water options and costs. He feels septic tanks are a mistake[2] and that no waste water effluent should be discharged in estuarine areas.[2] He feels the best option for the County will be an ocean outfall, with all waste water collected at one point. He feels there would be no damage to the ocean if located somewhat further out than the Carteret County 201 Plan proposed.[3] For the purpose of his study he used population projections of about 100,000 persons. It is generally considered, however, that an increase in waste water treatment capacity will have the effect of inducing additional population increases.

Intensive uses of man on the land disturb natural processes. Non-structural uses of the beach seaward of the high tide line is an exception to this. The action of waves and tides continually renew wet sand areas, thus allowing very intensive use of this narrow corridor. The same is not true for the dry sand areas, the frontal dunes and secondary dunes; nor for the shrub thickets and maritime forest. Development on barrier islands should be placed as lightly on the land as possible, with an attempt made to create the least amount of change in the landscape, in order that the island survive as long as possible.

Beach erosion is seen by natural scientists to be a natural process of movement landward, rather than an erosion process which typically has been accelerated by man on the land. The continued availability of access to coastal waters is dependent upon the continued existence of natural features of the coastal landscape. Inlets move, overwashes occur, new inlets are formed, sand continually moves both in the water and on the dunes. The cost of stopping or delaying or "correcting" these processes can be very expensive. Pilkey's How to Live With an Island specifically identifies environmental problems related to Bogue Banks.[4] At least one resident of Carteret County has indicated his feeling that the publication is an attempt by Pilkey to ignite controversy. It seems to be an objective view that the book is factual. Problems Pilkey identifies appear to be the result of the desire for coastal access, to some extent accelerated by developers. A view of this process is proposed by Robert Tennenbaum, ". . .The developer simply responded to market opportunities in his search for profit, an integral part of the American capitalist system." The desire to create a family beach atmosphere on most of Bogue Banks should have the result of providing ultimately less use of the ocean beach than would the banks in public or commercial ownership.

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2 Personal Conversation of 3/5/79.

3 Henry von Oesen and Associates, and Wm. F. Freeman Associates, Carteret County Complex 201 Facility Plan, n.d. (1975).

4 Orrin H. Pilkey, Jr., et al, How to Live With an Island: A Handbook to Bogue Banks, N.C. Dept. of Natural & Economic Resources, Raleigh, N.C., 1975.

Continual use of even one foot path over the dunes will have the potential result of eliminating the dune. The island is fragile. Intensive development such as that at Indian Beach, or development on areas of previous or potential overwashes and inlets, construction of roads perpendicular to the beach, and other actions could, in time of a serious stom, induce damage which would have the effect of, temporarily at least, reducing access opportunities, and could result in disaster relief and/or flood insurance payments of massive proportion.

Estuarine areas have aspects which are likewise of environmental importance. To many people "clam kicking" will ultimately destroy production of shellfish as well as reduce propagation of finfish and shrimp, and reduce the protection marshes provide to adjacent land. Too much access will eliminate bird rookeries found in estuarine waters.

Regarding most surface uses of open waters in the estuary, James Brown, of the State Division of Marine Fisheries, feels that an unlimited amount of recreational use can be allowed. Excessive wave action in narrow reaches would accelerate damage in areas of bulkheading and fragile estuarine shorelines. It is assumed that this and safety needs have precipitated "no wake" zoning, although zoning would be appropriate in any area of congested boating.

Implementation and enforcement of Carteret County ordinances relating to land protection, dunes vehicle control; the Carteret County Land Use Plan and Coastal Area Management Act, as well as local municipality counterparts will assist in meeting the general public need for protection of environmental features. Responsible private action will assist in maintaining public access to public lands and waters.

Sailing and Motorboating off Radio Island

SECTION V

SUPPLY - PRESENT ACCESS AND USE

Most of the southern ocean shoreline in Carteret County is privately owned. There are a number of public access points in the Fort Macon State Park area and the municipality of Atlantic Beach. Public access is also available at some of the private lots, piers and illegally used foot paths (leading from Salter Path Road to the beach). The county neither owns nor manages these points. The majority of the access points, both private and public have very limited public service facilities and parking and have been established only on paper, hence, have not been marked as being public access points. A few walkways and ramps over the frontal dune have been provided but the majority of the points do not have them.

U.S. Dept. of Commerce, NOAA, Office of Coastal Zone Management, Draft Environmental Impact Statement Prepared on Amendments to the North Carolina Coastal Management Program, Washington, D.C., 1979.

Access Using Private Lands

The problem of how to get to the ocean and sounds has been identified as that of securing access to the coastal area, and that of transporting oneself the short distance from the public road to the public beach.

Regional Access

State highways provide the principal access for regional visitors to the county: Highways 70, 24, 58, and 101. Inter-city bus transportation is available, again using major highways. The intracoastal waterway and navigation channels with additional minor waterways, provide ingress and egress for a small number of visitors.

The Beaufort-Morehead Airport manager, Craig Willis, reports that more than fifty private planes are used by people vacationing in the county; rental cars and taxies are available for local transportation. The commuter airlines, Wheeler Airlines, reportedly discontinued service to the County because of inadequate business. Piedmont Airlines offers limited service to Jacksonville and New Bern, within reach of the County, but not convenient enough to induce visitation to Carteret County attractions. An airport study considering future expansion is underway. "Airport planning is essential" according to the Carteret County Land Use Plan prepared by the North Carolina Coastal Resources Commission.[1]

The Southern Railway system also serves the area, but does not provide passenger service.

Local Access

Local congestion on state highways and local streets is obvious to the visitor and frustrating to the resident at busy times. Beaufort residents report that it takes one hour to get to Atlantic Beach, with traffic sometimes backed up for six blocks west from the intersection to the bridge at 28th Street and Arendell Street in Morehead City. Highway 70 traffic from the west has the same problem, with traffic reportedly regularly backing up at least to the Plaza Shopping Center; at very busy times the line has extended two miles west.[2] Local streets are also occasionally congested in Harker's Island, Cape Carteret, and the Cedar Point Area, as well as that expected in the more populated areas.

The North Carolina Department of Transportation Carteret County Transportation Plan of 1971 has not been implemented. Morehead City, which reports a traffic increase of 30 percent between 1968 and 1973, has a "sketch thoroughfare plan" which is expected to be completed shortly. Completion of the Salter Path Road will improve some aspects of travel on Bogue Banks, but is constricted by traffic at Atlantic Beach "circle" and at the two bridges to

1 N.C. Coastal Resources Commission, Coastal Area Management Act Land Use Plan, Carteret County, N.C., Raleigh, N.C., 1978.

2 From 6/26/79 conversation with Major Condie of Morehead City Police Department.

the mainland. Access to both the Morehead City and Beaufort waterfront areas is accomplished by using local streets which are quite constricted and unable to handle the potential volume of traffic generated by the waterfront attractions. Mayor Dixon of Morehead City would like their waterfront area studied, designed and developed to better serve visitors to the area.[3] The two waterfront areas, along with Fort Macon State Park and the Atlantic Beach amusement area, constitute the major destination points for recreation traffic.

Local Access for Recreation Uses

Most access for water-related recreation use is provided by commercial facilities. It is expected this supply will continue as long as the market holds up and as long as uses of the land continue to be seen by the owners as the highest and best use for their respective properties. However, those desiring simple access to water cannot depend entirely for their access by the use of commercial or privately owned property; uses are likely to change.

A wide variety of recreation uses require access: power boating and water skiing, use of small boats and canoes, sailing, fishing, swimming, surfing, scuba and skin diving, shelling, birding, nature observation, hiking or jogging along the beach, four wheel drive or off road vehicle use, enjoying vistas and visual uses, securing "wilderness" experience at remote places, picnicking, camping, hunting, and possible other uses.

Access for recreational use of Cape Lookout National Seashore, is not included in the scope or responsibility of this inventory, even though many county residents use Core Banks and Shackelford Banks for family recreation. Fort Macon State Park was also identified as being outside the scope of this study, but the inventory does include Fort Macon facilities because of their ease of access and importance to the non-boating public and to the less affluent.

The Coastal Beach Access Inventory prepared by the office of Coastal Management staff and the inventory prepared by staff of the Division of Parks and Recreation which lists all recreation areas in Carteret County, were used as the basis for inventory of access points. Additional minor access points include private lands used by trespassing; highway right-of-ways providing access for boat mooring, car top launching; and fishing or sun bathing near bridges. Another type of access is that provided by the State Port in allowing visitations to the port, when staff personnel are available as guides.

An interesting opportunity is offered by the Sylvia II with tours of the sound allowing passengers to take part in and experience the work of a small commercial fishing boat, at the same time gaining information and apprecia-

3 Personal conversation 3/15/79.

tion of local cultural and natural history. The vessel is docked near the Taylor Boat works on Peltier Creek. Interpretation of "privateering" by experience sailing on the Meka II out of Beaufort is another unique type of recreation access available. Local head boats and 46 sport fishing vessels provide additional access to the ocean. Recently added harbor tours provide relatively low cost narrated scenic tours. Commercial businesses in Atlantic Beach provide a variety of other types of access opportunities.

Some of the parking at Beaufort Launch Ramp July 4, 1979

Fort Macon State Park Beach, July 8, 1979

Major Free Access Sites

NOTE: Maps keyed to these tables begin on p. 45.

Key	Access Site	Ocean-side Location	Sound/River Location	Parking Capacity	ORV (4-WD) Access	# of Ramps Small Boat Access,	Cartop Launch Site	Scenic Vista	Camping w/Water Access	Fishing	Swimming	Surfing	Picknicking	Nature Observation	Public Restrooms	
A-1	Harker's Island "Causeway" -Northern-most bridge		X	40			X	X		X	X		X			Most of land is State-owned.
A-2	Beaufort Jaycee Park		X	30		2										Add'l parking for 75 cars on shoulder
A-3	Radio Island, East side		X	30+	X			X	X	X	X					Commercial Prop.; use not restricted
A-4	LST Ramp, Radio Island		X	150				X		X	X			X		Closed during maneuvers; SCUBA area
A-5	Fort Macon State Park	X	X	480				X		X	X	X	X	X	X	Lifeguards in seas.
A-6	Triple Ess Pier	X		100				X	*	*	X				X	Cars w/surfboards prohibited
A-7	Oceanana Pier	X		110						*	X				X	"
A-8	Sportsman's Pier	X		60					*	*	X				X	"
A-9	Atlantic Beach "Circle"	X		285				X			X	X				The major public beach; lifeguards in season.
A-10	Morehead City Municipal Park		X	50		4	X	X					X		X	Often crowded
A-11	Iron Steamer Pier	X		130				X		*	X				X	
A-11a	"State of N.C. Ocean Access" W. side of Iron Steamer Pkng.lot	X									X	X				Not identified or managed for use.
A-12	Twin Piers	X	X	80					*	*	X				X	Little parking for non-patrons.
A-13	Emerald Isle Pier	X		50				X		*	X				X	
A-14	Bogue Fishing Pier	X		30						*	X				X	Emerald Isle Lifeguards; commercial parking adjacent.
A-15	Cedar Point Boat Access Area		X	20		1										Int. Paper leases to NC WildlifeCom.
A-16	Cedar Point Recreation Area, U.S. Forest Service		X	30		1	X		X				X	X	X	Ramp not adequate for most boats

* Fee charged for this use

Estuarine Shore Commercial Campgrounds With Boat Launching Ramps
(Not keyed to Maps)

Driftwood Campground, Cedar Island
Cedar Creek Campground, Atlantic
Bullock's Marina and Campground, Harker's Island
Riverside Campground and Marina, Otway
Cedar Point Family Campground, East of Swansboro
Sound View Campground, East of Swansboro

Minor Free Access Points Which Receive Regular Use

NOTE: Maps keyed to these tables begin on p. 45.

Key	Access Site	Ocean-side Location	Sound/River	Approx. Parking Capacity	ORV (4-WD) Access	Small Boat Access	Scenic Vista	Camping	Fishing	Swimming/Sunbathing	Nature Observation	Comments
B-1	South End of Cedar Island Road (Adjacent to Lewis Creek)		X	5		X						U.S. Fish and Wildlife Service Ramp
B-2	Adjacent to Thorofare Bridge, NC 12		X	5		X						"
B-3	Road End So. of SeaLevel Hospital		X	5		X						Ramp in Poor cond.
B-4	Highway R.O.W. at Salter's Creek		X	15					X			
B-5	Highway R.O.W. at Smyrna Creek		X	15					X			
B-6	Wards Creek East of US 70 Bridge		X	20		X						Includes privateland
B-7	East and West Causeways at North R. Bridge		X	25		X			X			Poor ramp.
B-8	Large open area So. of Harkers Is. School (Privately owned)		X	10			X					Used heavily by Island residents
B-9	So. End of Straits Bridge @ Harker's Is.		X	20						X		Private above Mean High Water line
B-10	Street Ends in Beaufort		X				X					Mostly no parking
B-11	East Side of Beaufort-Morehead Drawbridge		X	20					X	X		Some use on Private land; R.O.W. parking
B-12	East Side of Morehead-Beaufort Highrise Bridge		X	10			X	X	X	X	X	NC Marine Fisheries & State Port land.
B-13	So. End of Oyster Creek Road at Mouth of Mill Creek		X	5		X						Usable only at high tide; USFS land
B-14	Morehead City Town Park, 800 Evans St.		X	X			X					Street parking; area very small
B-15	Street ends in Morehead City		X	X			X					
B-16	Calico Creek Bridge (20th St.) Morehead C.		X	5					X			"No Fishing" signs
B-17	NC 24 Bridge across Gales Creek		X	10					X			" (Ignored)
B-18	NC 24 Bridge across Broad Creek		X	10					X			" "
B-19	East End of Club Colony, Atlantic Beach	X		5	X							No parking ignored; Pedestrian access; ORV-damaged dunes.
B-20	West End of Club Colony, Atlantic Beach	X		5	X							" Trail not on easemnt.
B-21	Trail opposite Landmark Inn	X		-	X							Ocean access for Landmark Guests.
B-22	State Road to Beach, just West of Salter Path (East of Squatters Campground)	X		-	X				X	X		Pedestrian access for Indian Beach.
B-23	Road End at Bogue Inlet	X		-	X		X			X		Pedestrian Access. Formerly major access. No parking enforced.

In addition to the above, most motels and campgrounds provide guest access. Some non-guest parking is overlooked and unregulated. The N.C. Marine Resources Center, Pine Knoll Shores; and the Hampton Mariners Museum in Beaufort, provide water-related nature observation activities and interpretation.

Public Lands/Easements Generally Restricted to Local Residents Because of No Parking or No Access Identification

Map Key	Access Site	Uses	Comments
C-1	Club Colony, Atlantic Beach; 5 Easements	Pedestrian Ocean Beach Access	No Parking Allowed
C-2	Atlantic Beach, 6 Road Ends	Pedestrian Ocean Access	No Parking Allowed
C-3	Ocean Ridge (E. of Atlantic Beach); 11 Easements	Pedestrian Ocean Access	No Parking Allowed
C-4	Pine Knoll Shores (2 Parks)	Parking and Pedestrian Access to Ocean Beach.	Owned by Homeowners Assoc.; Resident Parking only.
		Internal Access to Sound	Residents only
C-5	Hoffman Beach (E. of Salter Path); 5 - 10' Easements	Pedestrian Ocean Access	No Parking Available
C-6	Emerald Isle Easements (3 every 1100' of development)	Pedestrian Ocean Access	No Parking Allowed.
C-7	Cape Carteret Boat Launch Areas (3)	Boat Access to Sound	No Parking Allowed.

Private Lands Regularly Used for Ocean Beach Access Without Permission

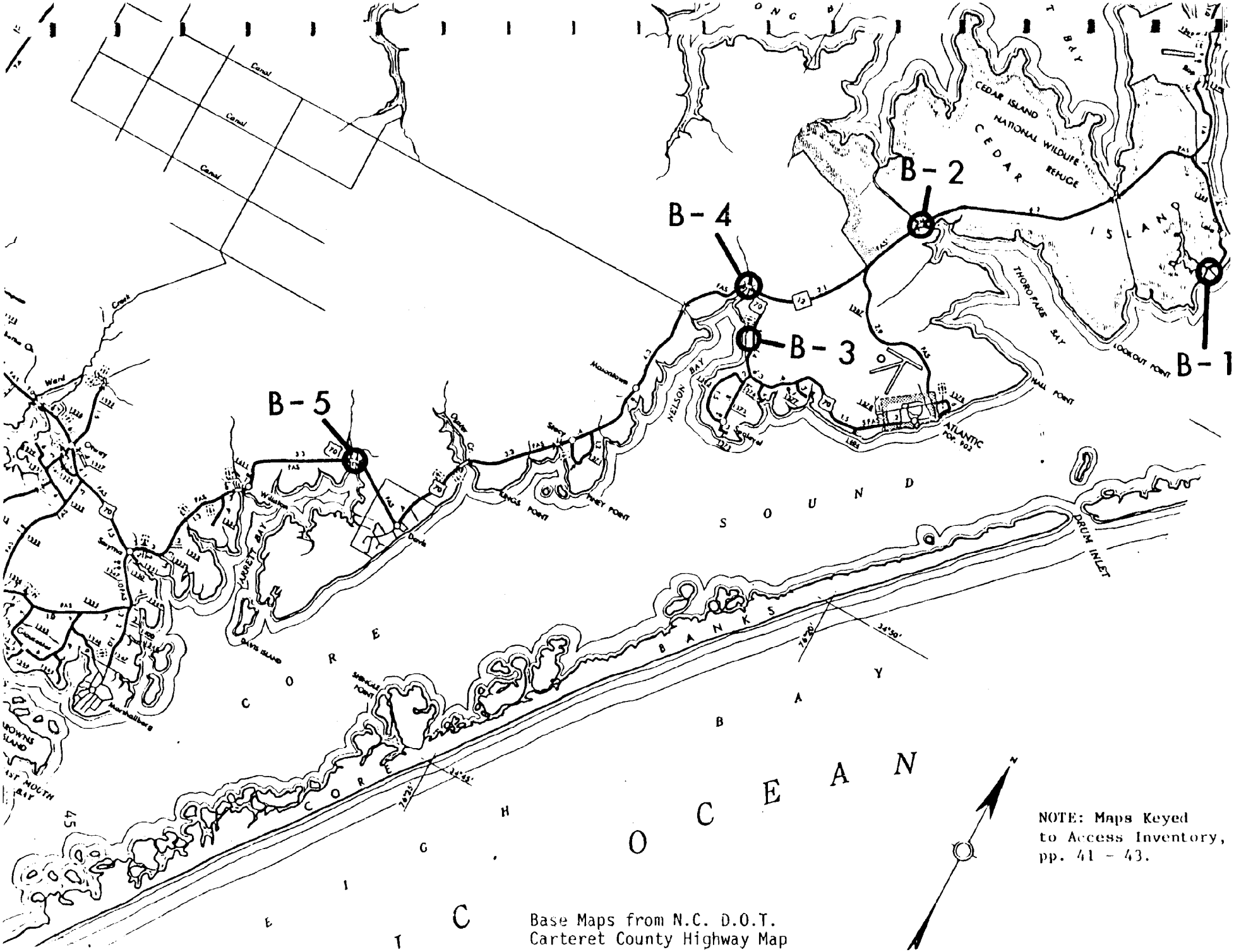
Key	Access Site	Owner, if Known*	Comments/Uses
D-1	Old Road West of "A Place at the Beach" Condominiums	Habib Engineering Contracting Co., Ltd.	ORV, Pedestrian Access; Much unregulated use.
D-2	Trail Opposite Croatan Trailer Park	H. Morrison Johnston, et al.	"
D-3	Trail Opposite Fast Fare	Philip R. Taylor	"
D-4	Trail Approx. 200 yards East of Whaler Inn	Edith C. Lumpkin, et al.	" Pedestrian Access only
D-5	Trail Approx. 100 Yards West of Iron Steamer Pier	Frances Webb Roosevelt	" Much unregulated use
D-6	Trail Approx. 1 Mile West of Ramada Inn	T.R. Roosevelt, et al.	ORV, Pedestrian; Room for 10 Cars; Unregulated Use.
D-7	Trail off Old Highway at Indian Beach	Walter C. Latham	Room for 5 Cars;Pedestrian access.
D-8	Trail Approx. 150 Yards West of Indian Beach Trail (D-7)	Walter C. Latham	ORV, Pedestrian access.
D-9	2 Trails in Undeveloped Area Between Bogue Pier and Islander Motel	Luther B. Fletcher, et al.	ORV, Room for 10 Cars; Much Unregulated Use.
D-10	Clearing Immediately East of Islander Motel	?	ORV, Room for 10 Cars; Wire barricade regularly cut and posted signs disregarded.
D-11	Trails about 1 Mile East of Bogue Inlet	Am. Classic Ind. and Lewis R. Holding	ORV, Room for 15 Cars; Some dune destruction from ORV's.
D-12	Area East of East End of Inlet Drive	Section Fifty-One Association	ORV Access

* Source: Carteret County Tax Collector Records

Commercial Launch Sites and Marinas

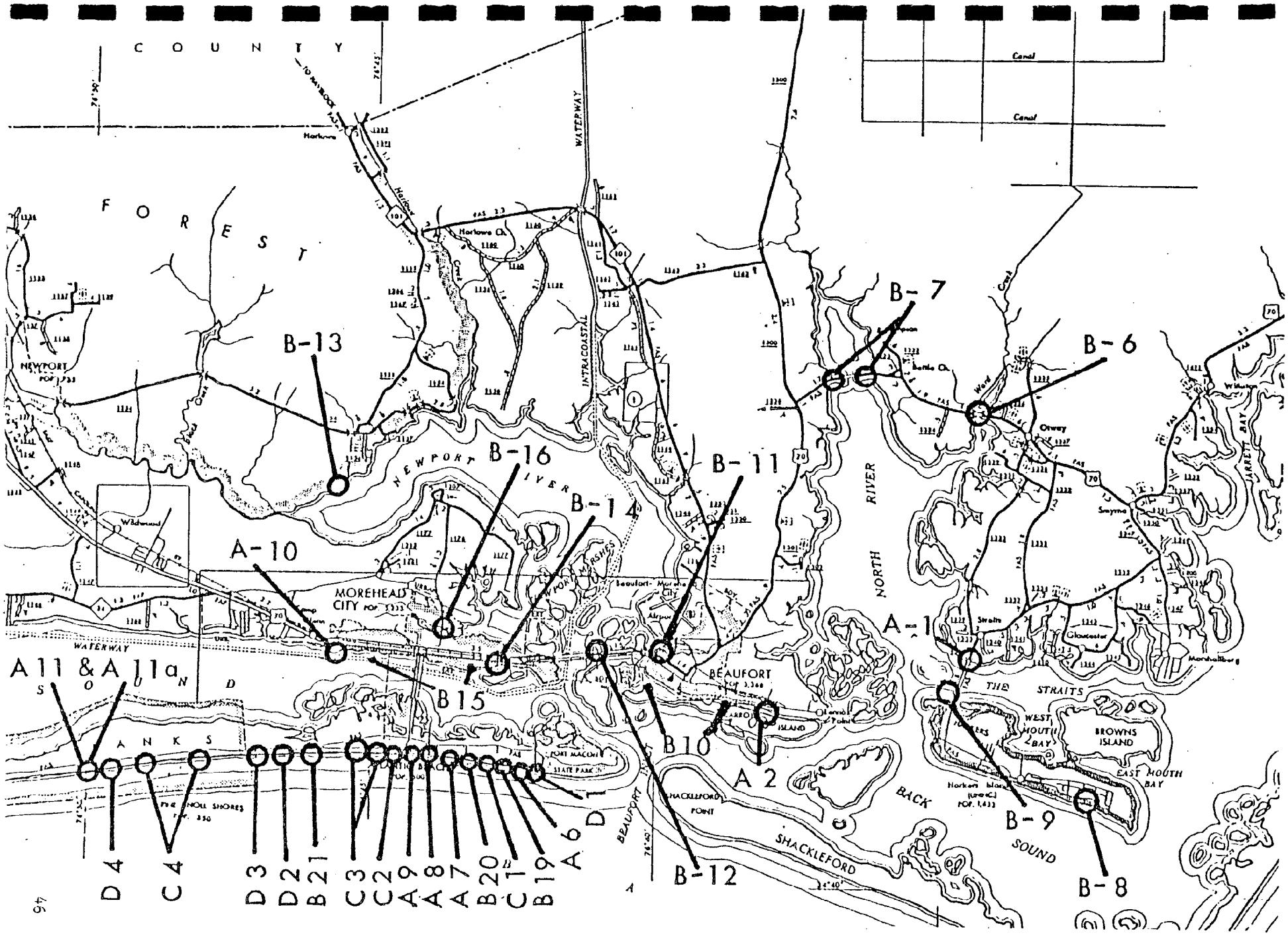
Note: These are not keyed to the maps

	Access Site	Approx. Dry Storage Capacity	Approx. Wet Storage Capacity	Approx. Parking Capacity	# of Launch Ramps	Comments
1	Gaskill's Boat Launch, Cedar Island			5	1	
2	Morris Marina, Atlantic		25	20	1	Road access very poor
3	Willis Brothers Texaco, Atlantic		20	20	2	
4	Cape Lookout Motel and Marina, Harker's Is.	10	30	20	2	Being Closed in Fall 1979 - Park Service
5	Harker's Marina, Harker's Island	10	20	20	2	
6	Calico Jack's Inn and Marina, Harker's Is.	50	70	25	2	Cape Lookout Access
7	Grayson Motel and Marina, Harker's Island		25	20	2	Cape Lookout Access
8	Fishermans Inn Marina and Campground,		20	10	1	Harker's Island
9	Hill's Launching Ramp, South River			5	1	
10	Mason's Motel and Marina, Core Creek			15	1	
11	Airport Marina, Beaufort			20	1	
12	Lanes Marina, Inc., Morehead-Beaufort Cswy.		25			
13	Morehead Sports Marina, " " "	20	20	30	2	
14	Morehead City Yacht Basin		50			
15	Triple Ess Yacht Basin, Atlantic Beach		55	25	2	
16	Anchorage Marina, Inc., Atlantic Beach	80	140	15	1	
17	Fort Macon Marina, Atlantic Beach	160				
18	Atlantic Beach Causeway Marina	20	12	20	2	Rental Boats available
19	Bel-Air Motel, Atlantic Beach	10		5	1	
20	Herb's Tackle Shop, Atlantic Beach			10	1	
21	Crow's Nest Marina, Atlantic Beach	165	12	25	2	
22	70 West Marina, Morehead City	300				
23	The Harbor Master, Morehead City	20	30			
24	Cannon Boat Works, Morehead City		30			
25	Taylor Boat Works, Morehead City		9			
26	Spooners Creek Yacht Harbor, W. of Morehead City	15	90			
27	Newport River Boat Launch, Newport			5	1	
28	Island Harbor Marina, Emerald Isle	15	65	25	1	
29	Swansboro Yacht Basin, E. of Swansboro		40			
30	Dudley's Gulf, E. of Swansboro	165				
31	Stella Boat Launch, Stella			5	1	



NOTE: Maps Keyed to Access Inventory, pp. 41 - 43.

Base Maps from N.C. D.O.T.
Carteret County Highway Map


COUNTY
FOREST
NEWPORT
MOREHEAD CITY
BEAUFORT
WATERWAY
INTRACOASTAL
NEWPORT RIVER
NORTH RIVER
BACK SOUND
SHACKLEFORD
BEAUFORT INLET
THE STRAITS
WEST MOUTH BAY
EAST MOUTH BAY
BROWNS ISLAND
SHACKLEFORD POINT
B-13
B-16
B-14
B-11
B-7
B-6
A-10
A-1
B15
B10
A 2
B-9
B-12
B-8
A11 & A11a
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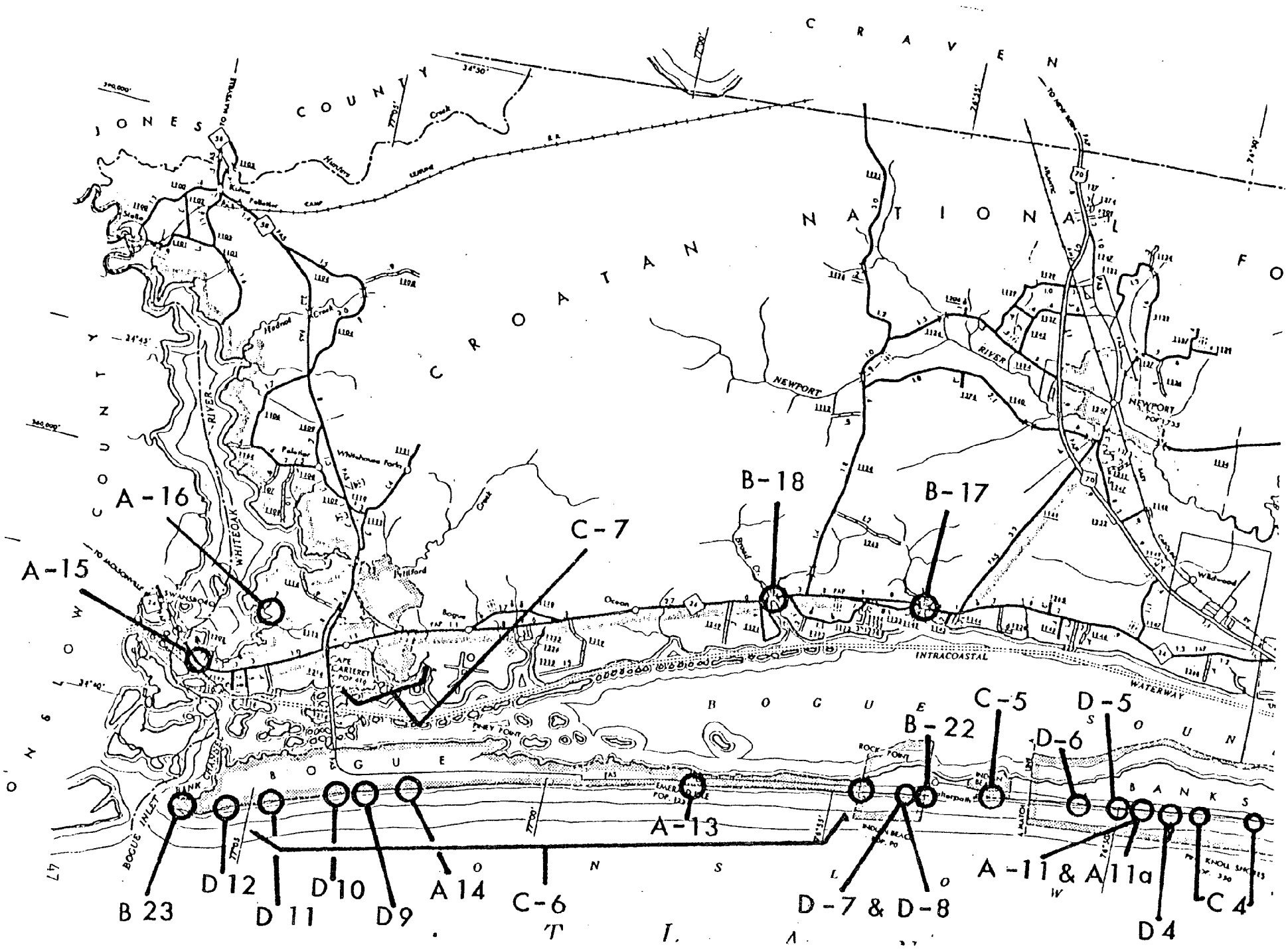


CRAVEN
JONES COUNTY
CROATAN NATIONAL FO
ONSLOW COUNTY
NEWPORT
RIVER
WHITEOAK
Whitehouse Forks
Pelletier
Hadnot Creek
Ocean
Bogue
CAPE CARTERET
INTRACOASTAL
WATERWAY
BOGUE SOUND
BOGUE BANKS
ONSLOW
BOGUE INLET
ROCK POINT
EMERALD ISLE
INDIAN BEACH
Wildwood
A-15
A-16
C-7
B-18
B-17
B-22
C-5
D-5
D-6
A-13
B 23
D 12
D 11
D 10
D 9
A 14
C-6
D-7 & D-8
A-11 & A11a
D 4
C 4

Perceptions of Population Characteristics

The Neuse River Council of Government's Population and Socio-Economic Base Study published in August, 1975, provided general information regarding Carteret County, most of which reflects 1970 conditions:

1. Carteret County Population - 1940 - 18,284; 1950 - 23,059; 1960 - 27,438; 1970 - 31,603; 1973 - 33,808.

2. 57.9% of residents were living in rural areas of the county.

3. The 1970 education level for those 25 and over in the county was 10.9 years (10.7 years in Region P).

4. The median age in 1970 was 28.3 years according to the Bureau of Census.

5. The median family income in the county was $7156, this compared to $6514 in Region P and $7774 statewide. (This is low compared to the U.S. median of $9590.)

6. Carteret County had 16.6 percent of its population living in "poverty families" in 1970; this is below the regional 22.2 percent but a little more than the state average of 16.3 percent.

7. Of all counties in Region P, only Carteret County experienced a net in-migration between 1960 and 1970, with 665 people moving to the county.

8. The 1970 non-white population included 11.1 percent of the total who were black, and .139 percent who were Indians.

R. Curtis Fleshman, Assistant Superintendent of Carteret County Schools, reports 7,398 children in the school system; 1,415 of these are at West Carteret High School and 873 at East Carteret High School. He indicated a gradual reduction in school populations, with most fluctuations affected by situations at Cherry Point Marine Air Station.

Nancy Ward, a County Recreation Supervisor, reports that 15 percent of the county population is 55 years of age or older (est. 7100), that the Recreation Department and schools provide activities for 16 educable mentally handicapped residing in the county, and that county statistics indicate there are 28 persons physically handicapped.

The North Carolina Wildlife Resources Commission reports boat registration in Carteret County as follows:

Year	Number Registered	Comments
1968	2,243	
1970	2,591	Ten horsepower or over: average six percent increase per year 1968 - 1977
1975	3,894	
1976	4,971	All boats with motors (estimated to include 783 boats under ten horsepower).
1977	5,267	Six percent increase.
1978	5,477	Four percent increase.[4]

With the Office of State Planning and budget reporting 37,100 population for the county in 1979, this equates to one boat for every 6.7 persons. Carteret County has less than seven-tenths of one percent of the State population and about 2.8 percent of registered boats in North Carolina.

Local Recreation Interests

The 1969 recreation interest survey by the Carteret County Recreation Commission and the Environmental Studies program of Carteret High Schools reported recreation interest of 744 students of East and West Carteret High Schools. Respondents were asked to name two activities which take up the majority of their leisure time. Team sports were first with 479 selecting this, surfing was second with 200 choices, and sailing was the third ranking activity with 125 identifying this choice.[5]

A 1979 study, again with the assistance of the Environmental Studies Program at West Carteret High School, surveyed 209 students from East and West Carteret High Schools and 15 adults. Respondents were requested to identify the number of times in the last year they had taken part in a water-related recreation in Carteret County. Those recording participation ten or more times or "on occasion" were recorded as having an interest in the respective activities. Three exceptions, charter boat fishing, head boat fishing and excursion boat rides, constituted an interest if five or more times were recorded. An average of thirteen activities per respondent were re-

4 Ms. Helen Gournas, Boat Registration Section, North Carolina Wildlife Resources Commission, May 22, 1979.

5 Carteret County Parks and Recreation Commission, A Plan for Parks and Recreation in Carteret County, n.d. (estimated 1975).

corded as interests as follows:

No. Participating	Percent of Those Surveyed(224)	Water-Based Recreation Interest
148	66	Swimming/sunbathing at the beach
125	56	Hiking/jogging/walking on beach
112	50	Power boating on sound or river
90	40	Visit waterfront areas to watch commercial shipping or look at vessels
79	35	Visit other shoreline area to enjoy the scenery
76	34	Shell collecting/birding/ nature observation on beach
69	31	Clamming/oystering (non-commercial)
68	30	Visit Ft. Macon
56	25	Fishing in sound or river
56	25	Launch boat from public boat ramp
57	25	Power boating on ocean
53	24	Picnic on the beach
43	19	Fishing in ocean, other than above
43	19	Go camping in tent or trailer
39	17	Surfing
39	17	Sailing on the sounds
36	16	Four wheel drive vehicle use in coastal area

35	16	Take excursion boat ride
29	13	Fishing from commercial pier
28	13	Hunt waterfowl or rails
25	11	Visit Core Banks
19	8	Surf fishing
17	8	Head boat fishing
17	8	Sailing on ocean waters
17	37	Water skiing
15	6	Skindiving/SCUBA
15	7	Charter boat fishing
11	5	Jet ski/pedal boat rental
4	2	Rent a boat

One hundred three, 46 percent of those surveyed, reported not owning a recreational boat. Fifty-four percent reported owning boats, with 22 of these (10 percent of those surveyed) having more than one boat. Of the 121 persons who own boats, 40 have a permanent mooring, 48 transport their boat when they want to use it, and 12 have their boat in dry storage until it is used. It is not known how many of the latter are in commercial dry storage warehouses and how many are merely stored on land adjacent to a launching ramp. It is assumed that most of the inboard motor boats shown below and some of the outboard motor boats would be listed in the class of "part time commercial" but are used for family recreation as well.

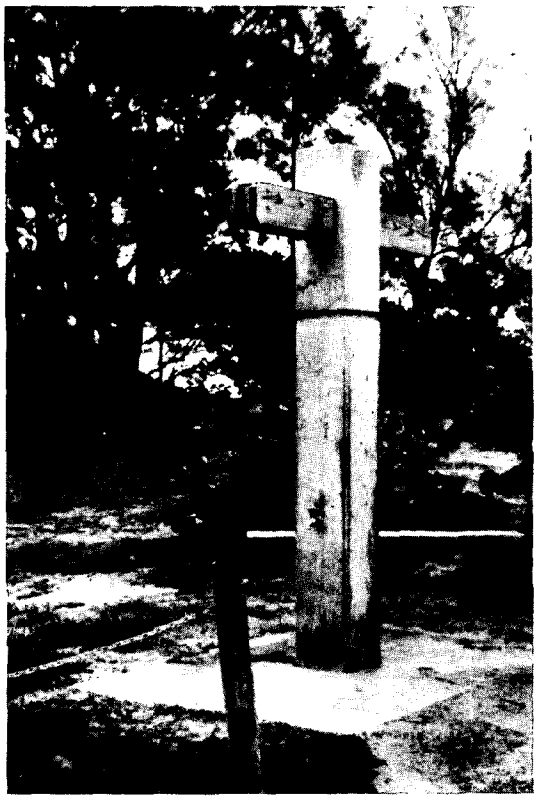
Number of Owners	Percent of Those Surveyed	Type of Boat
68	30	Outboard motor boats
27	12	Inboard motor boats
24	11	Sailboats
15	7	Other (Prams, Rowboats)
9	4	Canoe

Attitudes and Opinions

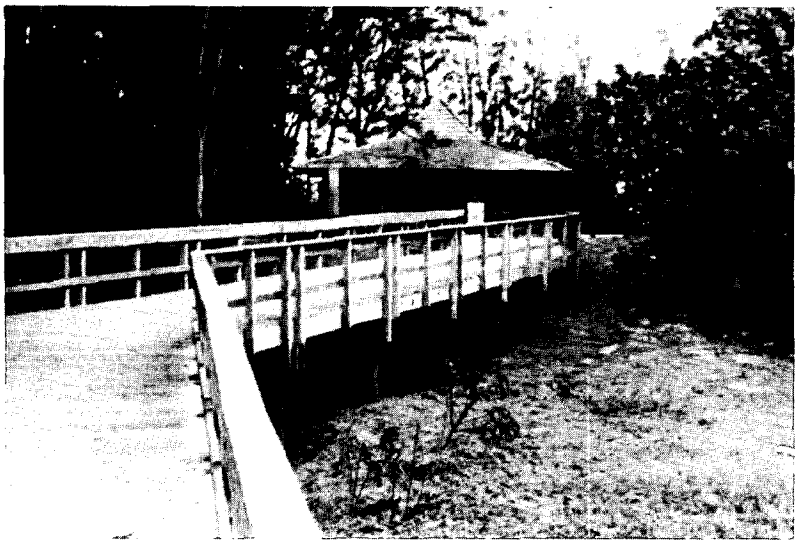
Groups surveyed included (1) those attending the April 10, 1979, pre-study public meeting on access, (2) homerooms at East Carteret High School selected at random, (3) the journalism class and Environmental Studies Program classes at West Carteret High School, (4) other classes at East and West Carteret High Schools selected by the ESP project team. With one exception, all attitudes expressed by the various groups were reasonably consistent. The one exception to those printed below is question "g" in which the adults answering the survey indicated the feeling that drinking water supplies are adequate to accommodate growth. Numbers reported below are percentages of those surveyed; numbers do not add up to 100 percent because those not responding to the question are not shown.

	%Yes	%No	
a.	46	38	Carteret County can accommodate additional growth and use of shorelines.
b.	59	26	Growth of tourism and increased use of ocean and estuarine areas will be of economic benefit to Carteret County.
c.	29	54	It is possible to accommodate more tourists in the County and still retain pleasant living conditions.
d.	62	21	A moderate growth should be promoted, with additional beach and boat access provided, to serve both residents and tourists.
e.	68	16	Growth in tourism in Carteret County will occur even if nothing more is done to promote it.
f.	63	20	Highway transportation into Carteret County should be improved.
g.	37	42	Drinking water supplies are adequate to accommodate growth.
h.	22	60	Waste water treatment facilities in the County are adequate to accommodate growth.
i.	34	49	Present law enforcement systems are adequately handling summer crowds.
j.	54	30	Subdivision developers should provide public access or allow public purchase of access rights to ocean and sound.
k.	71	10	Estuarine and ocean shoreline resources can be damaged by too much use or improper uses.
l.	34	46	Emergency evacuation (the reverse of access) opportunities in the event of severe storms are presently adequate to allow cautious people to obtain safety away from coastal areas.

m.	62	20	State Government should do more to assist in providing beach access.
n.	66	17	County government should do more to assist in providing beach access.
o.	63	21	Local government should do more to assist in providing beach access.
p.	21	49	Providing beach access is a primary function of private enterprise.



Showers at a beach park, Boca Raton, Florida



Delray Beach, Florida, Beach Access

Boca Raton, Florida, Dune Trail

SECTION VI

ANTICIPATED DEMAND

"The pressures on the nation's coastal zone are even more severe than in 1972. Certainly, the need for additional recreational access to the nation's coasts and waters continues to grow."

Robert W. Knecht, "Coastal Zone Management Comes of Age," Practicing Planner, Dec. 1978.

Bogue Point, July 8, 1979

Population Increase Demands

By 1990, local population is anticipated to increase 21 percent over the present 37,100. In addition, it is assumed that maximum interest in popular recreation sites is generated within one-half day's drive of the attraction (Area 1 on map below). A lesser demand exists as distance, time and travel costs increase. It appears that the principal market area for Carteret County is within North Carolina and includes counties outside a 160 mile radius: Alamance, Caswell, Forsyth, Guilford, Randolph, Rockingham and Person Counties (Area 2 on map). Counties principally attracted, because of their proximity, to Dare County and the South coast were not included. Demand in counties reported includes demand for competing coastal areas. An 18 percent increase is projected for these populations by 1990. An estimated 3.6 percent of this group may be found in Carteret County on an average summer weekend.

Population Estimates[1]

Carteret County

	1977	1980	1990
Carteret County	37,100	37,700	44,900
N.C. Counties within 160 miles (1) (above)	1,876,900	1,982.200	2,259,300
N.C. Counties within 160-200 miles (2)	836,400	872,500	944,100
	2,750,400	2,892,400	3,248,300

Carteret County reportedly has 75,000 to 100,000 people within its borders during summer weekends. Somewhere between 38,000 and 60,000 people would be coming from outside Carteret County, with most of these going to locations on Bogue Banks. Morehead City, although seen by some as a home for summer residents, reportedly does not increase its public drinking water consumption during summer months, thus showing a limited number of summer residents. Once here, however, summer residents on Bogue Banks compete with permanent

1 Source: N.C. Division of State Budget and Management.

residents for recreation amenities. Ten thousand additional seasonal residents are expected in the next ten years.[2] Because they have driven some distance, visitors are less likely to be disappointed by heavy traffic or long lines at the boat launch. Demand, generally, is a function of money, leisure time, and availability of the recreation resource. Thus, you could expect to find considerably more participation in coastal recreations by coastal area residents than you would find inland.

Activity Interest

Carteret County residents have an interest in some activities, but this does not result in a demand for the activity because it is still too expensive for many to undertake. Carteret County high school students surveyed in spring 1979, showed desires for some of the more costly recreations: skin diving and scuba, sailing on the sounds and in the ocean, water skiing, charter boat fishing, and four wheel drive vehicle use. Ten percent of the respondents indicated a desire for one or more activities which were "too costly". Ten percent is a low figure if the county continues to have 16 percent of its population at poverty level or below. On the other hand, one boater responded, "I can go all over the place in a boat for $12 a day." Money does not appear to be a problem to many. One fisherman interviewed on Radio Island said, "The gas crisis won't keep me from driving here from Statesville once or twice a year; you only live once."

The quality of the Carteret County environment and the type of local experiences which can be gained in leisure, contribute to a significantly higher demand for recreation activities related to the water than to other recreations.

The Statewide Comprehensive Outdoor Recreation Plan, in its 1978 update did not determine demand as was expected earlier. Demand in this context usually includes estimates of visitor days and specific activities, and proposes standards for land area in order to meet demand. Standards are maintained for different types of recreation areas, these based on local populations without considering needs of tourists or other visitors to the area. Standards which are identified, e.g., "Specialized Outdoor Recreation Area Low" which is that for boat access areas and others, shows a standard of 8 acres per 1000 of existing population to meet the demand created by that population. Reportedly, a multiplier is built into the standard of 8 acres per 1000 population to account for regional demand. Figures compiled in 1976 by the State Division of Parks and Recreation show Carteret County as being in need of 291 acres of "Specialized Outdoor Recreation Areas (low)" and 728 acres of "Specialized Outdoor Recreation Areas (medium)".[3]

The University of Wisconsin, in 1976, studied Great Lakes boaters in the Wisconsin coastal zone. They found the average boater was boating 42 days

2 Coastal Resources Commission, Land Use Plan Carteret County, North Carolina, 1978.

3 Inventory work sheet of N.C. Division of Parks and Recreation (See Appendix B)

per year, with 80 percent of this on the Great Lakes, because of the appeal of large bodies of water.[4] Eighty percent of boaters surveyed in 1975 listed fishing as the primary purpose of their boating, and they found recreational boating increasing at 5.5 percent per year. They predicted a doubling of registered boats in Wisconsin between 1968 and 2020. They found the average boating trip to last 1.67 days and the average spending $41.19 per trip per party. The report showed a Wisconsin demand for more docks, more and cleaner toilets and showers, repair services, boating supplies, food, pump outs, and additional marinas and/or additional slips.

The report seems to parallel situations in North Carolina. The North Carolina Wildlife Resources Commission reports a 10 percent average increase in boating licenses per year, although the last year only 4 percent was experienced. Projecting present Carteret County boat registrations with an increase of only 4 percent per year, 8,431 boats are predicted to be registered within Carteret County in 1989; this is an increase of almost 65 percent over the 5,477 boats registered in 1978. Like most all outdoor recreations, interest in the recreation increases at a faster rate than populations. Boat registration in Carteret County more than doubled in the last ten years. Boat registration has been increasing about 10 percent per year statewide.

In 1962 the U.S. Department of Interior in its Outdoor Recreation for America, indicated that shoreline needs were pressing, that the coast lines will be centers of more population in the future, and yet the present supply of publicly owned shoreline for recreation was not adequate.[5] The report predicted the demand for fishing opportunities to increase by 50 percent by 1976 and 150 percent by the year 2000. Fishing and other water-based recreations are felt to have grown more than the report predicted; yet at the time, the report seemed overly optimistic; it is now seen as having been conservatively drafted.

Tourism Related Demand

"A trend toward increasing income, population and leisure time has resulted in greatly increased demand for recreational and tourist services."[6] This is shown by a congestion of existing parks and rapid growth of private and commercial recreation and tourist facilities. A trend is particularly notable in the development and use of water related sites for recreation homes, commercial recreation facilities and support services. It is proposed here that increasing demands for recreation and tourist facilities in Carteret County, and the attendant competition for space, has reduced the demand to local residents during the tourist season. Unfortunately for the resident who prefers more solitude at the beach, the commitment was made long ago to promote tourism to the area; the economic health of the county is depen-

4 Economic Impact and Needs of Wisconsin's Great Lakes Boaters, Recreation Resources Center, U.W. Extension, Madison, Wisconsin, 1976.

5 Outdoor Recreation Resources Review Commission, Outdoor Recreation for America, Washington, D.C., 1962.

6 W. Cris Lewis & Others, Regional Growth and Water Resource Investment, Lexington Books, Lexington, Massachusetts, 1973, p. 66.

CARTERET COUNTY TRAVEL INCOME

YEAR	NO. OF FIRMS	NO. OF EMPLOYEES	TOTAL TRAVEL EXPENDITURES
1963	185	690	$ 4,329,000.00
1964	202	615	$ 4,506,000.00
1965	Not Available	Not Available	$ 4,682,000.00
1966	N.A.	N.A.	$ 5,018,000.00
1967	N.A.	N.A.	$ 5,780,000.00
1968	239	791	$ 5,815,000.00
1969	279	818	$ 6,317,000.00
1970	N.A.	N.A.	$ 7,020,000.00
1971	N.A.	N.A.	$ 7,390,000.00
1972	N.A.	N.A.	$ 8,050,000.00
1973	N.A.	N.A.	$ 8,607,000.00
1974	N.A.	N.A.	$ 9,117,000.00
1975	291	1,462	$ 9,714,000.00
1976	296	1,469	$11,007,000.00
1977	298	1,556	$15,200,000.00
1978	305	1,754	$16,937,000.00

SOURCE: Dr. Lewis Copeland
University of Tennessee

Reprinted from Carteret County, North Carolina, Statistical Abstract.

dent upon it continuing. The recession of 1973 did not apparently have a materially adverse effect on the county, with about $1,000,000 increase in business shown that year.[7] Attendance at Ft. Macon State Park did go down considerably, yet County retail income increased. In spite of the threat of impending gasoline shortages, one major campground owner on Bogue Banks reports a 10 percent increase in gross revenue during 1979, at the same time with decreasing numbers of out of state visitors.

Demand for access to the new national seashore will have to be accommodated by the National Park Service and is not part of this study. Access will be through Carteret County, however, and visitors attracted to the seashore will discover natural features that attracted others here before them. It is likely that visitors to the seashore will generate income to the county beyond that per capita spending generated by visitors to Ft. Macon State Park. Low estimates of attendance show 500 persons per day and 200 overnight in the National Seashore. The highest level of use shown was in the neighborhood of 5,000 visitors per day with 1,100 overnight. It is expected that demand, as a spin-off from Cape Lookout National Seashore use, will include that for harbor tours, cultural attractions, access to places like Bird Shoals and Carrot Island and visual access to shipping and scenic attractions.

In the attempt to respond to the market, provision of facilities and services will generate additional crowded conditions. All major investments will induce additional growth. Construction of the Highway 70 New Bern By-pass has made it easier for some to travel to the coast; additional demand was created. While a third bridge will potentially provide easier access and evacuation routes for those on Bogue Banks, it will have the effect of generating additional traffic to the island. The same is true should a convention center come on the scene. People will be attracted to the county; they will have leisure time, mobility, and money to spend; and existing resources for recreation will become more crowded than they seem now. Interest on the part of local residents to take part in their favorite water based recreations will be further reduced and constricted.

People and Water

"Competition for shoreline use. . .has put a premium on availability of bathing beaches, boating facilities and other facilities for marine recreation. Along with decreased opportunities for expanding the number and size of areas for recreation, there has been a continuing increase in the demand for existing sites. The net effect has been overcrowding and the construction of parking lots, bathhouses, boardwalks, marinas, and other facilities that frequently detract from the natural character of the coastal landscape." [8]

Carls reported on some recreation studies which indicated that a preferred alternative to crowding is not necessarily the absence of all people. [9]

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7 Carteret County Economic Development Council, Carteret County, North Carolina Statistical Abstract, Morehead City, N.C., n.d.

8 Carls, Dr. E. Glenn, "Recreational Use of the Coastal Zone: Effects of Crowding and Development", Visual Quality and the Coastal Zone, Proceedings of a Conference Workshop, SUNY Syracuse, New York, 1976.

9 Ibid.

We know that teenagers prefer places where their peers are located, such as the Atlantic Beach Circle and the public beach there. Morehead City and Beaufort residents have indicated on several occasions they go to Shackleford Banks for their outing, "to get away from people", and they are happy to find many of their neighbors also over there. July 4, 1979, a mid-week holiday, reportedly found Shackelford more crowded than ever before. Radio Island provides the same sort of a place for those who do not have access to a boat. As crowding in these places increase, they will also become less attractive to local residents.[10]

Carls also identifies the desirability of water as a force which increases recreational demand. A campground for instance, is more heavily used when campers have a view of water nearby. Carls found that industrial or commercial development which did not contribute to the recreation amenities of an area, had a major effect in reducing preference and presumably user satisfaction. Developments which are rustic and seen as desirable backdrops to the recreation site are acceptable. Forty percent of those surveyed in the 1979 Coastal Access Survey indicated they visit waterfront areas to watch commercial shipping or look at vessels. In this case, the industrial complex relating to the State Port is an interesting water related feature. As an aside, it is reported that some ship captains allow visitors to board their vessels and look around. Some waterfront buildings in Carteret County are attractions and in themselves generate a demand for a recreational use. The boat building places, the fish houses, the "clam shucking places" and other structures which relate to the culture of the area are interesting to those who are not actively part of commercial fishing and boat building operations. In general, however, structures on the waterfront are seen generally to be unattractive to coastal visitors and serve to reduce demand for use of adjacent areas; the shore is not available.

Demand Assumptions

The interplay of many variables and forces on a given urbanizing area makes demand assessment extremely difficult. Interest in water related recreations has been increasing at least twice as fast as populations are growing. Population in the market area of Carteret County is anticipated to increase 18 percent by 1990, and predicted to increase 20 percent within the county.

Dr. Leon Abbas, Marine Recreation Economist with UNC Seagrant, has indicated in personal communication, that marina boat storage facilities in the county are near capacity now, and will be at capacity within a year. Campgrounds are at capacity on busy weekends, motels are full. Boat launch areas are over capacity on most weekends and many area residents stay home to avoid the crowds of people trying to get to beach and waterfront areas.

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10 Op. cit.

If only a linear projection were made, with recreation uses increasing only as fast as population, by 1990, ocean beach and estuarine recreation uses would increase by 20 percent over present levels. 1973 comprehensive state plans for recreation, after watching 1965 federal projections fall far short of actual increases, predicted annual increases in water-based recreations averaging 8.66 percent. If this insight is correct, Carteret County may expect increases in use exceeding the rate of population growth. Carteret County travel income is reported at an average increase of 13.7 percent per year.[11]

However, retardants to growth are on the scene in the form of inflation, rising costs of living, and decreasing supplies of automobile fuels. Increases in crowded conditions and reduced environmental quality also slow rates of increase in recreation uses. The peak may never be reached in Carteret County, for in relative terms, it is still undeveloped. It is quite distant from heavy concentrations of people, and there are significant numbers of local people who would like to apply brakes to the growth process. All will have the effect of reducing demand for recreation in the county.

Traditional standards for public swimming propose that three percent of local populations be accommodated at one time in public swimming pools. In coastal areas with attractive ocean and estuarine beaches, local populations seek access in disproportionate numbers, although not limited to swimming. It is estimated that 20 percent of Carteret County residents are taking part in water-related recreations at peak times. Up to 50 percent participation among area visitors requires establishment of State waterfront park standards which are considerably higher than those presently used. Regional demand cannot be met with previous standards as goals.

Triple Ess Pier, July 8, 1979

11 Dr. Lewis Copeland, University of Tennessee as reported in Carteret County Economic Development Council, Carteret County, North Carolina, Statistical Abstract, Morehead City, N.C., n.d. (included as Table p.)

Patterns of Demand for Selected Outdoor Recreation Activities in the U.S. -- 1960*

Activity and Percent Participating (Summer '60)	Days per Participant (Summer '60)	Days per Person (Summer '60)	Days per Person (Annual '60)
Physically Active Recreation:			
Playing Outdoor Games and Sports (30)	12.3	3.63	12.71
Bicycling (9)	19.4	1.75	5.17
Horseback Riding (6)	7.5	.42	1.25
Water Sports:			
Swimming (45)	11.5	5.15	6.47
Canoeing (2)	3.0	.07	.12
Sailing (2)	3.0	.05	.11
Other Boating (22)	5.5	1.22	1.95
Water Skiing (6)	5.1	.30	.41
Fishing (29)	6.8	1.99	4.19
Backwoods Recreation:			
Camping (8)	5.7	.46	.86
Hiking (6)	4.4	.26	.42
Mountain Climbing (1)	3.7	.04	.09
Hunting (3)	5.6	.19	1.86
Passive Outdoor Pursuits:			
Picnicking (53)	4.0	2.14	3.53
Walking for Pleasure (33)	13.1	4.34	17.93
Driving for Pleasure (52)	12.7	6.68	20.73
Sightseeing (42)	5.2	2.20	5.91
Attending Outdoor Sports Events (24)	5.5	1.32	3.75
Nature Walks (14)	5.2	.75	2.07
Attending Outdoor Concerts (9)	2.4	.21	.39
Miscellaneous (5)	8.4	.40	.57

*Rates shown are for persons twelve years old and over.

Source: U.S. Outdoor Recreation Resources Review Commission, National Recreation Survey, Study Report No. 19, Washington, D. C. (1962).

Reprinted from Coastal Recreation Handbook: A Handbook for Planners and Managers, U.S. Dept. of Commerce, NOAA, OCZM, 1976.

(44-0.00)

ADULT ACTIVITY DAYS BY SELECTED ACTIVITY (In North Carolina)

Activity	1971	1976	1986	2020	1971-2020 % Change
Hunting	3,275,000	3,363,300	3,397,400	3,672,200	12.1
Fishing	5,795,000	6,801,000	9,005,700	21,893,200	277.8
Swimming Pool	6,127,000	7,530,200	10,767,300	30,636,400	400.0
Swimming Other	7,017,000	8,155,300	10,605,600	24,621,100	250.9
Canoeing Exercise	558,000	625,000	790,900	1,713,700	207.1
Canoeing View Scenery	226,000	267,900	359,500	909,300	302.3
Hiking-Pack	423,000	580,400	952,700	3,392,400	702.0
Nature Walking	6,428,000	6,875,400	7,603,600	10,317,100	60.5
Bird Watching	5,131,000	5,223,500	5,123,000	4,581,500	-10.8
Picnicking	9,024,000	9,985,800	11,863,800	20,913,900	131.8
Camping	2,837,000	3,556,800	5,266,800	15,947,700	462.1
Biking	2,505,000	3,155,000	4,673,600	14,164,100	465.4
Rock Hunting	770,000	952,400	1,384,100	3,812,100	395.1
Sailing	483,000	654,800	1,078,500	3,812,100	689.2
Power Boating	2,777,000	3,378,200	4,799,500	13,499,600	386.1
Golfing	4,376,000	5,104,500	6,722,800	16,017,700	226.0
Tennis	1,901,000	2,232,200	3,181,700	8,988,100	372.8
Play Outdoor Games	8,073,000	8,378,500	8,556,300	8,708,300	7.9
View Outdoor Games	8,028,000	9,048,200	11,144,800	22,103,000	175.3
Water Skiing	1,524,000	1,949,500	2,983,900	9,547,700	526.5
Snow Skiing	392,000	520,900	862,800	2,762,900	604.8
Ice Skating	573,000	699,400	970,700	2,553,000	345.5
Trap Shooting	241,000	297,600	467,400	1,503,800	524.0
Archery	483,000	506,000	503,300	454,700	-5.9
Target Shooting	1,132,000	1,250,100	1,474,000	2,518,100	122.4
Horseback Riding	1,328,000	1,547,700	2,049,200	4,966,200	274.0
Wildlife Photo	513,000	670,000	1,060,600	3,497,300	581.7
Mountain Climb	1,147,000	1,235,200	1,384,100	1,923,500	67.7
Show Horses Ring	453,000	476,200	503,300	559,600	23.5
Pleasure Driving	27,947,000	29,287,600	30,828,000	35,252,900	26.1
Sightseeing	16,373,000	17,769,000	20,276,400	31,091,100	89.9
Outdoor Concert Drama	785,000	997,100	1,474,000	4,441,600	465.8
Historic	2,912,000	3,452,600	4,691,600	12,030,700	313.1
ultural	951,000	1,145,900	1,635,800	4,651,400	389.1
Zoo	1,026,000	1,145,900	1,348,200	2,273,300	121.6
Totals	133,531,000	148,819,000	179,755,000	349,731,000	161.9

Reprinted from 1973 N.C. Statewide Comprehensive Outdoor Recreation Plan.

SECTION VII

ANALYSIS OF NEEDS

". . .What publicly owned access is available in the several beach cities? We do not have this information in detail. We know there is a public beach at Atlantic Beach, Ocean Isle, and Several other cities. The total amount and distribution in each city is not known. If it is one small public beach (100 feet) along a ten mile beach, it would not represent balanced access."

"Preliminary Report on Beach Access Status, North Carolina," North Carolina Department of Natural and Economic Resources, Recreation Section, December, 1975.

One of the Public Easements at Club Colony

Relationship of Supply to Demand

Demand, minus supply, equals need. The supply of access opportunities is identified in Section V; additional commercial and informal access points exist along developed shoreline areas and causeways; principle water access points available to the public are shown. Demand is not as easy to identify. State planning agencies do not have recent demand information; Carteret County did not have financial resources to sample preferences in the area of influence. Unfortunately, samples of adult users obtained Memorial Day weekend were found to be invalid and were not used in the study. Information was limited to that obtained from local people, primarily high school students (highest participants in water-based recreation) with results showing similar preferences to a study of ten years earlier. Some of the surveys were conducted with the assistance of the Environmental Studies Program of West Carteret High School. The study was very population-specific, but acceptable, for primary concern in the study was to seek accommodation of local interest in recreation access to coastal waters.

If there were no competing demands, from visitors to the area in this case, local preferences and estimates of future use would be easier to compile. Non-resident participation acts as a competing demand and affects participation rates by local residents. Both groups, therefore, have to be accommodated.

In spite of State estimates of need shown in Appendix B as excessive supply, it is apparent without any study that beach and boating access points are overwhelmed on busy days and grossly inadequate. Severe restrictions on travel will reduce demand relating to non-residents and will increase demand for local people. The July 4th crowd at Shackelford Banks, the Morehead-Beaufort beach for those with boats, was the largest seen there by Neal Lewis, County Recreation Director. The Beaufort boat ramp was the busiest of any day this year. It is estimated that most of the users were local people. July 4th was mid-week, gasoline supplies were questionable, the weather was pleasant, predictions of use were down, and local boaters turned out.

Demand is also increased by increases in supply of facilities. The addition of harbor tour service created a demand that quickly generated a competitor, in response to a growing market. The addition of a major ocean beach with support facilities and businesses will generate uses beyond present levels.

Access Standards

Except when in public ownership or in long term publicly held leases, access cannot be expected to survive in a free market system unless access use is worth more to the owner than other uses.

Recreation planners have, for many years, used the general standard that ten percent of all shoreline within municipal jurisdictions be secured for public use. This standard is not applicable when considering large coastal counties such as Carteret, particularly when the standard was intended to serve local interests. The addition of regional, state and national needs, such as that present when considering coastal shorelines, creates additional demand beyond the responsibility of the county to respond in supplying needs. Ten percent of all shoreline in incorporated areas should be in public ownership regardless of regional or larger needs.

Ocean beaches are more significant for recreation than any other shoreline. As a result, the standard, as a long term goal, should be to secure public ownership of a strip of land paralleling the entire coast to assure legal access at times of high tides. "Private property rights must be protected and respected, but the rights of the public to use and enjoy publicly owned resources must not be restricted by lack of access." [1]

Perpendicular public access points should be located where the greatest accessibility is provided the general public and where the least impact is felt by neighboring residents.

Non-water dependent facilities should be located, whenever possible, away from shoreline areas. This would include land based recreation facilities and commercial support services. Access routes, bikeways or bus routes should connect these with shoreline areas. Priority assigned water dependent developments should be high. Opportunity for coastal recreation should not be blocked by other development except for that related to agriculture and water-dependent industry. Development should not be permitted to interfere with traditional public uses of shorelines.

It is proposed that Carteret County adopt a standard, seeking the long term goal of four acres per thousand current and future populations, for publicly owned and/or operated water access areas and waterfront parks. This standard should be applied to numbers of seasonal residents as well as those enumerated by the U.S. Census. It does not include state and federal parks; nor acreage in commercial uses however similar, because of their lack of permanence.

Of the four acres per thousand, the following subordinate units are proposed:

Boat access areas and marinas:	One-half acre per thousand population
Ocean waterfront parks:	Two acres per thousand
Estuarine waterfront parks:	One acre per thousand
Visual enhancement areas:	One-half acre per thousand

1 Outdoor Recreation Resources Review Commission, Outdoor Recreation for America, GPO, Washington, D.C., 1962.

Application of Standards to County Resources

	1979	1990
Permanent residents	37,100	44,900
Seasonal residents [2]	25,630	37,527
	62,730	84,427
Four acres per thousand standard	251 acres	329 acres
Estimate of existing acreage needed to meet the standard	201 acres	279 acres

Direct concern of county government is to administer unincorporated areas within its jurisdiction. Although county park and recreation areas may be located within corporate limits, functions of these properties are to serve larger than local needs. With a major concern of this study oriented to problems of access on Bogue Banks, it is thus paradoxical that in the future there may be no unincorporated land on the island. The County, if it undertook broad planning responsibilities, would be able to assume only an influencing posture in serving county residents. Urban sprawl characterizes development on most of the Banks; with some development, by design, intended to provide beach access only to residents. Inflated land values have been precipitated by demand for water related second homes and promotion of the area's assets. All contribute to a very short supply of land available for public open space.

The same pattern exists on the mainland side of the county's southern sounds. Should areas down east expand, there will be a greater need for public open space in the population centers; this includes the need for water related parks as well as traditional community parks. The existence of farms and forests sometimes instills a false sense of adequacy regarding available open spaces, particularly in urbanizing areas. The existence of open space and public recreation areas assists in maintaining both neighborhood and community identity and property values. In Carteret County, as it grows in population, water based public open space may come to be the major (if not the only) access point for traditional uses of marsh, shoreline and water. In 1979, major access is provided using commercial and private property.

Public access facilities are in short supply. Most of the existing sites are of poor quality and do not provide the type of experience desired. The principal exception to this is the Beaufort waterfront, but even here, traditional traffic circulation subtracts from the visual experience during busy times. Pine Knoll Shores, although well designed with good water access, cannot be considered as providing public access to the water. This and other development has interfered with traditional public use of public lands and waters.

2 Coastal Resources Commission, Land Use Plan, Carteret County, North Carolina, 1978.

With the exception of the Atlantic Beach circle shoreline, the small park at 9th and Shepard Streets in Morehead City, and waterfront access in Beaufort, no fully public access is administered by local government in Carteret County. It is anticipated that the county may begin operating at least a portion of the Airport Marina in the near future. All other local public access sites are administered by either State or federal agencies. Minimum standards for public access opportunities are not being met.

If Bogue Banks were undeveloped, it would be proposed that all development be landward of a beach road, with the road located no closer than 300 feet from the high tide line, this to assure public access to the public beach. An acquisition standard, then, would be to acquire the 300 foot parallel strip. Although desirable from the point of view of providing ocean access to maximum numbers, as a public service goal, it is unrealistic to assume this can be accomplished in Carteret County.

What are the opportunities remaining? It would appear important that flood prone ocean hazard areas, particularly inlet lands and overwash areas, be in public ownership. To the extent that the Federal Flood Insurance Program, following hurricane damage, will assist; use of state and federal grant monies can be matched with local funds, and donations can be generated, opportunity purchases of shoreline lands should be consummated. The same action is proposed for flood prone areas on the mainland, in and adjacent to populated areas.

Ideally, utilization should be secured of all publicly owned land within the county adjacent to water resources, which appear to be in excess of present need by the administering agency, if those lands can be utilized for public access purposes. This includes local, county, state and federal government properties of every description, whether on Radio Island, along the Cedar Island highway, or wherever located. Several opportunities exist; more will become available in the future.

Municipal governments should seek to accommodate local needs, with county assistance. For example, if Calico Creek is dredged, in Morehead City, creating potential access for the neighborhood around the 20th Street Bridge, assistance should be provided by the county in developing public water access opportunities. County assistance should not be provided where access will be limited to municipal residents only.

Development and maintenance of public access areas should at least meet the standard of adjacent properties, preferably setting the example in aesthetic considerations.

Capacity for Expanding Present Facilities

Concerns of county government for expansion potential are limited to that of the Airport Marina. Expansion is possible and is treated in Recommendation 15. Other limited potential expansions are also discussed in the recommendations, but county action would be limited to cooperative and influencing actions or grant support. Other recommendations propose acquisition of new facilities.

Expansion of commercial facilities will respond to the market and will accommodate non-residents primarily and those more affluent.

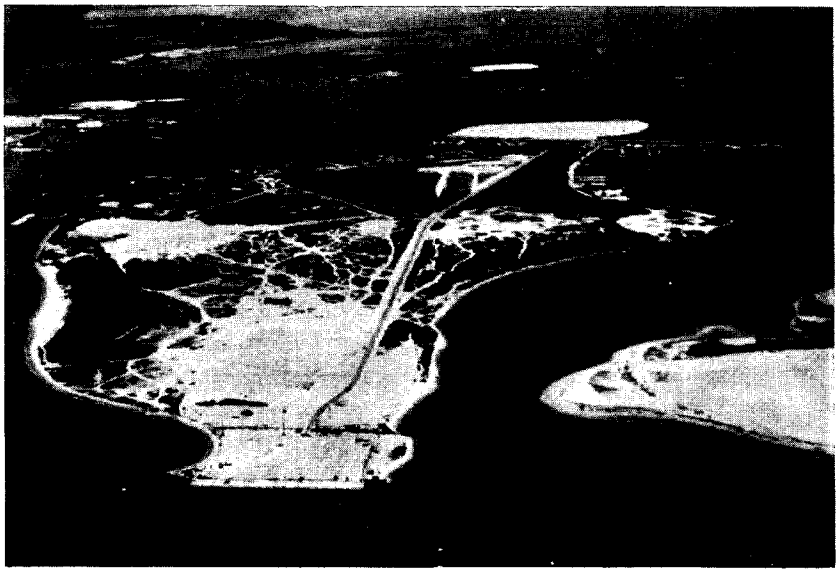
Waterfront Park Trail, Boca Raton, Florida

SECTION VIII

FACTORS INFLUENCING ACCESS FACILITIES

"While the nation's beaches remain a locus for swimming, fishing, sunbathing, and fraternizing, burgeoning use pressures and changing public preferences have spawned growing recognition of less tangible recreation-related values, including esthetic enjoyment, ecological interest, historical and cultural enrichment and spiritual renewal."

R.B. Ditton and M. Stephens, Coastal Recreation: A Handbook for Planners and Managers, U.S. Dept. of Commerce, NOAA, OCZM, Washington, D.C., Jan. 1976.



Radio Island

Space Requirements

Travel distance to recreation facilities, and travel time relationships, determines the frequency of participation as much as any variable. Those who live close to a water access point are likely to use it more than those who live further away. As mobility has increased, people have been willing to travel a greater distance for recreation experiences. In the not too distant past, popular travel spots were located fairly close to homes of the visitors. The more significant attractions, however, serve to induce demand from more distant places, but may be once-in-a-lifetime trips for many of the visitors. Carteret County residents need accommodations for very frequent access to coastal waters.

Facilities attract users in direct proportion to their size. Generally, the larger the investment, the larger the demand. Opportunity to participate in ten different recreations at one general location will generate more traffic than ten separate locations would induce.

Space between different activity locations also influences use of facilities. It appears, for example, that surfing and fishing pier use is more a problem of one invading another's "space" than a direct conflict between users. It is reported that a "surfing and fishing pier" in Cocoa Beach, Florida, is very popular. "Surfers: Beware of Fishermen," and "Fisherman: Beware of Surfers" are signs found at the entrance to the pier. A compatible existence results; pier owners probably have more revenue than those who restrict use to fishing only. For safety reasons, however, there is need to separate some uses. Power boating should be prohibited in swimming areas. Sailboats need more room for maneuvering than motor boats; water surface zoning is sometimes desirable for these and other reasons.

Socio-economic Factors

It is found, generally, that people in middle income brackets participate more using public recreation facilities than those above or below in income. Those in upper income groups provide more of their own resources, and are more likely to object to sharing space with lower income groups. The nicest residential development on Bogue Banks is also the least tolerant of other users. The absence of discretionary dollars by a family limits its activity in leisure and its demand for costly recreation activity. In a study related to the 1973 SCORP, the State learned that only 5.2 percent of those in the under $4,000 income participate in power boating; and that participation rates increased to 23.3 percent in the $10,000 and over income group. Age, income, race, and proximity of recreation facilities affect participation rates. There is a need to limit financial barriers in the provision of water access.

User characteristics and attitudes also influence use of access areas. Some Carteret County residents refrain from swimming along ocean beaches

because of their presumed danger of sharks. Many residents avoid places where non-residents are likely to congregate. In general, people enjoy most those leisure activities which place them with others they see most like themselves. In all groups there are differences in values, perceptions and preferences. It is important that there be a respect for these differences.

Recreation Trends

> A Gallup Poll has found that the number of Americans who exercise daily has risen from 24 percent to 47 percent in 16 years. An estimated 19 million jog and 25 million are regular cyclists.
>
> Attendance at National Parks, recreation areas, and seashores rose from about 31 million in 1960 to 96 million in 1975. Attendance at State parks nearly doubled between 1962 and 1975, from 285 million to 566 million. (The figures include many repeat visits by the same individuals.)
>
> A. C. Nielsen says swimming is now the most popular sport for Americans, with 104 million swimming at least occasionally in 1976. Fishing also ranked high, with 64 million active participants. The number of women who fish increased from 9 million in 1970 to 21 million in 1976. There were also 58 million campers as well as 43 million involved in boating and sailing.[1]

It is likely that percentages of participation related to Carteret County would show more spectacular increases than that above. A trend associated with increases in use identifies a related decrease in environmental quality. Americans have always been resilient, however, with "necessity the mother of invention". Concern for environmental quality has increased with the recognition that opportunities for working and living and playing may be reduced or lost for lack of resource protection. Governments at all levels have reacted and a great many volunteer organizations have become more concerned.

Carteret County has adopted some excellent ordinances regarding land preservation; it appears they are acceptable to residents and will be enforced. Waste water treatment planning has been proceeding for some time, and other environment-related studies have either been completed or are still being compiled.

Trends identified by the Outdoor Recreation Resources Review Commission in 1962 appear just as applicable today with the possible exception that mobility for the less affluent may be holding firm:

1. Urbanization can be expected to increase.

2. Mobility can be expected to increase.

3. Population can be expected to increase.

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1 Douglas M. Costle, "Recreation, Jobs, and Health," EPA Journal, June 1979.

4. If sufficient opportunities are available, present tastes and preferences for recreation in the short run can be expected to continue.

5. Life expectancy of persons can be expected to increase.

6. Leisure time can be expected to increase.

7. Real income can be expected to increase.[2]

It is also perceived that participation rates in recreation will continue to increase more rapidly than population increases. Federal government agencies have, in recent years, participated rather generously in funding local leisure services; this is expected to continue. 201 waste water treatment facilities programs and the Coastal Management Program have recently required recreation concerns to be added in apparent desire to secure maximum benefit from public investments.

New recreation possibilities come on the scene regularly. "Wind surfing becomes newest outdoor sport," was the headline of an article in the July 1, 1979, Raleigh News and Observer. The article reported popularity of the sport in New York, Florida, Los Angeles and Wisconsin locations, with competition in the latter. It would appear that the sounds offer great possibilities for this trend to spread to Carteret County. Interests in many recreations are cyclical, some transitory. Water based recreations, however, tend to increase in popularity. It is anticipated that shortages of gasoline, or high prices, will tend to give rise to increased popularity of sailing and non-comsumptive recreations.

Tourism and Growth Promotion

The report includes an earlier section on demand related to tourism, which should be referred to. Tourism promotion in Carteret County has had the effect of limiting, to some extent, the provision of public access facilities. Principal access opportunities are provided by commercial businesses, and reduces some, the need for regional facilities. It does not relieve the need for access services to local residents, most of whom are less affluent than visitors. It is important that tourism and growth promotion not proceed at a rate faster than the public infrastructure of waste treatment, water supply and transportation facilities can accommodate.

Carrying Capacity of Related Systems

As indicated, Carteret County cannot continue to handle increasing numbers of people without coming to the point that environmental resources will be degraded and attractiveness reduced. There are substantial problems that have affected life in other coastal areas because of lack of attention and

2 ORRRC, Outdoor Recreation for America, Washington, D.C., 1962.

investment applied to these concerns. "The continued use of septic tanks in large developments will result in contamination of surficial sands and adjacent water areas. This would close the rivers and sounds to recreation and fishing and would damage the economy substantially."[3]

The Convention Center report indicates that motels, restaurants and other services are operating at capacity during the peak periods.[4] Leon Abbas, Sea Grant economist has indicated in personal communication that marina facilities in the county will be at capacity in 1980. Most of the campgrounds appeared to be at or near capacity during Easter weekend and early summer periods in 1979. The Convention Center report showed 1764 motel rooms and 1023 campground spaces.

"Carrying capacity" has been defined as "the ability of something to absorb outside influences and still retain its essence."[5] Elements of carrying capacity for recreation uses involve physical carrying capacity or the limit to which use may be made without damaging physical characteristics, the erosion of dunes for instance. Difficult to measure, use in fragile dune environments needs to be restrained and managed in order to retain desirable features.

James Brown of the N.C. Division of Marine Fisheries, in personal communication, reports that most recreation use of estuarine waters will not endanger the condition of fisheries habitat. Carrying capacities of surface uses are not of major concern to fisheries biologists. Discharge of septic holding tanks from boats is of concern and is damaging, according to Brown.

Brown's comments refer to ecological carrying capacity, the effect of users on habitats, food chains and species behavior in marine environments. Too much use, as indicated elsewhere in this report, would likely damage habitat of colony birds on coastal islands and spoil banks. Development of Bogue Banks will seriously reduce populations of non-game species of animals and of maritime forest habitat.

Psychological carrying capacity is the "effect of the environment to yield satisfying experience to others,"[6] the effect of crowding discussed earlier. The over capacity of boat launching ramps takes access opportunities away from those unwilling to wait. While ocean beaches, the area seaward of the high tide line, can withstand any non-structural uses, the carrying capacity is limited by the number of people who occupy a given space. The Atlantic Beach area is the only place where this may becoming a problem. At present, the crowdedness is an attractive feature to young people.

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3 Henry vonOesen and Associates, Comprehensive Water and Sewer Planning Report, Carteret County, N.C., 1970.

4 East Carolina University Regional Development Institute, Feasibility of Constructing a Convention Center, Carteret County, N.C., Nov. 1972.

5 Joseph W. Penfold, et al, National Parks for the Future, The Conservation Foundation, Washington, D.C., 1972, p. 35.

6 Ibid.

Local zoning codes, county ordinances and CAMA permit process and other regulations identify limitations and protection needed to treat environmental resources compatibly.

Regulation of Population and Use Density

Land use patterns have been determined by developers in the county, and unless resubdivision occurs, ultimate populations have already been established. Indian Beach and Atlantic Beach would seem crowded by many standards. If desired, the only potential for reduced numbers of future populations per square mile exist in unincorporated areas; this is very limited on Bogue Banks. Some areas of beach are not crowded. If an area can hold more people, additional parking will generate it. Parking restrictions will reduce use. In years past, Fort Macon State Park has had a practice of limiting use by restricting swimmers within markers; management needs were satisfied; users were not. Supervised areas are available, but swimming and surfing are now allowed in other areas to those wishing that freedom.

Management Problems

The Fort Macon situation is a management problem, these more intense in areas of intensive use. Leadership or supervision increases liability and generally restricts freedom. Some areas need to be supervised to provide the option to those who wish this type of access. When supervised areas are provided, well-trained lifeguards are essential, and they must be clearly identified. To avoid user problems, some ocean beaches fly a green flag from lifeguard platforms to show the beach is open to swimming. The provision of supervised beaches implies to users that a safe beach exists. It is therefore important that both underwater and shoreline hazards be identified and removed. Most of the more populated beaches around the country use beach cleaning machines. It is possible that such machines will be needed the whole length of Bogue Banks when population levels increase. It would seem most economical that a coordinated, cooperative program be established at that time, perhaps managed by the county.

Management of off-road vehicles appears to be a growing need. The County Sheriff's Department reportedly will shortly have a vehicle which will operationalize this and accommodate other public safety needs, in unincorporated areas. Vehicles should be prohibited from the beach during high visitation, including Easter and Memorial Day weekends. Commercial fishermen and sports fishermen driving on beaches should be encouraged to use approved access places. Only the barest minimum of these ramps should be provided to avoid worse problems in managing the land. Both the state road at Salter Path and the Emerald Isle ORV access points show serious erosion problems which could be accentuated by storm tides.

Clamming is popular as a recreation. A concerted attempt should be made to eliminate "clam kicking" in order to perpetuate this resource for both recreational and commercial fishing.

Identification of access points appears desirable. A sign for this purpose is proposed, for primary use on public areas. Should landowners or commercial establishments desire to denote free access across their property, use of the sign should be allowed on an annual basis. Landowners allowing recreational use of their lands are immune from tort liability by State Statute (See Section II, Responsibility for Providing Access).

Recreation access, as part of the total system of recreation in the county, including public parks, recreation programs, commercial recreation and informal family and private recreation, should be included in the broad concerns of the Carteret County Parks and Recreation Department. A periodic, informal evaluation should be made to assure that the total complement of recreation options are available to residents of the county and to propose modifications intended to improve either the quantity or quality of offerings.

Interpretation of Access

If visitors or residents do not know of access opportunities, the access is non-existent. Opportunities are also limited by lack of skill or knowledge needed to participate in leisure activities. The State of Georgia provides fishery publications for each coastal county, available free of charge upon request. The State of North Carolina publishes a chart of salt water fishes, available for interpretation at marinas and other access points, but which is used primarily for non-productive access uses; there is a charge of 50 cents each. The State of Michigan issues a Michigan Harbors Guide which identifies by location and aerial photo major marinas on its shores.[7]

Ocean shorelines, and most estuarine shorelines, are poor places to learn to swim. Only 66 percent of high school students surveyed in May of 1979 indicated they participate in swimming. This may be a function of lack of water safety instruction opportunities. The County Parks and Recreation Department does provide a small program at two motel pools, but this is inadequate in scope. SCUBA participants undergo extensive instruction to allow free recreational pursuits. Motor boating, sailing and a variety of other water based sports require a learning process for one to become independent. Bogue Sound appears to offer a great resource for wind surfing; interest in this might be generated by wind surfing instructions. The same is true for fishing and many other activities.

Harbors of Refuge and Other Safety Considerations

A Harbor of Refuge is designated by the U.S. Army Corps of Engineers when

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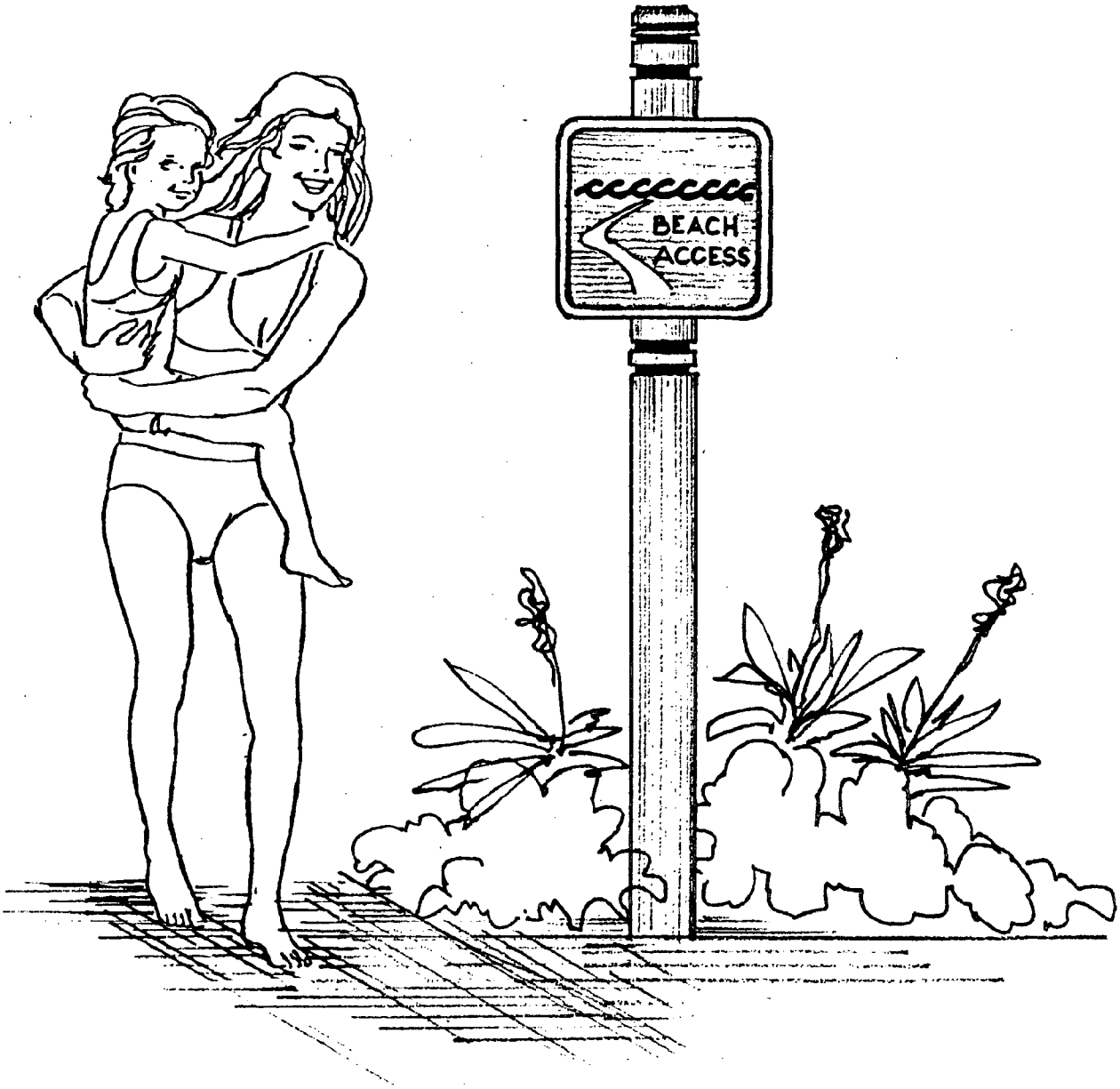
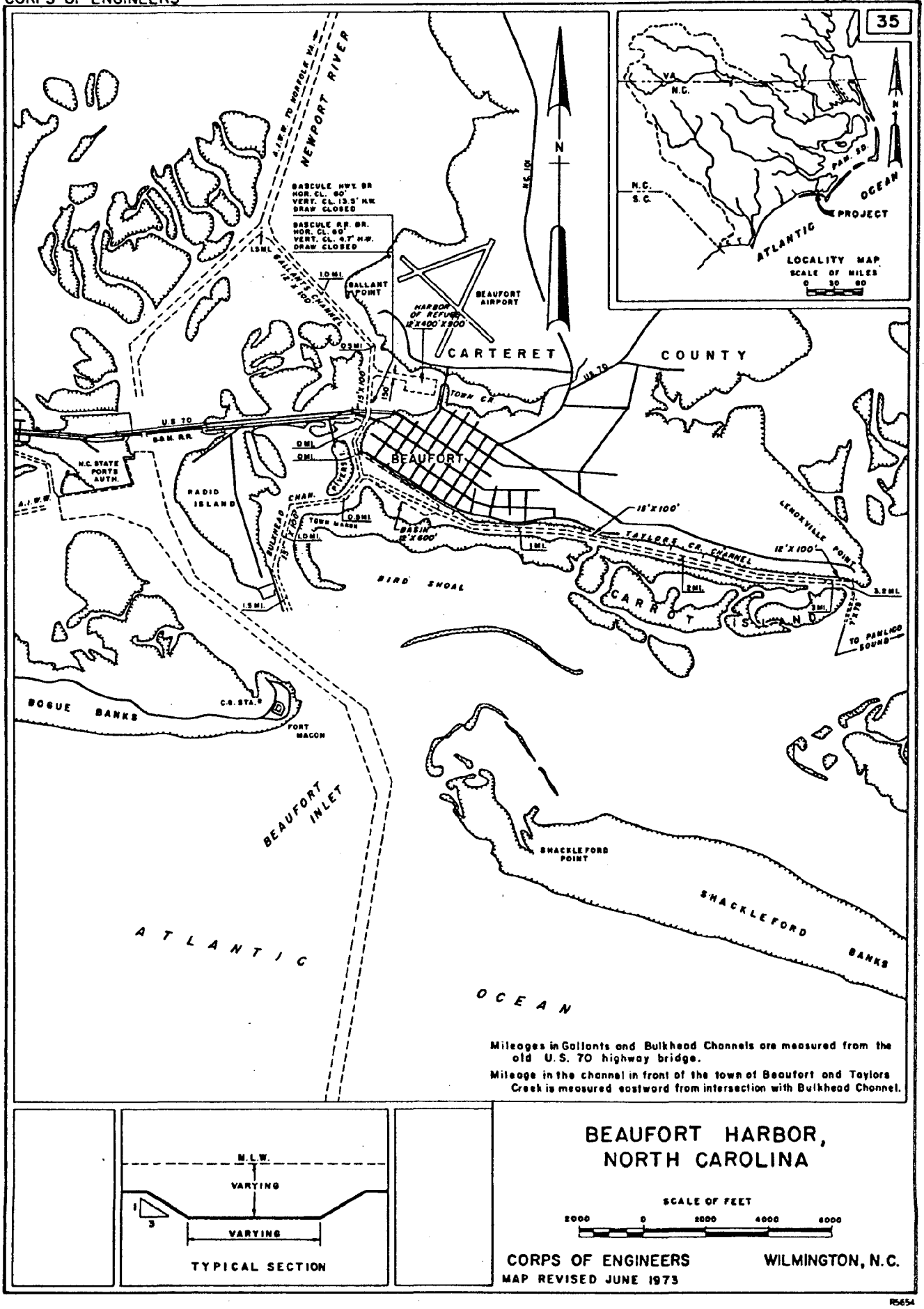
7 Michigan Department of Natural Resources, Michigan Harbors Guide, Lansing, Michigan, 1977.



ACCESS SIGNAGE

Proposed By Recreation and Park Consultants, Inc.



Mileages in Gallants and Bulkhead Channels are measured from the old U.S. 70 highway bridge.

Mileage in the channel in front of the town of Beaufort and Taylors Creek is measured eastward from intersection with Bulkhead Channel.

TYPICAL SECTION

BEAUFORT HARBOR, NORTH CAROLINA

SCALE OF FEET

2000 0 2000 4000 6000

CORPS OF ENGINEERS WILMINGTON, N.C.

MAP REVISED JUNE 1973

R5654

a remote harbor is provided specifically to accommodate transient vessels, not to provide a home port for water craft in the immediate area. G. T. Swain, engineer with the Wilmington office of the Corps of Engineers has interpreted berthing needs for transients as the provision of public wharf space sufficient to accommodate two "average size" vessels. Eighty to 100 feet of space would be required. Harbors of Refuge must be 20 miles distant from the nearest available harbor. The Corps does allow docking and mooring adjacent to the H.O.R., but temporary docking space must be available for transient craft. This is normally concerned with commercial craft, but larger recreation vessels can also use these for refuge.

Harbor of Refuge facilities in Carteret County have some problems. Mr. Swain identified these as including the following:

Atlantic: Piers built into the Harbor of Refuge.

Harkers Island: Some of the area has been filled and platted. "Corps cannot maintain until the County makes some improvements."

Cedar Island: "Private property owners are tying up and denying others from tying up."

Beaufort: The County has not complied with its agreement in providing public wharf space.[8]

It would appear that transient recreation craft would have difficulty finding refuge in the event of a severe storm. Several other harbors exist, most of them down east, primarily serving commercial fishing vessels. Boaters have identified, however, that when problems occur they have no difficulty being accommodated by area residents. The only instance of difficulty reported was of a disabled catamaran which beached at the Fort Macon State Park swimming area in 1978, and was told to "get out". Because of change in personnel at the park, this is unconfirmed. The present Park Superintendent reports that boats are able to use the beach except at the jetties and within the protected swimming area, for safety reasons. This is certainly acceptable.

The risk of hurricanes seems to be higher with each year of insignificant damage. Unfortunately, the study found that most people are not aware of emergency procedures even though a hurricane plan exists. Emergency preparations should not be implemented for any but severe storms to avoid calling "wolf," but the system should be improved to inform and interpret to visitors, in particular, evacuation procedures.

In spite of fairly heavy use of boats and beaches in the county, only seven drownings were reported for 1978, four related to boating. This is still

8 Personal conversation 5/24/79.

seven too many, but should not precipitate beach and swimming restrictions. Very often recreations are attractive which have an element of risk in them and users need the option to use unsupervised beaches and waters. Supervised public beaches are available at the State Park, Atlantic Beach, and Emerald Isle.

Boating safety laws and other regulations are being enforced by the U.S. Coast Guard and the N.C. Wildlife Resources Commission. The N.C. Division of Marine Fisheries has assisted at times aiding boats in trouble.

Scott Daughtry, Superintendent at Fort Macon State Park, reports that the jetties at the inlet are the source of most accidents, with fishermen and others sometimes slipping on the rocks.[9] Two locations in the park provide emergency access to the beach; eleven others have been located in the county which are somewhat more public (see inventory of access points in Section V).

Funding Sources

Throughout the study, issues regarding growth keep surfacing. Growth proponents generally are seeking increases in per capita income or gross spending in an area, to increase the private wealth of an area. It is found, generally, that while one may be interested in seeing an area grow in population, there is also a strong feeling against the growth of government. The two are tied together. Growth in use of the beaches has precipitated a recent action by the County Board of Supervisors to provide Sheriff's Department patrolling of the beaches. Growth of resident populations will require additions to waste water treatment capacity - or - additions to the waste water treatment facilities will allow additional growth of populations and/or industry. Relationships regarding provision of recreation access are similar, with one exception: recognition by private industry that a profitable market would result from investment in access facilities may provide an alternative to public investment in this area. Because market conditions change, however, services providing basic access to at least resident populations should be a governmental function.

Local government has several (limited) sources of financing its operations:

1. Current tax revenues
2. Operating revenues
3. Future bond authorizations
4. State grants
5. Federal grants
6. Donations from private sources

9 Personal conversation 7/11/79.

All of these have application in financing access improvements in Carteret County. Regarding the first three, and the funding of local match monies which may be required by the last three; public policy decisions determine which spending is for essentials that must be done, which is for those that should be done, and which is for desirable options that might be done.[10] With practical politics added to this mix, decisions include those based on opinions of that which can be afforded, and that which the body chooses to afford. In addition, priorities must be set on internal competing demands to maintain acceptable levels of service in all departments.

State grants most often are extensions of federal programs. The 1979 session of the General Assembly did, however, appropriate money for beach erosion abatement grants to coastal areas. A condition of the grants is that public access must be provided to those areas improved with state funding. (Beach improvement activities of the Corps of Engineers have the same condition.) Utilization of these or subsequently appropriated funds may provide beach access "through the back door," if used for example, at Bogue Inlet. Acquisition of access lands by the State Department of Administration is possible, though unlikely, unless responsibilities of the N.C. Division of Parks and Recreation would be broadened to administer smaller areas or unless the Division's mission were broadened to include the total supply of local recreation, including recognition of impacts of regional visitors on local recreation opportunities. Sites acquired by the state which are too small or remote from existing parks should be transferred to local government administration. Should there be lands along Salter Path Road in excess of need for the 100 foot right of way, use of these should be sought for parking and access to the low capacity foot trails, if the trails can be secured for general public use.

The North Carolina Wildlife Resources Commission has limited funding for construction of boat launch areas. Local sponsors must provide the land. According to William Jansen of the Commission Boating Division, there are no plans for funding Carteret County projects in the next five years.[11]

Potential for future assistance is provided by several federal programs.

1. The U.S. Department of Commerce was authorized by the Coastal Zone Management Act to provide 50 percent matching grants for acquisition of beach access. Eighty percent federal grants are available for planning. Acquisition funds, although authorized, have not been appropriated by Congress.

2. Section 308 of the CZMA covers the Coastal Energy Impact Program, which provides funding for "planning grants, credit and repayment assistance and environmental and recreational loss grants". Should Carteret County be impacted in the future, by refining, transportation or storage activities related to the energy program,

10 Research Triangle Regional Planning Commission, The Research Triangle Region of North Carolina Economic Indicators, Raleigh, N.C., 1970.
11 Personal conversation 3/5/79.

recreation loss mitigation funding should be sought. A resolution adopted by the Coastal Resources Commission June 6, 1979, indicates the absence of recreation impact consideration in the Core Creek refinery by the Corps of Engineers and requests this be corrected.

3. The Coastal Plains Regional Commission and associated Economic Development Administration grants and EDA loans contribute to tourism development (where none before or where there is a shortage of local private capital in a tourism-dependent area). Grant monies earmarked for the convention center by EDA are presumed to make it very difficult to secure other grants for Carteret County from this source. CPRC grants for recreation have been tied to net economic increases. It seems unlikely grants would be awarded for facilities which do not have a direct relationship to tourism income, e.g., free beach or boat access.

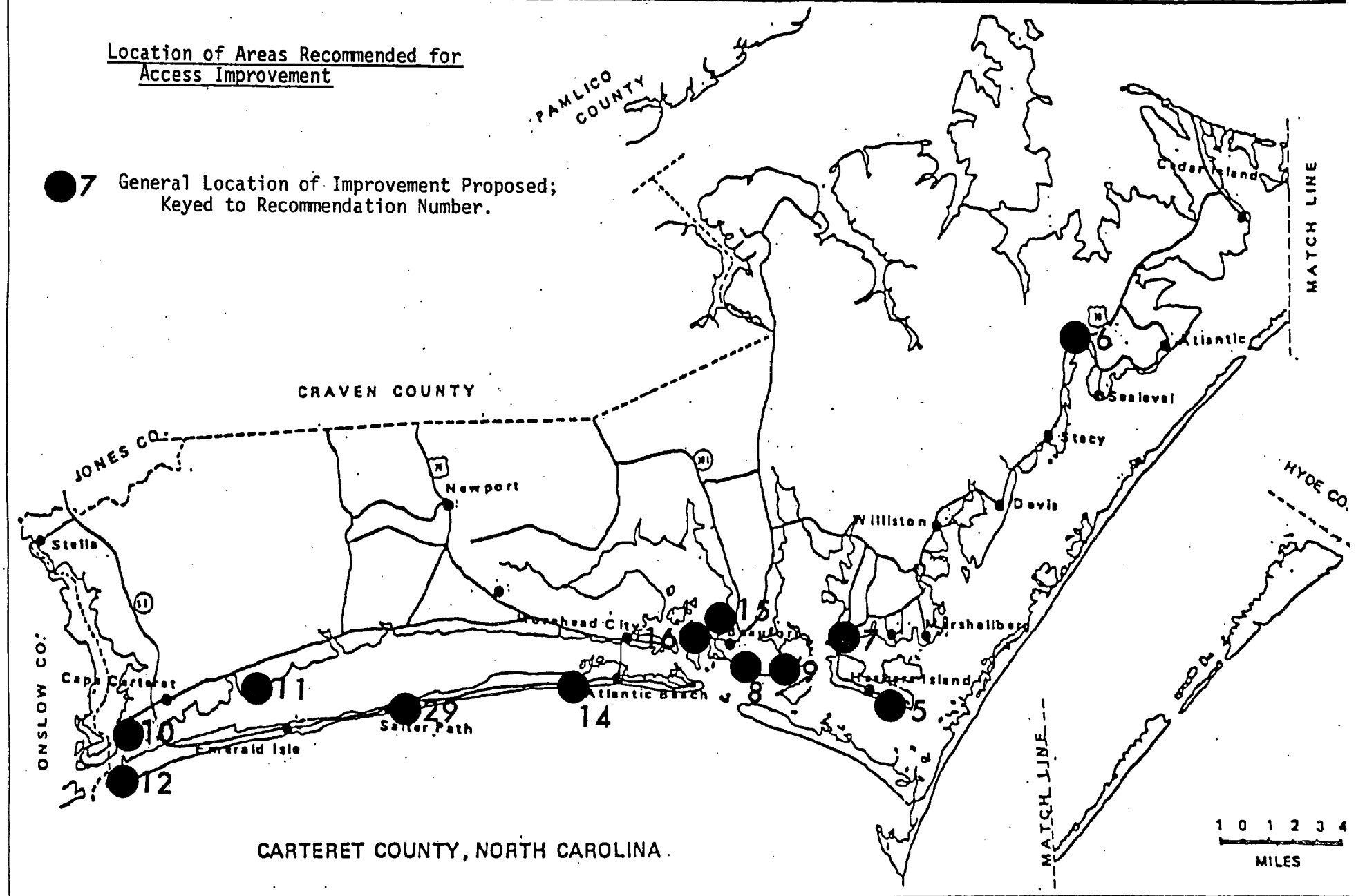
4. U.S. Army Corps of Engineers programs provide 100 percent grants or costs assumed for navigation projects; and when there is available money, 50 percent grants for recreation. Dredging of channels to benefit recreational boaters, and other recreation projects, are allowed within Corps programs; because of few projects many Corps personnel are not aware of this possibility.

5. The U.S. Environmental Protection Agency recently added recreation concerns to 201 waste water treatment grant programs, for planning only. Should Carteret County get to the point of providing ocean outfalls or have other waste water treatment projects which are related to bodies of water, recreation uses are suggested. The related Section 208 planning program will shortly provide recreation-related information; this program is intended to make all waters "swimmable and fishable by 1983".

6. Both Title I Community Development funds and Revenue Sharing Funds can be used to supply local match money in other federal grant programs.

7. The grant program most relied upon by park and recreation agencies is that administered by the Heritage Conservation and Recreation Service in the Department of Interior. Fifty percent grants are available through an administering state agency (NRCD, BOR) which fund acquisition and development projects. The program allows the value of donated land (if not accepted prior to grant receipt) and "bargain sale" donations, to contribute to the local match. "In kind" contributions, or the value of local work associated with the project may also contribute to the local match money.

A variety of publications describe in detail the above and other assistance programs of the federal government.



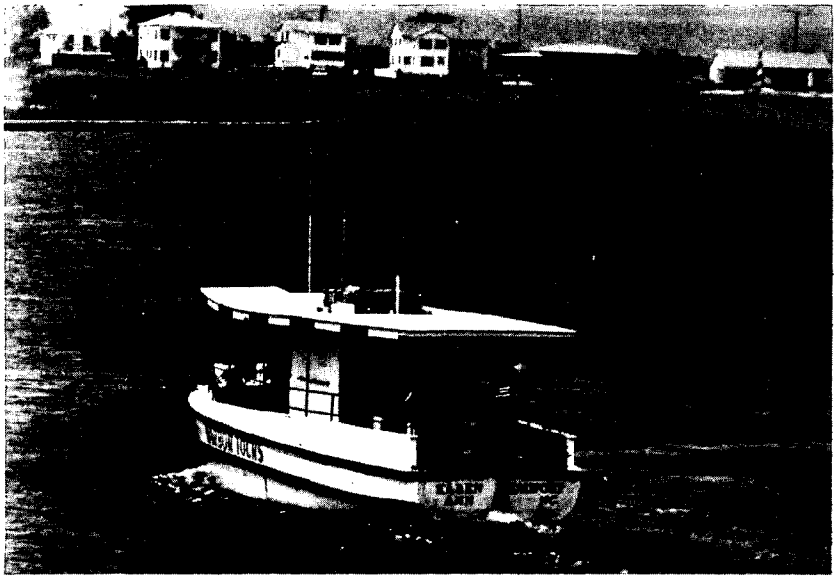
Base Map Provided by Carteret County Planning Department

SECTION IX

RECOMMENDATIONS

"There is a balance between beauty and business that must not be ignored."

James A. Michener, in The Quality of Life



Beaufort Harbor Tours

General

Recreation planning, as indicated earlier, should include the broad scope of park and recreation functions, facilities and administrative services, including provision of ocean beach and estuarine recreation access. When considering total recreation needs and desires, there is an overlapping relationship of water-related activities with other recreations. This includes concerns for informal family and individual recreation preferences, provision of open space to preserve property values and environmental quality; and the provision of a balance of recreation options, including water and shoreline activities. Planning activities within Carteret County should accommodate this spread of interest, and work to avoid situations where recreation options for local populations are reduced by the pressure of tourists competing for use of finite resources.

Recommendations for action by local, state or federal agencies are intended to precipitate discussion by county officials. If found acceptable, the county should communicate their concerns and interest to appropriate officials.

It is proposed that, except for the seashore at Atlantic Beach, Bogue Banks beaches continue to serve primarily as places for family recreation, without provision of adjacent commercial zoning that would precipitate visitation by large numbers of young people.

Access in down east areas should be limited, aimed at providing local access. It seems appropriate that the county attempt to retain the character and culture of down east fishing villages, not adding facilities which will induce growth beyond that generated by traditional patterns or local community decisions. Assuming that a majority of present down east residents and landowners want perpetuation of the rural atmosphere around the settlements, it would appear desirable to secure a consensus of area residents as a prelude to adoption of a county ordinance (or amendments) which will satisfy local desires.

The Harker's Island community will be impacted by need for access to Cape Lookout National Seashore and is likely not to retain its character to the extent of other down east areas. It appears that access to the sound is reasonably available to down east residents. In many cases this involves a first come, first served claim for dockage of work boats and part time commercial boats as well as recreation craft, along highway rights of way and other access locations including those adjacent to and within Harbors of Refuge.

The Beauty-Business Balance

If, as it appears, a majority of present Carteret County citizens are concerned about land uses in the county, feel a threat of impending disaster

to their quality of life; if permanent population will grow to 70,000 by 2025 and potentially with present zoning, to over 150,000 (including seasonal residents), then it may already be too late to significantly moderate the growth trend. It is not too late to develop a cooperative system of planning which will seek consistency in development efforts and retain desirable features of the coastal environment. It is not too late to seek coordination with state and federal programs and policies, as well as with private development interests. Discussion of the Carteret County Land Use Plan, and changes desired, would provide one jumping-off place for such cooperative activity to begin. Local values need to be protected.

RECOMMENDATION 1: Develop a vehicle for coordinating a search for and work toward county-wide goals, including recreation, preservation and development. This might be achieved by assignment of responsibility to County staff, creation of an ad hoc committee; or the Board of County Commissioners could play an active role in concert with principal elected officials from the municipalities. In all cases, the County Planning Commission and planning department staff should participate actively. There is a need for a resident consensus effecting a self-determination toward enhancement of life in Carteret County. There is need for a method of communicating concerns to the various municipalities to encourage local programs which would complement county-wide goals. An example of this is the basic need to improve waste water treatment capacity before the sounds become polluted (as they have in other places), and before the economic base and environmental quality are degraded.

RECOMMENDATION 2: Establish advisory committee of mainland down east representatives, appointed by the County Board, for the purpose of discussing local determination alternatives.

RECOMMENDATION 3: Acknowledge and/or modify the Carteret County Land Use Plan, prepared by the North Carolina Coastal Resources Commission, and secure copies of the land use map associated with it for use in the County. The Plan should be expanded, including policy statements on siting of energy facilities, beach erosion and beach access. It is recommended that sites of previous overwash on Bogue Banks be considered for designation within Areas of Environmental Concern.

RECOMMENDATION 4: Associated with the above or as a second related action, establish an advisory committee for the purpose of recommending actions to assure adequate operation of the Harbors of Refuge and availability of safe refuge for transient vessels. This group should be broad enough to evidence concern for the Beaufort (Gallants Channel/ Town Creek) Harbor of Refuge.

RECOMMENDATION 5: Assist in retaining open space across from the Harker's Island School and Rescue Squad Headquarters. It appears this is seen by the Islanders as a key feature of the Island, with use allowed by the owner apparently without complaint. Residents and others use the area for visual access to the sound, Shackleford Banks and Cape Lookout and for other informal uses. Harker's Island residents reporting a desire to retain this local amenity also report acquisition is unlikely to be accomplished (1) because of property value and (2) because of the desire to keep the land in the owner's family. It may be possible to secure development rights or a scenic easement or provide preferential taxation which will assure, temporarily at least, existence of this open land, picturesque trees and comfortable vista.

RECOMMENDATION 6: Secure use of excess state land to be made available by relocation of the bridge over Salter's Creek, to establish a boat launch ramp, courtesy dock, and 40 car/trailer parking area, to provide access to the new Nelson Bay-Long Bay channel, a shorter route to Pamlico Bay from Core Sound. Purchase of some adjacent land may be necessary in order to provide parking. "Part of old roadway will be available for access to the channel", according to William G. Marley of the N.C. Department of Transportation.

RECOMMENDATION 7: Seek improvement of the small beach and car top launch area on State Right of Way at the Harker's Island bridge (storage area for pilings). The U.S. Army Corps of Engineers will shortly undertake a dredging project adjacent to this, estimated to produce 20,000 cubic yards of spoil. The site is now used for car top boat launching and some sunbathing. The shoulder and parking area could be graded occasionally. No other improvements should be made; a paved ramp would not have adequate slope and would generate too much use for this location. Several area boaters have requested access to this area. The N.C. Department of Transportation should be contacted for support.

RECOMMENDATION 8: Promote improvement of Beaufort Jaycee Park/Wildlife Resources Commission Boat Launch area. Parking available is inadequate to serve the two launch ramps. The existing ramps can handle twice present capacity of parking area, with a short wait during busy times. Construction of additional ramps would not improve capacity because of parking limitations. The parking area should be improved and expanded, and parking spaces clearly

identified for maximum utilization. Parking spaces should also be identified on streets. Approximately 120 cars were parked at this location July 4, 1979.

RECOMMENDATION 9: Acquire 6-10 acres for a waterfront park in area of Lennoxville Point. Facilities should include three boat ramps, 130 boat and trailer parking spaces, courtesy docks, boat beaching area, public restrooms and picnic area. A vista of the sound is desirable. This area is within zone V4 and A4 (Base Flood el. 8' MSL) of HUD Flood Hazard Boundary map and is undeveloped, but has development pressure.[1]

RECOMMENDATION 10: Seek improvements to W/R Commission/International Paper boat launch area at Cedar Point. Secure "First Right of Refusal" for acquisition of property east of ramp (appears to be 2 lots, one improved). Construct one additional ramp and a car top launch area. Provide a beach area for temporary placement of boats leaving the water.

RECOMMENDATION 11: Acquire 15-25 acres for a waterfront park and major boat launch area east of Cape Carteret, for operation as a county park and outdoor recreation area. Facilities should include four boat ramps with spaces for parking 40 cars per ramp, courtesy dock, boat beaching area (also used as car top launch area), fenced dry surface storage area for 40 trailers and/or boats, restrooms, area manager office/concession stand, picnic area and rental slips. A community park ballfield and/or other needed recreation facilities adjacent could utilize parking areas during slack times and contribute to other recreation needs.

West Bogue Banks

The Town of Emerald Isle controls beach access for 10 miles from Bogue Inlet East. Current political controversy over beach access will likely culminate in voters determining local beach policy by either re-electing current or electing new Town officers. Traditional access to Bogue Point has been prohibited by imposition and strict enforcement of no parking regulations. Many in the area including some Emerald Isle residents, have expressed frustration because of the closing action. Some Cape Carteret residents were shown access points to the ocean at the time of land purchase there (2 miles from the beach), and have been frustrated by change in land use in one case and by parking prohibitions in another. Hammocks Beach State Park is five to seven miles distant (close to the area), but caters to wilderness uses and requires great vigor to walk to the shadeless beach

1 U.S. Department of HUD, Flood Insurance Study, Carteret County, North Carolina (Unincorporated Areas), n.d.

(acceptable for wilderness uses and preservation). A beach recreation area is needed at the west end of Emerald Isle, but is expected to be very difficult and expensive to secure.

RECOMMENDATION 12: Assist in securing public access to Bogue Point. A non-commercial beach access area, with parking for 100 cars, public restrooms, drinking water, pedestrian crossovers and temporary lifeguard chairs should be sought for this area. The Corps of Engineers is studying Bogue Inlet and "beach erosion problems" on several miles of Emerald Isle ocean front. It is likely that beach improvement activities of the Corps will require public access to the improved beach in order to proceed with the project. These lands are all within the corporate limits of Emerald Isle. If the majority vote in the fall to continue prohibiting access to non-residents, an impasse may be reached and the circle of frustration broadened. Take no action that will officially involve the County in Emerald Isle pre-election politics. Seek participation of Emerald Isle officials in County-wide planning activity described in Recommendation 1.

RECOMMENDATION 13: In the event the Swansboro Coast Guard Station is abandoned, the County should take whatever action is necessary to assure it is transferred to other public ownership. The site would provide limited parking and access to the shoreline, and meeting room space for leisure time activities and interpretation of cultural history and recreations on and around Bogue Banks. Some anticipate the Station will one day be located on an island, in which case public ownership of the site will be beneficial.

RECOMMENDATION 14: Assist in expanding capacity of public access at Atlantic Beach. Unlike other beach communities, it appears the Town of Atlantic Beach is interested in promoting growth and use of the beach by the general public. Additional capacity can be gained by securing beach access and parking west of the developed area. A fee for parking would assist considerably in generating operating revenue; other concessions could be provided. A 500-car parking area would satisfy many people who are otherwise unable to use the beach on busy days. (See Recommendation 27). The cost of land on Bogue Banks and the desirability of avoiding development of new commercial areas makes expansion of capacity of Atlantic Beach particularly appealing.

RECOMMENDATION 15: (See Page 92)

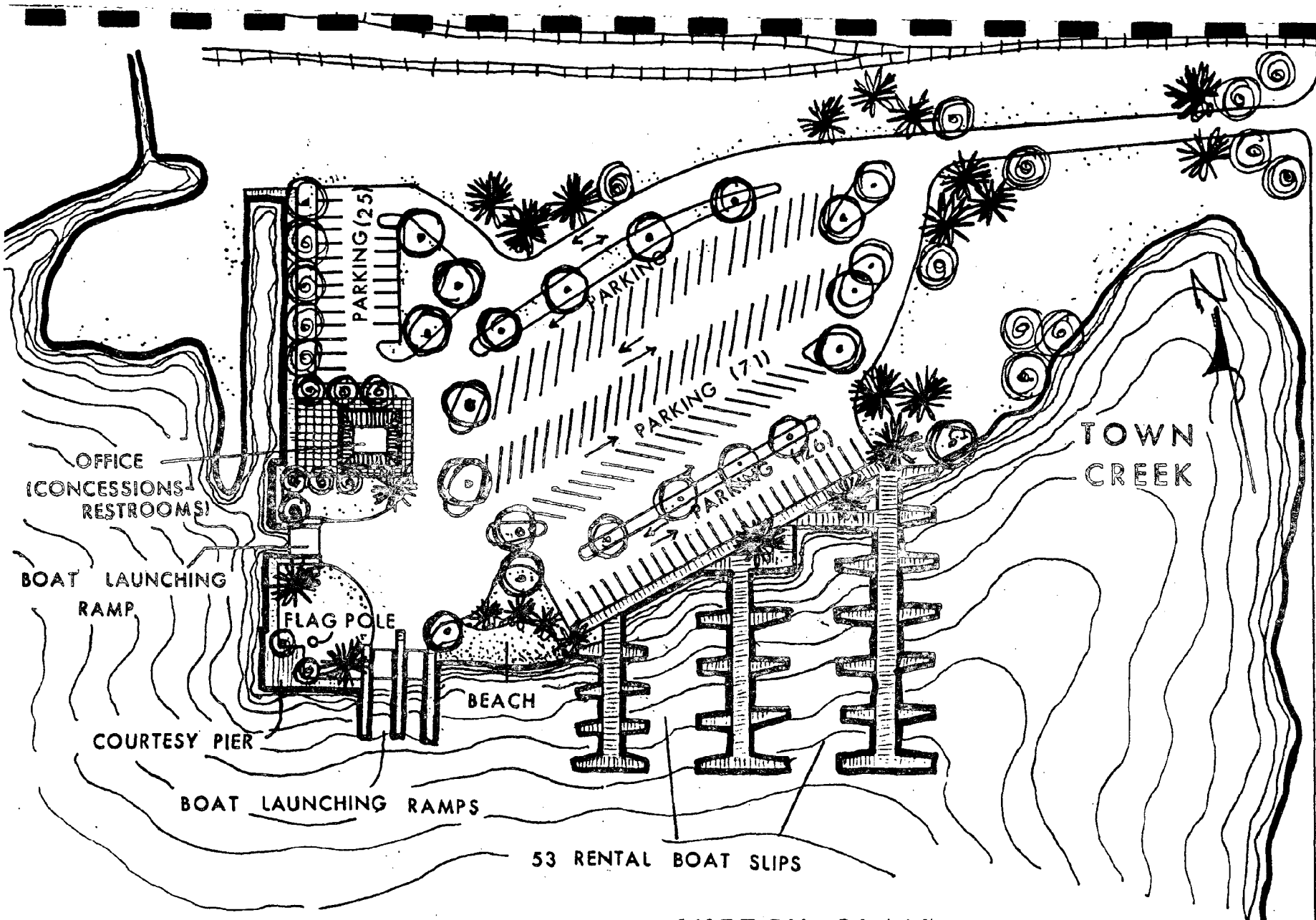
Improve Airport Marina. Construct 80'-100' public wharf for temporary and emergency use associated with and within 25' of adjacent Harbor of Refuge and to meet agreement with Corps of Engineers. Include three boat launch ramps, "courtesy" piers/boarding docks, adjacent small beach area for car top launching and boat beaching, finger piers and parallel piers for slip rental, parking for 100 cars, fish-cleaning station, boat sanitary pump-out station, boat washing station, site manager's office/concession/rest rooms, perimeter fence with gate, entrance sign and flag pole. If possible, provide space for Mariner's Museum boat-building facility. Dry stack storage, more economical of water space, cannot be provided because of small site (maximum of five acres), location in line with airport runway, and building height restrictions. If development of the full site is implemented, it is possible, and more desirable, that commercial boat storage facilities fill the need for storage capacity. A site analysis and master plan are necessary as preliminary steps toward permitting and construction contracts. Over-riding public benefits to be realized from encroaching on a small amount of marsh are expected to result in project approval by permitting authorities.

RECOMMENDATION 16:

Consider for a major boat launch site, 10 acres of the 33 acre spoil bank at the east end of the Morehead-Beaufort high rise bridge. Preliminary analysis indicates feasibility as a launch site; sand can be stabilized, and a channel can be dredged on the east side of the site. A feasibility analysis and functional design study is desirable, however, to best determine access ramp location, traffic circulation, parking and site access. The N.C. Department of Transportation should be requested to undertake a signalization study for the Highway 70 intersection with Morgan Street and Inlet Drive, and should be approached regarding highway modifications to allow storage and turning lanes. Use of the north 23 acres as a "put and take" spoil bank, its practicality and potential for funding development and operation of the site need to be reviewed. In State ownership, State Ports Authority and N.C. Division of Marine Fisheries staff are both tentatively agreeable to the proposal; additional commitment is necessary. The State Ports Authority has indicated possible future need for port expansion. A sketch prepared for the Marine Fisheries Division several years also in included as Appendix C.

RECOMMENDATION 17:

Request emergency evacuation preparation improvements. Recent acquisition of the Navy surplus LCU's by the



SKETCH PLAN SCALE 1"=100'

AIRPORT MARINA

RECREATION & PARK
CONSULTANTS, INC.,
RALEIGH, N.C.

N.C. Division of Marine Fisheries, for use out of their Morehead City headquarters, improves somewhat the opportunity for emergency evacuation of Bogue Banks and Cape Lookout National Seashore. Utilization of the craft for evacuation is to be triggered by the State Division of Civil Preparedness. For the safety of those who secure access, and to seek the least expenditure of public funds, the county's operational evacuation plan must be further developed and interpreted to result in timely evacuation and minimum property damage and personal injury. It appears there is a lack of citizen information regarding evacuation activities. An education process is necessary. Installation of warning flag/weather flag locations throughout the county, operated perhaps by volunteers and public safety agencies with associated flag chart signs for interpretation, would provide interest to visitors and boaters, and assist in early warning communication. With each year of hurricane-free damage, the risk of severe storms seems to increase.

RECOMMENDATION 18: Seek changes to Federal Flood Insurance Program to benefit both access preservation and economy. The Federal Flood Insurance Program and federal disaster programs in general, are subsidized by the people of the United States. Carteret County has qualified for the emergency phase of the flood insurance program. County ordinances prohibit rebuilding or repair of any building damaged more than 60 percent of its pre-damage value.[2] Not enough is done to prohibit reconstruction in hazard areas, but such prohibition contravenes the Federal Flood Insurance Code. It would seem appropriate that a system be promoted through local, state and federal authorities, that would reduce future public liability for flood damage claims, (1) by imposition of flood plain-flood prone area development prohibitions (sites of predictable or previous overwashes included); (2) by funding for public use, access and conservation, acquisition of undeveloped shorefront property, and property seriously damaged within flood prone areas; (3) providing relocation assistance and full replacement costs for new structures in non-hazard areas; and (4) working to secure public access to water in hazard areas, when and where public liability is assumed for private hazardous actions and continued use of pre-existing structures. Without waiting for changes in the Flood Insurance Program, an attempt should be made to influence developers not to build in overwash areas and other areas subject to flood tides.

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2 Section 60.4, Zoning Ordinance of Carteret County.

RECOMMENDATION 19: For preservation of natural systems which make ocean beaches attractive, (1) require boardwalks over frontal dunes for continued unrestricted use of existing pedestrian access; (2) limit and identify ORV access points. At all locations where permitted, wooden ramps should be provided for vehicle crossovers to allow continued use and in order to maintain frontal dune elevations. Existing State and Emerald Isle vehicle crossovers should be included. This may require additions to the "Outer Banks Land Protection Ordinance of Carteret County".

RECOMMENDATION 20: Seek legislative assistance, and assistance from Wildlife Resources Commission members and staff to broaden the financial base of the Commission, encouraging their participation in State Bureau of Outdoor Recreation funding programs (Land and Water Conservation Fund of U.S. Department of Interior (HCRS), and use of State General Funds for acquisition, development and operation of areas. The Wildlife Resources Commission needs to be influenced to seek and accept funds other than those which are sportsman-generated to meet needs for boat access areas. The Commission practice in the past has been to limit itself to traditional programs and practices in order to perform well in those areas. Boating programs have suffered. The policy of accepting, for administration and maintenance, existing boat launch areas does not add to the inventory of sites available, only to the management load. Their need to have land acquired previous to construction of ramps and the provision of only small amounts of construction dollars have contributed to the inadequacy of access in Carteret County. The Commission does not appear to have funds available for improvements "promised" for the Beaufort access area.

RECOMMENDATION 21: Improve access opportunities for those recreationally disadvantaged.

1. Accommodating the Physically Handicapped. Unfortunately, one cannot push a wheelchair down the beach. High vantage points are difficult to reach for those with walking impairments. A blind person cannot enjoy the sight of sailboats in the sound or the oyster catcher on the spoil bank. In Carteret County there are a few places where one can see the ocean from an automobile, but literally no place one can reach the top of a dune by way of a 5 percent or less slope. There are innovations, however, which are allowing greater numbers of recreationally disadvantaged to enjoy more of these simple pleasures in life. Trails for Braille-readers have been constructed, gentle crossover ramps and platforms provide vistas to handicapped and aged in Florida,

fishing places have been provided for those in wheelchairs (rails are lower and planking is not gapped); and in Carteret County, the Marine Resources Center has a ramp which allows handicapped access, for interpretation of the coastal scene. Gravel paving in the parking area makes it difficult to reach the ramp, however. The best existing access for wheelchairs is at the Ft. Macon jetties.

Public recreation programs could provide special event tours for the handicapped if there is enough local demand. Tours could include a boat ride, tour of the State Port, Mariners Museum or Radio Island, a fishing experience, a look at the ocean from Triple Ess parking area, a trip to a boat builder, look at a fish or clam processing house, or any number of other experiences.

2. Accommodating the Less Affluent. Head boats, fishing piers, rental cottages, motels, campgrounds and other rental opportunities provide access to those not able to afford the luxury of boat or second home ownership. Some, of course, are not able to afford even these, but can enjoy use of public beaches, go clamming, fish at many places along rivers and sounds--if transportation is within reach. The road to Radio Island (Highway 70) seems hazardous; yet one can occasionally see a Beaufort fisherman on a bicycle heading to the LST Ramp. Radio Island is available for many uses as long as owners including the U.S. Navy don't object or don't develop the industrial sites. With 16+ percent of Carteret residents reported at poverty level or below, many cannot afford much. It may be appropriate to provide public recreation opportunities similar to those proposed for physically handicapped, at minimum or subsidized fee, without low income or handicapped pre-qualification. The Community Action Agency does allow transportation for recreation, but cannot accommodate those with severe handicaps. They report "full use" of present vans, but should be requested to look for funding and opportunities to add amenities for program clientele, perhaps by extending service hours and use of volunteers.

RECOMMENDATION 22: Consider establishing a volunteer work force, perhaps among retired residents, who would supervise and assist boaters in launching and retrieving boats, thus reducing launch time. This service is needed on days when the Beaufort and Morehead City access sites receive high use. Parking assistance provided may increase capacity and reduce feelings of insecurity some boaters have toward leaving their car at the site. Local authorities and Wildlife Resources Commission should approve.

RECOMMENDATION 23: Consider acquisition or use of federal or state property that may in the future be declared in excess of need. The Salters Creek-Highway 70 right-of-way is one that shortly could be secured to enhance water access for residents. As hindsight, continued seasonal operation of the Cape Carteret-Emerald Isle ferry would have been attractive as a cultural experience adding to typical water uses.

RECOMMENDATION 24: Support activities and opportunities to enhance harmonious development of commercial water-based recreation services and support functions. Improvement of waterfront aesthetics, such as Beaufort accomplished, is a good example. Ownership of Town Marsh acreage, across from Front Street, serves to protect scenic values and enhances the harbor development. Use of the Morehead City waterfront would be enhanced by redesign of both local circulation and the waterfront itself (see Recommendation 27).

Third Bridge to Bogue Banks

Issues related to feasibility of a third bridge are broader than this access study. It is anticipated that the independent study being carried out by Acres American Inc. will shortly have recommendations for the North Carolina Department of Transportation. Construction of a third bridge should reduce congestion at the Atlantic Beach causeway, improve conditions at the Emerald Isle bridge and reduce traffic problems in Morehead City, temporarily at least. Growth vs. no growth policies need to be considered. Completion of a third bridge will most likely induce further growth, development and traffic on Bogue Banks and possibly on Highway 58 and Highway 24. Regional access will be improved much as the New Bern Bypass improved access to the region. It is felt, however, that the New Bern Bypass induced traffic to and increased congestion in Morehead City and Atlantic Beach by allowing more vehicles ease of access to the area without attendant local improvements. It is anticipated that Salter Path Road (now Highway 58) will not be able to handle local traffic to and from three bridges without further changing the design cross section of the improved road.

RECOMMENDATION 25: Review growth-inducing potential of a third bridge to Bogue Banks. It is recommended that the county secure information from the N.C. Department of Transportation which estimates the amount of traffic, growth and development which will be induced by the construction of a third bridge. A conscious action should be taken to establish county policy regarding growth. A third bridge is anticipated to further reduce beach access to permanent residents, while making beach access more available to tourists and summer residents. This may properly be addressed in Recommendation 1 on County-wide goals.

Inter-city Bus and Train Transportation

It is expected that the automobile will continue as the most convenient form of transportation into and within Carteret County. For the long range, however, it may be practical to institute excursion train and bus service from Raleigh-Durham east, leaving on Friday nights and returning on Sunday nights during the heavy tourist season. It is possible that the gasoline shortage and high prices may ultimately make feasible an autotrain/passenger train terminating at a site west of Morehead City, perhaps on land leased from the Southern Railway and linked with local attractions by a shuttle bus system.

RECOMMENDATION 26: Determine the market for inter-city public transportation service. The beginning step would be to seek funding for a study, hopefully following indication of tentative support from the Southern Railway.

Local Access

Preliminary analysis indicates that a bus or tram system with parking on the mainland is not feasible at this time. Bogue Banks does not have a large number of visitors who go to the island for a day's experience or family outing who do not see themselves in need of automobile transportation. The urban area on the mainland is not populated enough to make such a system feasible. Population concentrations on the island are spread the entire length of the island, making operating costs more prohibitive than presently can be justified. The exception to this is the area of Atlantic Beach and Ft. Macon State Park. (Ft. Macon has more of a family beach atmosphere than Atlantic Beach.)

Consideration and study of a weekend or seasonal bus or tram system for the beach areas should be tied to both a possible passenger railroad terminus and a local shuttle/excursion bus serving Morehead City and Beaufort waterfront and historic areas.

RECOMMENDATION 27: Study the feasibility of a public transportation system to and from high use areas. An automobile parking structure may be too expensive and season too short to amortize costs from revenue produced. In anything but publicly owned surface parking storage facilities, land uses and prices are such that operation of a parking facility would not be the highest and best use of land in central locations. Public transportation systems are not usually self-supporting, but will often provide public benefits which exceed the net operating loss expected. The study of a potential public transportation system should address several considerations and alternatives, including the following:

(a) The likelihood of extended cooperative activity between the municipalities involved and establishment of either public, quasi-public, or private transportation agency.

(b) Establishment of automobile-free zones in areas with central attractions. This might include the Atlantic Beach "circle", the historic area of Beaufort, and certain waterfront areas. Similar actions are popular in Europe and used in Williamsburg, Virginia. Actions such as these will result in disbenefits to automobiles.

(c) Timing of bus or tram schedules coordinated with harbor excursion tours, bridge openings and arrival of excursion trains.

(d) The provision of parking areas on the fringes of the central locations with services to avoid impeding commercial traffic.

(e) A shuttle bus with limited parking may be one alternative at Atlantic Beach. To effectively extend the public beach at Atlantic Beach, a cooperative effort should be initiated between Carteret County, the Town of Atlantic Beach and the State of North Carolina, for the funding of access and development of a parking area immediately west of the Town of Atlantic Beach. (See Recommendation 14.)

(f) Bus transportation to fishing piers, particularly those on the east end of Bogue Banks, may become a practical source of access if other rail and/or bus systems develop. Seasonal minibus or van operation by a cooperative group of pier owners may be practical; with customer pickups at motels and central parking locations.

(g) An open tram in Atlantic Beach and causeway area, circulating among various attractions and motels.

Bikeway/Pedestrian Way on Salter Path Road

The potential for bicycle-automobile accidents makes a bikeway somewhat infeasible directly adjacent to Salter Path Road. It seems possible, however, that a parallel bikeway is practical for the entire length of Highway 58 on Bogue Banks, particularly with the likelihood of continuing gasoline shortages and high prices.

RECOMMENDATION 28: It is recommended that the N.C. Department of Transportation Bicycle Coordinator be requested to make a feasibility study for a County bikeway system. Modify the County Zoning Ordinance regarding walkways and bikeways to encourage development of safe bikeways and safe pedestrian ways, rather than restrict them through excessive set back provisions (included only in Section 73-A.3 of Residential Resort District).

Bogue Banks Parking Lot Access

Similar to the situation within central business districts, surface parking may not be the highest and best use of land to a private developer, because of the increasing costs of property on Bogue Banks. Parking facilities which are not in public ownership will likely not remain as parking facilities because of the market for land. Parking structures are not financially feasible on the island with only four or five months of use. State acquisition of the 25 acre Roosevelt property at Salter Path is reported to require public access and limited parking as a condition of the potential gift.

RECOMMENDATION 29: The State Department of Administration should be encouraged to proceed to secure access to the Roosevelt property, and should also be requested to survey, improve and identify its property adjacent to the Iron Steamer Pier (a 100 foot strip) as a public parking and ocean beach access location. This could be accomplished by either agreement with the pier owner or construction of highway access. The former would provide the maximum of service to both the public and the pier. Management of both sites by the State should be most economically provided by extending management responsibility of Fort Macon State Park; park staff presently administers the Theodore Roosevelt Natural Area nearby.

RECOMMENDATION 30: The practicality of parking strips or lanes on the Salter Path Road right-of-way should be recommended for study to the State Department of Transportation, in order to make publicly-owned beach foot paths more accessible. This would be particularly beneficial to residents, off-season surfers, and others willing to walk to the ocean beach from the road. Considerable parking may already be possible along shoulders of the improved road. Identification of parking areas and access points is recommended; however, roadway/traffic safety must be taken into consideration.

Implementation Proposal

Many of the recommended actions have fairly equal priority and can be carried on concurrently. In general, however, actions are listed in order of priority.

Phase I

		Generalized Capital Cost Estimates
1.	Request comments on the report, including the following: County advisory commissions, N.C. Coastal Resources Commission and Departments of Administration, Commerce, Natural Resources and Community Development and the Wildlife Resources Commission; local legislators and municipal officials.	$ - - -
2.	Implement Recommendations 1 and 3, with staff support assigned by the County Manager.	- - -
3.	Implement Recommendation 2, and with concurrence, Recommendations 5 and 7.	- - -
4.	Contact Town of Beaufort regarding Recommendations 8, 9, and 15. Seek joint action on 8 and 9.	- - -
5.	Contact N.C. Wildlife Resources Commission on Recommendation 7, 8, 9, 10, 16 and 20.	- - -
6.	Contact Towns of Beaufort and Morehead City regarding Recommendation 22.	- - -
7.	Implement Recommendation 4; establish contact with Mr. G.T. Swain, engineer with Wilmington Corps of Engineers.	- - -
8.	Contact N.C. D.O.T. regarding Recommendations 4 and 6 establishing boat access, and number 23.	- - -
9.	Seek grant from Coastal Resources for construction planning of Airport Marina parking, two ramps and bulkheading (Recommendation 15).	1,000 (County)
10.	Discuss grant funding criteria with NRCD Division of Parks and Recreation and State Bureau of Outdoor Recreation; identify projects and desired funding. In addition, seek major State participation in Atlantic Beach and Emerald Isle projects, but propose local operations.	- - -
11.	Discuss Recommendation 12 and 13 with Emerald Isle officials, seeking a long term solution to Bogue Point access. Establish contact with Corps of Engineers on the issue.	- - -

12.	Contact Town of Atlantic Beach regarding Recommendation 14. Seek agreement for bargain sale or donation of land.	$ - - -
13.	Seek bargain sale (for owner's tax benefit) or donation of property and/or execute option or "first right of refusal" agreement for waterfront park east of Beaufort (Recommendation 9).	- - -
14.	Seek "first right of refusal" agreement on Cedar Point land (Recommendation 10).	500. (plus land eventually)
15.	Seek "first right of refusal" agreement on land east of Cape Carteret (Recommendation 11)	1000. "
16.	Formally indicate interest in Spoil Bank (Recommendation 16) to State Ports Authority and NRCD Division of Marine Fisheries.	- - -
17.	Request N.C.D.O.T. study of Highway modifications proposed in Recommendation 16.	- - -
18.	Implement Recommendation 19 through ordinance review and activities of Dunes Protection Officer.	- - -
19.	Seek implementation of Recommendation 17 through County Civil Preparedness Office.	0 - ?
20.	Contact NRCD Flood Insurance Coordinator regarding Recommendation 18, seeking its implementation. With the State, draft a contingency plan to acquire flood hazard lands; other coastal counties may participate.	- - -
21.	Identify to N.C.D.O.T., U.S. Coast Guard and others, interest in Recommendations 13 and 23.	- - -
22.	Discuss Recommendation 24 with Towns of Morehead City and Atlantic Beach regarding redesign of waterfront areas and the "circle" to maintain and improve circulation and property values. Request funding comments from Neuse River Council of Governments.	- - -
23.	Request Neuse River COG to respond to Recommendations 26 and 27.	- - -
24.	Request N.C.D.O.T. to respond to Recommendations 25, 27, 28 and 30.	- - -
25.	Request N.C. Department of Administration to respond to Recommendation 29.	- - -
26.	Request Chamber of Commerce or County Parks and Recreation Department to prepare information brochure on access opportunities, including those for the handicapped.	500

27. Encourage adaptation of public and commercial access facilities to accommodate physically handicapped. $ - - -

28. Review conditions and ordinances prohibiting surfing within 500 feet of commercial piers and prohibiting fishing from certain bridges. - - -

29. Encourage Fort Macon State Park to design and paint parking lines to increase beach parking capacity. Encourage establishment of a trail to the Sound. - - -

30. Seek construction funding for improvements to Airport Marina (HCRS, CRC, Corps of Engineers). 60,000 (County)

Total Phase I. . . . . $ 63,000

Phase II - Second Year

1. Assess extent to which access program is meeting goals. Revise program accordingly. $ - - -

2. Consider bond issue funding to provide local match monies for acquisition and development of the following:

Airport Marina - docks, piers, building, fencing	70,000 (County)
Cape Carteret area park - acquisition, road, gravel parking and boat launch area	130,000 (County)
Lennoxville Point - acquisition, road, gravel parking and boat launch area	130,000 (County)
Salter's Creek Boat Launch development	5,000 (County)
Portion of Atlantic Beach local match money (Estimated to total $400,000 for Acquisition)	20,000 (County)
Portion of Bogue Inlet local match money (Estimated to total $300,000)	10,000 (County)
Total Phase II	$365,000

Phase III - Third Year

1. Review previous activities; revise program accordingly - - -

2. Assuming "put and take" spoil area is functional (Recommendation 16) use funds generated from sale of sand as match for construction grant on Highway 70 site. Secure planning grant from CRC; project cost should be limited to that generated from sand sales and grant match. - - -

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APPENDIX A

STATE OF NORTH CAROLINA RECREATION AND TOURISM RESOURCE POLICIES*

Recreation

It is State policy:

(1) To protect and preserve its land and waters for the benefit of all its citizenry by acquiring and preserving park, recreational and scenic areas. As set forth in Section 5, Article 14 of the Constitution of North Carolina and implemented under all authorities mentioned below.

(2) To preserve to the greatest extent feasible, the public's opportunity to enjoy the physical, esthetic, cultural, and recreational quality of the natural shorelines of the State. As set forth in and implemented under the CAMA.

(3) To maintain superior quality of water and air resources to ensure continued enjoyment of the natural attractions of the coast. As set forth in G.S. 143-211 and implemented under authority of G.S. 143-214.1 and G.S. 143-215.1.

(4) To provide or help provide outdoor recreation opportunities for all citizens and visitors. As set forth in the "State Comprehensive Outdoor Recreation Plan" (SCORP) and implemented under authority of G.S. 113-34, Acquisition and Control of State Forests and Parks.

(5) To plan and promote recreational developments in these areas, with emphasis upon making the seashore areas of North Carolina attractive to permanent residents. As set forth and implemented under G.S. 113-14.1, Promotion of Seashore Industry and Recreation.

(6) That the State acquire, locate and manage state-owned lands in a manner generally consistent with local land-use and land classification plans, and with local land-use regulations. As set forth in the CRC's "State Guidelines for Local Planning" and implemented under the authority of the CAMA.

*State of North Carolina Coastal Management Program, pp. 110-112.

(7) To maintain a continuing planning program for outdoor recreation to guide decision-making in outdoor recreation programs and needs. As set forth in the "State Comprehensive Outdoor Recreation Plan" (SCORP) and implemented under authority of G.S. 113-34, Acquisition and Control of State Forests and Parks.

(8) To acquire adequate examples of natural outdoor recreation features and to preserve them in as close to a natural state as feasible. Such natural features should be made accessible to the public for outdoor recreation to the extent that such use does not destroy or degrade the resource. As set forth in the "State Comprehensive Outdoor Recreation Plan" (SCORP) and implemented under authority of The Natural and Scenic Rivers Act of 1971 (G.S. 113A-30 et seq); The North Carolina Trails System Act (G.S. 113A-83 et seq); and G.S. 113-34, Acquisition and Control of State Forests and Parks; and G.S. 113-29 et. seq., Acquisition and Development of State Forests.

Tourism

It is State policy:

(1) To assist in the sound development of the seacoast areas of the state, giving emphasis to planning and promoting attractions and facilities for travelers in these areas; with particular interest upon the development of the scenic and recreational resources of the seacoast. As set forth and implemented under authority of G.S. 113.14.1, Promotion of Seashore Industry and Recreation.

(2) To coordinate the activities of local government and state and federal agencies in planning and development of seacoast areas for the purpose of attracting visitors. As set forth and implemented under authority of G.S. 113-14.1, Promotion of Seashore Industry and Recreation.

(3) To discourage sprawl and strip development and roadside advertising where they detract from scenic quality by encouraging the Department of Transportation and local governments to adopt and enforce design standards for all roadside advertising. As set forth by the Land Policy Council and implemented under authority of G.S. 136-122 et. seq., Preservation, etc., of Scenic Beauty of Areas Along Highways.

(4) That reforestation and preservation of vegetative cover be encouraged as much as possible toward enhancing state visual quality. As set forth by the Land Policy Council under authority of the Land Policy Act (G.S. 113A-50).

Unique Cultural and Natural Resources

It is State policy:

(1) To promote and encourage throughout the coastal area knowledge and appreciation of North Carolina history and heritage by providing assistance for identifying places of historical significance and, where feasible, acquiring such properties. As set for and implemented under authority of G.S. 121.9, Administration of Historic Properties.

(2) To foster the preservation of coastal complex natural areas, unique coastal geologic formations, and coastal areas that sustain remnant species by receiving and studying recommended acreas that may fall into those categories, designating as AECs areas as are deemed to qualify, and establishing a management program for the preservation of those areas. As set forth in the "State Guidelines for Areas of Environmental Concern" and implemented under authority of the CAMA.

Beach Access

It is State policy:

(1) That in the 75 foot estuarine shoreline AEC high priority of land use allocation shall be given water access proposals, provided that public resources will not be detrimentally affected. As set forth in CRC's "State Guidelines for Areas of Environmental Concern" and implemented by authority of the CAMA.

(2) That in the ocean hazard area (ocean beaches, frontal dunes, and inlet lands), structural access ways to the beach may be permitted on or seaward of the frontal dunes, provided that their specific location and design are demonstrated to be the most suitable alternatives and will not damage the dunes. As set forth in CRC's "State Guidelines for Areas of Environmental Concern" and implemented by the authority of the CAMA.

APPENDIX B

BUREAU OF OUTDOOR RECREATION OPEN SPACE CATEGORIES AND,
N.C. DIVISION OF PARKS AND RECREATION INVENTORY SHEET
FOR CARTERET COUNTY

BOR Class	Subclass	Designation
I		High Density Recreation Areas
	01	Mini-Park
	02	Playground
	03	Neighborhood Park
	04	Combined Neighborhood Park and Playground
	05	Playfield
	06	Community Park
	07	Citywide Park
	08	District Park
II		General Outdoor Recreation Areas
	09	Countywide Park
	10	Specialized Outdoor Recreation Area -- Low Intensity Use (SORA LOW)
	11	Specialized Outdoor Recreation Area-- Medium Intensity Use (SORA MED)
	12	Specialized Outdoor Recreation Area-- High Intensity Use (SORA HIGH)
III		Natural Environment Areas
	13	Natural Specialized Outdoor Recreation Area --Low Intensity Use
	14	Regional State Park
	15	Destination Park/Recreation Area
IV		Outstanding Natural Areas
	16	Unique Natural Area
V		Primitive Areas
	17	Wilderness Area
VI		Historic and Cultural Sites
	18	Historic/Cultural Area

* Reprinted from North Carolina Statewide Comprehensive Outdoor Recreation Plan

N.C. Division of Parks and Recreation Inventory Worksheet Region P

County CARTERET

Subclass	County Population In Thousands	X	Subclass Standard	= Gross Need	- Present Supply	= Net Need
Neigh. Emph.	9690		2.5	24	4	20
Comm. Emph.			2.5	24	73	-49
City Park			5.0	48	—	48
District Park	26,710		2.5	67	—	67
County Park	36,400		10.0	364	—	364
SORA LOW			8.0	291	527	-236
SORA MED			20.0	728	2664	-1936
SORA HIGH			2.0	73	—	73
III SORA LOW			150.0	5460	84,011	-78,55
State Park			15.0	546	385	161
Dest. Park			125.0	4550	—	4550

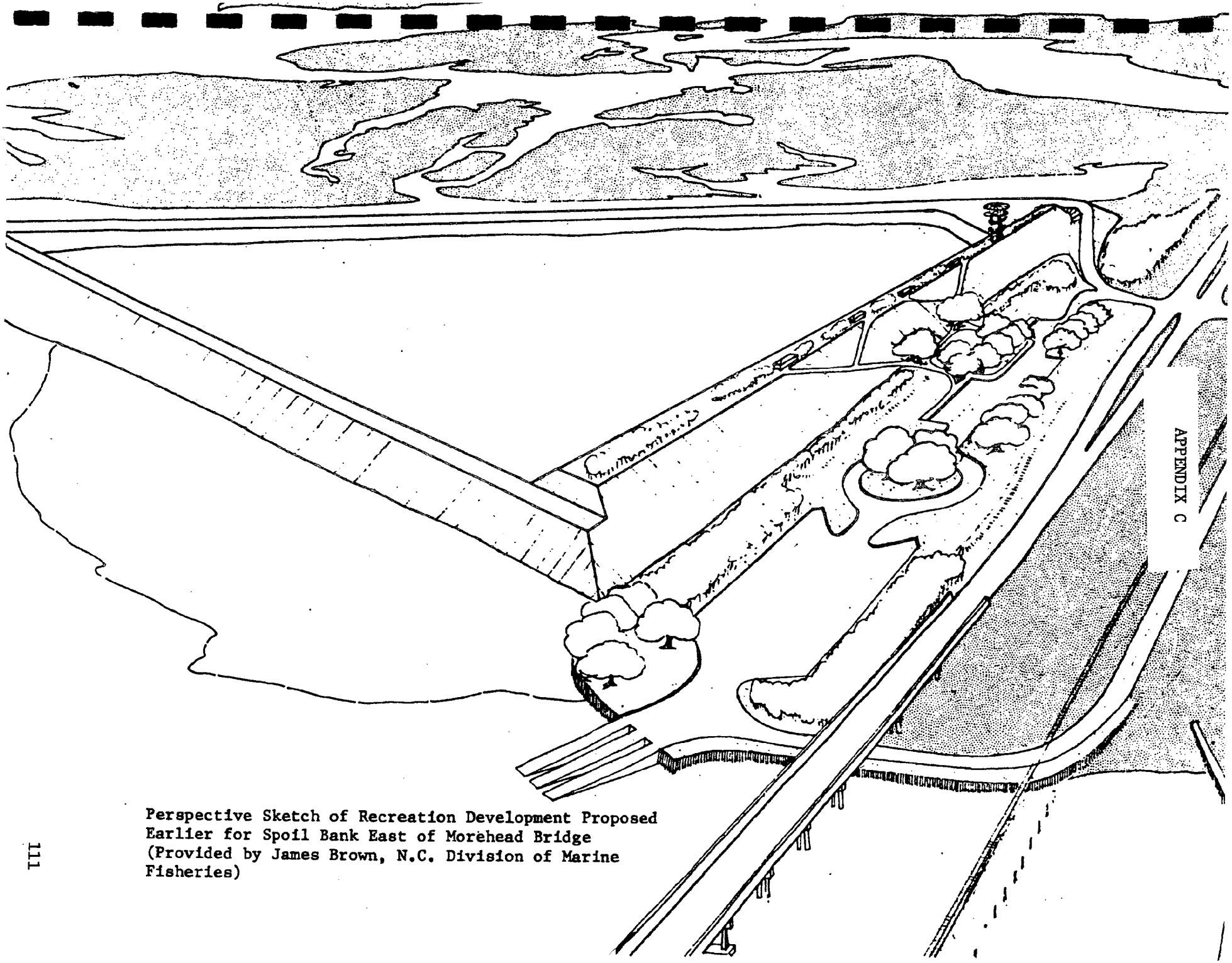
NOTES Data prepared 1976.

IV

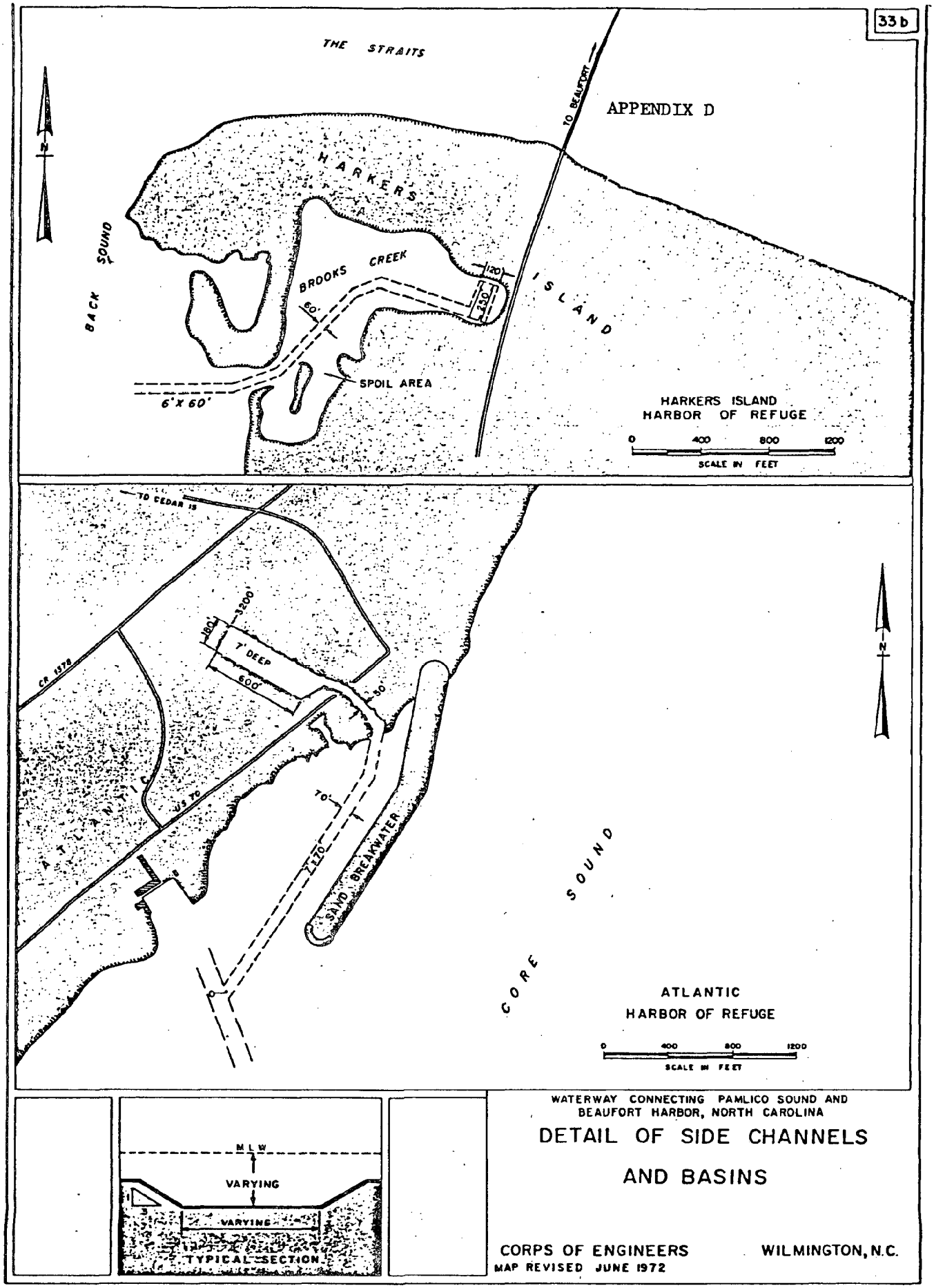
V

VI

265

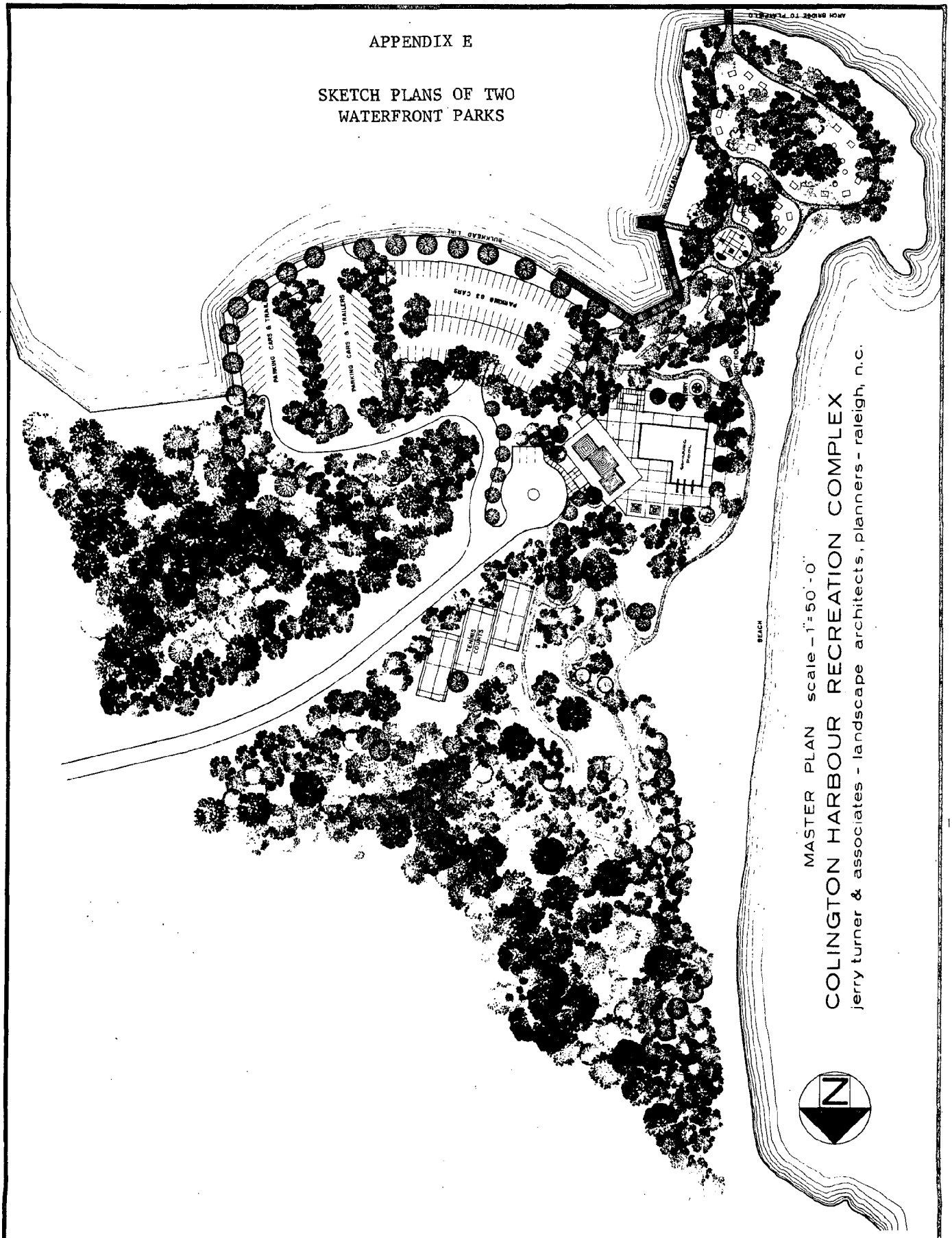


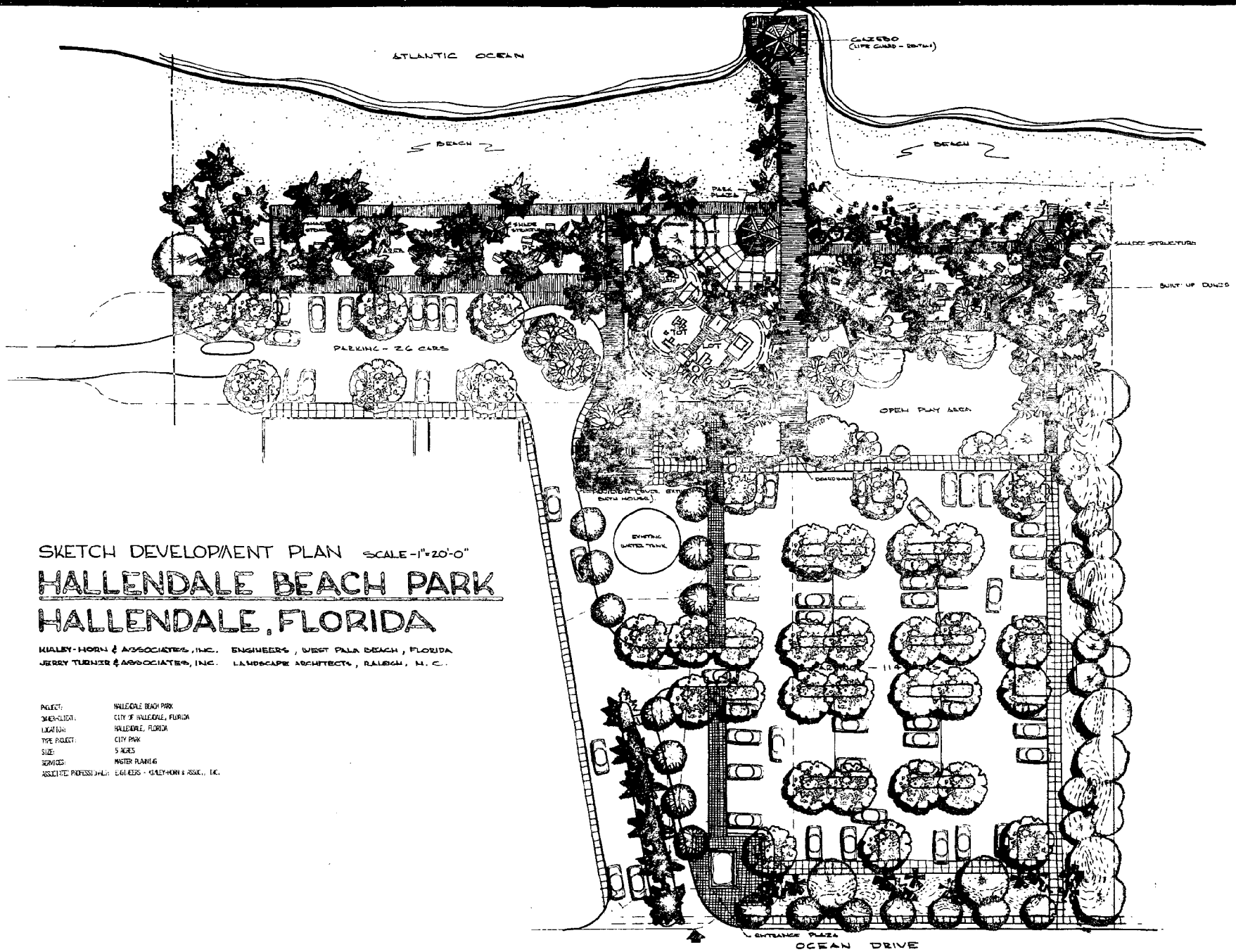
Perspective Sketch of Recreation Development Proposed Earlier for Spoil Bank East of Morehead Bridge (Provided by James Brown, N.C. Division of Marine Fisheries)


33b
THE STRAITS
TO BEAUFORT
HARKERS
ISLAND
BACK SOUND
BROOKS CREEK
120'
250'
50'
SPOIL AREA
6'X 60'
HARKERS ISLAND
HARBOR OF REFUGE
0 400 800 1200
SCALE IN FEET
TO CEDAR IS
CR 1378
180'
3200'
7' DEEP
600'
50'
70'
1110'
SAND BREAKWATER
US 70
ATLANTIC
CORE SOUND
ATLANTIC
HARBOR OF REFUGE
0 400 800 1200
SCALE IN FEET
M L W
VARYING
VARYING
TYPICAL SECTION
WATERWAY CONNECTING PAMLICO SOUND AND
BEAUFORT HARBOR, NORTH CAROLINA
DETAIL OF SIDE CHANNELS
AND BASINS
CORPS OF ENGINEERS
WILMINGTON, N.C.
MAP REVISED JUNE 1972

APPENDIX E

SKETCH PLANS OF TWO
WATERFRONT PARKS





SKETCH DEVELOPMENT PLAN SCALE-1"=20'-0"

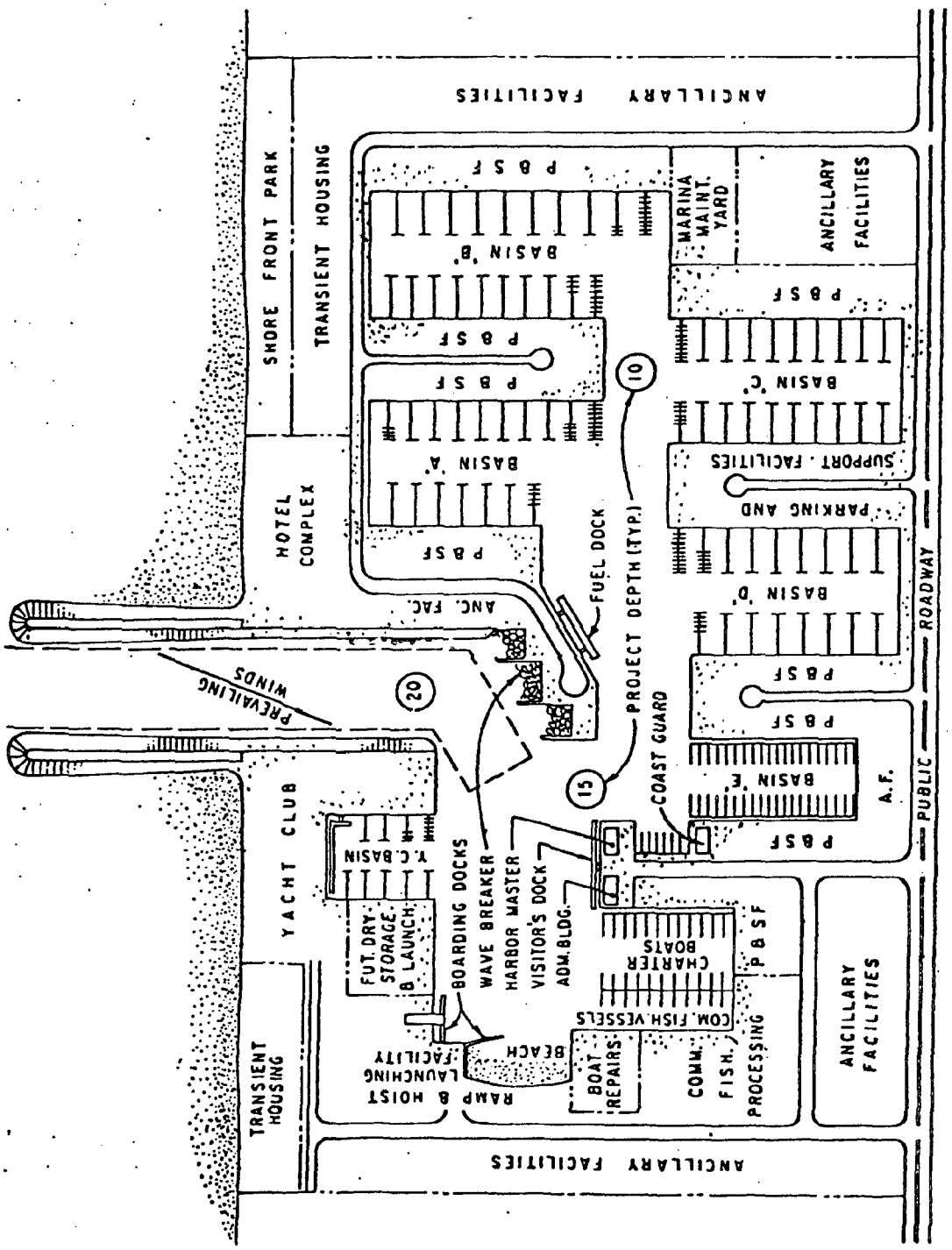
HALLENDALE BEACH PARK
HALLENDALE, FLORIDA

KIMLEY-HORN & ASSOCIATES, INC. ENGINEERS, WEST PALM BEACH, FLORIDA
JERRY TURNER & ASSOCIATES, INC. LANDSCAPE ARCHITECTS, RALEIGH, N. C.

PROJECT:	HALLENDALE BEACH PARK
OWNER-CLIENT:	CITY OF HALLENDALE, FLORIDA
LOCATION:	HALLENDALE, FLORIDA
TYPE PROJECT:	CITY PARK
SIZE:	5 ACRES
SERVICES:	MASTER PLANNING
ASSOCIATE PROFESSIONALS:	ENGINEERS - KIMLEY-HORN & ASSOC., INC.

APPENDIX F

SKETCH PLAN OF LARGE MARINA



Schematic layout of a marina showing desirable interrelation of facilities.

Plan credit: U.S. Army Coastal Engineering Research Center, Kingman Building, Ft. Belvoir, Virginia 22060

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