

MAINE STATE LEGISLATURE

The following document is provided by the
LAW AND LEGISLATIVE DIGITAL LIBRARY
at the Maine State Law and Legislative Reference Library
<http://legislature.maine.gov/lawlib>



Reproduced from scanned originals with text recognition applied
(searchable text may contain some errors and/or omissions)

LR
Shelf

1978

v.1

STATE LAW LIBRARY
AUGUSTA, MAINE

SHORE PROTECTION

Me

THE MAINE COAST: recreation and open space

recommendations for
consideration



prepared for the committee on coastal development
and conservation MAY 1978

GV
191.42
.M2
S24
1978
v.1



C



APR 23 1979

Cover Photograph by James A. St. Pierre

STATE LAW LIBRARY
AUGUSTA, MAINE

THE MAINE COAST:
RECREATION AND OPEN SPACE
Recommendations For Consideration

Prepared for the
Committee on Coastal Development and Conservation

by
James A. St. Pierre

Work for this project has been conducted as part of the Maine Coastal Program, Maine Bureau of Parks and Recreation and Maine State Planning Office cooperating. Financial assistance was provided by the Coastal Zone Management Act of 1972, administered by the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration.

May, 1978



JAMES B. LONGLEY
GOVERNOR

STATE OF MAINE
DEPARTMENT OF CONSERVATION
AUGUSTA, MAINE 04333

May 1, 1978



RICHARD E. BARRINGER
COMMISSIONER

Mrs. Jean Childs, Chair
Committee on Coastal Development
& Conservation
State House
Augusta, Maine 04333

Dear Mrs. Childs:

Transmitted herewith is the report "The Maine Coast: Recreation and Open Space".

In September, 1976, the Maine Bureau of Parks and Recreation, in cooperation with the State Planning Office, initiated a study to identify sites of outstanding significance in Maine's coastal area which would be suitable for one or more forms of outdoor recreation and which could be considered worthy of protection because of the importance of their natural features. As it has evolved, the project has been broadened to include a review of coastal properties currently held by the Bureau of Parks and Recreation.

This document summarizes the work of the study. It presents information - much of it brought together for the first time - which, when studied systematically, suggests a framework for a program of coastal conservation - conservation, that is, for the protection of areas which in many cases are most suitable for outdoor recreation, wildlife habitat, historic interpretation, scenic viewing, environmental study or other uses which contribute to the quality of life in Maine. Additional background information to the discussion and recommendations of this volume has been included in a separate appendix volume.

The goal of Maine's Coastal Program is to achieve a balance between conservation and development in the coastal area that will satisfy the short and long term social, economic, and environmental needs and aspirations of the people of the State of Maine. However, the growth of population, tourism, and residential, commercial and industrial development, together with increasing interest in conservation and concern for the fragile coastal environment, are resulting in frequent conflicts over the use of coastal resources. To improve the process of making decisions on the use of coastal resources and to insure that irreversible changes are not inflicted on areas which are outstanding in their natural state, it is important to identify these areas of particular significance.

Mrs. Jean Childs
Page 2
May 1, 1978

The report has been prepared with the assistance of the State Planning Office and the Bureau of Parks and Recreation, but as an independent project. It has not been adopted or endorsed as a program of action by the Bureau of Parks and Recreation, though it will be carefully reviewed by Bureau staff. It is hoped that it will be useful to the Committee in better understanding certain coastal issues and considering policy alternatives affecting the development and conservation of the Maine coast.

Sincerely,



Herbert Hartman
Director

/jk
enc.

CONTENTS

LETTER OF TRANSMITTAL iii

CONTENTS v

TABLES AND ILLUSTRATIONS vii

I INTRODUCTION 1

 Context of the Report 3

 Goal of the Study 4

 Objectives of the Study 4

 Statement of the Issue 4

 Definitions 4

 Organization of the Report 6

II PERSPECTIVE 9

 Overview 11

 The Maine Coast as a Unique Natural Resource 13

 Why Conserve Open Space? 17

 Coastal Protection 23

 Findings 31

 Coastal Ownership 33

 Visitor Use 39

 Natural Feature Deficiencies 44

 Recreation Preferences 46

III RECOMMENDATIONS 49

 Programs Recommendations 51

 Site Recommendations 77

 Bureau of Parks & Recreation Developed Coastal
 Holdings 77

 Bureau of Parks & Recreation Undeveloped Coastal
 Holdings 111

 Coastal Sites Deserving Protection 149

IV	IMPLEMENTATION	233
	Land Protection Considerations	235
	Roles, Responsibilities and Funds	236
	Past and Future Studies	241
	Implementation Techniques	244
V	SUMMARY OF RECOMMENDATIONS	249
	Program Recommendations	251
	Site Recommendations	253
	REFERENCES AND SOURCES	261

APPENDIX (bound as a separate volume)

- A. Bureau of Parks and Recreation Unit Analyses
- B. Maine's Coastal Islands: Recreation and Conservation,
 March 1978
- C. Maine's Coastal Beaches: Recreation and Conservation,
 April 1978
- D. Camping
- E. Maine Bureau of Parks & Recreation Coastal Area
 Properties, 1978
- F. Natural Feature Glossary
- G. Maine Resident Outdoor Recreation Participation
 and Preference Survey: A Look at the Coast, 1977

TABLES AND ILLUSTRATIONS

Table

1	Coastal Area Minor Civil Divisions	7
2	Maine Coastal Public and Private Conservation Open Space Land Ownership by Administrative Unit	37
3	Percentage Distribution of State Park and Memorial Use: 1976	42
4	Natural Feature Deficiencies by Administrative Unit	45
5	Recreation Preferences by Administrative Unit,	47

Figure

1	Maine Bureau of Parks and Recreation Administrative Units	8
2	Land Ownership in Maine's Coastal Area	34
3	Ownership of Public and Private Conservation Open Space Land in Maine's Coastal Area	34
4	Ownership of Public and Private Conservation Open Space Land in Maine's Coastal Area by Administrative Unit,	35
5	Maine State Park and Memorial Estimated Visitor Day Use: 1966-1976	40
6	Maine State Park Estimated Visitor Camping Use: 1966-1976	41
7	Fully or Partially Developed Bureau of Parks and Recreation Coastal Holdings	254
8	Undeveloped Bureau of Parks and Recreation Coastal Holdings	256
9	Sites Recommended for Protection	257

What we must learn to do is manage our environmental resources. This will involve a combination of forbidding their use where adverse effects of any level of use are deemed to outweigh benefits, restricting their use through standards or, more desirably, explicit prices set by Government, and where feasible improving the quality of the resources through carefully planned acts of public investment and operation of facilities.

--Allen V. Kneese, "Protecting Our Environment and Natural Resources,"
1970

INTRODUCTION

Context of the Report

Although initiated in 1976 as a separate study, this report is closely associated with a group of six special studies undertaken in 1977 for the Governor's Advisory Committee on Coastal Development and Conservation (CCDC). These studies addressed the following issues:

- optimizing use of Maine ports;
- maximizing benefits derived from tourism;
- encouraging growth of the commercial fishing industry;
- siting heavy industrial facilities on the coast;
- assessing the cumulative impacts of incremental development in coastal communities;
- disseminating resource planning and management information to decision makers.

The six studies, together with the present report, are intended to provide information to the CCDC so that it can recommend to the Governor, policies consistent with the goals of Maine's Coastal Program. A principal goal of the Coastal Program is the achievement of a pattern of coastal resource use that will provide the following benefits for the people of Maine:

1. Economic expansion in an orderly fashion compatible with traditional activities.
2. A clustering of development so that the character of coastal communities will be maintained.
3. An increase in social well-being, especially in such aspects as community stability, the availability and quality of basic services, the general standard of living and in opportunity for coastal access.
4. Maintenance of environmental quality, including the maintenance of open space and agricultural and forest land.
5. Protection of those aspects of the coast that make it a unique resource, particularly its aesthetic values.
6. The management of the renewable resources of the coast on an optimum sustained yield basis.

Goal of The Study

With respect to outdoor recreation, the Committee on Coastal Development and Conservation has adopted a goal of

Improving and expanding opportunities for Maine people and visitors to the state for outdoor recreation on the coast, through coordinated planning, conservation of visual qualities, open space preservation, and land acquisition.

Objectives of The Study

Objectives: To achieve this goal the following objectives have helped to guide this study:

1. To address the need for additional open space sites for outdoor recreation and resource protection in the Maine coastal area.
2. To identify sites in the coastal area which might be protected because of their intrinsic natural (and in a few cases historic) characteristics.
3. To recommend programs and sites worthy of protection which can help insure that natural features and outdoor recreation opportunities of the coastal area are protected, conserved, restored, and if possible, improved.

Statement of the Issue

In a sentence the issue here is:

What programs might be implemented and sites protected to maintain and enhance outdoor recreation and natural resource conservation in Maine's coastal area?

Definitions

1. Recreation

A recent report by the Congressional Research Service, Recreation and the Coastal Zone, suggests that the types of recreation activities commonly engaged in at the coast can be broken down into three categories:

<u>Passive</u>	<u>Interactive</u>	<u>Active</u>
Sunbathing	Swimming	Athletic Games
Strolling	Fishing	Power Boating
Picnicking	Hunting	Sailing
Nature Study	Skin Diving	Water Skiing
Sightseeing	Surfing	Backpacking
	Camping	Bicycling

Though not exhaustive, this list clearly suggests the distinctions between passive, interactive, and active recreation uses.

"Passive" uses require little in the way of specialized equipment or skills on the part of the participant. These activities require small amounts of land area per user and are similarly undemanding in cost. All of these activities could be done elsewhere, but they are found to be particularly enjoyable in the unique environment of the coast.

The "interactive" uses are closely tied to the coast because the necessary conditions for these activities are present primarily along the seashore. These uses require some personal skills and/or equipment but are still relatively undemanding in terms of required space per user. Camping may not have the same dependent relationship with the coastal area as do the other activities in the interactive category, as it may serve primarily as a means of being close to the shore to participate in other activities.

The list of "active" recreational uses of the coast is comprised of activities which dominate the environment. These activities usually require extensive or expensive equipment and the land and water space requirements are high. Personal skills must be developed for most of the uses in this category. As with the passive category, these activities generally could be carried out elsewhere, but are frequently done in the coastal area as a matter of preference.

2. Open Space

Open space is a term more easily defined by what it is not than by what it is. For the purposes of this report "open space" shall be interpreted to mean areas of land, air and water which are not preempted by intensive uses such as residential, industrial and commercial building sites, paved parking lots and roads, etc.

Open spaces may be wilderness areas, city or state parks, urban green belts, town forests, watershed protection districts, wildlife habitats, beaches, and so on. In short, open space is undeveloped or predominantly undeveloped area having potential for outdoor recreation use and conservation purposes.

3. Coastal Area

The extent of Maine's coastal area was established in 1969 when the State's Coastal Program was initiated. The area includes all coastal towns and townships on tidewaters, all coastal islands,

and the sea to the limits of the State's jurisdiction. The inland boundary of the coastal area is, therefore, the inland line of coastal town boundaries (see Figure 1), and the seaward boundary is the outer limit of the United States territorial sea.

One hundred and forty-three minor civil divisions are located in the Maine coastal area. These are listed in Table 1 by Bureau of Parks and Recreation administrative unit. Figure 1 illustrates the six administrative units of the Bureau of Parks and Recreation in the coastal area. These units were chosen to facilitate analysis of use, ownership and preference data relative to existing programs of the Bureau. Information in the Appendix is organized by administrative unit for the entire coast.

Organization of the Report

Five principle sections comprise the body of the report. Goals, objectives, organization and definitions are set out in an introduction (I).

To set the stage for an understanding of the recommendations, background information and findings are presented in a section on perspective (II). The discussion details the factors which make the Maine coast unique, some reasons for conserving open space and the present status of coastal protection in Maine. Coastal ownership, state park visitor use, deficiencies in types of protected natural features and unmet recreation preferences are also summarized.

Recommendations (III) are broken down into program recommendations and site specific recommendations. This is perhaps the most important section in the report, for it details actions which should be seriously considered to improve outdoor recreation and resource conservation on the coast.

Section IV is a general discussion of several factors bearing on implementation of the recommendations. It touches on roles, responsibilities and sources of funds for acquisition and development as well as suggested studies and various implementation techniques.

A summary of recommendations (V) and a list of references and sources conclude the volume.

As a supplement to the report, a technical appendix containing additional, relevant data has been prepared. Appendix information is available from the Bureau of Parks and Recreation.

A separate, related report on coastal public access is being prepared and is expected to be available from the Maine State Planning Office by October, 1978.

Table 1

Coastal Area Minor Civil Divisions

<u>Southern A</u>	<u>Southern D</u>	<u>Eastern W (cont'd)</u>
Cumberland	Belfast	Penobscot
Freeport	Bremen	Sedgewick
Yarmouth	Bristol	Sorrento
	Camden	Southwest Harbor
<u>Southern B</u>	Cushing	Stonington
Arundel	Damariscotta	Sullivan
Biddeford	Frankfort	Surry
Cape Elizabeth	Friendship	Swans Island
Eliot	Isle au Haut	Tremont
Falmouth	Islesboro	Trenton
Kennebunk	Lincolntonville	T7 SD
Kennebunkport	Matinicus	T8 SD
Kittery	Monhegan	T9 SD
Old Orchard Beach	Newcastle	T10 SD
Portland	Nobleboro	Winter Harbor
Saco	North Haven	
Scarborough	Northport	<u>Eastern E</u>
South Berwick	Owls Head	Addison
South Portland	Prospect	Beals
Wells	Rockland	Calais
York	Rockport	Centerville
	Searsport	Cherryfield
<u>Southern C</u>	So. Bristol	Columbia
Alna	So. Thomaston	Columbia Falls
Arrowsic	St. George	Cutler
Augusta	Stockton Springs	Dennysville
Bath	Thomaston	East Machias
Boothbay	Vinalhaven	Eastport
Boothbay Harbor	Waldoboro	Edmunds
Bowdoinham	Warren	Harrington
Brunswick	Winterport	Jonesboro
Chelsea		Jonesport
Dresden	<u>Eastern W</u>	Lubec
Edgecomb	Bangor	Machias
Farmingdale	Bar Harbor	Machiasport
Gardiner	Blue Hill	Marion
Georgetown	Brewer	Marshfield
Hallowell	Brooklin	Milbridge
Harpswell	Brooksville	Pembroke
Perkins Twp.	Castine	Perry
Phippsburg	Cranberry Isles	Pleasant Point
Pittston	Deer Isle	Robbinston
Randolph	Ellsworth	Roque Bluffs
Richmond	Franklin	Steuben
Southport	Gouldsboro	Trescott
Topsham	Hancock	Whiting
West Bath	Hampden	Whitneyville
Westport	Lamoine	
Wiscasset	Long Island Pt.	
Woolwich	Mt. Desert	
	Orrington	

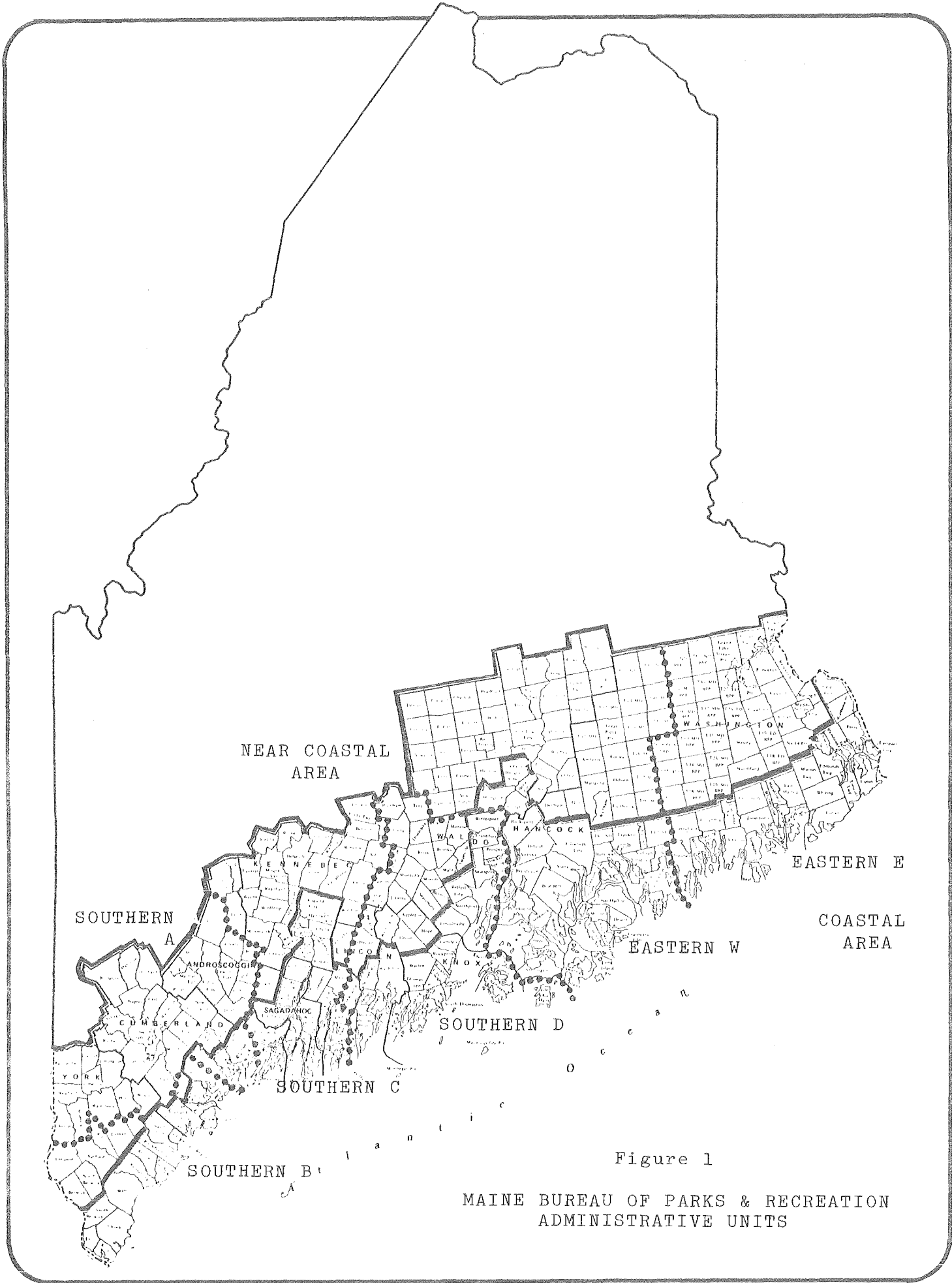


Figure 1

MAINE BUREAU OF PARKS & RECREATION
ADMINISTRATIVE UNITS

Several factors are necessary for an effective program of natural area protection at the level of the state agencies ... (including) a clear definition of objectives which will delineate the future of the state's particular resources towards which agencies can direct their studies....

--Herbert Hartman
"Natural Area Protection
in Maine", 1973

OVERVIEW

Some of the most precious and most vulnerable resources in Maine are in our coastal area. The coast of Maine is a composite resource which is important to the economic, environmental and social needs of Maine. To improve the quality of life of our citizens and visitors, to avoid waste and inefficient resource use, and to maximize net social returns, economic considerations direct that use of many of these resources should be allocated between the present and the future. There are other natural resources, however, which yield the greatest social return by not being developed - scenic headlands and sandy beaches and spruce capped islands, for example. These may be best suited to developing facilities for their enjoyment consistent with protection of their fragile natural features.

But resource conservation is important not only for parks and recreation. It is essential also for commercial and sport fisheries, for scientific study and environmental education, for forest and agricultural production, for public health and safety in air and water quality control and flood plain management.

It is perhaps most useful to look at Maine's coastal land and water resources as scarce goods with inherent natural and social values. There are pressures on these limited resources from a variety of uses, some of which are complementary, some of which are competing. Every portion of the coast cannot be all things to all people. If we are to conserve areas which represent some of the most outstanding examples of natural features to be found in Maine while providing opportunities for outdoor recreation, choices simply will have to be made which will preclude alternatives.

At present only a small proportion of the seashore in Maine is in public ownership - roughly three to four percent. This situation - with more than 95% of our coastline in private ownership - presents some unique problems for achieving an allocation of resources in which conservation values are given equal consideration with economic interests.

Ultimately, as an allocation problem, the issue is this: how to provide, at the lowest real and intangible costs, for many diverse and often conflicting demands, both public and private, and still obtain the optimal long term social, ecologic and economic benefits. More briefly the question is how to fairly achieve the most benefits for the least costs. In the end, the greatest problem relating to use of the Maine coast is in the decision making process.

One thing is clear: the State has a responsibility to the people of Maine to protect, for the general good, those resources which must be considered to belong to the people in common.

This obligation was recognized by the Maine Legislature when it declared

...that the highest and best uses of the seacoast of the State are as a source of public and private recreation and solace from the pressures of an industrialized society, and as a source of public use and private commerce in fishing, lobstering and gathering other marine life used and useful in food production and other commercial activities.

...preservation of these uses is a matter of the highest urgency and priority and that such uses can only be served effectively by maintaining the coastal waters, estuaries, tidal flats, beaches and public lands adjoining the seacoast in as close to a pristine condition as possible taking into account multiple use accommodations necessary to provide the broadest possible promotion of public and private interests with the least possible conflicts in such diverse uses. (38 M.R.S.A. 541)

These facts taken together - the importance of the coast and the responsibility for resource conservation - prompted the State Planning Office and the Bureau of Parks and Recreation to undertake a study of the coastal area of Maine to identify sites suitable for recreation and conservation which may be protected for recreational use and resource conservation. This working document is the product of that study. It is a presentation of information and guidelines intended primarily to help the Governor's Committee on Coastal Development and Conservation in making decisions relating to the provision of recreation opportunities and the protection of outstanding natural features in Maine's coastal area.

Maine is fortunate to be particularly well endowed with still unspoiled areas of coastline not found in other regions. Our coast is unique not only for its natural features, climate, soils, geography, vegetation, but for its prehistoric and historic importance as well. It is also unusual for its small proportion of public ownership. With other coastlines, it shares the dilemma of attracting the pressures which threaten its very appeal.

There has been established a substantial body of regulatory laws and management programs to protect coastal resources. A patchwork of both federal and state statutes regulate coastal activities. Governmental agencies at all levels, as well as private organizations hold real estate on the coast for a variety of conservation purposes. Much of this is beneficial. Still, opportunities for public use of the Maine coast continue to contract as more and more private property is closed to public use. To be sure, there is no simple solution to this complicated issue. But it seems clear that with the integrity of many coastal areas being subjected to resource use changes of unprecedented scope, more sites protected in the public interest are a necessity.

THE MAINE COAST AS A UNIQUE NATURAL RESOURCE

Taken as a whole, the coast of Maine is a unique natural resource. At least seven factors or groups of factors make the Maine coast outstanding.

- A. First of all, the coast is a definite and distinct part of the state which differs from, say, the rolling fields and mountainous areas because it presents an interface unlike that found away from water. This is the triple terrestrial-atmospheric-hydrologic interface where the land meets the air meets the ocean. The confluence of these three systems results in a variety of special ecologic and physiographic associations like that found nowhere save at the edge of the sea.
- B. Less tangible but equally as important is the thalassic drama of the coast which offers an almost inexplicable attraction to the seashore. The crashing of the waves on a rocky island, the taste of the cool salty air, the awesomeness of an unmarred landscape stretching toward the horizon, the smell of the mud flats on a foggy summer morning - all of these together are part of the draw of the coast. Too, there is the mystery of the ocean as the original source of life and the continuing source of recharging vitality. In many ways the sea is yet in our blood.
- C. As a third aspect, the Maine coast is unique because of its historic and prehistoric importance. Long before Europeans "discovered" the New World, aboriginal Americans lived on the coast seasonally gathering their food from the sea and the shore. With the advent of colonization, the settlements on the coast played a key role as a focus for the trade which permitted development of much of the vast North American hinterland.
- D. Fourth, is the group of natural features which together set the Maine coast apart from any other physiographic area in the world: climate, soils, geography and vegetation.
 1. Much of the Maine coast has what is known as a perhumid climate. This refers to humid weather systems associated with thick fogs and frequent rains, and relatively cool summers and warm winters. Perhumid climates are found in very few locations in North America. Other than along the Maine coast they occur only along the Pacific coast of Washington and Oregon and in small pockets in some mountain regions.
 2. By and large the soil along the coast of Maine is shallow and infertile. In the southwest are the major sandy beaches, residuals of till wash plains left when the last glaciers finally retreated from Maine 12,000 years ago. East of York County are soils from clay, sand, and glacial till.

3. The diversity of geographic forms is perhaps the most noticeable natural feature of the Maine coast. As distinguished from inland Maine, most of the coast is rolling rather than hilly or mountainous in relief, although there are a few exceptional hilly areas on the coast which are all the more important due to their rarity. The southern portion of the coast is quite flat while from Casco Bay east the present shore was formed by submergence under the weight of the most recent glaciers and a general rise in sea level. The resultant landforms are plains in the extreme south and bold peninsulas and islands in the east.

The irregularity of the coast presents both advantages and disadvantages for recreational use and resource conservation. On much of the Pacific coast, for example, one can see for miles from the high, open bluffs fringing the ocean. This offers excellent, sweeping panoramas, but often dictates the setting aside of vast tracts to protect scenic vistas. The jagged, forested coast of Maine requires the setting aside only of pockets of seaside land. At the same time, natural area and park management is more difficult due to the discontinuity of coastal park and conservation sites.

It is interesting that along the Maine coast are a large proportion of the total percentage of the nation's headlands. Maine also has the deepest harbors and highest tides of the entire U.S. Atlantic seaboard. In addition, the irregularity of the coast gives Maine one of the longest shorelines of any state: 3500 miles (5600 km). Yet this lengthy shoreline accounts for only a small measure of our total land acreage. The value of the seashore, like any resource, is proportional to its rarity.

The diversity of coastal wetlands is as unique as the variety of landforms. Lakes and ponds are scarcer in the coastal area than in any other region of the State. Large estuaries and salt marshes as well as extensive mud flats, on the other hand, are found from Kittery to Cobscook Bay - evidence of the unusually high tides which stretch northward into the Bay of Fundy.

4. The climate, soils, and geography of the Maine coast combine to support the great spruce-fir forest region which characterizes the coast from Casco Bay eastward. South of Casco Bay is an area of mixed hardwoods interspersed with some softwoods. Offshore on the coastal islands are found many rare birds and plants beyond their inland limits of tolerance.

All of these natural factors together help describe the uniqueness of the coast.

- E. The fifth factor which makes the coast of Maine unique is its relatively low state of development, particularly Downeast. To be sure, much of the shore from York to Portland is lined with private homes and cottages. However, compared with states to the south, the Maine coast has so far escaped most of the sort of development which alters the face of the shore beyond recognition. Only in Portland has significant dredging and filling changed the shore to an undistinguished facade of piers and highways.
- F. But that is not to say that the pressures for development on the entire coast are not tremendous. Commercial, residential and recreational interests compete daily with industrial interests for the use of precious coastal land. Today about 45 percent of the resident population of Maine lives on the twelve percent of land comprising the coastal fringe. The vast majority of the state's public energy needs are generated at power plants sited on the coast. And in recent years at least a dozen major industrial developments have been proposed for various coastal locations in Maine. Moreover, it is estimated that over three-quarters of Maine's recreation generated employment occurs in the coastal area.

All of these pressures entail more than merely land use conflicts. They threaten a social order and cultural heritage as well. For many of the rustic villages barnacled to the shore and the quaint summer colonies alike represent the last strongholds of established ways of life which remain in many other places only as artifacts and memories. Conservation of the Maine coast must ultimately include protection of human as well as natural resources.

- G. One fact which surprises many is the low percentage of public ownership along the Maine coast. Approximately four percent of the total shoreline is in the public domain. In all of New England approximately eight percent of the coastline is publicly owned. In many of the western states the proportion is much higher. More than 60 percent of the shoreline of California, and 72 percent of the coast in Oregon, for example, is public. On the whole nationally (excluding Alaska) about 23 percent of the coast is public property. Furthermore, in most states the rights of the public in the intertidal portion of the shore are extensive, while in Maine this area is generally considered to belong to owners of the upland property.

The many characteristics of the coast come together as an indispensable aspect of what might be called the "Maine Image" - spruce covered islands surrounded by colorful lobster bouys; sunshine and peasoup fogs; weather-grayed fishing shacks; cold, blue waters which flow to an intangible celestial attraction.

All of these factors combine to offer problems and opportunities for using and protecting a natural resource - the Maine coast - the likes of which cannot be found anywhere else in the world.

WHY CONSERVE OPEN SPACE?

In many areas of the United States more urbanized than Maine, it would be unnecessary to address the question of why to conserve open space. The benefits of open space areas would be obvious. However, in Maine where perhaps better than 90 percent of our land area is undeveloped, it would be easy to conclude that we already have an over abundance of open space areas. The crucial points then are not only how much open space there is and why it is valuable but where it is located and to whom it is available.

Open space resources are not of a single type although there is some overlap between types. For discussion purposes open space resources can be broken down into several types:

A. Open Space Areas for the Conservation of Natural Resources.

1. Fish and Wildlife

Needless to say, fish and wildlife are important to the State's economy, both directly and indirectly. Fisheries landings along the Maine coast in 1977 totaled 182,200,000 pounds. Landed value of this harvest was \$62 million. Total economic value of the commercial fishery in Maine comes to well over one million dollars a day. Hunting, sport fishing and nature study also are important recreational activities. To maintain each of these it is essential to have productive habitats. This means that dunes, estuaries and other wetland areas as well as upland habitats must be protected. Today there are a number of endangered, threatened or peripheral fish, birds and plants in the coastal area. It is primarily the responsibility of the federal Fish and Wildlife Service, the Maine Department of Inland Fisheries and Wildlife and the Department of Marine Resources along with private organizations such as the Audubon Societies to protect fish and wildlife resources on the coast.

2. Scientific Study and Environmental Education

While in many cases areas for scientific study and environmental education are coterminuous with fish and wildlife habitats they are distinct because they are often areas of unique ecological or geological character. Numerous academic and research programs already use the resources of the Maine coast for scientific study and environmental education. Both of these uses can directly benefit our physical and mental wellbeing by increasing our knowledge of ecosystem diversity and the impacts of human activity affecting the sea and the shore. It is imperative that we protect the best examples of harbors, salt marshes, mud flats, rocky shores and beaches so that we do not find ourselves studying only historical references.

B. Open Space for Parks and Recreation and the Protection of Scenic Resources

1. Parks and Recreation

The Bureau of Parks and Recreation has over the years acquired some excellent open space lands and outstanding resources in Maine, particularly along the coast. However, during the past few years there has been a general shift away from acquiring resource oriented parks in favor of providing smaller, user oriented recreation areas near population centers throughout the State. Undeniably these urban area parks are an important addition to Maine's outdoor recreation facilities. Nevertheless, acquisition of those open space areas and natural features important for recreation and protection in their own right should not be allowed to lapse.

The State in its parks and memorials holds some 13,500 acres in Maine's coastal area - seemingly a large amount of land, but a mere fraction of a percent of the total coastal land base. Increasing population, expanding tourism and improved environmental awareness combine to suggest that pressures for outdoor recreation are greater than ever. Of course, balancing this is the uncertainty of the short and long term energy outlook. But there will always be people wanting, willing and able to go to the resource parks. A case can clearly be made for a manifold increase in the property in our coastal state parks. Particularly since the value of these parks toward open space and resource conservation in Maine goes far beyond simply fulfilling recreation needs.

2. Scenic Resources

Although intangible, the scenic resources of Maine, especially at the edge of the sea, are among the State's most precious. The natural scenery is one of the amenities which makes Maine such an attractive place for residents and tourists alike. The conservation of coastal open space as an aesthetic resource, then, is of no small value.

To date, in addition to those areas protected in park and wildlife areas, approximately 9,000 acres of coastal land have come under the protective cloak of easements granted for conservation purposes. Most of these easements have been granted by private island property owners. Although these easements do not allow public access except in a few cases, they do restrict visual intrusions in many significant coastal locations. Besides these individual landowners, private conservation organizations, notably the Nature Conservancy, also help protect scenic resources by holding properties in their natural state.

One 12-mile stretch of road in the coastal area has been designated as an official scenic highway. Other open space areas with good coastal vistas could be included in an expanded scenic highway system to encourage their retention as open spaces.

Maine's environmental laws also help to protect scenic resources along the coast. Under the Mandatory Shoreland Zoning Act, for example, areas tagged as protection zones have restrictions on development and tree cutting. This protects the shore not only from visual degradation but also from erosion and other types of degradation.

C. Open Space Resources for Managed Protection

1. Forests

While most of Maine's remaining great woodlands are located inland back from the coast, forest lands are among the most productive and most economically important of the state's natural resources. In the Downeast coastal reaches of Hancock and Washington Counties large scale timberland management is yet the rule. Indeed, timberland ownership by the major forest products corporations is on the increase there. Along most of the rest of the coast small scale woodlot management and tree farming is more common. Meanwhile residential, industrial and commercial land uses are increasingly eating away at the remaining tracts of woodland. Few spots on the coast today are managed as high quality sustained yield forest land. Fewer still are the ancient stands of virgin trees.

2. Agricultural Land

Despite the efforts of the pioneers who cleared the forest to farm the land, agriculture in Maine has been on a disturbingly precipitous decline for the past several decades. Between 1954 and 1974, acres of cropland statewide dropped 50 percent. Rich soiled, rural roadside farms sprout mobile homes and shopping malls rather than crops. Abandoned fields support scrub pine and junipers rather than productive forest timber. With the first signs of weather catastrophe and crop failure in our western and mid-western farm belts and of inevitable energy cost increases portending shifts toward greater self-sufficiency, it behooves us to save our most productive agricultural lands. Of the \$1.1 billion in cash farm receipts in New England in 1976 Maine's share amounted to more than 35 percent. And though the state now imports more food than it exports, agriculture is still the fourth largest industry in Maine. A rationale for allowing existing prime agricultural lands to be converted to other uses will not be justifiable in the long run.

In 1977, the Commission on Maine's Future recommended that "it be the policy of the State of Maine to preserve and reclaim agricultural land". Subsequently, a twenty-one member state commission was established by the Legislature to explore recent declines in and the future of farming in Maine. Ultimately, we may have to try Agricultural Resource and Protection Zoning, purchase and lease back or other programs. One possibility would be to emulate Nova Scotia where after 1978, land used for growing crops will become tax free.

3. Farmland and Open Space Law and Tree Growth Tax Law

According to the National Wildlife Federation urbanization devours nearly a million acres of farmland in the United States every year. Additionally, two million acres of agricultural land is lost annually due to leapfrogging development and the construction of new ponds and reservoirs.

The Maine Farm Productivity and Open Space Land Law enacted in 1971, revised in 1973 and further amended in 1976 - was intended to prevent the forced conversion of farmland and open space land to more intensive uses as the result of economic pressures caused by taxing these lands for their potential uses such as houseslots or commercial development. Farmland or open space landowners may apply to have their land classified for current use valuation.

The law also allows municipalities to accept or acquire scenic easements or development rights for the preservation of open space or agricultural farmland. These easements or development rights must be held for a term of at least ten years. As of January 1977, only 4,608 acres had been classified as farmland in the coastal area (0.2%). Less than 46,000 acres (1.9%) were classified as open space.

The Farmland and Open Space law has been criticized on a number of counts. It has not, for example, protected large tracts of open space lands, particularly near cities. Neither has it significantly prevented the conversion of agricultural land to other uses. Traditionally, most farm and open space lands in Maine have received low assessments. There is little incentive, then, to seek special classification. Simply stated, few people in Maine seek classification for philosophical reasons. On the contrary, economic considerations are the most important. As more towns are re-evaluated and as market values rise, more landowners will seek to have their farm or open space land taxed at current use levels.

Somewhat similar to the Farm Productivity and Open Space Land Law is the Tree Growth Tax Law which declares it to be the policy of the State to "tax all forest lands according to their productivity and thereby to encourage their operation on a sustained yield basis." The law is intended to provide incentive to forest landowners to retain their land holdings in forest production and to improve woodland management practices. Parcels over 500 acres must be included while the law may be applied to parcels of 10 to 500 acres at the owner's discretion. Nearly 132,000 acres of woodland in the coastal area towns (5.4%) were classified under the law as of the beginning of 1977.

D. Open Space Areas for Public Health and Safety

1. Air Quality

Maine generally has few air pollution problems. With the exception of emissions from out-of-state sources entering Maine airsheds, Maine's worst air quality problems are localized. Some of the state's urban centers are trouble spots due to geographical peculiarities which cause temporary thermal inversions or due to concentrations of emissions. In the case of the latter open space areas can have a definite beneficial effect. The stiffling canyon effect of tall city buildings can be relieved by opening up the "canyons" with open spaces which promote air circulation.

2. Water Quality

Open space areas can play a vital part in the protection of both surface and subsurface water supplies. Lakes and streams must be guarded for watershed protection while aquifers and aquifer recharge zones must be protected for well water supplies. Although Maine has thousands of freshwater lakes, there are fewer lakes and ponds in the coastal area than in any other portion of the state. Furthermore, coastal water supplies in Maine are especially fragile because of the concentrations of population and the danger of saline intrusion.

3. Flood Plains

Intertidal inundation is the way of the sea. Historically building on the flood plains of the seashore has been the way of people. It is a well known and sad story that the two often conflict - with neither the winner in the end. Nationally floods are our single greatest annual disaster. Winter storms in January-February 1978 caused damages in Maine's coastal counties totaling \$47 million. Most of the destruction was a direct result of coastal flooding. There are now both federal and state programs to discourage incompatible flood plain

activity. The President, moreover, recently directed all federal agencies to refrain from supporting, funding or issuing licenses and permits to most new projects located on floodplains. Yet people continue to fight the water at the ocean's edge. All major flood plain areas along the Maine coast could be included as part of a statewide open space program implemented for the public's safety.

4. Soil Stability and Erosion

Many coastal flood plain areas are particularly susceptible to shore erosion, most notably beach areas in southern Maine. Erosion and soil instability may be the results of natural processes but they are often severely aggravated by human intervention. The construction of seawalls, buildings, piers, jetties, groins and other coastworks can increase erosional rates many fold. Extant state legislation concerning wetland alteration, shoreland zoning, subdivision construction and site location offers some protection. Still, shoreside development continues to accelerate coastal property instability and loss. Following the storms of early 1978, coastal property owners from Kittery to Lubec have sworn they will rebuild once again - a prospect which promises to be more expensive than ever, both to the individuals and the public who will subsidize the reconstruction.

A coastal open space program could include the acquisition of those private beach areas which are subject to chronic and acute shoreline erosion. The State could purchase coastal beaches, such as Higgins Beach in Scarborough and Ferry Beach in Saco, while towns would continue to maintain them. This would serve the multiple purposes of increasing coastal recreation opportunities and protecting a fragile resource while improving the safety of citizens who should not be living right at the edge of the land anyway. The costs of such a program should be weighed against the long term costs of periodic reconstruction and the loss of preogatives not exercised if acquisition is not undertaken.

These then are some of the types and values of open space. There are a variety of techniques for protecting valuable open space areas. Many of these are discussed in the Implementation section of this report. The most important factor affecting open space acquisition at all levels is the availability of money. If open space and resource conservation are to be carried out on a large scale, it is essential that funds for this purpose be greatly increased.

COASTAL PROTECTION

There are a number of existing and proposed recreation and conservation efforts which affect the Maine coast. These range from regulatory laws to ad hoc special interest groups.

Federal

Among the most important national laws affecting coastal resources are the following:

- Coastal Zone Management Act (1972, 1976)
- Maine Protection, Research and Sanctuaries Act (1972)
- Water Pollution Control Act (1972, 1977)
- Deepwater Ports Act (1974)
- Ports and Waterways Safety Act (1972)
- National Environmental Policy Act (1969)
- Fishery Conservation and Management Act (1976)
- Clean Air Act (1970, 1977)
- Flood Disaster Protection Acts (1973)
- National Historic Preservation Act (1976)
- Water Resources Development Act (1974)
- Land and Water Conservation Act (1965)

All of these laws are useful tools for protecting coastal areas. However, none of these laws alone, nor all of them together, are adequate for conservation of our coastlines.

The two federal agencies which hold coastal land in Maine for resource protection are the National Park Service and the Fish and Wildlife Service. Besides these, the Coast Guard, the Navy and the Air Force all maintain installations on the coast, though, except in a very few cases, active recreation is not allowed on these properties and protection of natural resources is at most incidental to the purposes of the installations. One 260 acre tract in Winterport is managed by the U.S. Forest Service for blueberry production.

One coastal area, Monhegan Island, has been designated a National Natural Landmark. Twenty-three coastal sites are National Historic Landmarks. Of the 328 Maine sites on the National Register of Historic Places, 215 are located in coastal area communities. Twenty-five of the 32 sites in Maine on the National Registry of Historic Districts are in coastal towns.

There are also a number of federal or federally funded administrative programs which have a bearing on coastal recreation and conservation. The Heritage Conservation and Recreation Service, for example, administers the Land and Water Conservation Fund which provides matching grants to states, and through the states, to local governments for the planning, acquisition and development of public outdoor recreation areas.

The Soil Conservation Service, an agency of the U.S. Department of Agriculture, is involved in recreation largely through its Resource Conservation and Development Projects. Three RC&D projects in Maine combined cover all of the State's coastal counties.

The Department of Housing and Urban Development administers several programs which provide technical and financial assistance to communities relating to recreation. Comprehensive Planning Assistance "701" grants and Community Development "block grants" are the most important of these.

The Economic Development Administration provides funds for a variety of development projects including such facilities as marinas and campgrounds.

The Office of Coastal Zone Management provides monies to states and communities for planning and implementation of programs to encourage the development and conservation of resources in coastal areas. Under the Coastal Zone Management Act, states and municipalities are also eligible for grants to set up estuarine sanctuaries and soon will be eligible for grants to acquire lands to provide public access to public coastal areas and to preserve coastal islands.

U.S. Army Corps of Engineers has completed sixty-five navigation projects in coastal rivers and harbors in Maine. These projects are intended to improve navigation for both commercial and recreational boating.

There are a number of other federal agencies which have an impact on coastal resource use. However, these are the major agencies affecting coastal recreation and protection in Maine.

State

Currently there are about 75 state laws, administered by more than a dozen separate agencies, which pertain to management of coastal resources in Maine. Of these, seven are administered by the Department of Conservation, two specifically by the Bureau of Parks and Recreation:

<u>LAW</u>	<u>AGENCY</u>
Bureau of Parks & Recreation Statutes	Bureau of Parks & Recreation
Water Safety Aids to Navigation, Boating Facilities	Bureau of Parks & Recreation
Keep Maine Scenic	Department of Conservation
Coastal Island Registry	Bureau of Public Lands
Submerged & Intertidal Lands Act	Bureau of Public Lands
Land Use Regulation for Wildlands	Land Use Regulation Commission
Mining on State owned Lands	Bureau of Geology & Public Lands

With respect to the conservation of shorelands, there are thirteen principal state statutes governing land and water use and quality along the coast:

STATUTE

PURPOSE

Coastal Wetlands Act (38 M.R.S.A. 471-478)	Directs the Board of Environmental Protection to regulate uses that could harm tidal and subtidal lands.
Coastal Island Trust Act (12 M.R.S.A. 641-646)	Enables coastal island trusts administered by coastal island commissions to be set up to control and guide the development of Maine's coastal islands.
Submerged Lands Act (12 M.R.S.A. 514-A)	Reaffirmed the State's ownership of submerged and intertidal lands.
Coastal Conveyance of Petroleum Act (38 M.R.S.A. 541-560).	Established an oil spill prevention and clean-up program financed by a fee on oil brought into Maine ports.
Land Use Regulation Commission (12 M.R.S.A. 681-689)	Directs LURC to zone all land use in the unorganized areas of the state, including six unorganized townships and 116 islands in Maine's coastal area.
Mandatory Shoreland Zoning Act (12 M.R.S.A. 4811-4814)	Requires municipalities to enact and enforce zoning for shore areas within 250 feet of water.
Protection and Improvement of Waters Act (38 M.R.S.A. 356)	Mandates that the quality of all state waters be protected from degradation.
State Plumbing Code (22 M.R.S.A. 42)	Sets up minimum standards for subsurface waste water disposal.
The Subdivision Law (30 M.R.S.A. 4956)	Specifies that communities have to review proposed subdivisions to see that they meet minimum state criteria.
Site Location of Development Act (38 M.R.S.A. 481-489)	Controls large development projects through a permit procedure.
Protection and Improvement of Air Law (38 M.R.S.A. Ch. 4)	Directs the Board of Environmental Protection to regulate all air emissions to protect public health, property, and natural resources.
Solid Waste Management Act (38 M.R.S.A. Ch. 13)	Encourages programs that will reduce the volume of and assure the environmentally sound disposal of solid waste, and promote the reuse and recovery of valuable resources.
Conservation of Maine Species Act (12 M.R.S.A. 3504)	Gives the Department of Marine Resources broad regulatory powers to manage almost all phases of marine fisheries.

The Maine Bureau of Parks and Recreation is, of course, charged with providing opportunities for public recreation. But the Bureau also has other responsibilities. To quote the Bureau's statutes: "wilderness or natural areas, or both, shall be established and managed primarily to preserve the natural character and features of such areas, and any use or development which threatens such character and features shall be prohibited." The law also states that one of the types of parks the Bureau "shall have jurisdiction, custody and control in, over and upon [is]...any area of land largely in a natural condition and containing natural features of scenic, ecological or scientific interest or importance." (12 M.R.S.A. 601-602).

All of these laws are a very important part of the effort to protect our shore and marine resources. But as William R. Adams, Jr., former Commissioner of the Department of Environmental Protection, pointed out in a speech to the Commission on Maine's Future in 1976

Maine cannot rely upon environmental laws alone to preserve our lifestyles. Environmental laws cannot halt the development of agricultural land, nor dictate shoreland uses. Environmental laws are no panacea against changes to landscape or lifestyles, and people who think so are in for a rude shock.

In his talk, Commissioner Adams went on to cite examples of environmental regulations which offer little control over cumulative effects. As long as the criteria for approval are met for any one specific wetland project, for instance, the Board of Environmental Protection is required to approve the permit. The additive result of approving an endless number of individual applications could be "wall-to-wall piers from Kittery to Eastport." What we are missing by this case-by-case regulation are the broad social and political issues which, in the end, will result in infringements of the rights of the general public. "Pocketcombs" of wall-to-wall private piers limit public access to public lands below the low-water mark and cause farreaching changes in esthetic appearance.

The end consequence of this sort of environmental management will be a contraction of the alternatives available to the people of Maine to protect their resources and to improve their lifestyles. What can be done is to improve the coordination of planning on a regional and statewide basis. This need not mean the loss of all local decision making. What it does mean is the setting of policy at the State level with the execution of regulation left to the municipalities, subject to oversight by the State. The Maine shoreland zoning experience provides a good case study of this type of social-environmental control. Despite all the problems encountered in the imple-

mentation of shoreland zoning, it is fair to say that the exercise has served its purpose. We only need to improve our enforcement techniques. What is important is that the rationale behind shoreland zoning as a method of helping to protect a fragile resource has been accepted by the people of Maine as a social control necessary to guard the rights of the public at large.

Besides the Bureau of Parks and Recreation there are three principle state agencies responsible for managing public lands along the coast of Maine. The Department of Inland Fisheries and Wildlife administers wildlife management areas including 25 coastal eider duck islands. The Bureau of Public Lands maintains the Coastal Island Registry and has responsibility for the submerged and intertidal public lands as well as the public reserved lots and public "agricultural lands." The Bureau of Forestry manages a few select forest lands for silviculture experimentation.

The State Planning Office is also involved in the conservation of coastal resources though it neither administers regulatory laws nor holds public lands. The Coastal Program of the State Planning Office seeks mainly to coordinate the various activities of local, regional and state governments to meet short and long term economic, social, and environmental needs by balancing the conservation and development of Maine's coastal resources.

The 106th Maine Legislature, in 1974, set up a Registry of Critical Areas (natural features "of unusual natural, scenic, scientific, or historical significance") to be coordinated by the State Planning Office. An eleven member Critical Areas Advisory Board was created to advise and assist in the establishment of the Registry and in the conservation of critical areas throughout the State. So far, more than ninety coastal sites have been registered as official critical areas.

On February 4, 1976, Governor James B. Longley revamped the Advisory Committee on Coastal Development and Conservation. One of the major responsibilities of the CCDC, as stated in the Governor's Executive Order, is to "make recommendations for the conservation of important coastal natural resources."

Local

At the local level, a number of coastal communities in Maine manage lands for resource conservation and public outdoor recreational use. In some instances, however, notably coastal beaches, it is not clear whether the municipalities, in fact, legally own some of the lands they manage. Title searches would have to be done to clarify ownership. It is expected that over the next few years cities and towns in Maine will become more actively involved in the provision of outdoor recreation facilities.

Attempts have been made in several Maine communities in recent years to control residential growth by enacting a moratorium on building. Harpswell, for example, voted in 1973 to approve a moratorium banning all new subdivisions and most commercial development until 1975 or until a comprehensive plan had been formulated and accepted by the town.

More recently, voters in Arundel enacted an ordinance which limits housing construction in that town to 36 units annually. This action was taken as a check on the residential growth which resulted in a 49% increase in population in the town during the six years 1970-1975.

Also, as mentioned above, all municipalities were required by the Mandatory Shoreland Zoning Act to zone all shore areas within 250 feet of high water mark. One hundred twelve of the coastal cities and towns now have State approved ordinances describing their shoreland zoning. Seventeen have State imposed ordinances on all of their shore areas and two have State imposed ordinances on some of their shorelines.

One bill, initially passed by the State Legislature in 1977 but vetoed by the Governor, would have increased the Community Recreation Fund of monies available to towns to purchase open space and recreation property. Money for this proposal would have come from an increase in the State's real estate transfer tax.

Private

Along with federal, state and local efforts to protect Maine's coastal resources there are a number of private groups which actively participate in coastal conservation.

The Critical Areas Program, for instance, grew out of a Natural Areas Inventory which was conducted by the Natural Resources Council of Maine in 1971-73. The purpose of the inventory was (1) to identify, classify and describe sites and areas whose natural state was suggested to be of unusual interest, and (2) to develop a program for natural area protection which would be more comprehensive in scope and more coordinated than had been undertaken previously. Dozens of coastal natural features were listed in the original Natural Areas Inventory. The State Planning Office is now in the process of updating the Inventory.

Several private, not-for-profit organizations have become involved in coastal land ownership in recent years. Most prominent among these are The Nature Conservancy, the National Audubon Society, and the Maine Audubon Society. The Maine Chapter of the Nature Conservancy alone holds forty-four properties in the coastal area with a cumulative acreage of over 3700 acres.

However, ownership is only part of the involvement of these organizations. The Audubon Societies, for example, also conduct extensive environmental education programs. Since 1936 the National Audubon Society has operated the Audubon Camp of Maine on Hog Island in Upper Muscongus Bay as an adult education center. Two sessions are held annually in the summer. Maine Audubon conducts numerous field trips annually to coastal islands, operates a nature center at the Scarborough Marsh and conducts educational programs at its Mast Landing Sanctuary in Freeport.

Several small, private landowner organizations provide ongoing resource protection. The Monhegan Associates, for example, is a group of private individuals, most of them landholders on Monhegan Island, which oversees the conservation and use of that portion of the island which remains undeveloped. The Hope Island Club holds Hope and Sand Islands in Casco Bay. Friends of Nature retain McGlathery and Little McGlathery Islands in Merchant Row as undeveloped. The Isle of Springs Association protects the shore area of that island off Boothbay Harbor for the members collectively. The Dix Island Association, holds most of the land on Dix Island in Muscle Ridge for the members in common.

An organization which does not own land itself but which helps obtain conservation easements from private landowners is Maine Coast Heritage Trust. The Coast Heritage Trust has helped secure easements on more than 135 properties, mostly in the coastal Hancock County region. The recipients of these easements include local, state and federal agencies as well as certain private conservation organizations.

There have also been a number of private ad hoc citizens groups formed to respond to particular threats to coastal lands over the past ten years or so. The formation of Citizens Who Care in 1969, to oppose the development of an oil terminal by King Resources in Casco Bay is one example. Another group is the Coastal Resources Action Committee. CRAC has intervened in the administrative proceedings of the Board of Environmental Protection on a number of occasions to block the construction of heavy industrial developments on the coast. Safe Power for Maine worked in opposition to the siting of a nuclear power plant on Sears Island. During the last ten years there have been more than a dozen proposals for heavy industry on the coast, each with its watchdog citizens group.

Other private organizations which have been involved in various aspects of coastal area resource protection are the Sheepscot Valley Conservation Association, the Maine Public Interest Research Group, the Oyster River Bog Association, the Royal River Watershed Association, Save Our Environment, For the Love of Eastport, Friends of Merrymeeting Bay, Save Agamenticus, Pine

Tree Conservation Society, Damariscotta River Association, Citizens for Safe Power, Ocean Park Conservation Society and the Coastal Resources Center. Local conservation commissions, both through the Maine Association of Conservation Commissions and individually, have also played a major role in resource conservation at the municipal level.

FINDINGS

COASTAL OWNERSHIP

There are 2,449,969 acres in the 143 minor civil divisions of Maine's coastal area (excluding most coastal submerged lands). Of this, about 2,348,000 acres (95.8%) are privately owned. The balance, about 101,900 acres, is open space land maintained in a natural condition by public agencies or private conservation organizations. Figure 2 illustrates land ownership in the coastal area. Figure 3 gives a breakdown of the public and private conservation open space lands by jurisdiction for the coast.

Federal

Federal agencies, notably the National Park Service and the Fish and Wildlife Service, hold about 50,000 acres, or 2.1% of the total coastal area acreage. This does not include Coast Guard lighthouses and military installations which are closed to the general public and General Services Administration properties. The largest block of federal land ownership on the coast is the 34,370 acres of Acadia National Park in Hancock and Knox Counties.

State

Slightly more than 25,000 acres are controlled by various state agencies in the coastal area excluding the 1,299 small coastal islands under the jurisdiction of the Bureau of Public Lands. This acreage is equal to approximately one percent of the total coastal land area. The Bureau of Parks and Recreation controls in its coastal state parks and memorials more than 13,500 acres of this 25,000. The other state agency with substantial coastal open space properties is the Department of Inland Fisheries and Wildlife.

Municipal

The coastal cities and towns control about 17,900 acres of open space lands maintained in a natural condition. Not included in this figure are some small local parks (under 10 acres), tax delinquent lands and coastal beaches. Beach areas were not included because of the difficulty in defining boundaries and the confusion over ownership. In any case, excluding these beach open spaces does not significantly affect acreage figures for the coast as a whole.

Private Conservation*

A total of nearly 8,400 acres are owned by private conservation organizations in the coastal area. The Nature Conservancy is the largest single land owner in this category with 3,724 acres. State designated game sanctuaries have been included here where acreages

*Private conservation lands are included in this report because they accrue some public benefit from their open space values by having restrictions on their use or development. Although in many cases they are, in some cases they are not, available for public recreational use.

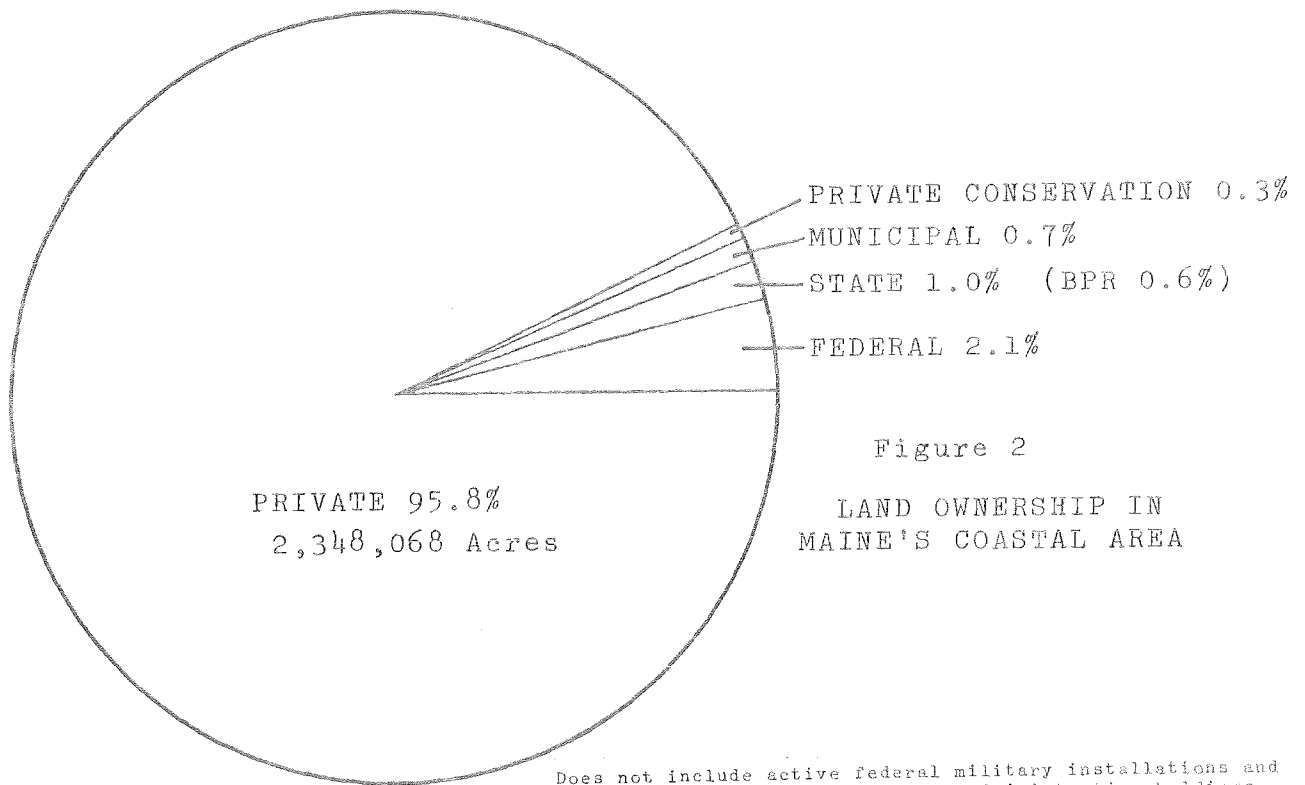


Figure 2
LAND OWNERSHIP IN
MAINE'S COASTAL AREA

Does not include active federal military installations and light stations, General Services Administration holdings, Maine Department of Transportation properties, unregistered State owned islands, and some municipal beaches.

Figure 3
OWNERSHIP OF PUBLIC AND
PRIVATE CONSERVATION OPEN
SPACE LAND IN MAINE'S
COASTAL AREA
101,901 ACRES

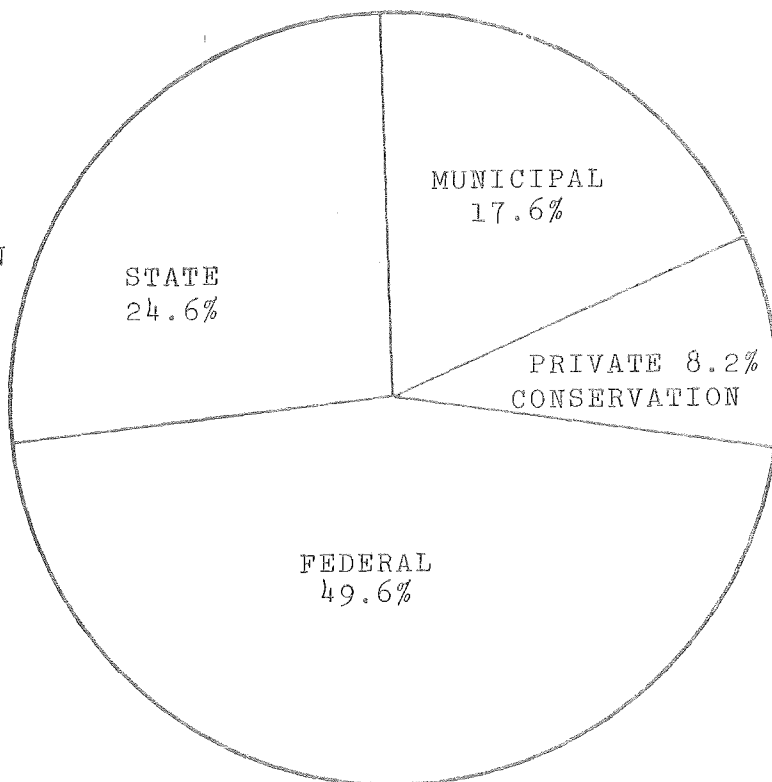
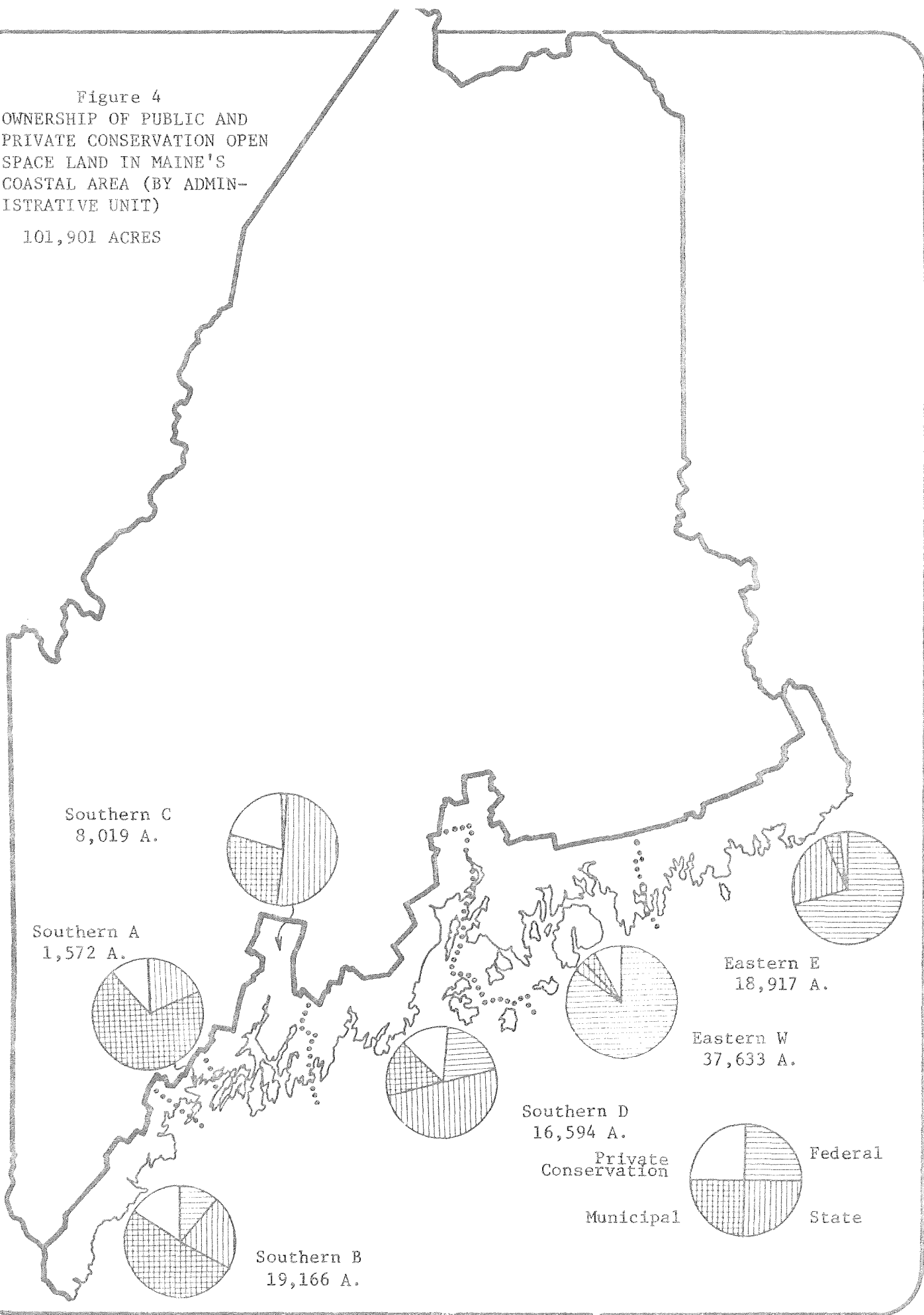


Figure 4
 OWNERSHIP OF PUBLIC AND
 PRIVATE CONSERVATION OPEN
 SPACE LAND IN MAINE'S
 COASTAL AREA (BY ADMIN-
 ISTRATIVE UNIT)

101,901 ACRES



were known. In addition to these areas, there are about 9,000 acres of private lands encumbered with conservation easements which restrict development to various degrees. These areas have not been included in the inventory because for the most part they do not allow public access. These lands under easement do, however, constitute an important floral, wildlife and aesthetic resource. The Bureau of Parks and Recreation has responsibility for monitoring 13 separate coastal conservation easements totaling about 900 acres.

Table 2

MAINE COASTAL PUBLIC AND PRIVATE CONSERVATION OPEN SPACE LAND OWNERSHIP

By Administrative Unit

	ADMINISTRATIVE UNIT												COAST		
	Southern A		Southern B		Southern C		Southern D		Eastern W		Eastern E		Total Acres	% of Total Acres	% of Total Public & Private Conservation
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%			
Coastal Acreage	46,599	100	375,315	100	369,988	100	445,402	100	650,352	100	562,313	100	2,449,969	100	-
Federal	0	0	2,641	0.7	30	*	3,215	0.7	31,584	4.9	13,133	2.3	50,603	2.1	49.6
State (BPR)	289 (288)	0.6 (0.6)	4,210 (1,080)	1.1 (0.3)	4,272 (1,465)	1.2 (0.4)	8,423 (6,016)	1.9 (1.4)	3,333 (2,656)	0.5 (0.4)	4,504 (2,039)	0.8 (0.4)	25,031 (13,544)	1.0 (0.6)	24.6 (13.5)
Municipal	1,107	2.4	9,695	2.6	2,172	0.6	2,761	0.6	1,094	0.2	1,067	0.2	17,896	0.7	17.6
Private Conservation	176	0.4	2,620	0.7	1,545	0.4	2,195	0.5	1,622	0.2	213	*	8,371	0.4	8.2
Total Public & Private Conservation	1,572	3.4	19,166	5.1	8,019	2.2	16,594	3.7	37,633	5.8	18,917	3.4	101,901	4.2	100

* Less than 0.1%

VISITOR USE

Figure 5 shows that the volume of visitor use at state parks and memorials with day use facilities increased at both coastal and inland facilities between 1966 and 1976. However, coastal use rose at a considerably faster rate than inland use. Since 1970, inland day use has remained fairly stable averaging about 420,000 visitors annually. Coastal day use, in contrast, has markedly increased in recent years. The volume of coastal use is now more than three-fold that of inland use.

A comparison of coastal/inland design capacities and user estimates for 1976 reveals that while inland facilities total 53% of potential capacity and coastal facilities 47%, coastal use was 76% and inland 24%. The pressures on coastal state parks and memorials is not only disproportionately large but seems to be growing.

As presented in Figure 6 visitor use at state parks with camping facilities increased between 1966 and 1970, both inland and coastal. Inland park camping use peaked in 1970 at about 237,600. Coastal camping use peaked in 1971 at about 104,300. Camping use declined until 1974. Inland use increased slightly during 1975 and 1976, due largely to the opening of Peaks-Kenny State Park in Dover-Foxcroft. Coastal use increased in 1975 then dropped again during the wet 1976 season.

Despite the fact that inland camping facilities were increased significantly between 1966 and 1976 with the addition of Rangeley Lake and Peaks-Kenny State Parks and expansion of sites at Aroostook State Park, the gap between inland and coastal use appears to be narrowing. Coastal parks were expanded by only about twenty sites. The importance of coastal/inland camping is illustrated by comparing site and user ratios. In 1976, 30% of the Bureau's camping sites were in coastal parks. Camping use was 31% coastal and 69% inland. Twenty-three percent of the campers at coastal state parks were Maine residents as compared with 35% at noncoastal parks.

These figures suggest that perhaps attempts should be made to spread use more evenly between coastal and inland regions.

To summarize, it appears that visitor utilization of state parks and memorials for day use activities is far heavier along the coast than inland. Camping use, on the other hand, is much heavier inland though overall use of available facilities is no greater inland than in the coastal parks. It is important to note that none of these statistics reveal potential demand or user preferences. They merely suggest how use matches existing supply.

Figure 5

MAINE STATE PARK AND MEMORIAL ESTIMATED VISITOR DAY USE: 1966 - 1976

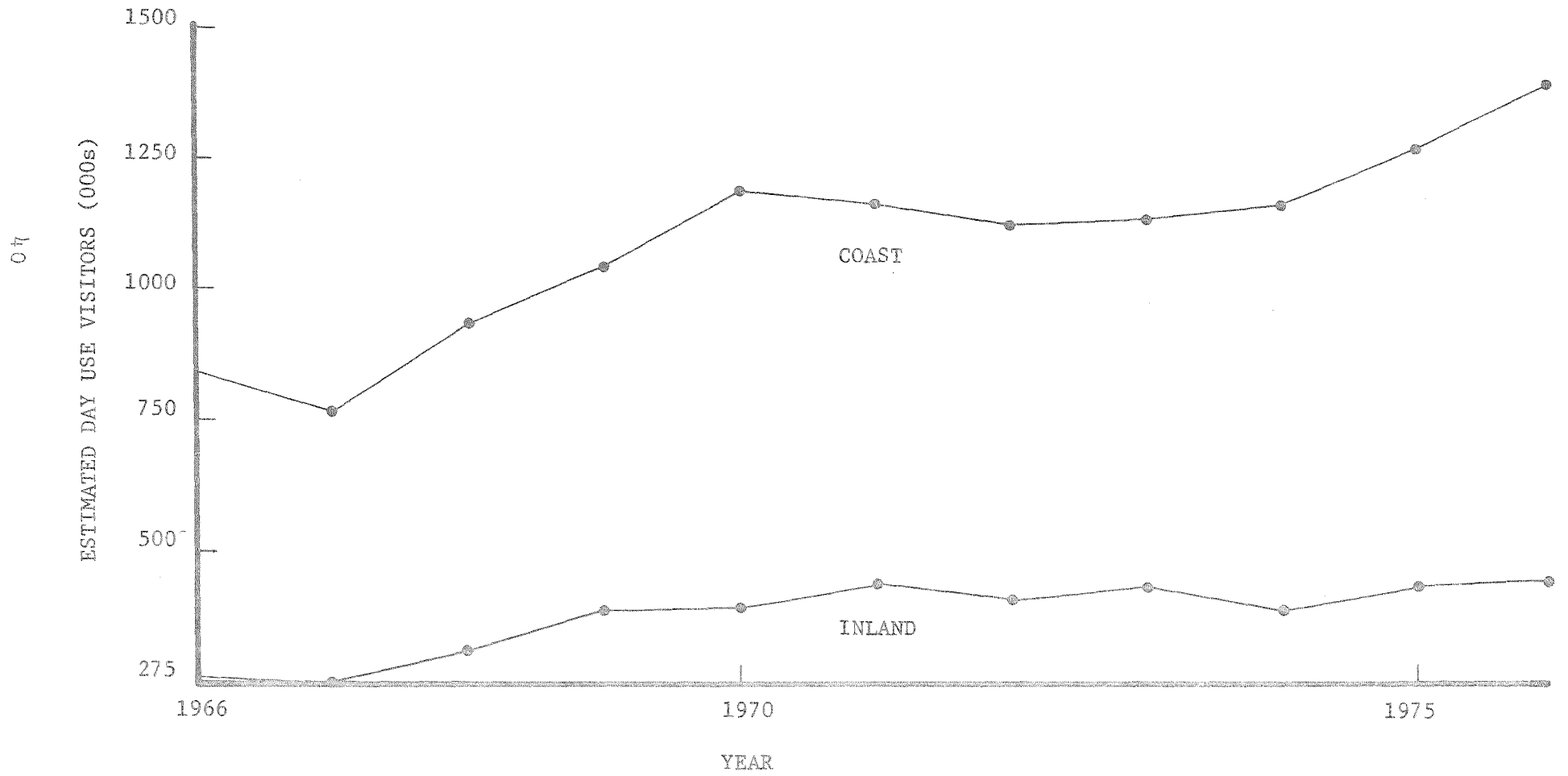


Figure 6

MAINE STATE PARK ESTIMATED VISITOR CAMPING USE: 1966 - 1976

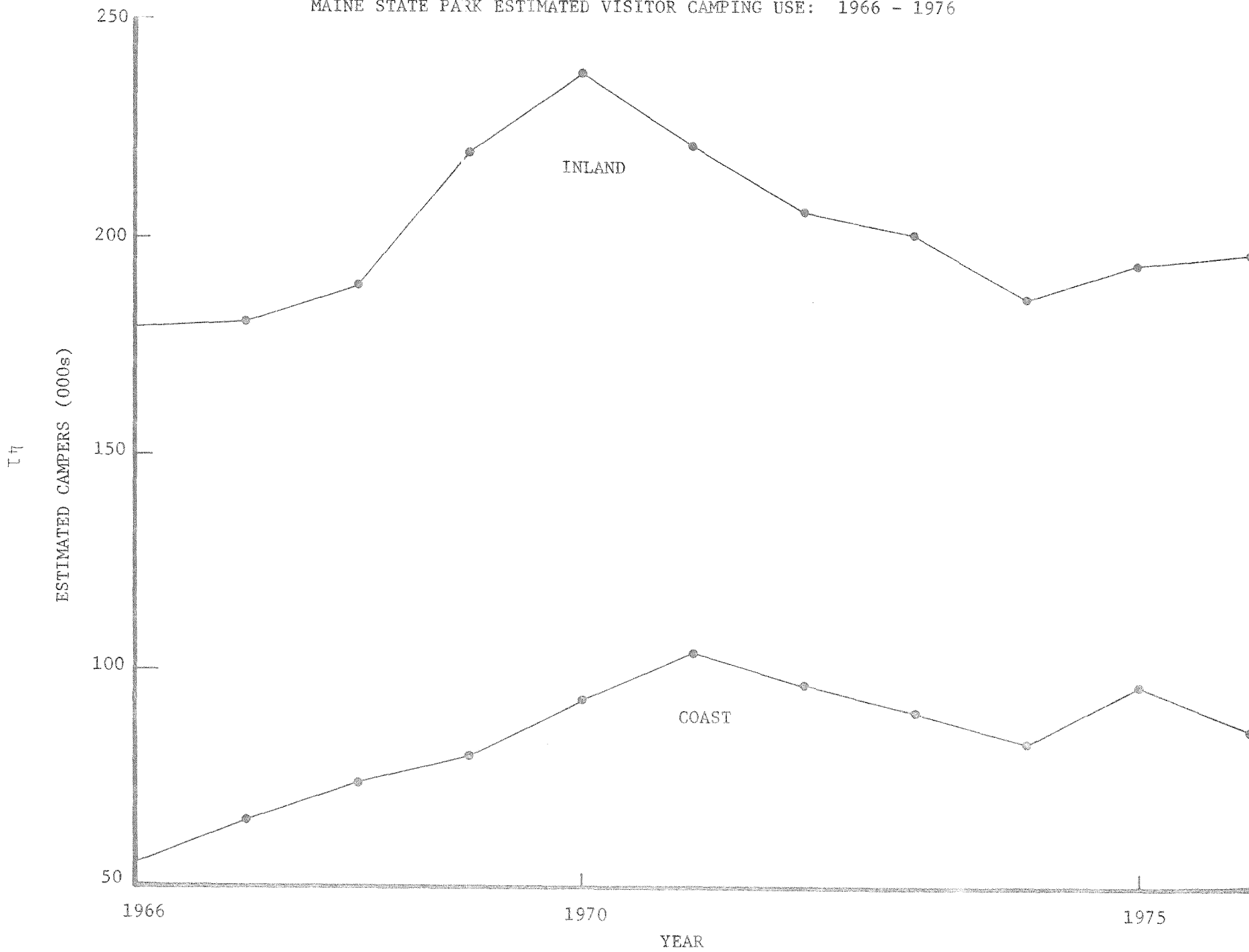


Table 3

PERCENTAGE DISTRIBUTION OF STATE PARK & MEMORIAL USE: 1976

Unit	Day Use		Camping		Total Public Use	
	Coastal	Inland	Coastal	Inland	Coastal	Inland
Southern A	12.6	87.4	0	100	9	91
Southern B	100	0	--	--	100	0
Southern C	97.4	2.6	--	--	97.4	2.6
Southern D	91.3	8.7	81.5	18.5	90.2	8.8
Eastern W	100	0	100	0	100	0
Eastern E	100	0	100	0	100	0

NATURAL FEATURE DEFICIENCIES

One criterion useful for assessing the conservation importance of sites being considered for protection is the need for the types of natural features represented on a particular site. Need can be approximated by looking at the types of natural features which are not well represented on a unit by unit basis. Types of protected features which appear to be deficient have been estimated for each Bureau of Parks and Recreation administrative unit. Protected features include those held by public agencies or private conservation organizations. Deficiencies are summarized in Table 4.

Generally, if a particular feature was known in at least one or two substantial protected areas, it was not considered deficient. Thus, because a natural feature type is not listed as deficient does not mean that other examples of the same type should not be protected. Deficiencies listed are only intended to suggest minimums. Table 4 summarizes the deficiencies for each coastal unit; an "X" indicates a deficiency. Forests (coniferous, deciduous and mixed) and lakes and ponds are represented in every unit. Other features are found to be deficient in various units. It should be pointed out that this assessment of deficiencies is limited to available inventory information.

Table 4

NATURAL FEATURE DEFICIENCIES BY ADMINISTRATIVE UNIT

Unit	Sand Beaches	Sand Dunes	Cobble Beaches	Rocky Headlands	Hills	Lakes & Ponds	Rivers & Streams	Forests	Grasslands	Bogs and Heaths	Freshwater Marshes	Estuaries and Salt Marshes	Sub-Alpine Habitats	Intertidal Flats
Southern A	X	X	X							X		X	X	
Southern B					X					X	X		X	
Southern C			X		X					X			X	
Southern D		X							X				X	X
Eastern W		X	X				X					X		
Eastern E		X	X		X								X	

RECREATION PREFERENCES

A criterion useful for assessing the comparative recreation importance of sites being considered for acquisition by the Bureau of Parks and Recreation is recreation preference. In 1977, a survey was conducted for the Bureau to determine recreation habits and preferences of both coastal residents and Maine people statewide. Briefly, coastal respondents preferred ocean-oriented activities somewhat more and camping somewhat less than respondents statewide. When asked what types of recreation facilities in coastal towns the State should spend more on, a majority of coastal interviewees supported increased spending for all types except marinas. A more complete discussion of survey results is presented in the Appendix volume to this report.

Towards assessing Maine coastal recreational preferences and needs on a regional basis, preferences for coastal recreation facilities were identified by analyzing choices listed in four separate surveys issued between 1973 and 1977. Not all of the surveys are directly comparable since somewhat different methodologies were used. Nevertheless, a qualitative evaluation can be made of the results of each with some interpretation.

According to the analysis, natural/wildlife areas, beaching facilities, both coastal and inland, trails and historic sites appear to be the most important preferences. Preferences were also indicated for picnic areas, scenic road turnoffs and boat access sites.

Table 5

RECREATION PREFERENCES BY ADMINISTRATIVE UNIT

Unit	Coastal Beaching	Lake Beaching	Coastal Boating	Freshwater Boating	Picnicking	Camping	Natural/Wildlife Areas	Trails
Southern A	X	X	X	X		X	X	
Southern B	X	X	X	X		X	X	X
Southern C	X	X	X	X	X	X	X	X
Southern D	X	X	X	X	X	X	X	X
Eastern W	X	X				X	X	
Eastern E	X	X		X		X		X

...the development of recreation on the Maine coast so far has been quite scattered and piecemeal: superbly attractive in a few places, and an unadulterated mess in many places....Much more thought and care and planning and effort will be necessary in the years ahead if the coast is even to begin to meet in an attractive and tasteful way the demands that are going to be placed on it.

--Joseph L. Fisher,
"Toward a Maine Coastal
Park and Recreation
System," 1966

RECOMMENDATIONS

Two types of recommendations are offered here: those which relate to programs and those which deal with specific sites. The program recommendations deal with broad concepts affecting large areas of the coast. The site specific recommendations deal with particular spots in the coastal area. For each of the site recommendations a statement of explanation is included to outline selection rationale. Maps of parcels already owned by the Bureau of Parks and Recreation indicate property boundaries. Maps of other sites show approximate location only since no research on ownership patterns has been undertaken.

1

Subject

COASTAL OPEN SPACE AND RESOURCE CONSERVATION PROGRAM

Recommendation

The Department of Conservation should, in cooperation with the State Planning Office and other relevant agencies, take an active, initiating role in the managed conservation of open space sites and natural features of statewide and regional significance through the implementation of a clearly defined coastal open space and resource conservation program.

Rationale Summary

Although a great deal has been accomplished in Maine in recent years, particularly along the coast, much more could be done to protect the recreational, archeological, historic, and natural resources of the coastal area from resource degradation, visual intrusion or similar loss.

State agencies act, sometimes cooperatively, sometimes competitively, in the protection of significant natural resources. Local groups at times find themselves without funds or the support of community officials when they want, for example, to protect open space areas for passive recreational use. Private groups respond often to the inclinations of their most vocal members. In short, while there is some coordination, there is no real well defined, long term program of open space and resource conservation for recreation and other uses in Maine. To protect coastal land, water, and open space resources of statewide significance action is necessary within the framework of an integrated, balanced open space system.

Perhaps what is needed is a plan which would (1) allocate responsibilities for natural resource protection, (2) coordinate open space policies, uses and implementation based on clear objectives, (3) set out the varied objectives of the policy-makers, users and managers of open space areas, (4) inventory existing and potential open space areas, (5) define open space sites of statewide significance.

A recent report prepared for the Committee on Coastal Development and Conservation on the Cumulative Impacts of Incremental Development on the Maine Coast (Land Use Consultants, Inc., February 1978) found that economic forces are the most significant factor in shaping coastal development patterns. According to the report, all types of development-residential, commercial, industrial, and recreational-can cause loss of important open space areas and resource degradation. Particularly worrisome are the additive effects of incremental

development activities. "Adverse consequences of successive development do in fact exist, are becoming more widespread, and impose a variety of environmental, social and monetary costs." The report recommends a program of research and development to provide economic incentives for landowners and developers "as a means of protecting natural resources, retaining open space and enhancing visual and functional diversity in the coastal area." The recommendations of this report are consistent with the conclusions of the cumulative impact study.

2

Subject

COASTAL OPEN SPACE CONSERVATION FUND

Recommendation

A state level open space conservation fund should be established expressly for the purpose of providing monies to State agencies and on a matching basis to local and regional bodies and perhaps some private charitable organizations for the protection of coastal open space areas.

Rationale Summary

In Maine, where perhaps better than 90 percent of our land area is undeveloped, it would be easy to conclude that we already have an over abundance of open space. However, the crucial points are not simply how much open space there is and why it is valuable, but where it is located and to whom it is available. Many cities and towns, particularly along the coast, are currently experiencing high growth. As land uses change, often little attention is given to reserving undeveloped areas for outdoor recreation and resource conservation. Or, in some cases, funds are not readily available to finance park and open space projects.

During 1977 a bill was introduced into the 108th Maine Legislature to raise the real estate transfer tax from \$.55 for each \$500 to \$1.00. The money resulting from the increase would have been funneled into a fund to assist municipalities in the acquisition of land, interests of land or facilities for public recreational use. Though it failed enactment, the concept is sound and could be promoted again. It is possible that other sources could be tapped, such as the Maine Coastal Protection Fund, a \$4 million fund financed by oil companies who pay a fee for the transport of oil in state waters. However, under existing legislation, this Fund may not be available for land acquisition. An increase in the real property transfer tax to fund local inland, as well as coastal, acquisitions for conservation and recreation would be one equitable source of monies.

A recent report on the cumulative impact of incremental development on the coast recommended that "the State should establish a fund for the acquisition of property, easements, or development rights to preserve high priority scenic and natural areas of state wide significance; and for grants to municipalities for acquisition of properties considered to be of prime local significance." The recommendation complements the suggestions offered in this report. The establishment of such a fund would also increase the monies available for matching with federal Land and Water Conservation Fund grants.

3

Subject

COASTAL BEACHES

General Recommendations

1. Impose a five year moritorium on construction on all coastal sand beach systems, including dunes, beach associated wetlands and accretionary beach areas.
2. Undertake a comprehensive review of local, state and federal statutes dealing with shoreline erosion and coastal flood plain management.
3. Increase technical and financial assistance to improve the enforcement of existing local land use regulations (shoreland zoning ordinances, plumbing code, building code, etc.) over seaside development.
4. Establish a uniform minimum shoreline setback for all structures, except those whose function depends on seaside location such as piers.
5. Require that new public beach facilities built on beaches be elevated above 100 year flood levels.
6. Deny permits for new seawall construction where it can be reasonably demonstrated that the wall will interfere with the natural processes of the particular beach system.
7. Review on a case-by-case basis all seawall reconstruction projects and restrict reconstruction where it can be reasonably demonstrated that the wall will interfere with the natural processes of the particular beach system.
8. Establish a fund to finance State or municipal acquisition of those beach areas prone to chronic and acute erosion.
9. Clearly post and enforce existing regulations at all beach park recreational areas.
10. Provide public service radio reports of swimming conditions (tides, temperatures), traffic and crowds at State park beaches.
11. Clarify the public's recreational rights in the intertidal zone by enactment of open beaches type legislation.

12. Prohibit off road vehicular use of the beach.
13. Identify and where appropriate, open and mark existing public rights of way to the shore.
14. Acquire and mark additional public rights of way to the beachface where desirable.
15. Restrict public foot access to the beach to designated routes.
16. Protect the remaining major undeveloped coastal beach systems by implementing the management recommendations of the coastal beach atlas being prepared by researchers at the University of Maine.
17. Prohibit all filling of salt, fresh and intertidal marshes, regardless of size.
18. Protect all development on unique or especially valuable natural areas or wild-life habitats.
19. Organize an education program to improve public awareness of the values and the processes of coastal beach systems and the effects of building on the beach.
20. Study of the importance of coastal beach recreation to local and State economies.
21. Study of the role of increasing property taxes as a cause of shorefront development and a disincentive to beach conservation.
22. Study of the geologic effects of existing jetties, groins, and dredging projects on coastal sand beaches.
23. Determine natural and psychological beach carrying capacities.
24. Study of beach associated estuaries for designation as National Estuarine Sanctuaries.
25. Provide financial and technical assistance to municipalities with beaches of state level recreational significance to improve rest-rooms, change houses, and ecologically sound beach maintenance.
26. Encourage public and bicycle transportation for the heavily used southern coastal beaches as an alternative to the construction of additional nearbeach parking areas.

27. Provide a readily available and well advertised source of beach grass to beach property owners and technical assistance in planting and maintaining the grass as a natural method of dune stabilization.

Site Recommendations

28. Implement the recommendations of Phillip Trudeau's study of the Popham Beach and Reid State Park beach systems.
29. Undertake management studies, similar to that done for Popham Beach and Reid State Parks, for all major coastal beaches held by the Bureau of Parks and Recreation.
30. Construct parking areas to keep traffic off the backbeach at Sandy River Beach.

Rationale Summary

Each of these proposals relative to the protection and use of the beaches of the Maine coast grew out of an analysis of beach recreation/conservation activities prepared for the Bureau of Parks and Recreation. Detailed background information and additional recommendations are available in a separate appendix report, Maine's Coastal Beaches: Recreation and Conservation, prepared for the Bureau of Parks and Recreation.

General Recommendations

1. The Bureau of Parks and Recreation should resume an active participation in the conservation of islands for recreational use and resource protection.
2. The Bureau of Parks and Recreation should consider the establishment of a Maine Coastal Island Reserve System, in conjunction with other island management agents including the National Park Service, the U.S. Fish and Wildlife Service, the Coast Guard, the Maine Department of Inland Fisheries and Wildlife, the Nature Conservancy, the National Audubon Society and the Maine Audubon Society.
3. The Bureau of Parks and Recreation should work with the Greater Portland Council of Governments, the Mid Coast Regional Planning Commission, the municipal governments, Citizens Who Care and others toward the establishment of a Casco Bay Island Trust.
4. The Bureau of Parks and Recreation should look into the feasibility of negotiating agreements with private island owners for the recreational management of islands, e.g. The Nature Conservancy's Damariscove Island.
5. The Bureau of Parks and Recreation should work with private island owners for the permanent protection of islands of outstanding historic significance, e.g. Richmond, Butter and Ragged Islands.
6. The Bureau of Parks and Recreation should study acquisition of significant federal surplus island properties, e.g. Seguin Island, as they become available.
7. The State of Maine should undertake tax studies to clarify the role of property taxes in island development and conservation.
8. The Bureau of Parks and Recreation should urge the Maine Critical Areas Program to coordinate studies of (1) island fauna and flora which may have evolved apart and differently from mainland species; (2) the transfer of seed stock from island; (3) natural features which may be unique to coastal islands in Maine and which would qualify for registration as critical areas; (4) coastal seal haul out sites.

9. The Bureau of Parks and Recreation should encourage and work with municipalities interested in developing islands for recreational use, e.g. Fort Gorges and Peaks Island in Portland.
10. The Bureau of Parks and Recreation should evaluate and accept where suitable those unregistered islands proposed for transfer from the Bureau of Public Lands.

Site Recommendations

11. The Bureau of Parks and Recreation should encourage and work with other organizations such as Nature Conservancy to protect the Cape Porpoise Islands.
12. The Bureau of Parks and Recreation should encourage and work with other organizations such as the Maine Audubon Society to protect the undeveloped islands at Biddeford Pool.
13. The Bureau of Parks and Recreation should explore, with the owners of Richmond Island, conservation alternatives which would protect the scenic recreational and historic resources of the island.
14. To protect the scenic value and potential recreational and historical values of the sites the Bureau of Parks and Recreation should encourage conservation (and perhaps consider acquisition of) the following Casco Bay islands: Ragged, Flag, White, Turnip, Jacquish and Vaill.
15. The Bureau of Parks and Recreation should support and encourage efforts to protect from adverse development Cow, Goose and Little Goose Islands, Deer Point on Great Chebeague Island, the eastern marshy area and southern tip of Cliff Island, the interior forest and swamp area of Little Diamond Island, and the forested northeastern section of Great Diamond Island - all in Casco Bay.
16. The Bureau of Parks and Recreation should work to secure a conservation easement on Spruce Island and Coastal Island Registry island #77-051, next to Warren Island State Park to protect the view from the park.

Rationale Summary

Each of these recommendations relative to the protection and use of the islands of the Maine coast grew out of an analysis of island recreation/conservation activities prepared for the Bureau of Parks and Recreation. More work needs to be done to assess islands for potential acquisition. For instance, undeveloped islands of all sizes should be inventoried. Detailed background information and additional recommendations are available in a separate appendix report, Maine's Coastal Islands: Recreation and Conservation, prepared for the Bureau of Parks and Recreation.

5

Subject

MAINE ESTUARINE SANCTUARIES

Recommendation

The State Planning Office should coordinate a study of estuaries on the Maine coast for potential designation as marine sanctuaries.

Rationale Summary

The federal Coastal Zone Management Act of 1972 authorizes the Secretary of Commerce to make grants to coastal states for the "acquisition, development, and operation of estuarine sanctuaries for the purpose of creating natural field laboratories to gather data and make studies of the natural and human processes occurring within the estuaries of the coastal zone." To date, however, only two national estuarine sanctuaries have been established despite the recommendation of a recent study on Impacts of Construction Activities in Wetlands of the United States that "the cornerstone of wetland environmental protection must be a nationwide system of wetland reserves to provide sanctuary for those species and ecosystems which may be jeopardized..."

Already significant steps have been taken in Maine toward wetlands protection. A Wetlands Control Board, for example, was set up in 1967 to regulate the alteration of intertidal wetlands. By 1975, regulation of wetland alteration had been shifted to the Board of Environmental Protection and extended to include subtidal lands. In addition, both the Maine Department of Inland Fisheries and Wildlife and the U.S. Fish and Wildlife Service have acquired some vital wildlife wetland habitats over the past few years. The Mandatory Shoreland Zoning Act has provided an added measure of protection to wetland areas in Maine too. Yet even with all of these provisions fragile wetlands in Maine continue to be dredged, mined and filled.

The State of Maine, with some of the most important estuarine areas remaining on the North Atlantic coast, could very appropriately be the site of one or more national estuarine sanctuaries. Management might be a cooperative effort between the Maine Department of Marine Resources, the Department of Inland Fisheries and Wildlife, the Department of Environmental Protection and the Department of Conservation. Annual nationwide expenditures for this program, on a 50 percent federal matching basis up to \$6 million annually, have been authorized through FY 1980. Perhaps these estuarine sanctuaries could even be tied into natural-historical underwater parks for skin and scuba diving in, for instance, the Casco and Penobscot Bay areas.

This proposal for the establishment of marine sanctuaries in Maine is consistent with the recent message of the President on environmental protection in which he called for the identification of possible sanctuaries and the collection of data necessary to designate them as such under the law. The State Planning Office, as the state agency responsible for guiding the Maine Coastal Program, could direct a study of coastal estuaries to evaluate those most suitable as candidates for designation as sanctuaries under the Coastal Zone Management Act.

6

Subject

COOPERATIVE AGREEMENTS

Recommendation

The Bureau of Parks and Recreation should explore opportunities for expanding the use of cooperative agreements with recreation and conservation organizations to further mutual objectives.

Rationale Summary

In the past the Bureau has worked with other organizations such as the Appalachian Mountain Club and the Maine Audubon Society to permit expanded use of some of the Bureau's properties. Wherever possible and appropriate such agreements ought to be continued and expanded.

In addition the Bureau might become involved in the management of recreational use of some non-state lands. An example would be heavily visited Nature Conservancy properties. The Nature Conservancy is not well prepared to manage use of a few of its popular reserves with features of statewide significance such as Damariscove Island. Bureau cooperation could expand public recreational opportunities without the cost of fee acquisition.

Subject

CAMPGROUNDS

Recommendation

If the Bureau of Parks and Recreation provides additional coastal camping sites it should consider concentrating on primitive facilities in the southern and mid-coastal regions.

Rationale Summary

The great number of variables involved make it difficult to judge whether the pressures for campsites in Maine will continue to rise in the short and long term. The effects of fuel cost jumps, growing population, changing leisure time and preferences and average disposal incomes make recreation planning difficult. One recent long term study of annual family camping participation revealed that more than 50 percent of the campers were either camping less or had dropped out of the camping market. Distinct life style changes were also discernable (1) toward a more primitive type of camping experience or (2) toward season-long rentals and advance reservations at commercial campgrounds.

Most campers in Maine are not residents and most campgrounds are private operations. Still, up to one-third of the people of Maine participate in camping. Of those who camp at state parks most favor inland areas over coastal ones, though this may be due more to available supply than to demand. Recent surveys have also shown that affluent residents tend to show less support for public development of campgrounds. Age is another determinant. All of those interviewed in a 1976 survey who were under 35 years old felt that private entrepreneurs should not have a corner on the camping market. Overall, more than 60 percent of the people interviewed believed that the development of campgrounds should not be left exclusively to private entrepreneurs.

In Maine, most campgrounds are located along the coast in the southwestern part of the state and in the lakes region around Sebago. With the exceptions of Sebago Lake and Bradbury Mountain State Parks all of these are private campgrounds catering primarily to out-of-state tourists. There are a number of camping areas in the midcoast area and a cluster around Mt. Desert Island. In other regions of the state, campgrounds are mostly scattered with some clusters around the larger communities and along the fringe of the north woods.

Many of the private campsite areas in Maine offer electrical hookups, dump stations and other services for tourists in recreational vehicles. The Bureau of Parks and Recreation would do well to leave the provisions of facilities for campers using so-called elaborate recreation vehicles to the competitive private sector throughout the state. Those who can realize a profit from such operations should not be burdened with additional competition by public agencies. Uncertainty about the regional, national and global energy situation; moreover, makes it inappropriate for the Bureau to become involved in the promotion of energy intensive recreational activities.

The Bureau, on the other hand, can provide campsites for those who, alternatively, want to participate in a non-elaborate type of camping experience. In particular, the Bureau should try to meet the needs of Maine residents first and foremost. This might be accomplished by the use of differential fees, a resident preferred reservation system, etc.

The need for primitive campsites may be most pressing in the southern and midcoastal parts of the state where land use changes are occurring most rapidly, population growth is the greatest and suitable resources are disappearing the fastest.

There does not appear to be a need in the coastal area east of Mt. Desert Island for additional transient and destination campgrounds. There may be some need for primitive campsites. These might be provided on the coast at Eastern Head, and inland at Pleasant River Lake, Rocky Lake and in the Tunk Mountain area.

Many questions remain to be addressed. For instance, what portion of the facilities supplied by the Bureau ought to be coastal? Should parks be developed Downeast to draw people away from the southwestern coast?

8

Subject

PRIVATE PARK CERTIFICATION PROPOSAL

Recommendation

The Bureau of Parks and Recreation should study the establishment of a private park certification program.

Rationale Summary

It is suggested here that the State consider the establishment of a voluntary system by which private parks would be certified by the Bureau of Parks and Recreation. Certification would depend upon meeting clearly defined criteria for site development, density, road access and so on. A System such as this would provide high quality recreation facilities. At the same time, private operators would have positive incentive to work for certification because users would recognize and appreciate the significance of State certification and so would reward it with their patronage. As a result, local and regional recreation needs could be satisfied by the private sector, particularly in the heavily used coastal area. Meanwhile the State could concentrate its money on the development and operation of larger resource parks.

These parks, of course, would not be the equivalent of concession operated state parks because the State would own no part of the operation.

Subject

WILD, SCENIC AND RECREATIONAL RIVERS

Recommendation

The Bureau of Parks and Recreation should undertake a study of potential wild, scenic and recreational rivers in the Maine coastal basin.

Rationale Summary

Since the enactment of the National Wild and Scenic Rivers Act in 1968, more than 2,560 kilometers (1,600 miles) of river segments in fifteen states have been included in the Wild and Scenic Rivers System, including 152 kilometers (95 miles) of the Allagash River in northern Maine. Currently, the Penobscot River is also being studied for federal designation. There are, however, numerous other rivers in Maine, including many along the coast, which might qualify for inclusion in the System.

In 1977, the Federal Bureau of Outdoor Recreation (now the Heritage Conservation and Recreation Service*) screened a list of Maine rivers for consideration as potential wild rivers. Four rivers emptying into the Maine coastal basin each at least 40 kilometers (25 miles) in length, passed this initial filtering process. But there are many other coastal rivers which might qualify for inclusion in the System. All coastal rivers should be studied, regardless of length, for possible designation as scenic, recreational or wild rivers.

Briefly, to be included in the national System, all rivers must be substantially free flowing and have water of high quality. The river and adjacent lands also must be in a natural or esthetically pleasing condition and possess outstanding scenic, recreation, geologic, fish and wildlife, historic, cultural or other similar values. Wild, scenic, and recreational river areas are defined as follows:

Wild - Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic- Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

* At the national level, responsibility of wild and scenic river planning and coordination is being shifted to the National Park Service.

Recreational - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Designation as a wild, scenic, or recreational river means that steps are taken to protect a river from harmful encroachment. However, the Wild and Scenic Rivers Act does not prohibit the construction of bridges or roads, timber harvesting and livestock grazing or other uses that do not substantially interfere with full public use and enjoyment. Nor is public acquisition necessarily implied. Administration may be through scenic easements or local ordinances. In Maine, river or watershed associations might be logical administrative bodies.

Ideally, a statewide river program would be established in Maine to deal with the issue of river protection holistically. Collectively, our rivers are among our most precious renewable natural resources-particularly as the clean-up of our rivers from pollution comes to fruition. In the absence of a statewide program, a comparative study of coastal river areas should be undertaken.

Among those rivers draining the Maine coastal basin which should be screened for potential inclusion in the Wild and Scenic Rivers System are:

<u>River</u>	<u>Segment</u>	<u>Approx. Length</u>	
		<u>Km</u>	<u>(Miles)</u>
York	East Eliot-York Harbor	16	(10)
Mousam	Mousam Lake-Kennebunk Beach	59	(37)
Kennebunk	Spang Mills-Kennebunkport	22	(14)
Saco	Batlett, N.H.-Saco Bay	16	(103)
Presumpscot	Sebago Lake-Casco Bay	45	(28)
Royal	Intervale-Yarmouth	32	(20)
Kennebec	The Forks-Popham Beach	21	(131)
Back	Wiscasset-Bald Head	24	(15)
Sheepscot	Palermo-Five Islands	70	(44)
Damariscotta	Damariscotta Mills-So. Bristol	26	(16)
Meadomak	Lucas Corner-Martin Point	48	(30)
St. George	Sennebec Pond-Pleasant Pt.	46	(29)
Oyster	Warren-South Warren	11	(7)
Bagaduce	Brooksville-Castine	21	(13)
Union	Brandy Pond-Weymouth Point	78	(49)
Tunk	Spring River Lake-Steuben Harbor	14	(9)
Narraguagus	Deer Lake-Wyman	72	(45)
Pleasant	Pleasant River Lake-Carrying Place Cove	66	(41)
Indian	U.S. Route 1-Indian River	11	(7)
Machias	Headwaters-Starboard Cove	125	(78)
East Machias	Pocamoonshine Lake-Woodruff Cove	72	(45)
Dennys	Meddybemps Lake-Dennysville	29	(18)
Cathance	Lake Cathance-Dennys River	26	(16)
Orange	Rocky Lake-Gravel Point	22	(14)
St. Croix	North Lake-Lubec	139	(87)

Subject

MAINE COAST HERITAGE TRAIL

Recommendation

The Bureau of Parks and Recreation should take a leading role in the establishment of a Maine Coast Heritage Trail.

Rationale Summary

Because of its natural and cultural variety the seashore in Maine is an area of special charm and fascination. Each year millions of people of all types travel to Maine to walk, bicycle, hike, canoe, swim, ride horseback, camp, cross-country ski, drive and boat along the coast. Each, no doubt, has their favorite activities and spots. What a delight it could be, however, if many of these were linked together into a popularly recognized non-motorized trail stretching from Kittery to Calais. Such a sea-side trail would encourage people to leave their cars behind - at least for a while - in favor of experiencing the Maine coast by means of transportation other than the automobile. (The car already has its coastal trail - U.S. Route One).

President Carter has called for the designation of new recreational, scenic and historic trails as part of the National Trails System. This is a proposal for the establishment of a Maine Coast Heritage Trail network which could become part of the National Trail System, akin to the 847 mile Potomac Heritage Trail, the 1300 mile Florida Trail, or the 3200 mile North Country Scenic Trail, all of which are in the works at this time. An ambitious project, to be sure, but not an unachievable one.

A Maine Coast Heritage Trail would incorporate those stretches of the seashore already open to the public such as Marginal Way in Ogunquit, Parson Way in Kennebunkport, Shore Walk in Bar Harbor, the trails of Acadia National Park and Camden Hills and Cobscook Bay State Parks, the public beaches of southern Maine. But while the main trunk of the Trail would be a continuous walking/hiking trail many side excursions could be part of the experience as well: ferry rides to the Fox Islands, Squirrel Island, Islesboro, Monhegan and Swans Island; canoe trails around Scarborough, Freeport, Harpswell, Friendship and Mt. Desert Island; cross-country ski trails in Camden, Bar Harbor, Freeport, and Edmunds; bicycle trails in southern Maine, Boothbay Harbor, Camden, Mt. Desert, and Downeast.

A Maine Coast Heritage Trail would include not only existing paths but new areas as well. Trails

along the York Cliffs in York County, the Gouldsboro Hills in Hancock County, the headlands in Washington County from Cutler to Lubec, for instance, and abandoned railroad rights of way in various spots along the coast would be part of the system.

The Trail would cross wild areas and urban areas, historic sites, local parks, beaches and salt marshes. It would cross private lands and public lands but would be open to anyone interested in using it.

Of course, such a trail need not be whole from its inception. It would grow as new stretches were added until it formed an unbroken thread from one end of the coast to the other, from, say, the John Paul Jones Memorial in Kittery to St. Croix Island in Calais.

Who would help build the Trail? Local towns and conservation commissions, state agencies (Bureau of Parks and Recreation), federal agencies (Heritage Conservation and Recreation Service, National Park Service), schools (College of the Atlantic, Maine Reach, Center for Human Ecology Studies, Bates College Outing Club, University of Maine Outing Club), private conservation organizations (Maine Audubon Society, Natural Resources Council, Nature Conservancy), outdoor organizations (Appalachian Mountain Club, Sierra Club, Girl Scouts, Boy Scouts).

The Bureau of Parks and Recreation could give this coastal trail project a large boost by surveying existing trails, contacting pertinent groups, and so forth as part of a statewide trails study. The Bureau could also acquire property rights along sections of the Trail, develop portions of the Trail on existing coastal properties, and assist other agencies in building portions of the Trail network.

11

Subject

ABANDONED RAILWAY RIGHT OF WAY RECREATION TRAILS

Recommendation

The Bureau of Parks and Recreation should explore the use of abandoned railway rights of way as demonstration trails.

Rationale Summary

In 1973 a report was prepared for the State Parks and Recreation agency on the potential of abandoned railroad rights of way in Maine for trail use. The study included several rights of way in coastal towns which might be suitable for seasonal or year round trail use.

Several of these lines are short but significant because of their location. Those in York County are of particular interest due to the rapid growth the region is experiencing. The following list summarizes the most important coastal town rights of way.

<u>RIGHT OF WAY</u>	<u>TRAIL MILEAGE</u>	<u>GENERAL CONDITION</u>
South Berwick- Scarborough	35	good
Kittery Point-York Beach	7	non-existent to good
Kennebunk-Coopers Corner	4.5	good
North Yarmouth-Cumberland Center	6.5	good
Stockton Springs-Cape Jellison	1.5	poor-fair
Washington Junction-McNeil Point (Hancock)	10.5	poor-fair

In addition to the lines listed above, there are several Atlantic Shore Electric Railway rights of way in York County which may be useable for trail recreation.

Although in some sections of the county, refurbishment of abandoned railroad rights of way for trail use is quite common, in Maine little action has yet been taken to reclaim this resource. However, there appears to be a growing interest in using these lines as evidenced by the fact that the Town of Kennebunk is planning to utilize part of the old Boston and Maine line which runs along the Mousam River for a bikeway.

The State should study the use of other lines as possible multiple use recreational trails. Parts of lines in southern Maine could be included as sections of a Maine Coast Heritage Trail. Furthermore, with increased federal funds likely to be soon available on a matching basis, it behooves the Bureau of Parks and Recreation to at least seriously study a few demonstration trail projects.

12

Project

BICYCLE TRAILS

Recommendation

The Bureau of Parks and Recreation should explore with the Maine Department of Transportation the construction of demonstration bikeways within and connecting state parks, starting with a bicycle path connecting downtown Portland with Two Lights, Crescent Beach and Scarborough Beach State Parks.

Rationale Summary

The Bureau of Parks and Recreation manages three closely situated, major state parks in the Scarborough-Cape Elizabeth area. Combined visitation of the three parks in 1977 totalled 342,467. One survey conducted in 1975 found that about 43% of the visitors of Two Lights, 64% at Crescent, and 58% at Scarborough traveled from towns ten miles or less from each of the parks. A bicycle path connecting the parks with downtown Portland-South Portland would encourage city residents to exercise and visit the parks while conserving (petroleum) resources. The route could partially or wholly follow existing road rights of way.

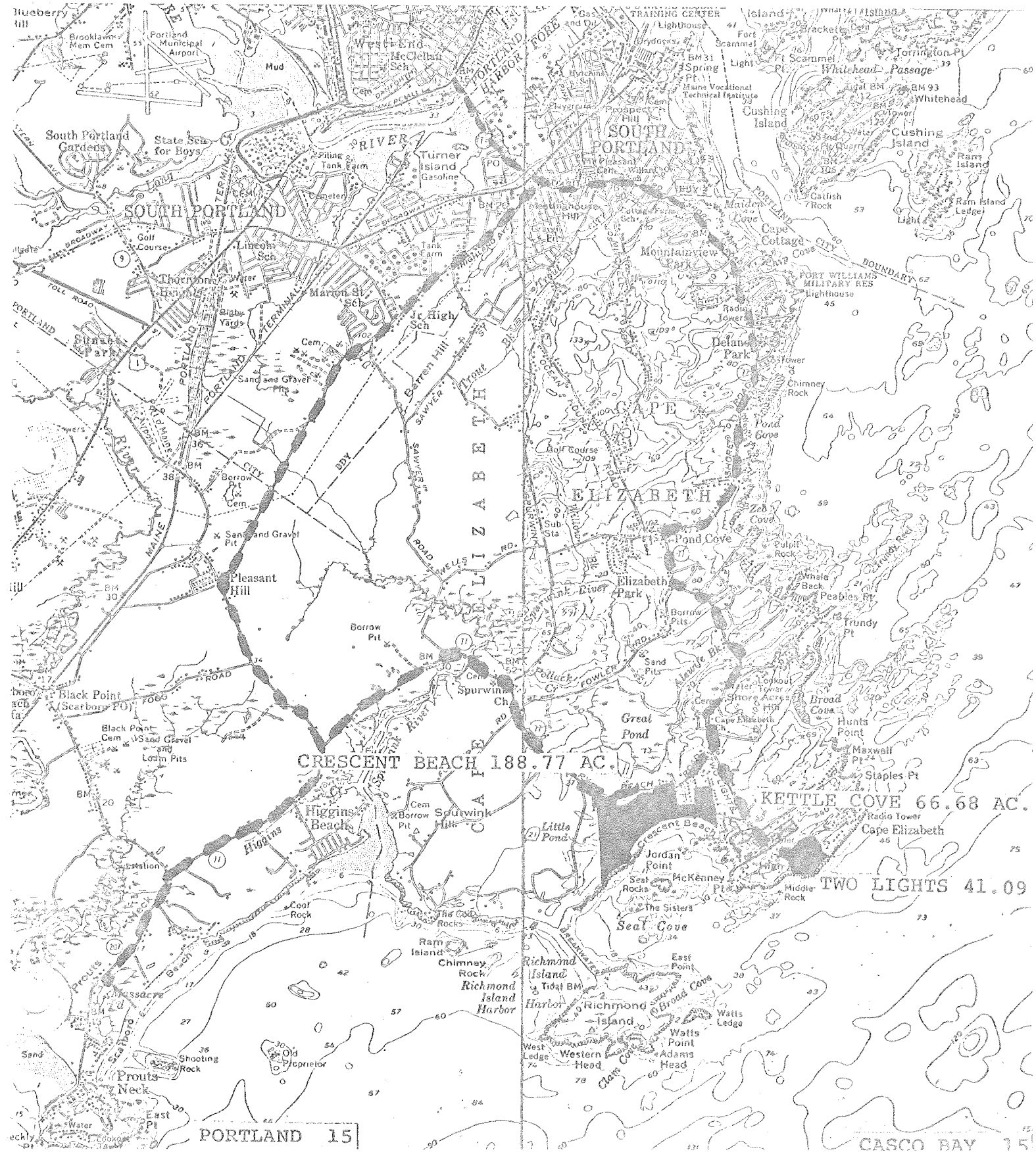
A 1974 Maine bicycling study included the following recommendations:

A statewide trails system incorporating bicycling paths should be established by the Bureau of Parks and Recreation. A statewide system of touring routes should be established by the Department of Transportation. The two agencies should work in consultation as the systems are developed and coordinate the routes and trails where possible.

Pilot bikeway projects should be established and monitored in various parts of the State to determine suitability of specific facilities for Maine cyclists.

The study specifically suggested a pilot project in Portland. A recreation/commuter bikeway as suggested here would be consistent with these recommendations. It would also be consistent with an amendment to the proposed National Energy Act. The amendment, which was recently approved by both the House and the Senate, would mandate a study of the potential of bicycling as an energy conservation measure.

A separate amendment, the Bicycle Transportation Act has a good chance of passage in 1978 as part of the Federal Aid Highway Act. This bill would fund bikeway projects in areas of 2,500 population or more on an 80/20 matching basis. A bikeway connecting Portland with the three coastal parks serving Greater Portland would be an excellent demonstration project.



CRESCENT BEACH 188.77 AC.

KETTLE COVE 66.68 AC.

TWO LIGHTS 41.09

In addition to promoting local bikeways, the Bureau might also work with the East Coast Bicycle Congress to extend the East Coast Bicycle Trail into Maine. The Trail now stretches over 1,600 kilometers (1,000 miles) from Richmond, Virginia to Boston, Massachusetts. Efforts are being made to extend the Trail south into Georgia and eventually it may reach to Key West, Florida. Mt. Desert would be a logical northern terminus.

Nationally, following a cooling of interest in bicycle sales after the energy crunch of 1973-74, sales reached an all time peak of 10 million bikes in 1977. In fact, according to the Bicycle Manufacturers Association of America, Inc., between 1972 and 1978, sales of bikes (imported and domestic) topped imported and domestic car sales by 68 million to 60 million.

Subject

SCENIC HIGHWAYS

Recommendation

The Maine Department of Transportation should undertake a study of scenic coastal highways.

Rationale Summary

There are still a great many spots along the Maine coast where spectacular scenery of the sea and shore is available from major roads. Sadly many of these scenic areas are being usurped by housing developments, shopping centers, fast food shops and the like. A systematic and comprehensive study of scenic highways along the coast should be undertaken to determine which stretches could be protected.

Passage of a bill in 1977 to control off-premise advertising by replacing most billboards with uniform directional signs demonstrated that the Governor and the Legislature are serious about protecting the visual resources of our roadways, which are, after all, a common public good. But controlling billboards is only a first step.

The Maine Department of Transportation could expand its program of providing scenic overlooks and rest stops at such areas as Catepillar Hill in Sedgewick as one example. Beyond this the Department of Transportation should consider a program of preserving and improving coastal highway vistas by protecting through acquisition or agreement undeveloped lands seaward of major coastal roads which do or could provide visual access to the ocean. Local governmental units might help implement such a program with financial and technical assistance from the State.

BUREAU OF PARKS & RECREATION DEVELOPED COASTAL HOLDINGS



CAMDEN HILLS 5035.39 AC.

L I N C O L N

M A I N E



Site

CAMDEN HILLS STATE PARK

Location

Counties: Knox, Waldo
Municipalities: Camden, Lincolnville

Present Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should continue to operate Camden Hills State Park; consideration should be given to the establishment of a network of pack-in campsites throughout the park.

Rationale Summary

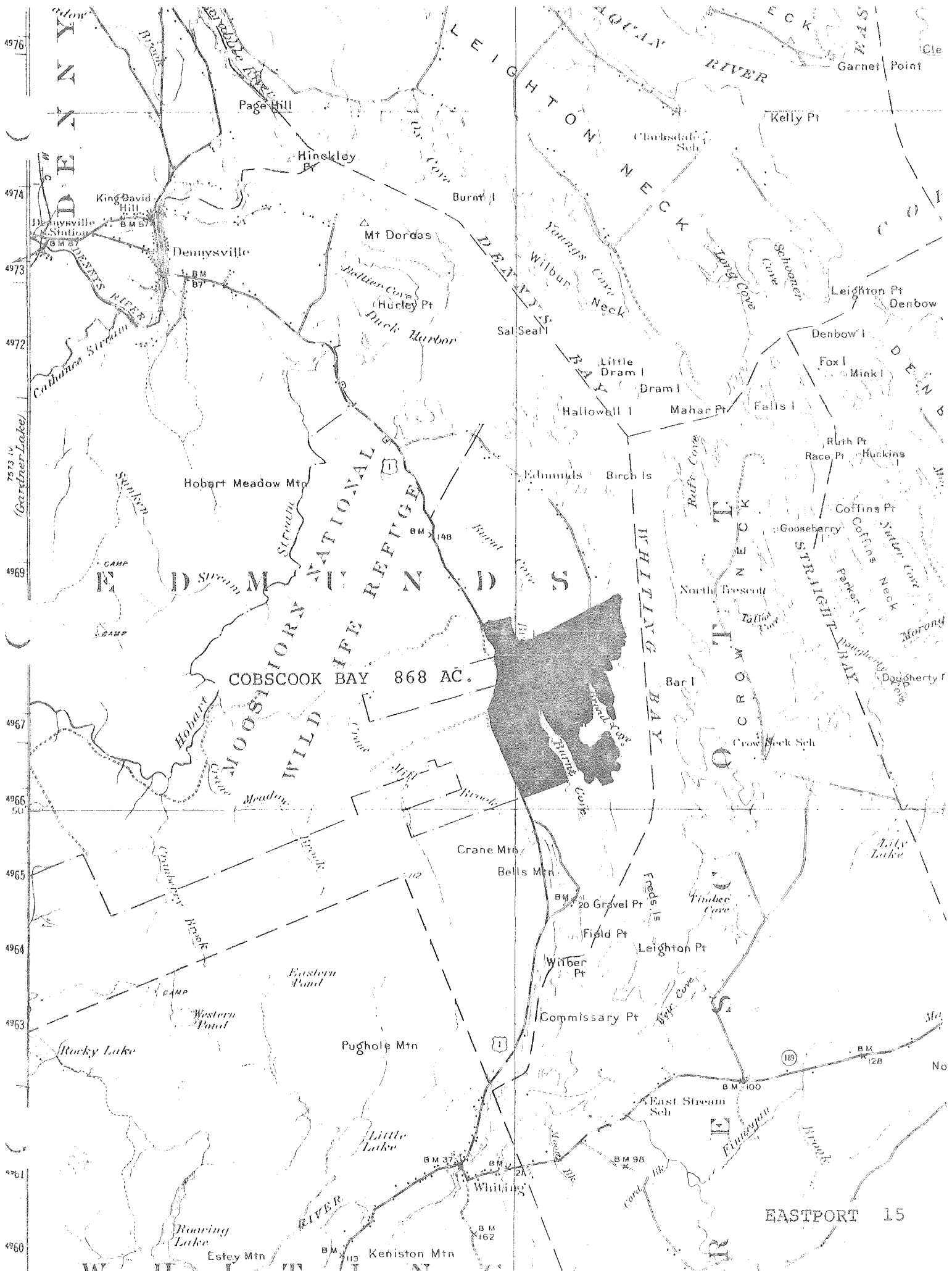
The Camden Hills are one of only three mountain ranges found along the Maine coast. They have been a popular recreation spot for decades. Many of the hills are located within the boundaries of the park, an area offering trails, camping and picnicking. Five areas in the park were listed in the Maine Natural Areas Inventory. The views of Penobscot Bay from Mt. Magunticook, Bald Mountain and the summit of Mt. Battie are unsurpassed.

Over 170,000 day trippers visited Camden Hills State Park in 1977. Camping use topped 47,000 making it the most heavily used coastal camping area in the state park system. Still, only a small portion of the park is used for high intensity recreation. Less accessible parts of the park would be suitable for pack-in camping though management costs could be high. The Bureau could also work to acquire in-holdings to consolidate the Bureau's holdings.

ELLSWORTH 76 MI.
8.7 MI. TO MARINE TSI

7573 IV
(Grantner Lake)

U.S. 11 77 MI



Site

COBSCOOK BAY STATE PARK

Location

County: Washington
Municipality: Edmunds Township

Present Ownership

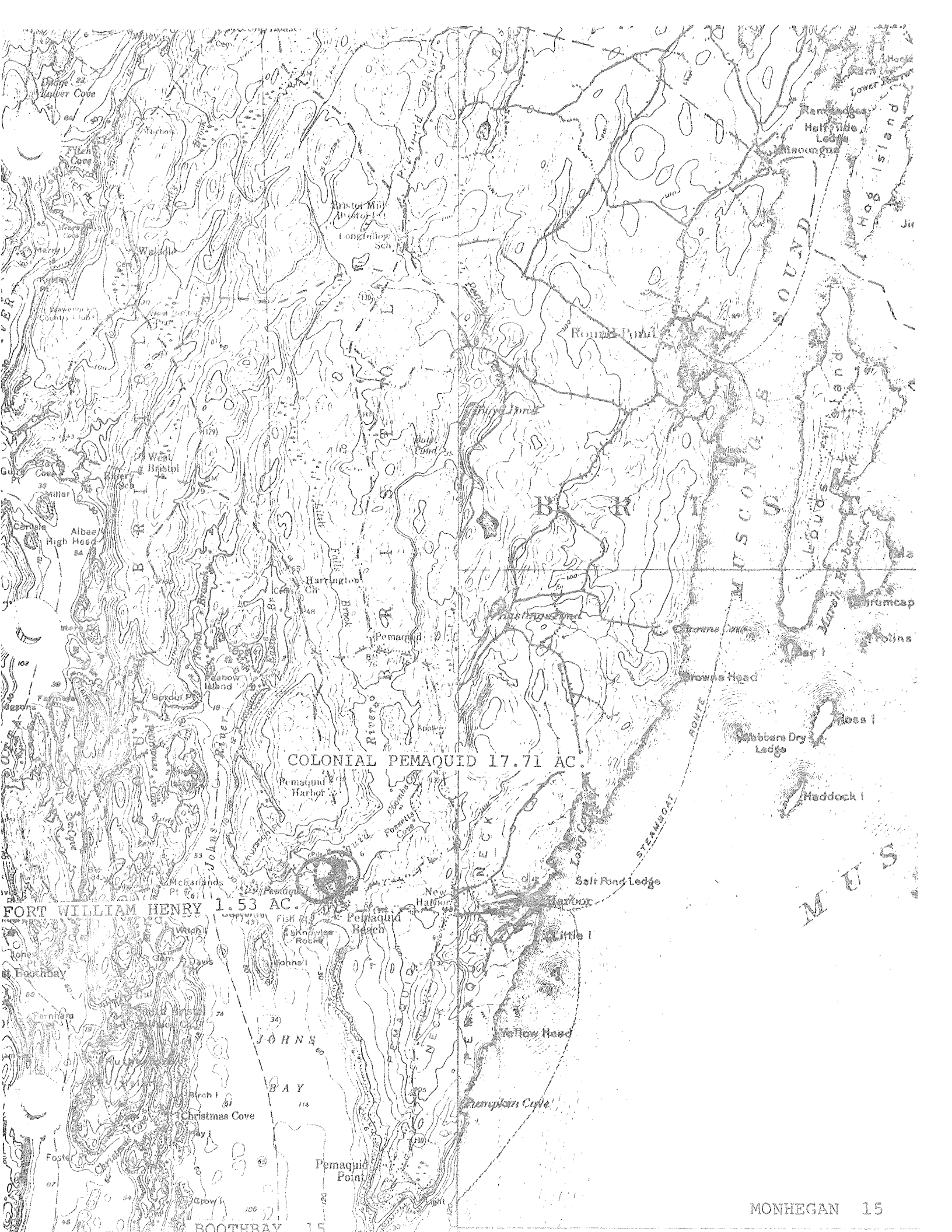
U.S. Fish and Wildlife Service; leased until 2000 to the Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should continue to operate Cobscook Bay State Park at present capacity levels.

Rationale Summary

Cobscook Bay is the only developed state park in Washington County offering camping as well as day use facilities. Since 1970 camping has remained fairly steady at 20-25,000 per year. Day use, on the other hand, has increased steadily to 20,500 in 1977. Present design capacities are adequate to handle at least short term future use.



COLONIAL PEMAQUID 17.71 AC.

FORT WILLIAM HENRY 1.53 AC.

16

Site

COLONIAL PEMAQUID

Location

County: Lincoln
Municipality: Bristol

Present Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should intensify historic interpretation and archeological diggings at Colonial Pemaquid.

Rationale Summary

The historic and prehistoric finds made to date at Colonial Pemaquid indicate that the site is of particular interest to our understanding of early occupation of the Maine coast. Best use of this resource suggest that time should not be wasted to tap these artifacts.



BACK COVE

PORTLAND
Portland Harbor

ELIZABETH

CRESCENT BEACH 188.77 AC.

KETTLE COVE 66.68 AC.

TWO LIGHTS 41.09 AC.

PORTLAND 15

CASCO BAY 15

CRESCENT BEACH STATE PARK

Location

County: Cumberland
Municipality: Cape Elizabeth

Present Ownership

Bureau of Parks and Recreation

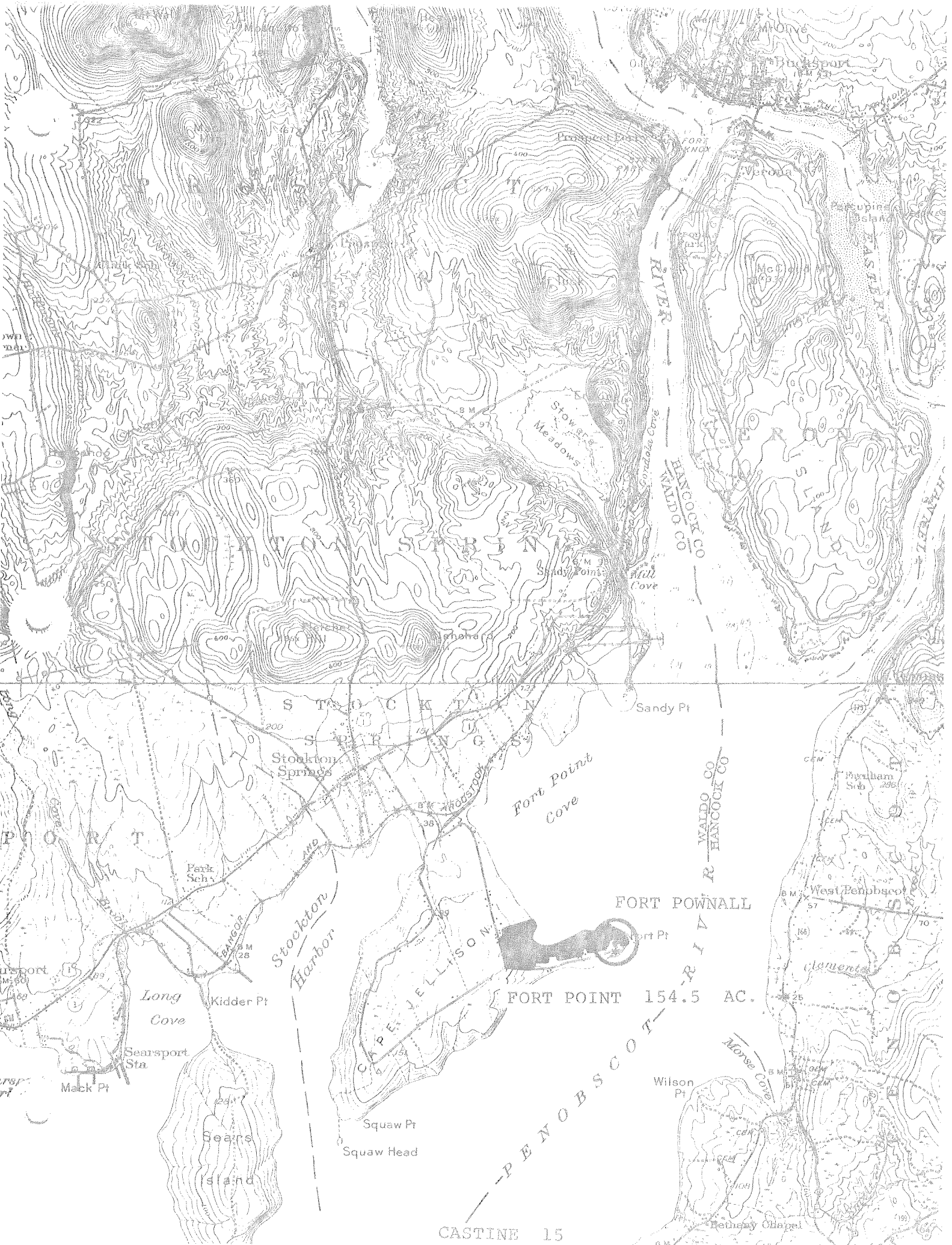
Recommendation

The Bureau of Parks and Recreation should operate Crescent Beach State Park as a high intensity beaching park in conjunction with nearby Two Lights and Scarborough Beach State Parks; facilities need not be expanded beyond present capacities for the short term.

Rationale Summary

In the past, Crescent Beach has been thought to be a park mainly of regional significance serving the Greater Portland area. A cursory study of state park visitor use conducted in 1975 found that over 80% of those visitors sampled were from Maine with 64% traveling ten miles or less. However, a more reliable survey was undertaken in 1977. Preliminary results of the recent study suggest that nonresidents now account for about 31% of park visitation. Managed complementarily with Scarborough Beach (low intensity beaching) and Two Lights (trails-picnicking) State Parks, Crescent Beach forms part of a park network which is of state level significance. Although public use of the park appears to be steadily growing, the area is still not being utilized to capacity. There is little need then to expand park facilities though there is some land available for this purpose within existing boundaries.

In addition to beach-dune, the park contains dry upland and backdune wetland. Eventually interpretive trails might be laid out to take advantage of this natural diversity.



Site

FORT POINT STATE PARK

Location

County: Waldo
Municipality: Stockton Springs

Present Ownership

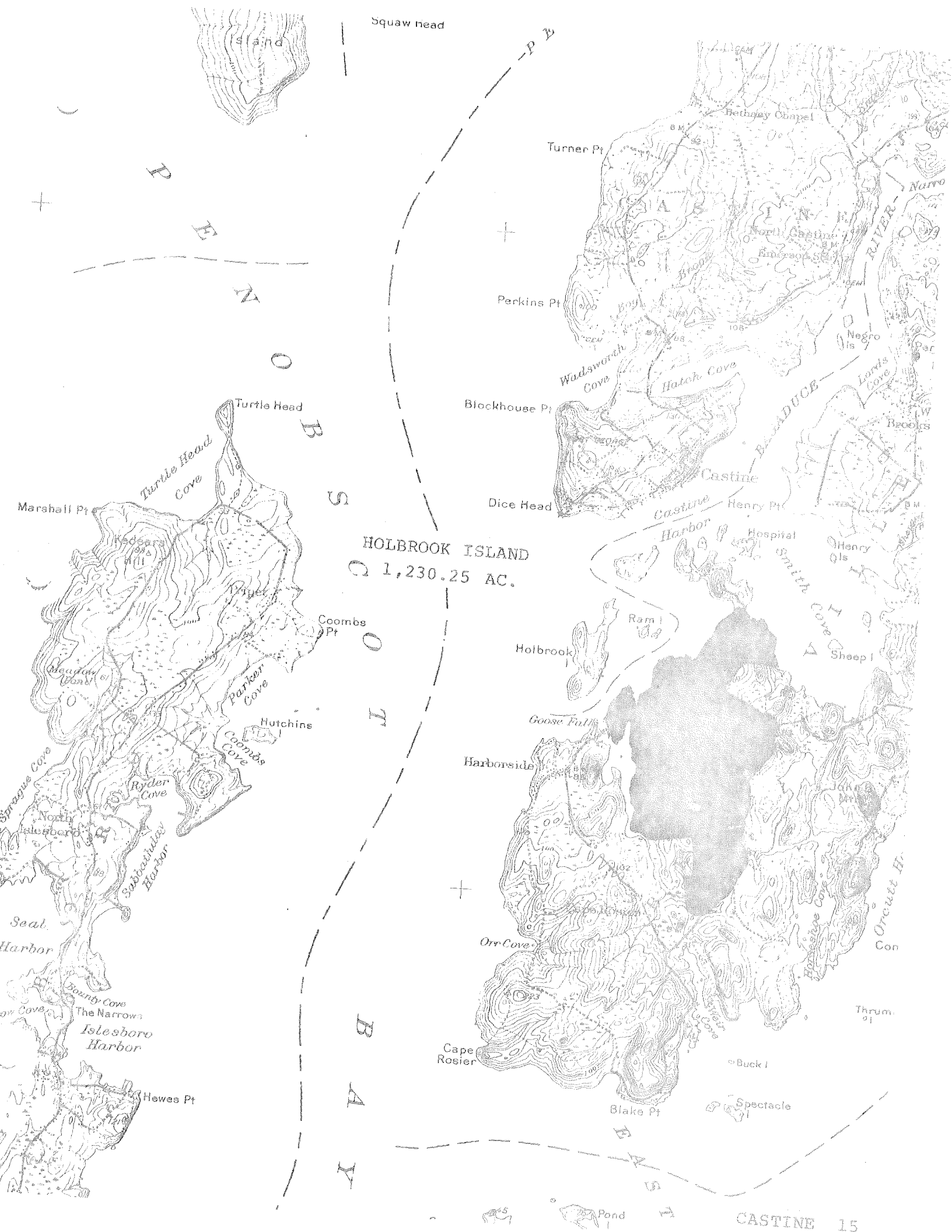
Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should continue to operate Fort Point State Park; consideration should be given to developing a network of trails throughout the park.

Rationale Summary

Fort Point State Park is not heavily used. It is perhaps most important for its proximity to the historic Fort Pownal site. According to the Maine Natural Areas Inventory the "features found in the Fort Point State Park include a good shale beach, steep bluffs approximately 80 feet high, a monument to Fort Pownal, and interesting copper mineral outcrops." The area could be developed into an attractive water access park with the construction of trails and other facilities. Already a pier has been built to accommodate boaters traveling in northern Penobscot Bay. Fort Point could be a component of a larger Penobscot Bay State Park incorporating various island and shore properties.



HOLBROOK ISLAND SANCTUARY

Location

County: Hancock
Municipality: Brooksville

Present Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should continue to maintain Holbrook Island Sanctuary as a wildlife and nature area.

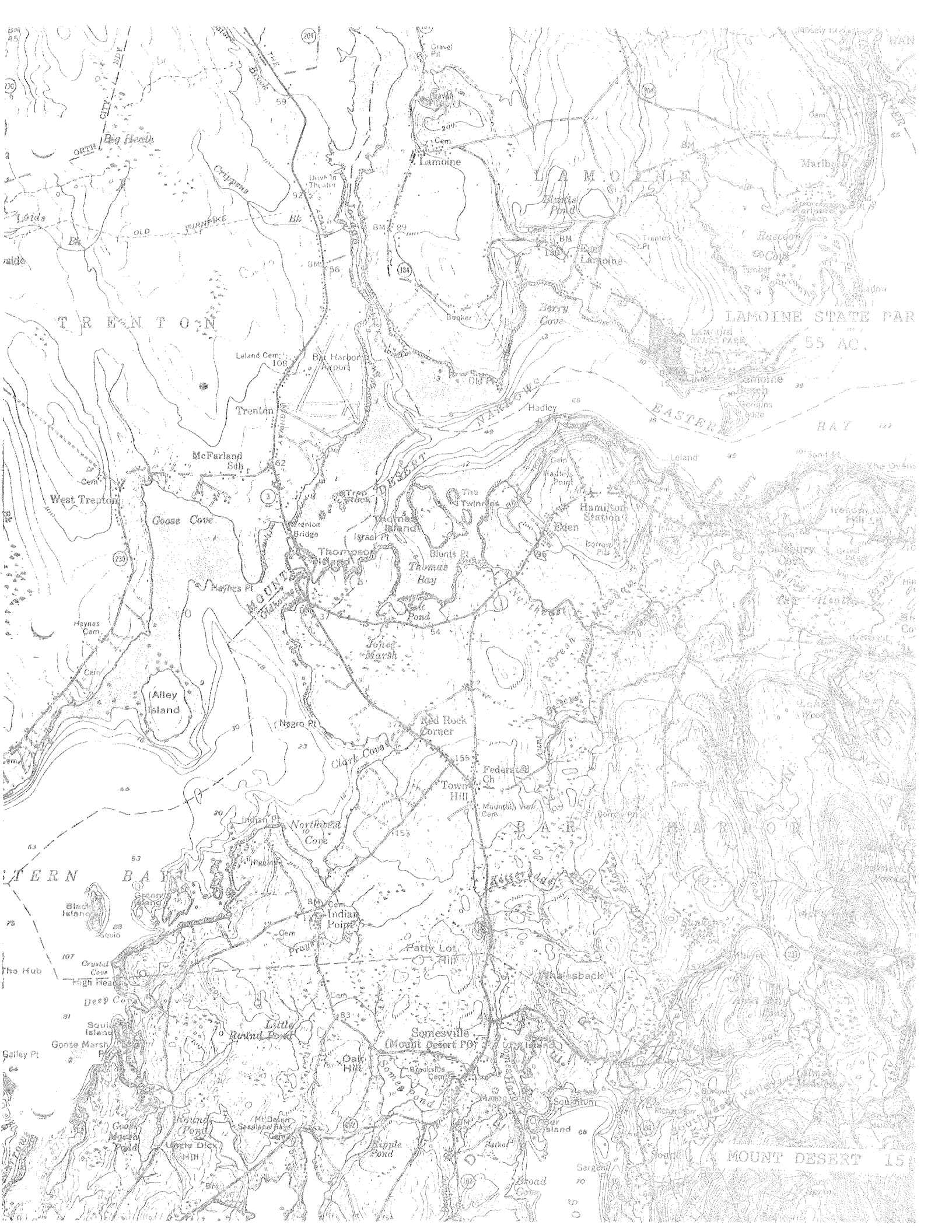
Rationale Summary

This 1,230 acre parcel in Brooksville was donated to the State in 1971 to be maintained and operated "for the benefit of all citizens of said STATE OF MAINE...as a Wildlife and Natural Area...and, as such, shall be kept forever wild as a bit of wilderness in an inhabited region devoted wholly to the preservation of nature-animal, bird and plant life..."

The deed is quite restrictive in what can be done in the sanctuary to improve recreational opportunities. Only three specific areas "may be improved for picnicking and such other uses compatible with public interest..." No motorized vehicular use except for ordinary road traffic is allowed. On the other hand, the deed states that "groups or individual lovers of nature, such as ornithologists, botanists, zoologists, artists and photographers are to be encouraged to take advantage of the exceptional opportunities for study and practice in those fields."

It would appear that little capital construction can be undertaken to provide recreational facilities within the sanctuary. As funds are available, those areas which may be improved to enhance public use and appreciation of the area should be.

Additionally, the Bureau should monitor land uses on properties adjacent to the sanctuary to guard the spirit in which it was given. The shoreland zoning ordinance of the town of Brooksville designates the shoreline of adjacent properties as a General Development District.



TRENTON

LAMOINE

LAMOINE STATE PARK
55 AC.

MOUNT
DESERT

EASTERN BAY

SAMESVILLE
(MOUNT DESERT PO)

MOUNT DESERT 15

Site

LAMOINE STATE PARK

Location

County: Hancock
Municipality: Lamoine

Present Ownership

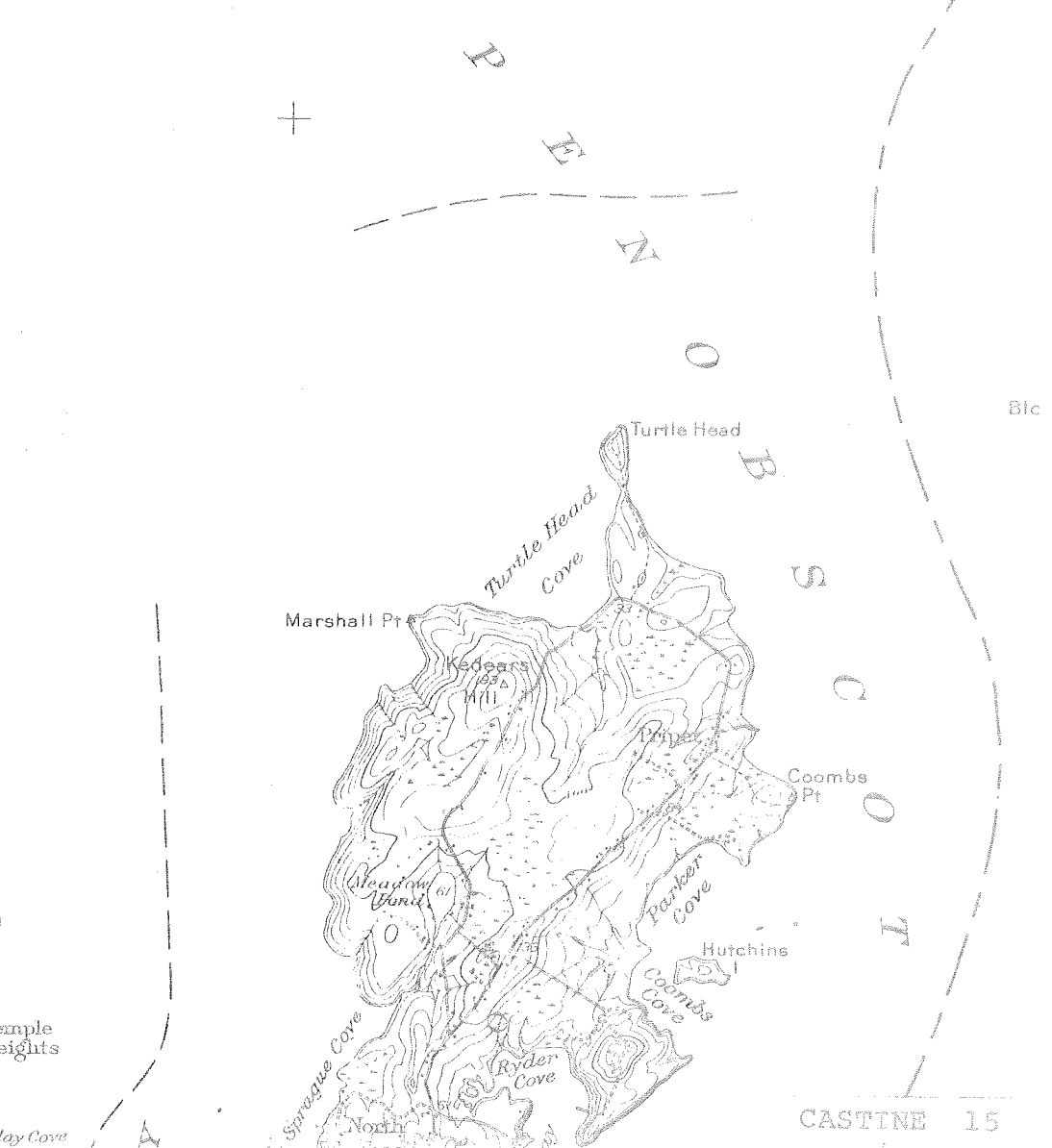
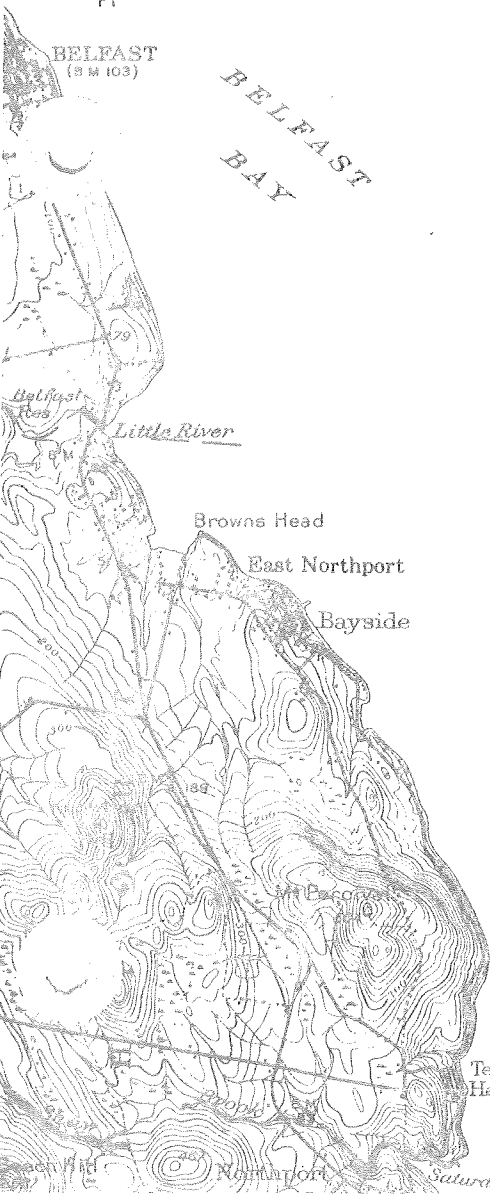
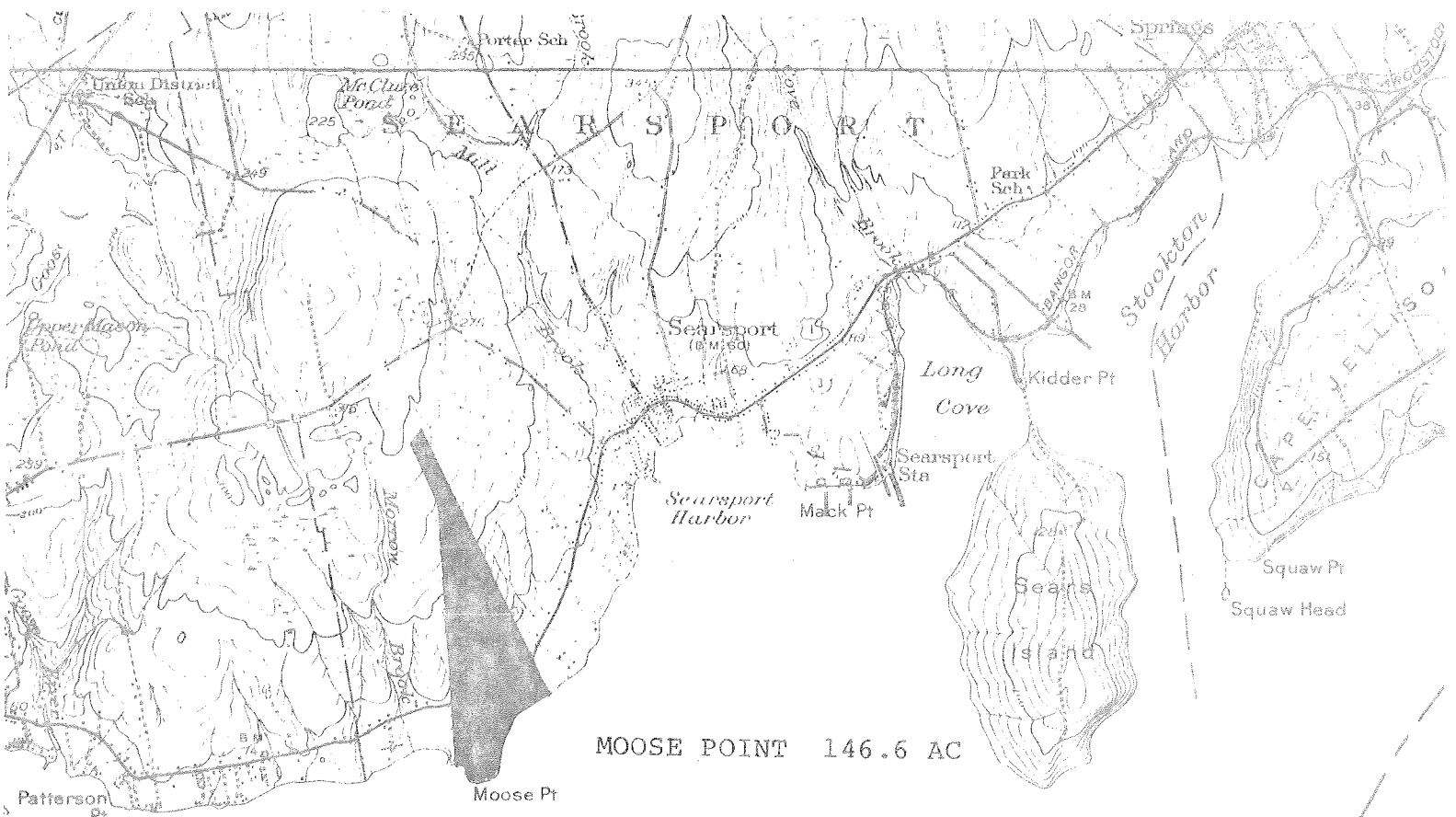
Bureau of Parks and Recreation

Recommendation

The Bureau should continue to operate Lamoine State Park at present design capacities.

Rationale Summary

Lamoine is the only state park in the Hancock County region offering camping as well as day use facilities. It functions largely as a spillover park accommodating many who cannot get into campgrounds in Acadia National Park. Use averages about 15,000 day use and camping visitors annually. To accommodate this level of use, park facilities need not be expanded.



Site

MOOSE POINT STATE PARK

Location

County: Waldo
Municipality: Searsport

Present Ownership

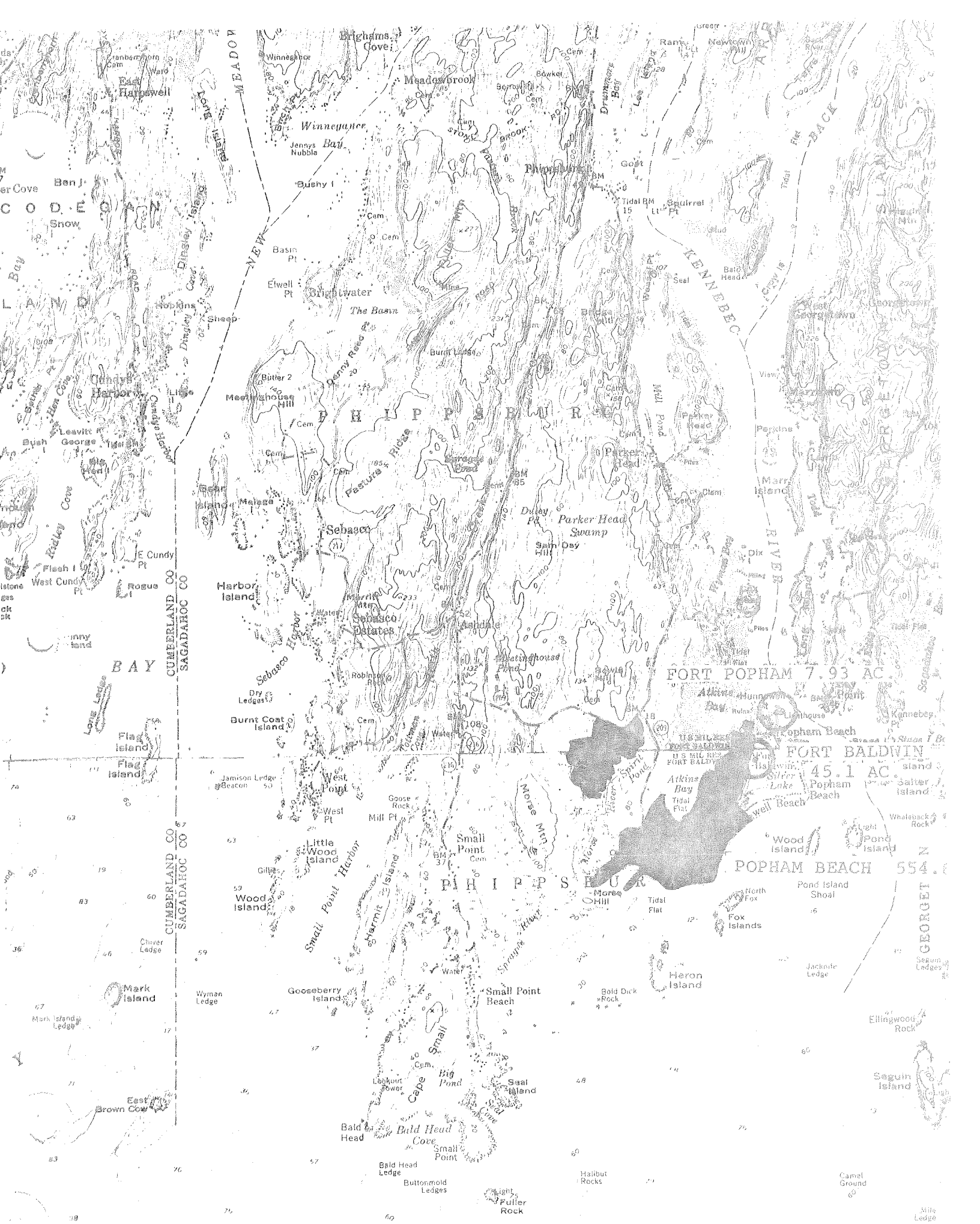
Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should continue to operate Moose Point State Park; consideration should be given to developing a network of trails in the portion of the park south of U.S. Route One.

Rationale Summary

Moose Point is both a popular roadside rest area and day use (picnicking, scenic viewing) park on Route One in Searsport. There is a good deal of land in the park which remains unused or under-utilized. For the short term, park facilities could be enhanced by the improvement of a trail network in the part of the park bordering Penobscot Bay. An attractive evergreen stand could be highlighted. The entire park was listed in the Natural Areas Inventory.



POPHAM BEACH STATE PARK

Location

County: Sagadahoc
Municipality: Phippsburg

Present Ownership

Bureau of Parks and Recreation

Recommendation

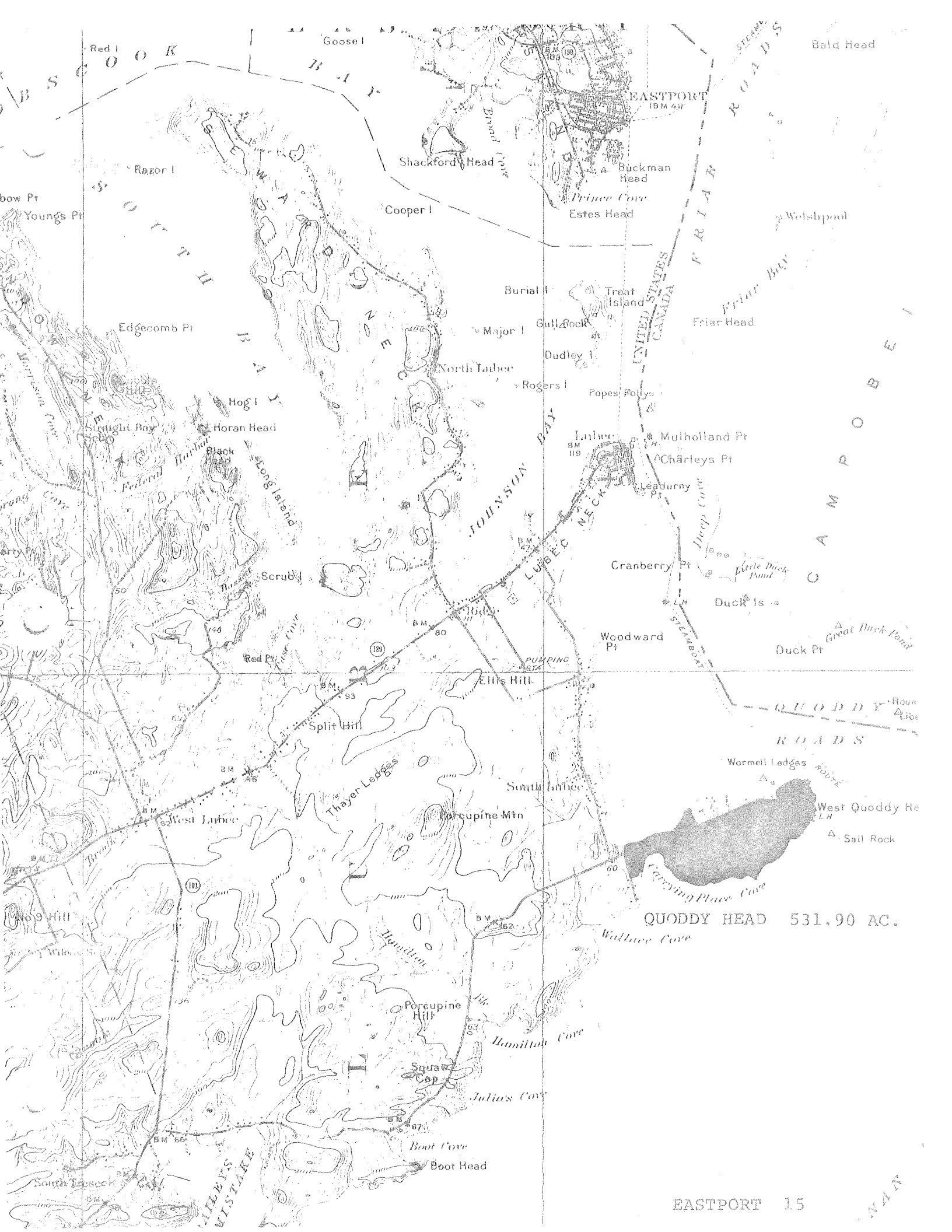
The Bureau of Parks and Recreation should continue to operate Popham Beach as a swimming-picnicking day use state park. Parking facilities should not be expanded on the sand dunes; rather, additional parking lots might be provided on Bureau property at Fort Baldwin or near Spirit Pond with public mini-bus transportation to the beach, if necessary.

Rationale Summary

Popham is part of the easternmost, large sand dune-salt marsh ecosystem in the United States. It is also one of the most popular coastal parks in the state. The conflicting goals of use and conservation are perhaps more evident here than for almost any other site studied. It is clear that if a quality experience is to be perpetuated at the park conservation will have to be given priority.

Popham presents a classic recreational use distribution problem. The issue is not people on the beach; it is getting the people to the beach over the fragile dunes. A method should be devised to accommodate more people on the beach without expanding the parking lots constructed on the back dunes. It has been suggested that the dune forest at Popham, one of the most mature maritime forests in Maine, could be the site of a conservation walkway, similar to the walkway through the white cedar swamp in the Cape Cod National Seashore (Philip Trudeau, et al, Beach Vegetation and Oceanic Processes Study of Popham State Park Beach, Reid State Park Beach, and Small Point Beach, 1977).

It should be noted that the problem of expanding public facilities at Popham has been studied in some depth by the Bureau of Parks and Recreation without satisfactory resolution. More attention will be given to this problem in 1978.



QUODDY HEAD 531.90 AC.

QUODDY HEAD STATE PARK

Location

County: Washington
Municipality: Lubec

Present Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should continue to operate Quoddy Head State Park; consideration should be given to expanding facilities at the park.

Rationale Summary

Annual public use of Quoddy Head State Park averages about 60,000 visitors. The park, easily accessible over paved road, has some spectacular resources including sheer cliffs and a unique raised bog. Trails and picnic facilities could be expanded to take advantage of much of the park now underutilized. The Department of Inland Fisheries and Wildlife has suggested (without explaining why) that the park could be enlarged.



KENNEBEC

Woolwich

Hanson

Bay

Point

Tidal

Flat

Sassaparilla

Upper

Hell Gate

Academy

Sch

Palace

Cove

Rock

Point

Lighthouse

Light

Winnegance

The Rock

Steed

Stuff

Head

Fisher

Eddy

Indian

Pt

Gravel

Rare

Island

New

Castle

Goat

Tidal

BM

Squirrel

Island

Mud

Seal

Bald

Head

Mill

Pond

Parker

Head

Swamp

Duck

Island

Marr

Island

REID STATE PARK

770.016 AC.

BATH 15

BOOTHBAY 15

REID STATE PARK

Location

County: Sagadahoc
Municipality: Georgetown

Present Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should continue to operate Reid State Park. Consideration should be given to developing recreational facilities such as interpretive trails on the undeveloped areas in the park.

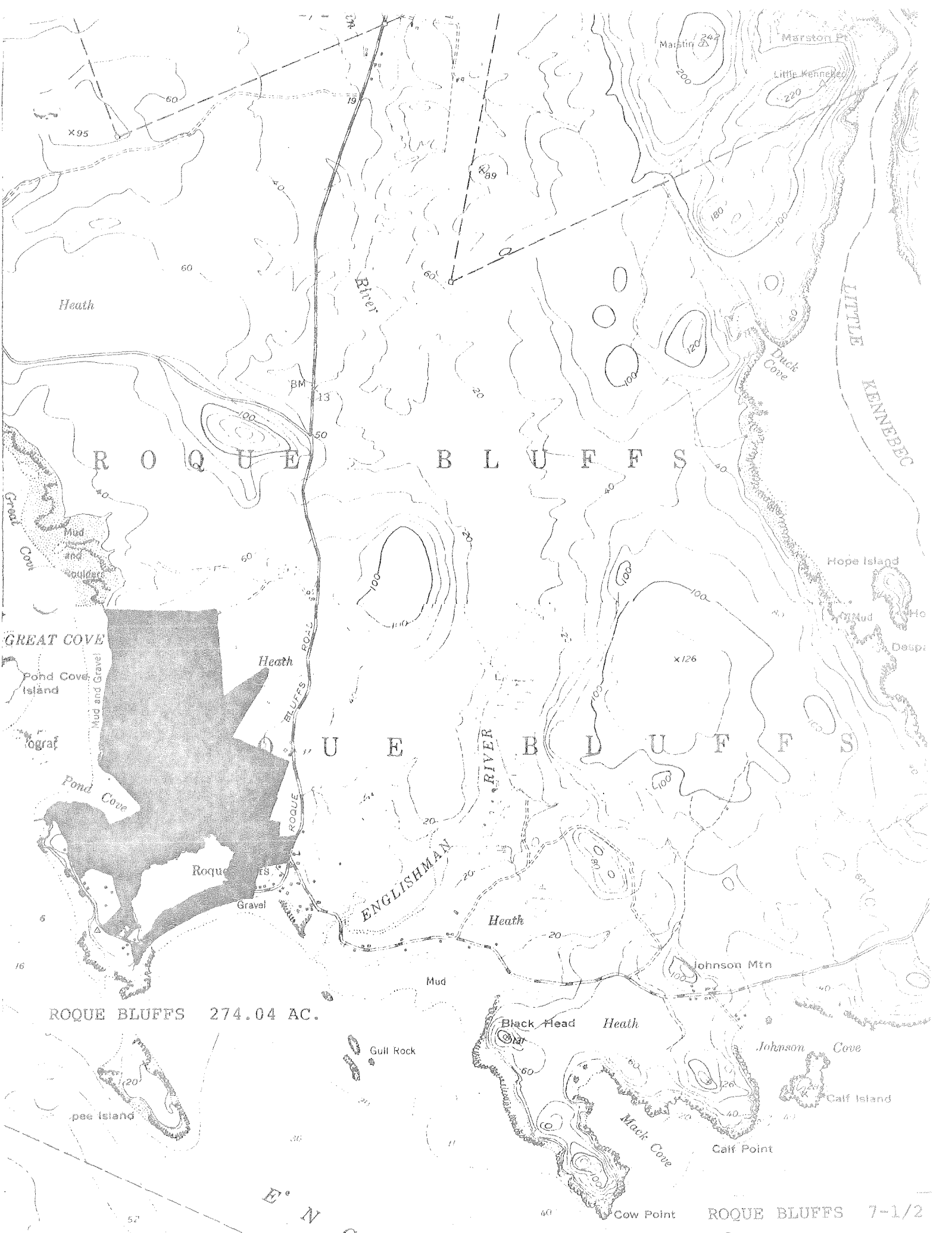
Rationale Summary

Reid accommodates the heaviest day use visitation of any site in the state park system. Nearly all of this is picnicking and beaching recreational use.

The park was listed in the Maine Natural Areas Inventory as being of regional (multistate) significance. According to the Inventory, the park is "An excellent area which combines sand beach, rocky coast, salt marshes and coniferous woods. The sand dunes are among the best in Maine. There is an extensive salt marsh area which supports a large variety of plant and animal species. There is also a small sphagnum bog within the park." To the west of the park is a locality of geological importance. It is said to be "the finest exposure of coticule rock in the Casco Bay area, if not the whole state" (A. M. Hussey, Significant Geologic Localities in the Casco Bay Group Southern Maine, Maine Critical Areas Program, 1977, p.41).

Nelson and Fink report that Reid is the northernmost, large backdune habitat in Maine and it probably constitutes the northern range limit in the state for several plant and bird species. It is also unusual in being (1) a large sand beach of locally derived origin (little sand is supplied from offshore) and (2) a barrier-marsh system with no tidal exist through the beach strandline. (Geological and Botanical Features of Sand Beach Systems in Maine, Maine Critical Areas Program, March, 1978).

Several years ago, an unsuccessful attempt was made to establish a nature trail on portions of the park not otherwise used. With recent changes in public attitudes and interests and the success of the interpretive design of Wolf Neck State Park and the naturalist programs of the Audubon Societies and others in Maine, another attempt at establishing a network of nature trails is justified.



ROQUE BLUFFS

GREAT COVE
Pond Cove
Island
Mud and Gravel
Roque Bluffs
Gravel
ROQUE BLUFFS 274.04 AC.

ROQUE BLUFFS 7-1/2

ROQUE BLUFFS STATE PARK

Location

County: Washington
Municipality: Roque Bluffs

Present Ownership

Bureau of Parks and Recreation

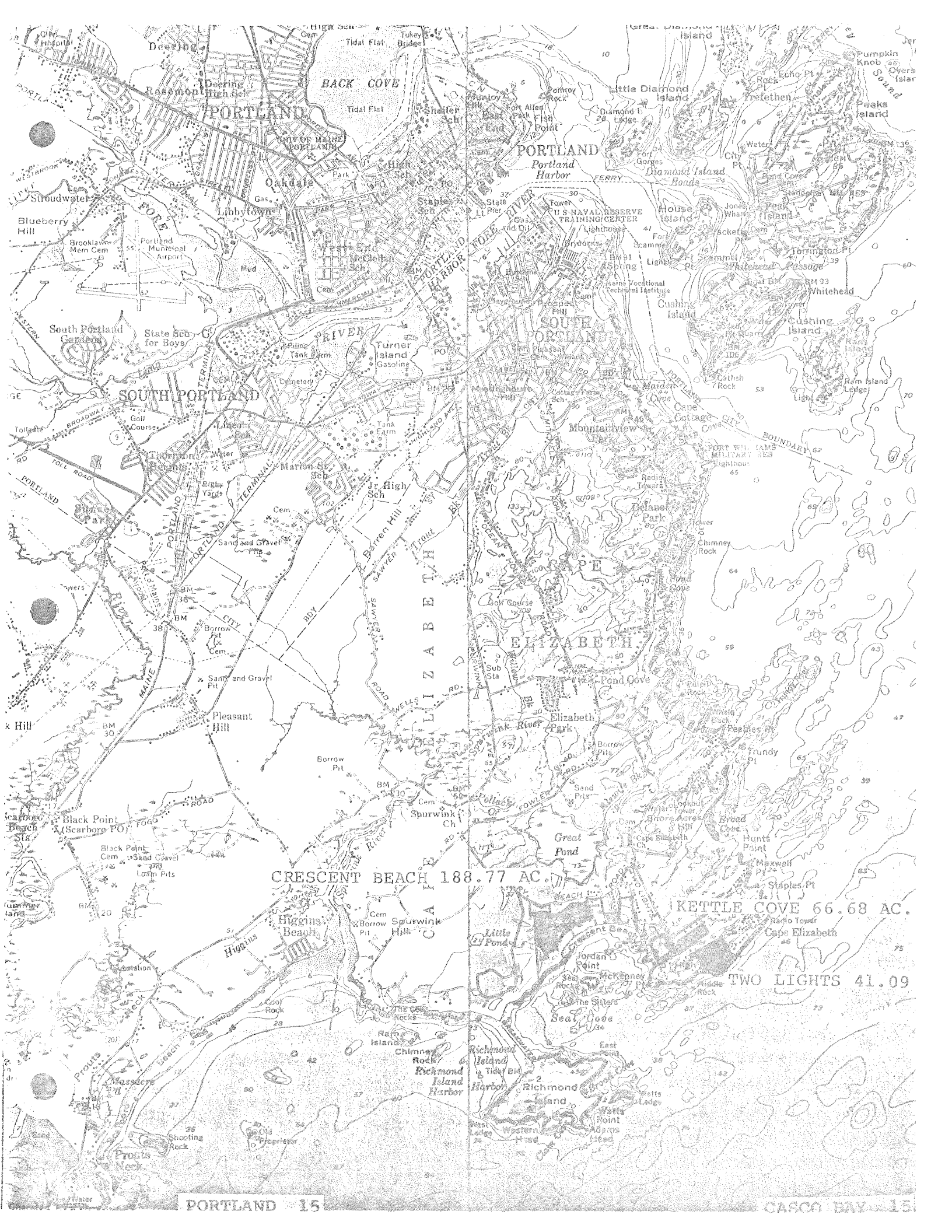
Recommendations

The Bureau of Parks and Recreation should continue to operate Roque Bluffs State Park; consideration should be given to expanding facilities at the park including the development of an interpretive trail system.

Rationale Summary

Roque Bluffs, one of the newest parks in the state park system, offers for public use one of the largest sand beaches in eastern Maine. Geologically, the beach is a pocket barrier fronting a shallow fresh water pond. It is likely that the pond was formerly a marine lagoon. The dunes support what may be the northmost stand of American beachgrass in Maine.

The parcel owned by the Bureau of Parks and Recreation includes, along with the beach and pond, upland which would be suitable for the development of an interpretive trail system, and perhaps camping facilities. During 1978, construction of day use facilities initiated in 1977 is scheduled for completion.



PORTLAND

PORTLAND
Portland Harbor

SOUTH PORTLAND

SOUTH PORTLAND

ELIZABETH

CRESCENT BEACH 188.77 AC.

KETTLE COVE 66.68 AC.

TWO LIGHTS 41.09

26

Site

TWO LIGHTS STATE PARK

Location

County: Cumberland
Municipality: Cape Elizabeth

Present Ownership

Bureau of Parks and Recreation

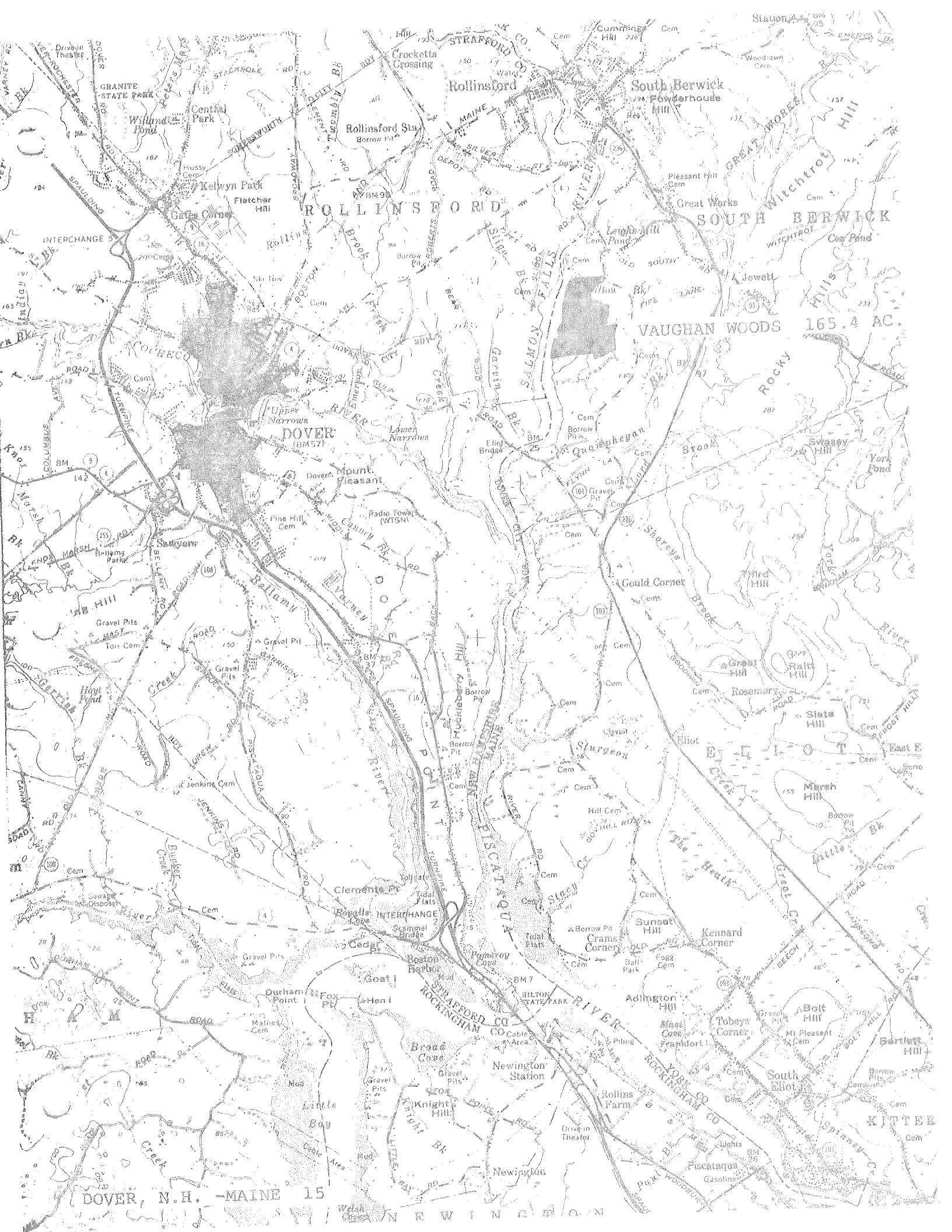
Recommendation

The Bureau of Parks and Recreation should continue to operate Two Lights State Park without increasing parking capacity.

Rationale Summary

Two Lights is a very popular trails-picnicking day use park among both residents and nonresidents (1977 estimates: 75,141 Maine residents, 72,195 nonresidents). Managed in conjunction with nearby Crescent Beach State Park and Kettle Cove boat access, the park forms an important urban recreation resource particularly for residents of the Greater Portland region.

In 1977, the entire shoreline section of the park was added to the State's Register of Critical Areas for its geological significance. Management suggestions indicate the "area should be preserved in its natural state" and that "an influx of visitors could pose a threat to the critical area." There is no substantial room for expansion of parking facilities.



DOVER, N.H. -MAINE 15

NEWINGTON

Site

VAUGHAN WOODS MEMORIAL PARK

Location

County: York
Municipality: South Berwick

Present Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should continue to operate Vaughan Woods Memorial as a low intensive day use picnicking and trail recreational area.

Rationale Summary

Vaughan Woods is a 165 acre wooded site bordering the Salmon Falls River. It is associated with several historic events including the landing of the first sawmill in America. The area is now used for picnicking, hiking, riding, and nature study. These uses should continue to predominate. The will of the donor states that the "land, woods and forest shall forever be retained and used... for a State Forest, public park and public recreation purposes, shall forever be left in the natural wild state and forever be kept as a sanctuary for wild beasts and birds....".

Annual use of the area now totals about 10,000 visitors. The instant design capacity appears adequate to accommodate anticipated use at least in the near term future.



NORTHPORT

LENVILL

BELFAST 15

WARREN ISLAND 70.4 AC.

CASTINE 15

PENOBSCOT BAY

Ram I
St I
Ke
Flat I

Gooseberry Pt
Grindel Pt
Sherman Pt

ISLESBORO FERRY

Warren I
Spruce I

Thrumcap Monument

Philbrook Cove
Cradle Cove
Gullkey

Site

WARREN ISLAND STATE PARK

LocationCounty: Waldo
Municipality: IslesboroPresent Ownership

Bureau of Parks and Recreation

Recommendation

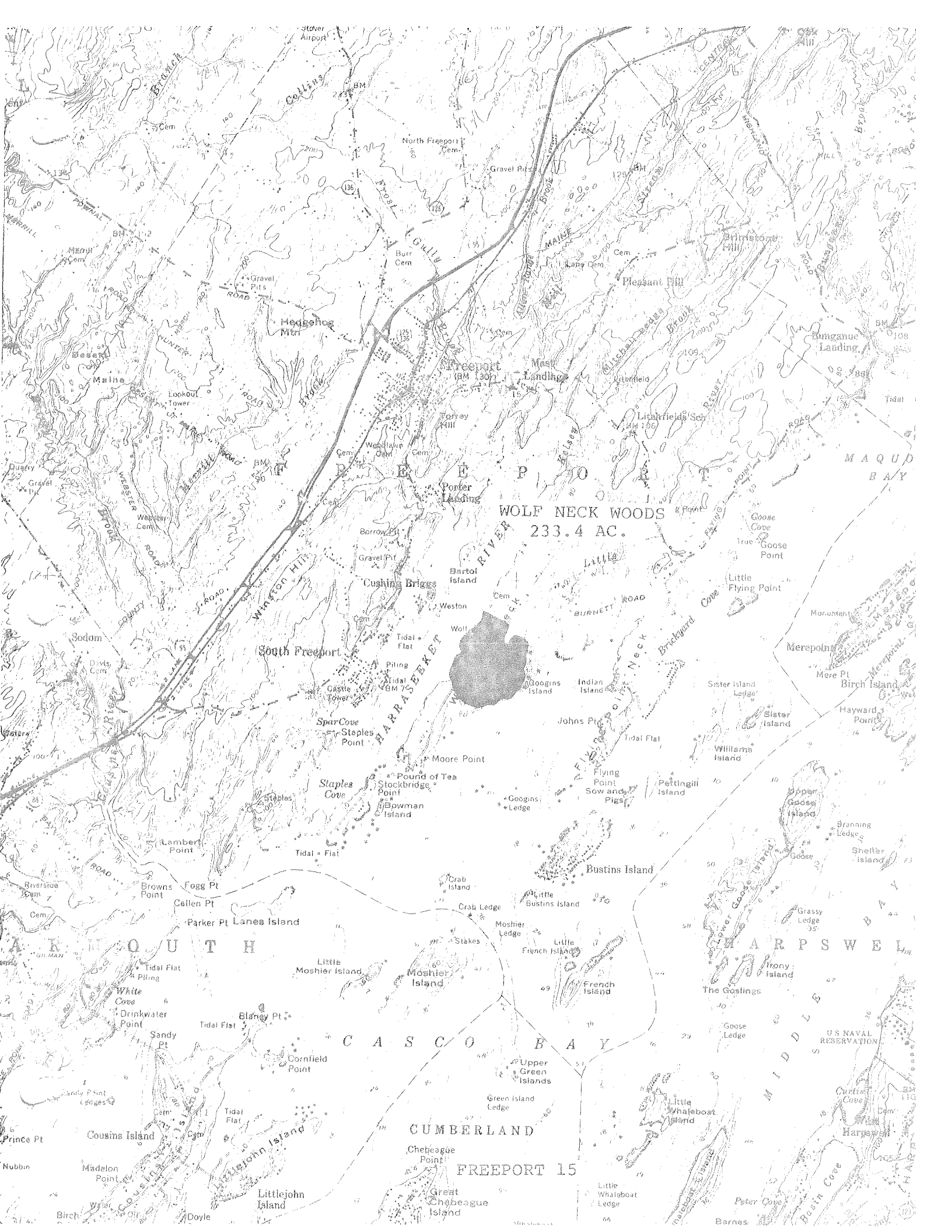
The Bureau of Parks and Recreation should continue to operate Warren Island State Park; development of additional camping shelters and initiation of public transportation to the island should be considered.

Rationale Summary

Warren is the only coastal island in the state park system formally offering camping to the general public. An increase in the use of overnight facilities can be expected as public pressures for island camping in Maine grow. Indications are that they have grown significantly in recent years.

Many people visit the island during the day and sleep in their boats anchored off shore at night. Some new facilities could be constructed on the island. A regular boat shuttle from the Islesboro ferry terminal could be set up though the cost may be high. Any actions taken to increase use of the island should consider protection of the active osprey nest on the southeast end of the island. The island was listed in the Natural Areas Inventory for its unusual forest.

During 1977, trails and picnic sites on the island were expanded. This work plus the drilling of an additional well is scheduled for completion during 1978.



WOLF NECK WOODS
233.4 AC.

CUMBERLAND
FREEPORT 15

MIDDLE ISLANDS
U.S. NAVAL RESERVATION

Site

WOLF NECK STATE PARK

LocationCounty: Cumberland
Municipality: FreeportPresent Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should continue to operate Wolf Neck State Park as a day use area offering trails and picnicking; existing parking capacities should not be expanded; the feasibility of opening up more of the parkland on the north side of the neck should be explored.

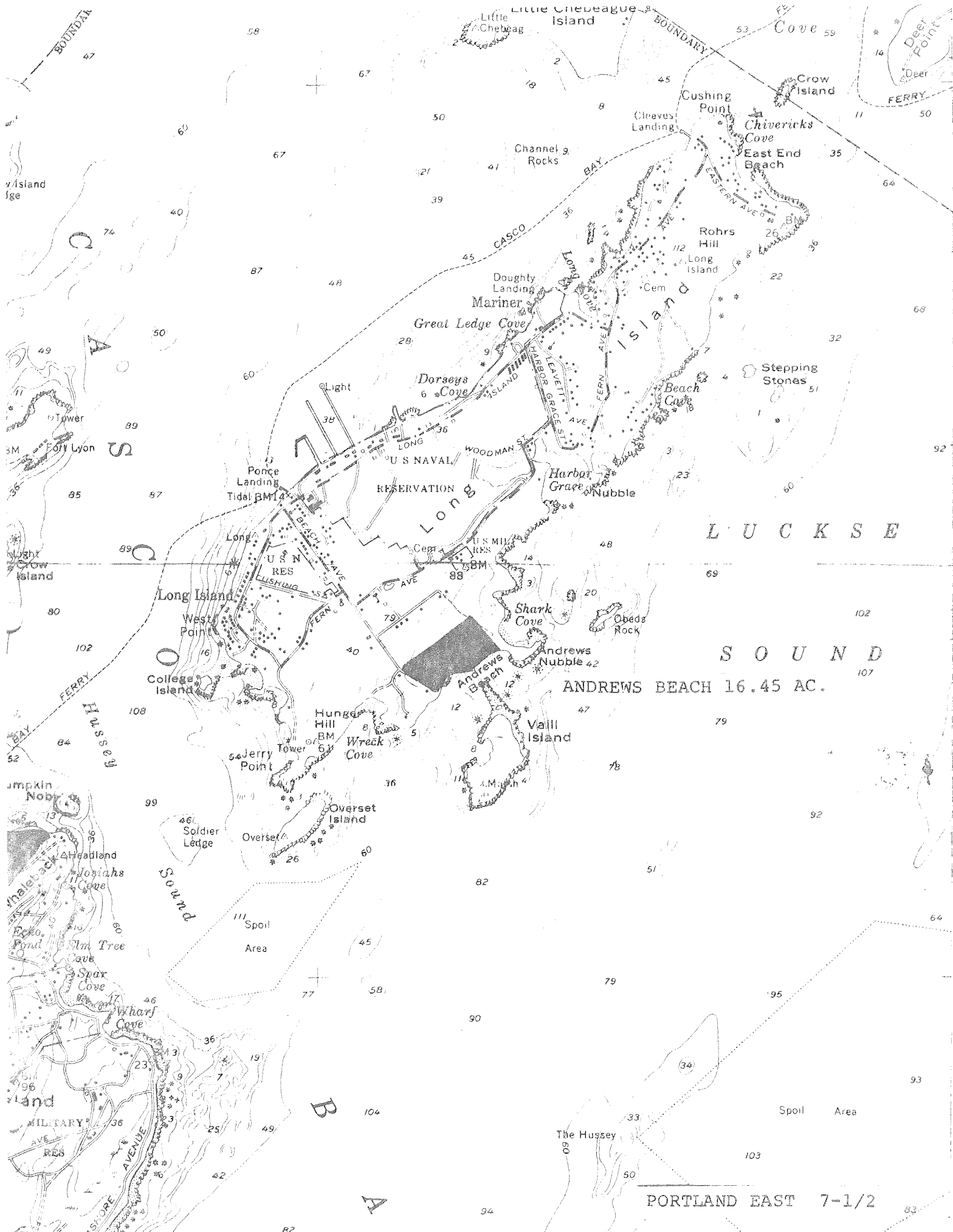
Rationale Summary

Wolf Neck is a site of interesting coastal history, geology and botanical diversity. Wolf Neck Woods is one of the better stands of old growth pine remaining on the Maine coast.

Between 1973, when it opened, and 1977 visitation at Wolf Neck State Park increased five-fold. It has become a four season park, nearly as popular in the winter as during the warmer seasons. To preserve the character of the natural area experience existing parking facilities should not be increased. On the other hand, there is a considerable portion of the park which is little used. The land on the north side of Wolf Neck Road could accommodate more visitors if made more readily available.

It has been suggested that a trail be constructed along the Harraseeket River connecting Wolf Neck State Park with Maine Audubon Society's Mast Landing Sanctuary. The Bureau of Parks and Recreation should pursue this with interested parties, securing agreements from landowners to allow public travel. From its earliest days, the Harraseeket has been one of the town's most important natural resources. Mast Landing was one of three ship-building sites in Freeport. Today the harbor is one of the largest and most scenic yachting centers on the Maine coast. Additionally, a fuchsite (an uncommon chromium bearing mica) locality, said to be the best of three of four known localities in the state, has been located along the river. A naturalist program is to be tested at Wolf Neck to expand the interpretive information now available. If successful, endowment funding for a permanent program should be explored.

BUREAU OF PARKS & RECREATION UNDEVELOPED COASTAL HOLDINGS



L U C K S E

S O U N D

ANDREWS BEACH 16.45 AC.

PORTLAND EAST 7-1/2

Site

ANDREWS BEACH

Location

County: Cumberland

Present Ownership

Bureau of Parks and Recreation

Recommendation

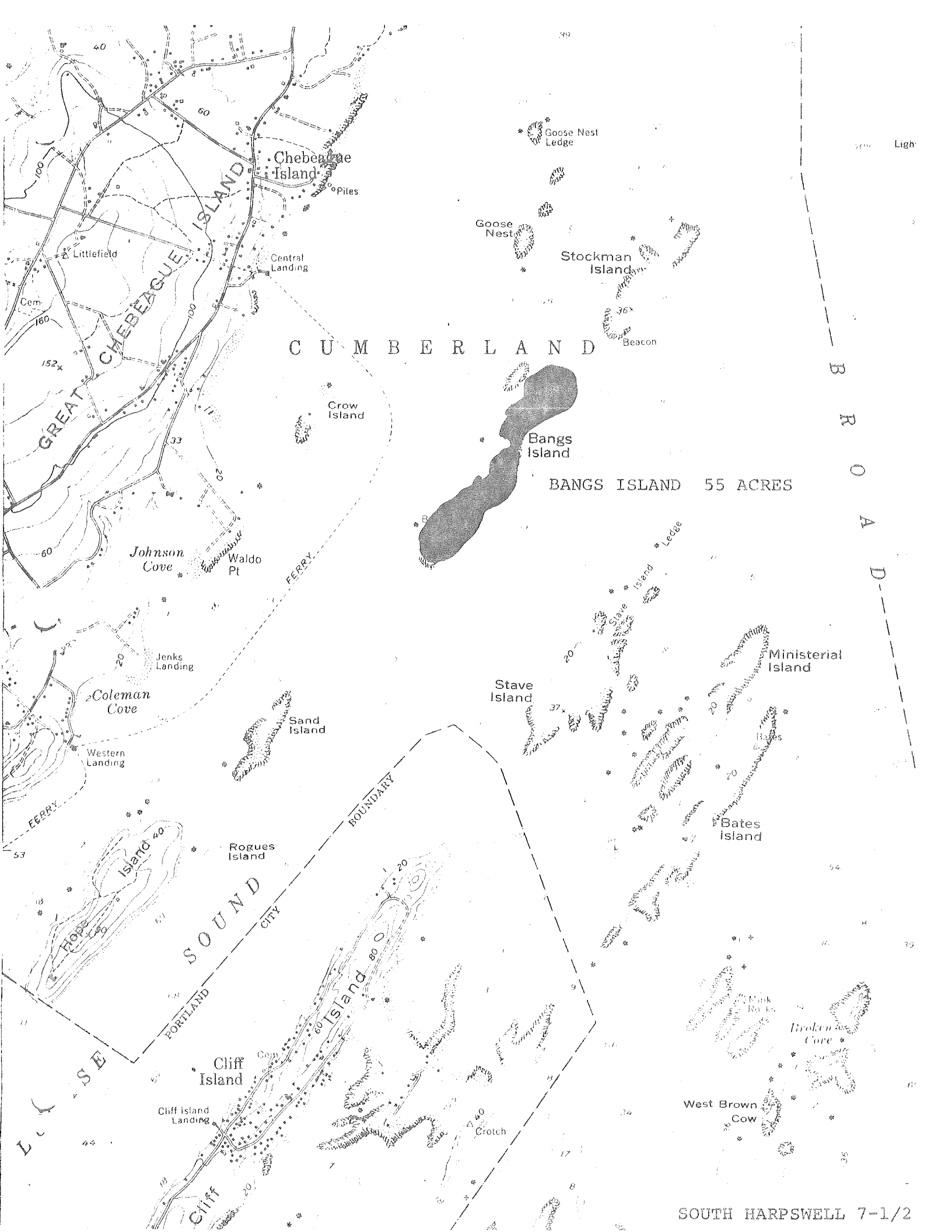
Facilities should be developed at the site owned by the Bureau of Parks and Recreation at Andrews Beach on Long Island to protect the resource and enhance the use of the beach by the general public; privately owned Vaill (aka Marsh) Island which lies off of the beach should be protected in a natural state.

Rationale Summary

Andrews is one of the finest offshore sand beach dune systems in southern Maine. According to the Natural Areas Inventory, when the wind blows from the east, the sands of the beach sing. There are no facilities to service recreational use at the beach though it is a popular site with island residents and Casco Bay boaters. Minimal facilities such as toilets and snow fences should be constructed to protect the beach system from visitor abuse.

Long Island is accessible by ferry from Portland. It has been suggested that the City of Portland assume management responsibility for the site. Even if this materializes, the Bureau of Parks and Recreation should include the beach in a plan, proposed here, to guide development and use of its island properties in Casco Bay so that all of the sites are managed as a system.

Additionally, Vaill Island, which is located immediately off of Andrews Beach, is an integral part of the beach system and ought to be protected for wildlife habitat and public use. The Maine Coastal Nesting Seabird Inventory (1977 Draft) listed five pairs of nesting eiders and 15 herring gull nesting pairs on the island.



CUMBERLAND

BANGS ISLAND 55 ACRES

Lighthouse

B
R
O
A
D

L
U
S
E
S
O
U
N
D
P
O
R
T
L
A
N
D
C
I
T
Y

SOUTH HARPSWELL 7-1/2

31

Site

BANGS ISLAND

Location

County: Cumberland
Municipality: Cumberland

Present Ownership

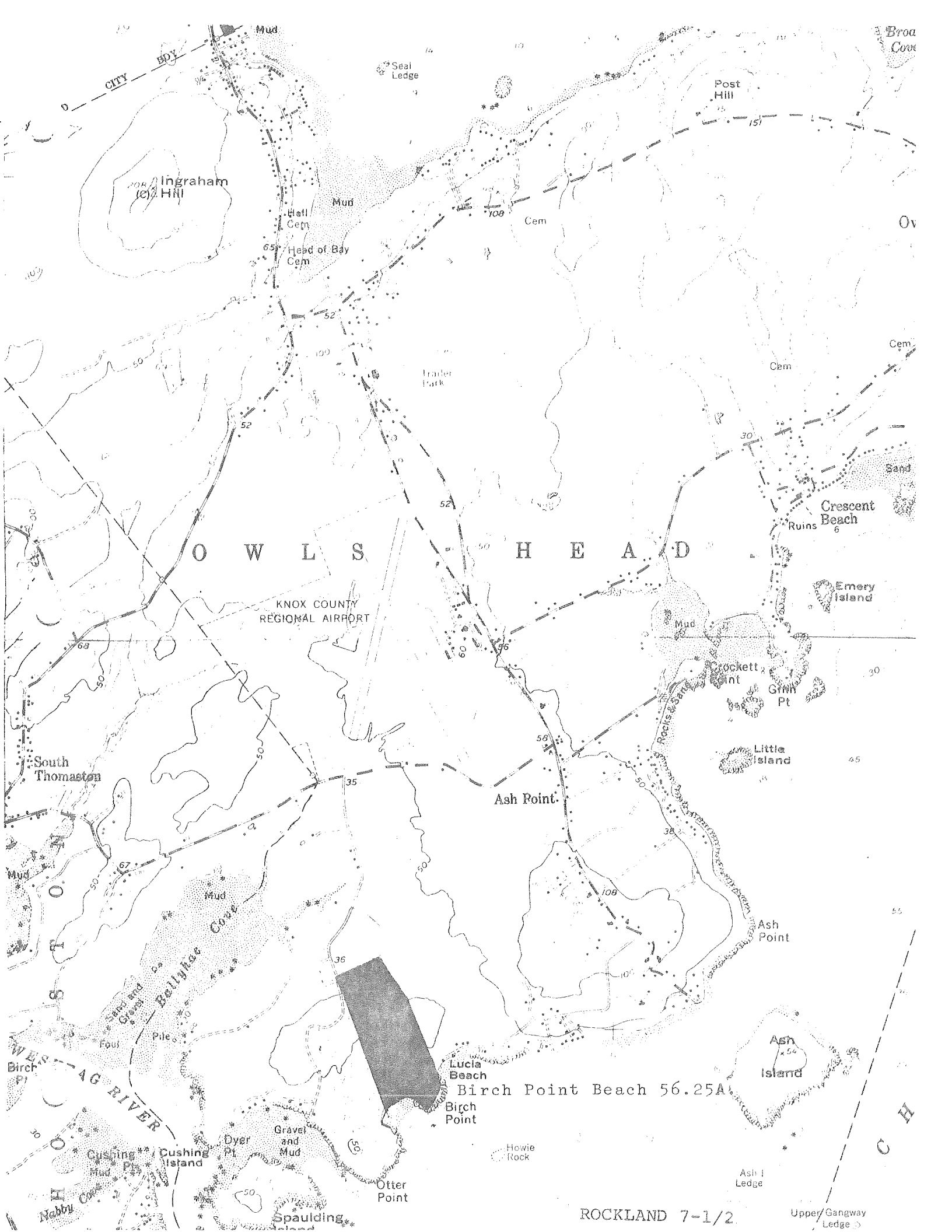
Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should transfer Bangs Island to the Department of Inland Fisheries and Wildlife for administration as a wildlife management area.

Rationale Summary

Bangs Island was acquired by the Bureau of Parks and Recreation primarily as wildlife habitat. The Maine Coastal Nesting Seabird Inventory (1977) listed 81 nesting pairs of gulls and 400 nesting eider pairs on the island. Bangs Island has limited access and little on-site recreational value. It would most logically be managed by the Department of Inland Fisheries and Wildlife as one of the Department's coastal nesting islands.



Birch Point Beach 56.25A

Site

BIRCH POINT BEACH

LocationCounty: Knox
Municipality: Owls HeadPresent Ownership

Bureau of Parks and Recreation

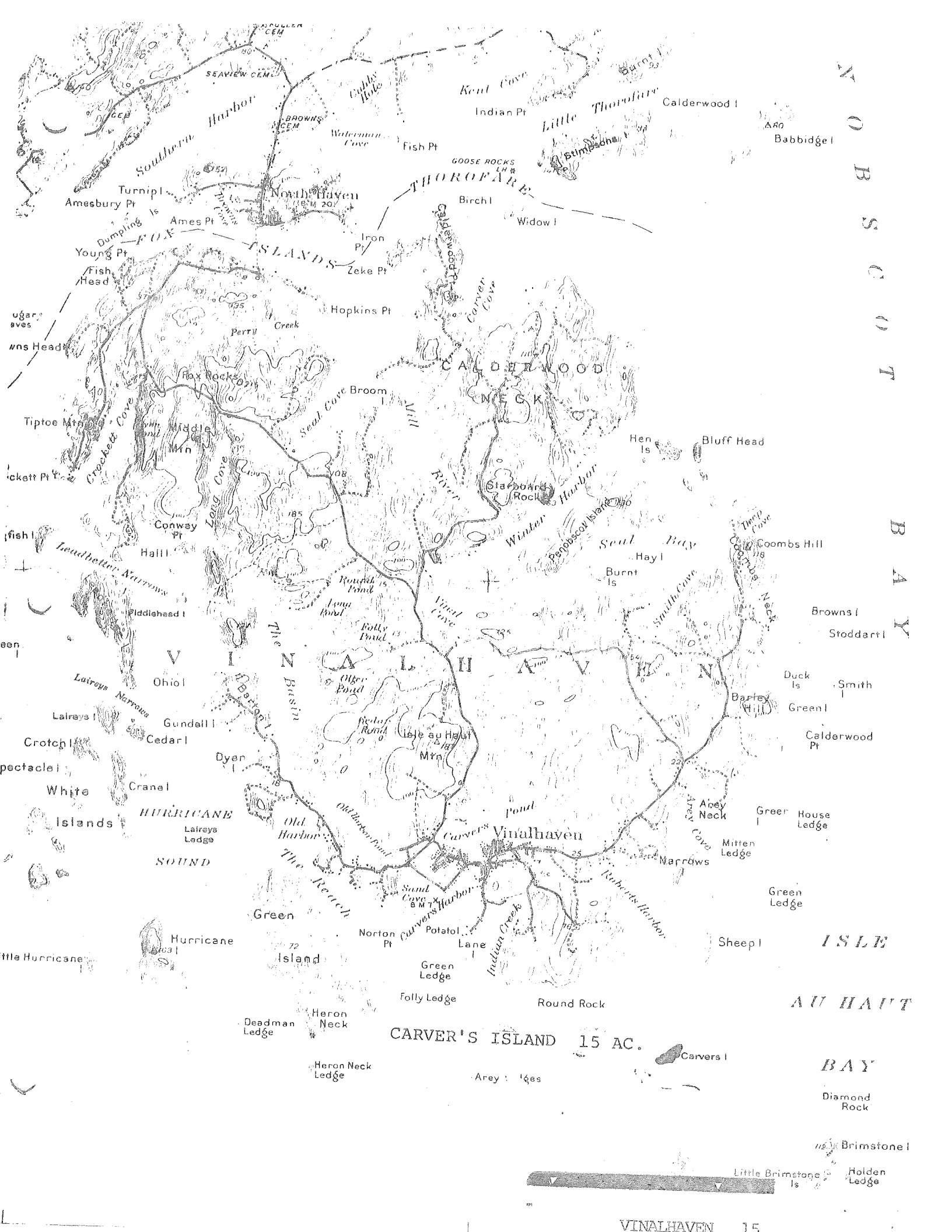
Recommendation

The Bureau of Parks and Recreation should develop its Birch Point Beach property for swimming-picnicking use if the town or another local or regional agency will operate and maintain the area.

Rationale Summary

There is some irony in this recommendation since it was the town of Owls Head which originally transferred the property to the Bureau of Parks and Recreation when it found it could not afford to develop and operate a park at the site. Nevertheless, it is questionable whether the site is of state level significance. It offers a fine, if small, sand beach in an area of few coastal beaches. But the property would mainly serve the population of Rockland. Like nearby Knox County Regional Airport perhaps the area could be run as a county regional park after the fashion of Mattawamkeag Wilderness Park in Penobscot County. The mid-coast counties are among the fastest growing in Maine.

Entrance road improvements and toilet construction have been scheduled by the Bureau for 1978.



N
O
B
S
C
O
T

B
A
Y

Browns I
Stoddart I

Duck Is
Smith
Green I

Calderwood Pt

Green House Ledge

Green Ledge

Sheep I

ISLE

AU HAUT

BAY

Diamond Rock

Brimstone I

Little Brimstone Is
Holden Ledge

CARVER'S ISLAND 15 AC.

Arey Ledges

Site

CARVERS ISLAND

Location

County: Knox
Municipality: Vinalhaven

Present Ownership

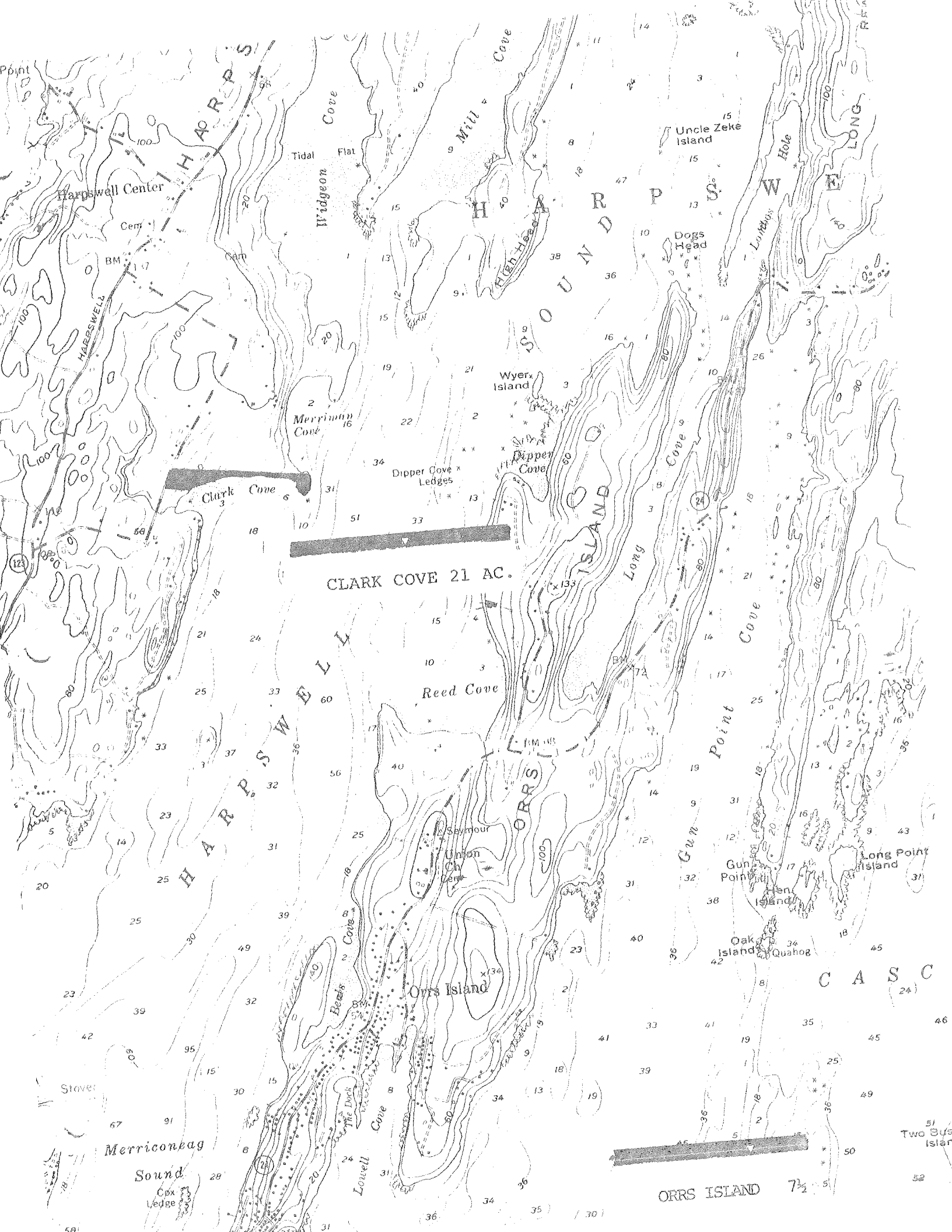
Bureau of Parks and Recreation

Recommendation

Carvers Island should be formally transferred to the Department of Inland Fisheries and Wildlife for administration as a wildlife management area.

Rationale Summary

Carvers Island was acquired by the Bureau of Parks and Recreation in 1972 to be preserved as waterfowl habitat. The Maine Coastal Nesting Seabird Inventory (1977 Draft) listed 20 black guillemot, 160 eider, 29 double-crested cormorant, 500 herring gull, and 50 black-backed gull nesting pairs on Carvers Island. The island is and could continue to be used for limited recreation during the non-nesting season. As no facilities are needed and management pertains principally to bird nesting the site would best be transferred to the Department of Inland Fisheries and Wildlife.



CLARK COVE 21 AC.

Reed Cove

ORRS ISLAND 7 1/2

Two Bus Island

Site

CLARK COVE

LocationCounty: Sagadahoc
Municipality: HarpswellPresent Ownership

Bureau of Parks and Recreation

Recommendation

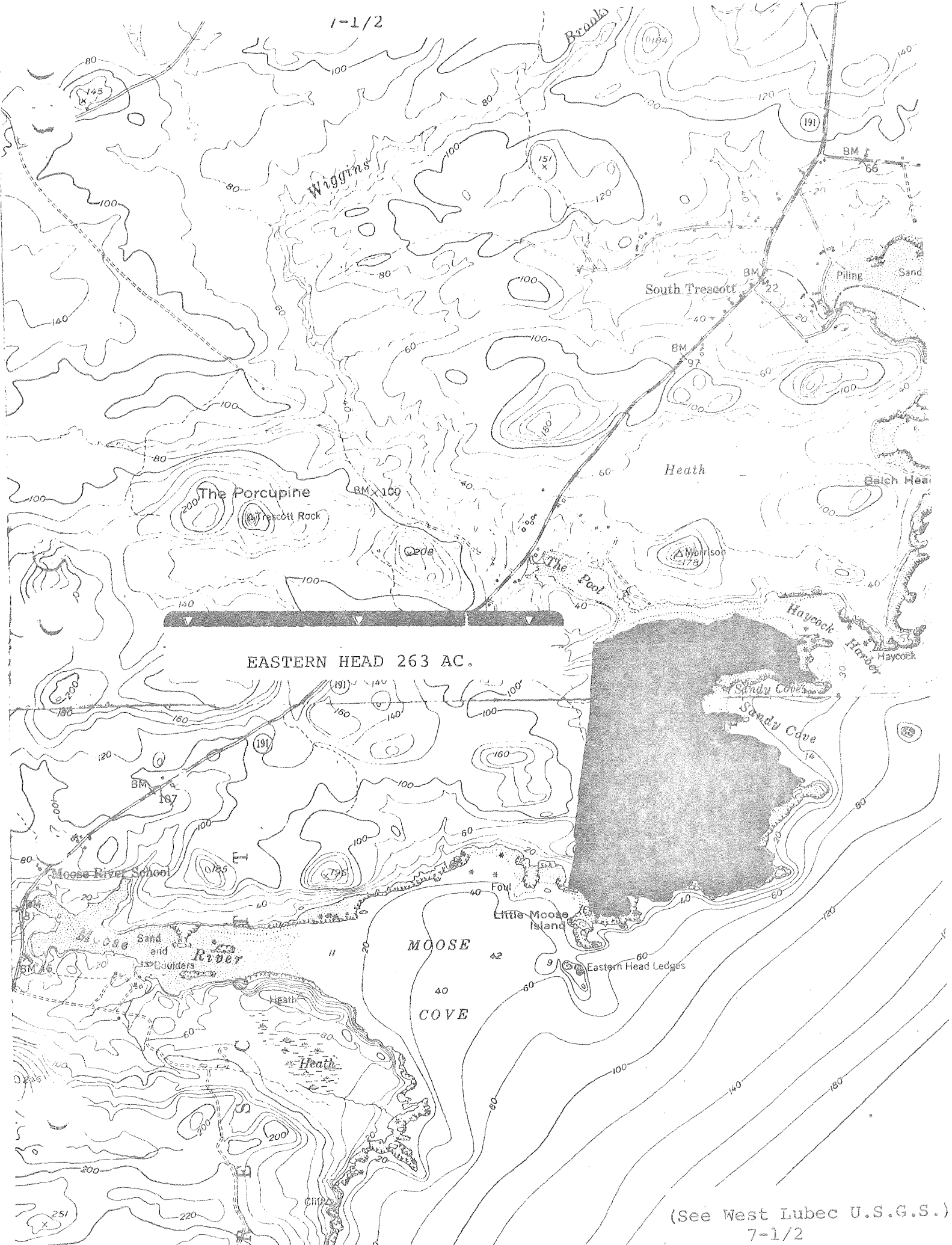
The Bureau of Parks and Recreation should consider selling, leasing or transferring its property on Clark Cove to a local or regional administrative body which could operate and maintain the area as a park for passive recreation.

Rationale Summary

The site is a bluff and gravel beach with good views south along Harpswell Sound. There are apparently no other significant bluffs in public or private conservation ownership in the Unit. Access is not difficult. The property borders a paved road and is about a mile and a half from Maine Route 123. The site would be most suitable for picnicking and sightseeing; the beach would be little used for swimming.

The Bath-Brunswick region is one of the fastest growing in the Maine coastal area. As more and more shoreland is developed, public access-physical and visual-to the ocean continues to contract. It is important that sites of scenic coastline be maintained for public use. The State should be responsible for providing access sites which serve people from widely dispersed areas. It is the local responsibility, on the other hand to provide sites of local significance.

Clark Cove is something of a marginal site. It is neither the most scenic nor the most accessible site in Harpswell. However, availability made the site attractive to the State. Realistically it is unlikely that the community would be willing to maintain the area even if developed by the State. (The Bureau of Parks and Recreation has development funds available.) Failing local interest, it may be best in the short term if the Bureau holds this property for future use or disposition. The Bureau intends to complete design construction plans during 1978.



EASTERN HEAD 263 AC.

Site

EASTERN HEAD

Location

County: Washington
Municipality: Trescott Township

Present Ownership

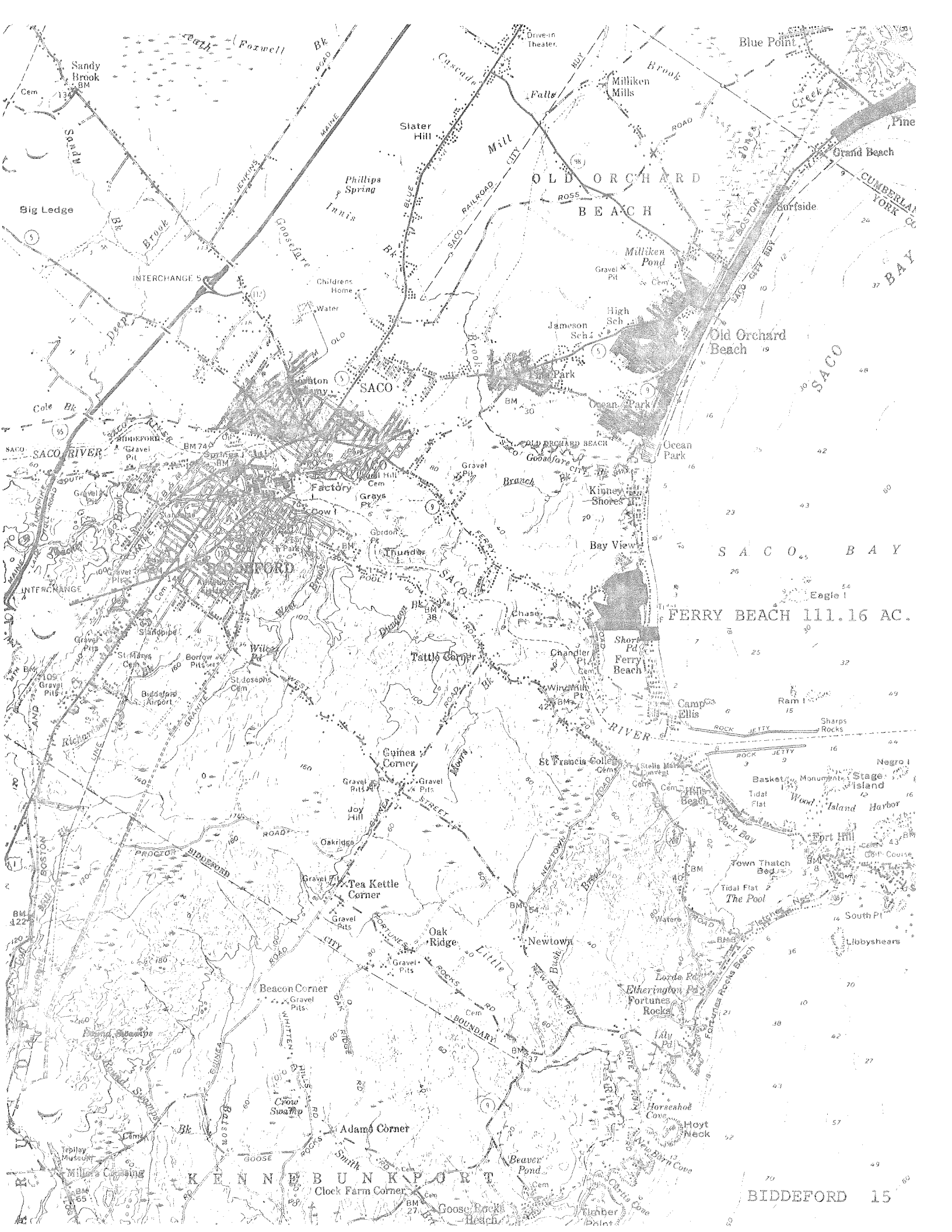
Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation's property on Eastern Head should be studied to determine what type and level of recreational use is most appropriate for the area.

Rationale Summary

Eastern Head is a magnificent chunk of the coastal headlands that stretch from Cutler to Lubec. It borders Haycock Harbor which Duncan and Ware describe as "a pleasant and remote little eel rut, where you will not be disturbed by any sounds except the surf on the ledges." (A Cruising Guide to The New England Coast, NY: Dodd, Mead & Co., 1972, p. 528). The property also includes one of the finest, albeit small, sand beaches in eastern Maine. The site is most appropriately suited for low intensity recreation, eg., walking, beaching, picnicking. A development/management plan should be prepared detailing what recreation will be designed for the site. An agreement is being negotiated to provide access to the Bureau of Parks and Recreation's property from Route 191.



S A C O B A Y

FERRY BEACH 111.16 AC.

BIDDEFORD 15

Site

FERRY BEACH

LocationCounty: York
Municipality: SacoPresent Ownership

Bureau of Parks and Recreation

Recommendation

Although it remains problematical, the Bureau of Parks and Recreation should make a definite commitment to develop or not a park at Ferry Beach in Saco; particular consideration should be given to the erosion potential of the beach portion of the Bureau's property.

Rationale Summary

Geologically, Ferry Beach is part of the largest beach system in Maine. The Saco Bay beaches stretch from Scarborough to Biddeford in a crescent extending nearly eight miles. Most of the beach has been extensively developed right up to the strandline.

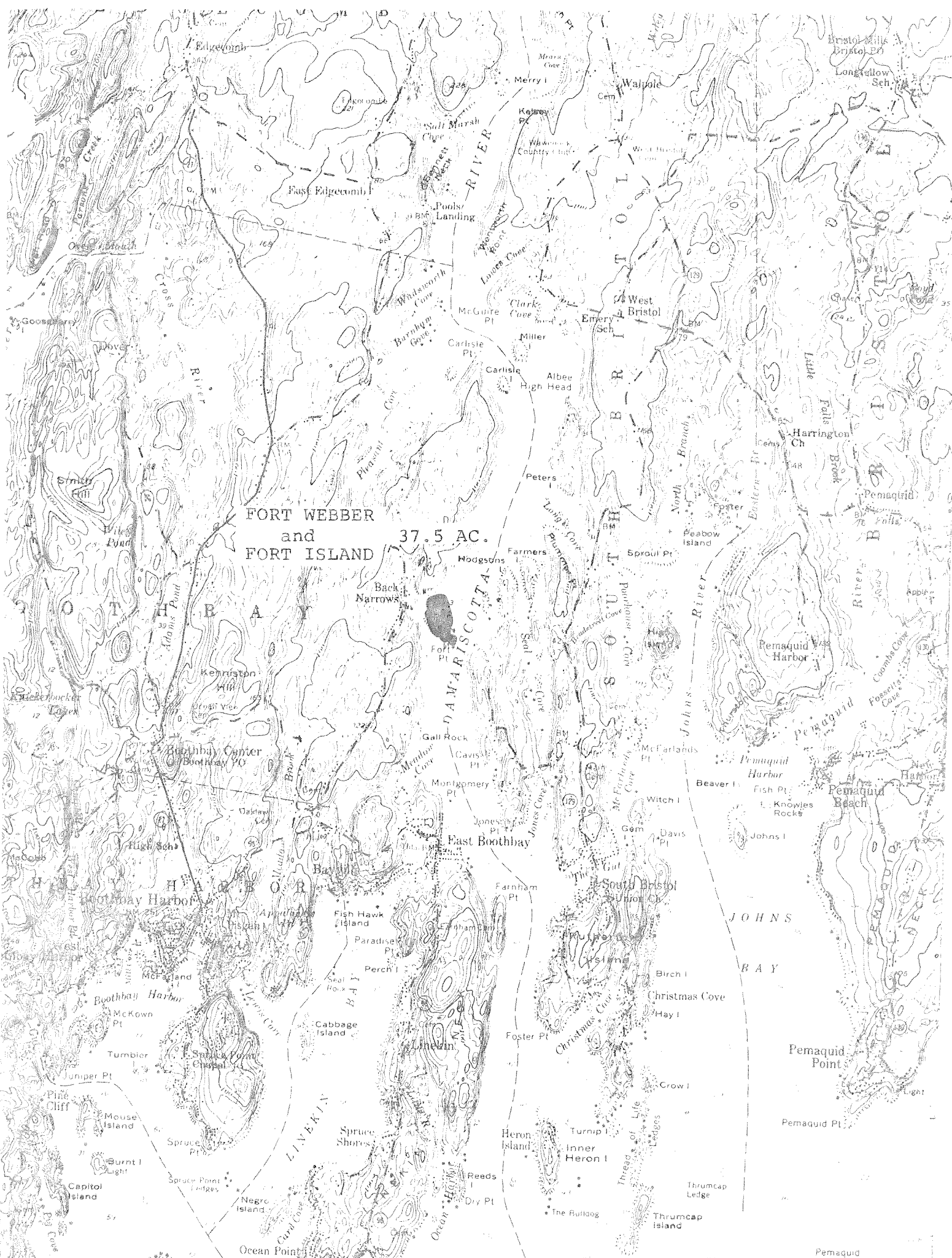
In 1966-69, the Bureau of Parks and Recreation was given 111 acres of land in Saco, including about 500 feet of beach frontage along one of the few remaining undeveloped portions of the beach. This property was donated to be developed into a state park. Day use activities—swimming, picnicking, walking, nature study and ice skating—would predominate. To develop the site most appropriately it was felt that adjacent land was needed for the construction of a parking and picnic area. The real estate already held by the Bureau was regarded as too low and wet for a parking lot. Negotiations were begun to acquire higher, adjacent land. However, ownership changed and the current owner has consistently refused to sell the Bureau the land it wants.

Though there are no facilities other than a fence and boardwalk, today the beach is used by many local as well as summer visitors. In winter, Long Pond is used for skating. The Maine Department of Transportation, in 1977, built a bikeway from downtown Saco to the planned entrance of the proposed state park.

The development of a park at Ferry Beach is a complex issue which has been much studied, discussed and worried over. Although it may be difficult to justify, a major public investment in a park there with only 490 feet of beach; although the site may be of less than state level significance; although the beach frontage may be threatened with erosion; although many area property owners are distributed

FERRY BEACH (cont'd)

by the prospect of channelling many more beach goers onto the beach; although the State may have to acquire additional land for optimal development - despite these considerations, a park might well (and perhaps should well) be developed at Ferry Beach. Prior to any development, as a result of the continuing erosion problems on the Saco Beaches, particularly at Camp Ellis, a geological study of the long term stability of the Bureau's frontage on Ferry Beach should be undertaken. It should also be noted that a stand of Tupelo trees, uncommon in Maine, on the site has been recommended for detailed investigation as a candidate for the Maine Register of Critical Areas.



FORT WEBBER
and
FORT ISLAND 37.5 AC.

Site

FORT ISLAND

LocationCounty: Lincoln
Municipality: BoothbayPresent Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should develop Fort Island as funds become available.

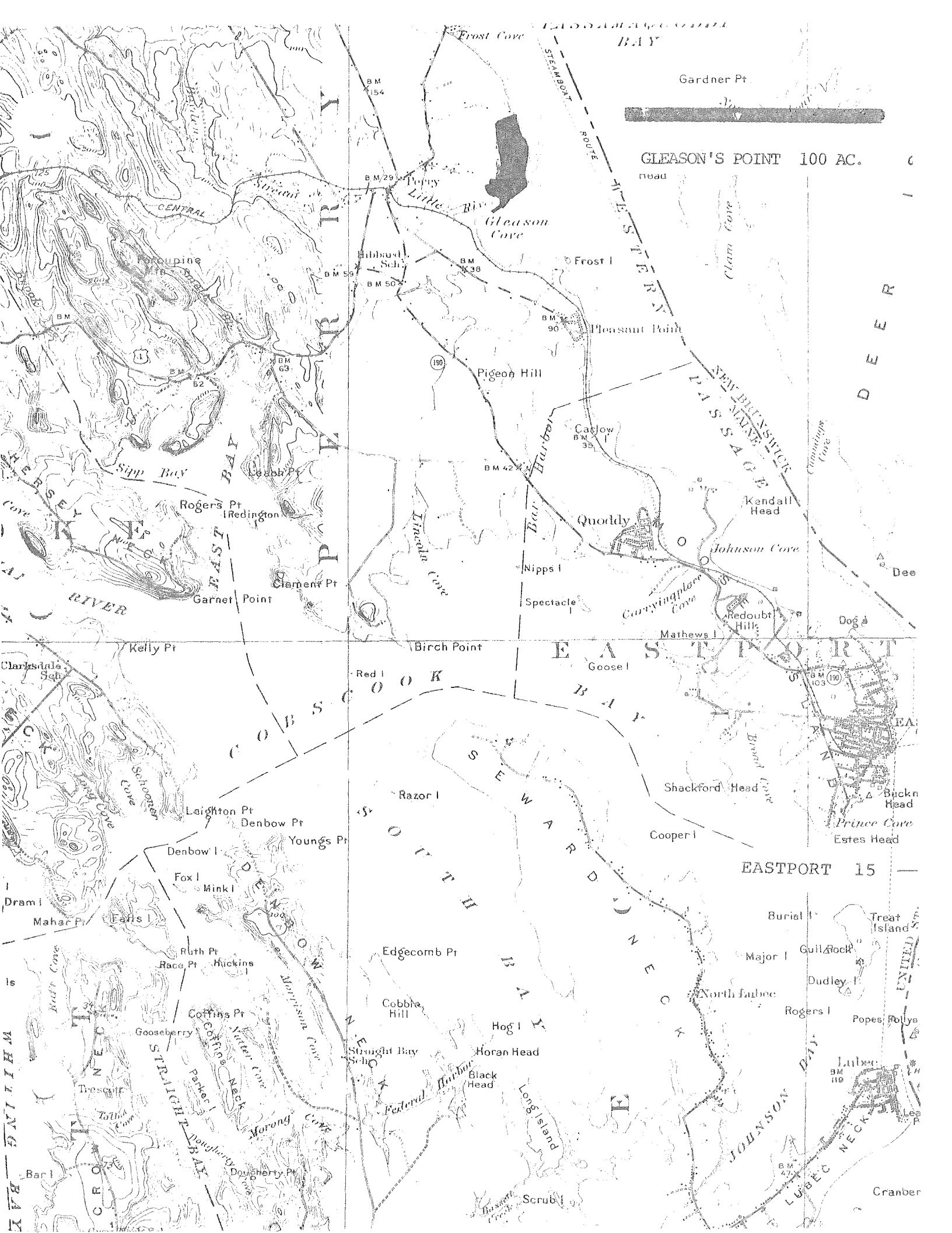
Rationale Summary

Fort Island (aka Weber's, Narrows and Bread and Cheese Island) is strategically situated at a bend in the Damariscotta River making it a logical location for military defense. In 1808 when the federal government was taking steps to fortify the Maine coast, a fort was built on the island to protect the settlements of Boothbay, Bristol, Newcastle and Damariscotta. The remains of the fort, it is believed, are sufficient to show the entire plan of the defense.

In 1954, Fort Island was transferred to the State to be used "for public park purposes". The island came into the news again in 1961 when a bridge linking Boothbay-Bristol by cutting across the island was proposed.

For several years, the Bureau has had an agreement with the Appalachian Mountain Club which makes periodic use of Fort Island. The island is forested with trails following the varied topography.

Relative to other coastal historic sites Fort Island is of less than primary significance. It could be developed for recreation and historic interpretation as funds become available. A thorough management plan should be developed prior to any development.



1/2 MILE
GLEASON'S POINT 100 AC.
near

GLEASON'S POINT 100 AC.
near

EASTPORT 15

UNITED STATES

Cranber

GLEASON'S POINT

Location

County: Washington
Municipality: Perry

Present Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should retain its property at Gleason's Point for future use or disposition.

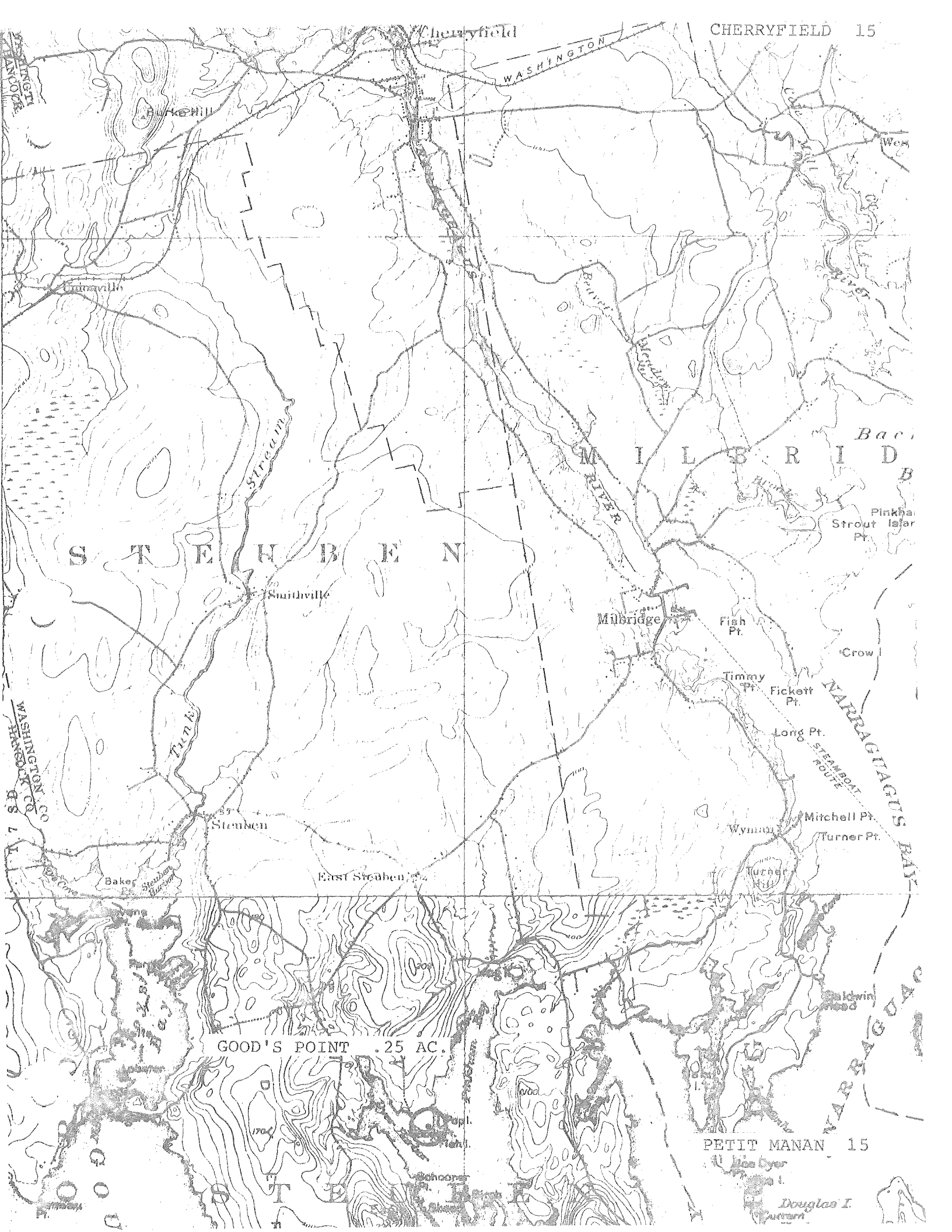
Rationale Summary

This 100 acre parcel consists mostly of open fields, remnants of an old farmstead, with excellent views of Passamaquoddy Bay. It also includes a gravel spit which extends into the mouth of the Little River. The site is located just off U.S. Route 1 with good road access.

Gleason Point has been nominated to the Maine Register of Critical Areas due to the population of gaper clams found in the intertidal area of Gleason Cove. The gaper clam is a large, filter-feeding, cold water bivalve found in Maine in only a few spots along the coast in Hancock and Washington Counties. Two other uncommon marine invertebrates are also found at Gleason Cove, the bushy-backed slug and the smooth top shell. It has been suggested that to protect these populations the site be maintained in a natural state.

Other public properties in the eastern Washington County region include the Bureau's Cobscook Bay State Park (day use - camping), Quoddy Head State Park (day use), St. Croix River Boat Access (day use), Eastern Head (undeveloped). The federal government maintains St. Croix Island National Monument, Moosehorn National Wildlife Refuge and Roosevelt Campobello International Park. The Maine Department of Fish & Wildlife holds wildlife management areas in Edmunds, Whiting and Pembroke. The Bureau of Public Lands is aggregating land at Rocky Lake in T18 ED. And there is at least one significant local coastal park at the reversing falls in Pembroke. To varying degrees each of these areas might serve as an alternative to a park at Gleason's Point.

Ideally, this site might be developed into a recreation area which would be operated and maintained by a local administrative body. Activities might include picnicking, field games and boating. Nevertheless, it is very unlikely, at least in the short term, that any local body will be able to operate the site. Failing this the Bureau should retain the property for resource protection and potential future use.



GOOD'S POINT .25 AC.

Site

GOOD'S POINT

Location

County: Washington
Municipality: Steuben

Present Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should transfer or lease Good's Point.

Rationale Summary

This is a one-quarter acre site at Good's Point in Steuben which receives no public use. It is of local significance only.



SOUTH HARPSWELL 7-1/2

Site

JEWELL ISLAND

Location

County: Cumberland

Municipality: Portland, Cumberland

Present Ownership

Bureau of Parks and Recreation

Recommendation

Jewell Island should be developed by the Bureau of Parks and Recreation as a day use and overnight state park featuring a limited number of picnic tables, a trail system, a small number of primitive campsites, and a harbor anchorage. Public transportation to the island need not be provided and facilities should be kept to a minimum.

Rationale Summary

Jewell Island, has a rich and fairly well documented history dating back to the pre-Colonial period. In 1858, W. S. Carter described the island as "fertile and well cultivated." During World War II, fortifications were constructed on the island as part of a coastal defense battery to protect Portland Harbor. The remaining military structures are a hazard but could be transformed into an asset. Several observation towers on the island appear structurally sound and offer outstanding views in all directions.

Most of the island is now forested. The shore is predominantly steep and rocky. Yet there is an unusual cobble beach at the Punchbowl which was listed in the state's Natural Areas Inventory. On the west side of the island is a well protected anchorage popular with yachting enthusiasts. The island is now used by day sailors and for some camping. A squater has been living seasonally on adjacent Little Jewell Island for several years.

The Bureau should prepare a plan to guide development and use of its island properties in Casco Bay so that all of the sites can be managed as a system.



Coles Hill

Cory Corners

Elms

LAUDHOLM

Cem

Warriland

Brook

Upper Landing

Drakes Island

Drakes Island

Island

LAUDHOLM 198.50 AC.

Goulds *Rocks

Wells

High Sch

Ocean View Cem

Lower Landing

WEBHANNET RIVER

Tidal Flat

Creek

TELEPHONE

WEBHANNET RIVER

Beach

Wells Beach (Webhannet PO)

MILE Substation

ROAD

ATLANTIC AVE

Site

LAUDHOLM FARM

LocationCounty: Cumberland
Municipality: WellsPresent Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation should develop a day use state park at Laudholm Farm.

Rationale Summary

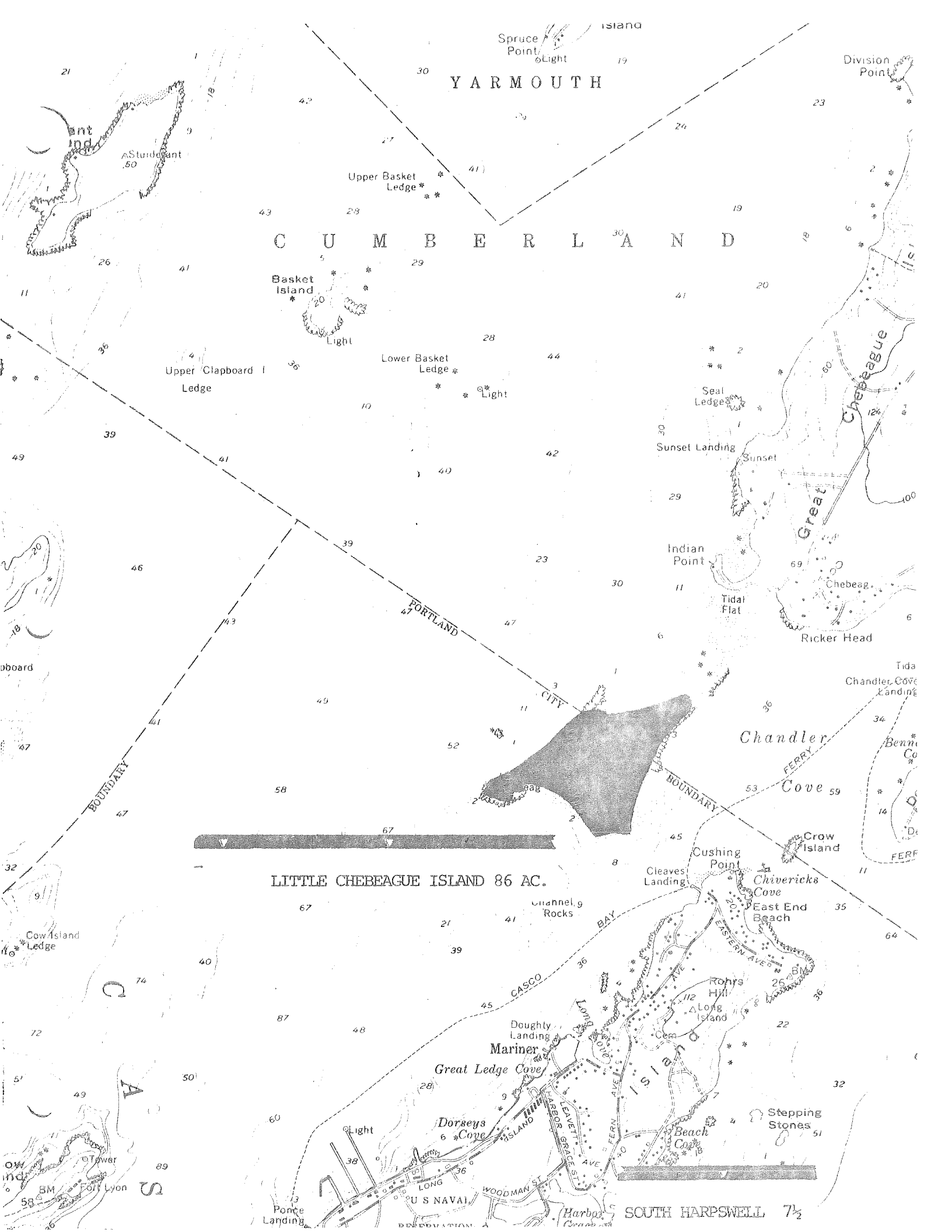
This property, acquired by eminent domain in 1968, includes one of the few remaining undeveloped sections of large sandy beach in southern Maine. It could provide recreation on both shore and upland in a region of swelling residential, commercial and tourist growth. The park would offer day use swimming, interpretive trails, picnicking, and open field recreation opportunities as well as wildlife habitat protection.

Although located on paved road a few miles from the center of Wells, the site is quite isolated and has many characteristics of a remote beach-marsh estuarine ecosystem. The beach would be a particularly good area for low intensity beaching in region of heavily used beaches. As the dune and marsh areas of the site are fragile, there should be no road access to the beach and a carry in - carry out policy should be strictly enforced. The property is part of a State designated wildlife sanctuary and borders one section of the federal Rachel Carson National Wildlife Refuge.

Laudholm Beach, in recent years, has been significantly erosional. One recent report has pointed out that "several property owners in the vicinity of the jetties (at Wells Harbor) have benefitted with the addition of land to their deeded holdings of 1962. Unfortunately, their gain is at the expense of increased degradation of the recreational beach and erosion of property owned by the State on the northern tip of Drake's Island." (Barry Timson and Donald Kale, Maine Shoreline Erosion Inventory (Draft), Maine Bureau of Geology, 1977, p. 77).

Development funds are available for park facility construction. The preparation of design construction plans are scheduled to be completed in 1978.

Careful attention should be paid to the erosion problems of the beach.



YARMOUTH

CUMBERLAND

LITTLE CHEBEAGUE ISLAND 86 AC.

SOUTH HARPSWELL 7 1/2

Site

LITTLE CHEBEAGUE ISLAND

Location

County: Cumberland
 Municipality: Portland, Cumberland

Present Ownership

Bureau of Parks and Recreation

Recommendation

Little Chebeague Island should be developed by the Bureau of Parks and Recreation as a day use state park featuring picnicking, trail and swimming opportunities; overnight camping on the island should be strictly prohibited; public ferry transportation to the island, say, on weekends, should be explored.

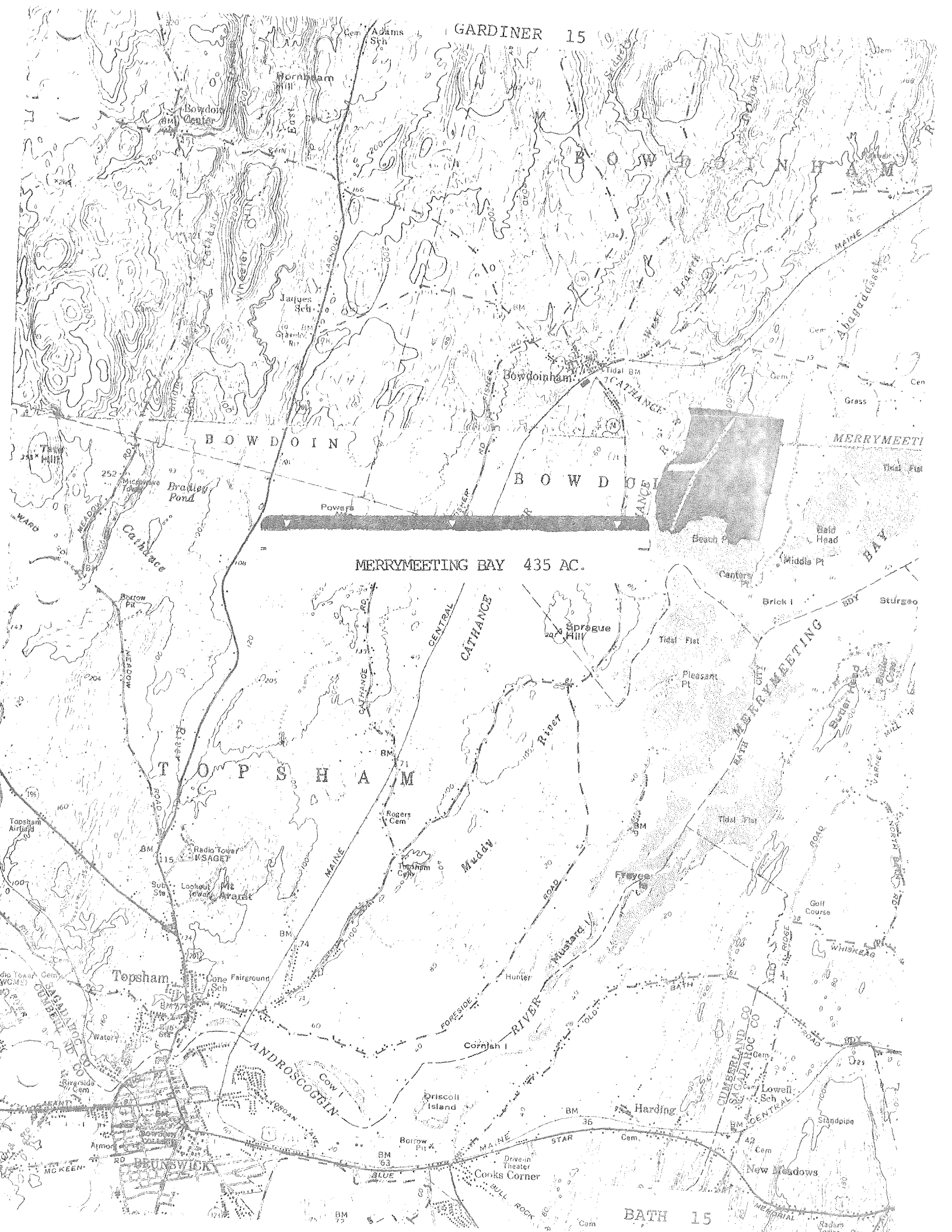
Rationale Summary

Little Chebeague, like Jewell Island, was acquired by the Bureau of Parks and Recreation for resource protection to provide water oriented recreation facilities in the scenic and heavily populated Casco Bay area. The island is used for recreation though no development has yet taken place. Unrestricted use poses the threat of fire or other resource destruction.

In addition several dilapated houses on the island are a safety hazard. The island is listed in the Maine Natural Areas Inventory for its sand beaches. There is also an impressive stand of very large white birch on the island.

The island could be developed for moderate intensity day use. Picnic and toilet facilities could be provided to accommodate an instant capacity of approximately 1,000 people. Summer ferry transportation would open up the island to a wide variety of recreationists.

The Bureau should develop a plan to guide development and use of its island holdings in Casco Bay as well as the acquisition of additional properties in the Bay area, so that all of the sites can be managed as a system.



BOWDOIN

BOWDOIN

MERRYMEETING BAY 435 AC.

Topsham

BATH 15

Site

MERRYMEETING BAY

LocationCounty: Sagadahoc
Municipality: BowdoinhamPresent Ownership

Bureau of Parks and Recreation

Recommendations

The Bureau of Parks and Recreation should actively explore the feasibility of setting up a nature center with interpretive trails in cooperation with the Department of Inland Fisheries and Wildlife and the Audubon Society at its property on Merrymeeting Bay.

Rationale Summary

This 435 acre forested parcel was acquired as wildlife habitat and is now managed by the Department of Inland Fisheries and Wildlife. A report on the entire Merrymeeting Bay area prepared for the Department of Conservation in 1975 recommended that a "nature/visitors/education center with overlook to tidal flats, exhibit area, and nature conservation trails that illustrate the ecology of the Bay" be developed on the site.

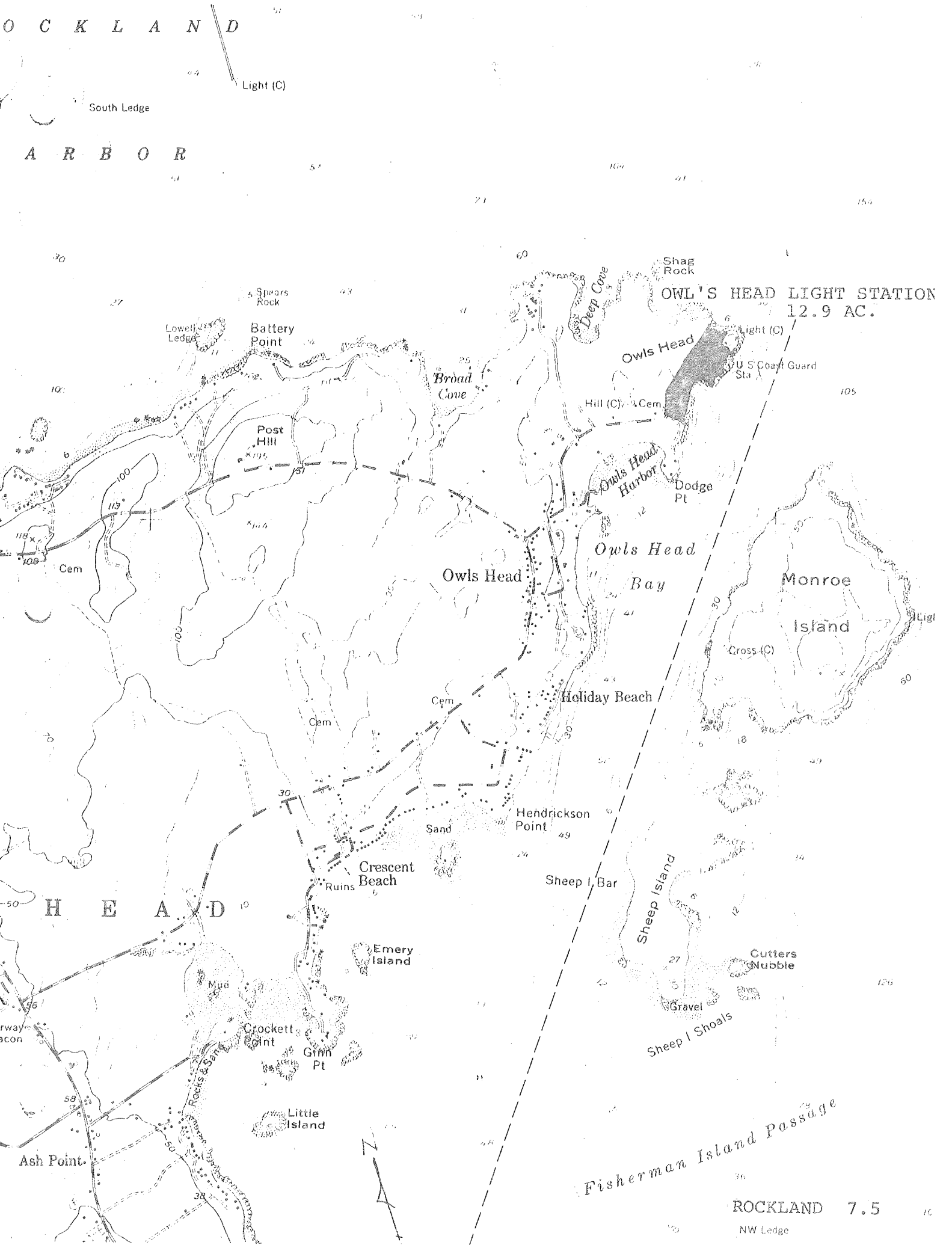
Merrymeeting Bay, a tidal embayment formed by the confluence of six rivers, is unique in Maine. It offers an excellent opportunity for the interpretation of migratory waterfowl ecology. An interpretive center might be set up by the State and staffed by the Maine Audubon and/or Merrymeeting Audubon Societies after the Scarborough Marsh model. (The site is accessible by road.)

O C K L A N D

A R B O R

H E A D

Ash Point



OWL'S HEAD LIGHT STATION
12.9 AC.

Fisherman Island Passage

ROCKLAND 7.5

NW Ledge

Site

OWLS HEAD LIGHT

LocationCounty: Knox
Municipality: Owls HeadPresent Ownership

Bureau of Parks and Recreation

Recommendations

Picnicking-walking facilities should be improved at Owls Head Light when funds become available; directional signs and access roads should also be improved.

Rationale Summary

This site at Owls Head adjacent to the historic Light offers a quiet spot to picnic, walk, take in the views. Whether it is of state level significance is debateable. Yet unless the local communities are willing to run it, the Bureau of Parks and Recreation should continue to look after the area, improving the facilities as money is available.



DEER ISLE
 STOUT
 HANCOCK CO
 KNOX CO
 MERCHANT ROW

Site

PICKERING COVE

LocationCounty: Hancock
Municipality: Deer IslePresent Ownership

Bureau of Parks and Recreation

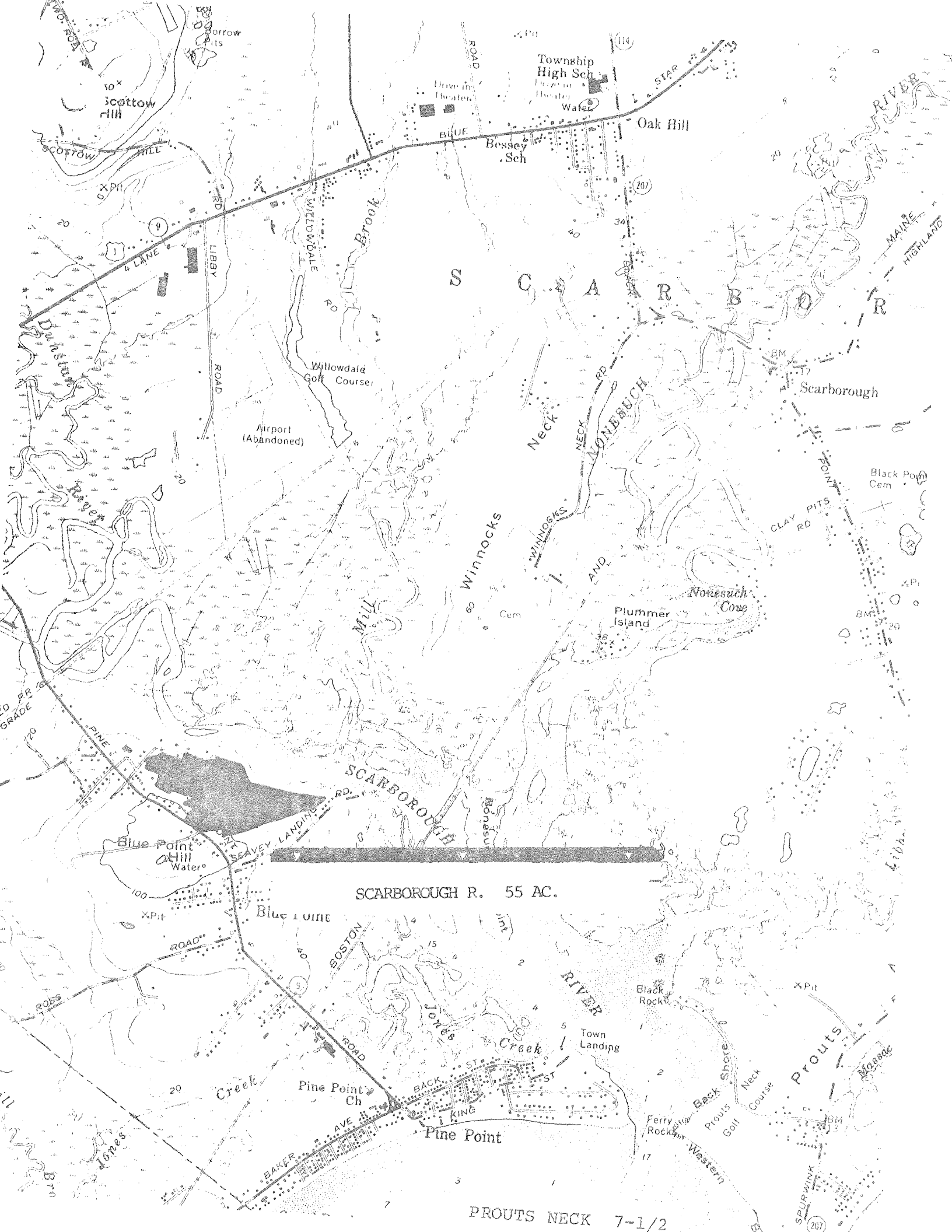
Recommendation

The Bureau of Parks and Recreation should develop its property at Pickering Cove on Deer Isle as funds become available.

Rationale Summary

This site has rocky shoreline and both open field and forest cover in addition to an interesting cave. It could be developed for picnicking and trail use with a possible boat launching site. However, improvements would first have to be made to the main access road.

The site might more logically be operated by a local or regional body than the Bureau. However, it appears unlikely, at least in the short term, that any such body will be willing to take on this responsibility. As an alternative, then, the Bureau ought to hold on to the parcel for future use.



SCARBOROUGH

SCARBOROUGH R. 55 AC.

PROUTS NECK 7-1/2

Site

SCARBOROUGH RIVER

LocationCounty: Cumberland
Municipality: ScarboroughPresent Ownership

Bureau of Parks and Recreation

Recommendation

The Bureau of Parks and Recreation is negotiating an agreement with the Department of Inland Fisheries and Wildlife to manage its land bordering the Scarborough River as part of the Scarborough Marsh Wildlife Management Area; the upland portion of the Scarborough River parcel, it is expected, will be leased to the town for outdoor recreation.

Rationale Summary

This property consists of marsh frontage, open field upland and some wooded acreage. It was acquired in 1971 because it had "potential for water fowl habitat, as well as for development for local recreation." The site has good access from Route 9.

It is anticipated that lease agreements for the use of the site will be signed soon. A bikeway is proposed to be built from U. S. Route 1 to Pine Point in Scarborough. However, this facility would be a paved road shoulder path only and so would have little if any affect on the property. Construction of the bikeway would start in the spring of 1979.

COASTAL SITES DESERVING PROTECTION

METHODOLOGY

Presented here is a summary of the process used to determine the significant coastal area sites identified in this study.

First, a review of secondary sources was undertaken to determine those sites which in recent years have been suggested as important resource areas and/or which would be suitable for outdoor recreational use. This yielded a large list of potential study sites of varying significance. Some small sites on the list, for example, clearly were only of local significance. Other recommendations involved sites so large that they were useful only for hinting at general regions. A total of more than 160 sites were listed from the review of secondary sources.

While the review of secondary sources was underway, a number of relevant agencies, organizations and individuals were contacted directly by letter, telephone or in person. Of the approximately fifty-five groups and individuals contacted, about twenty-five formal and informal replies were received suggesting ten possible study sites. Each of these sites was reviewed as a potential study area. The third method of site identification used was review of old and new United States Geological Service topographic maps and personal on-the-ground reconnaissance.

The sites identified during the study are not intended to be a complete catalog of natural areas along the Maine coast meriting protection. They are selected areas with unusual or unique natural features which may be suitable for one or more forms of outdoor recreation and which in many cases should be protected from inappropriate use or development. Few of the sites are really self-contained ecological units; rather they are ecological islands subject to modification by activities and conditions in the surrounding areas.

This study has been neither exhaustive nor comprehensive. It is suggestive. Within the constraints of time, staff, and budget, some particular sites have been identified as worthy of protection. The report represents a first cut, a small portion of a large task. A thorough recreation-conservation program would include consideration of national (estuarine sanctuaries, wild and scenic rivers, national parks and monuments), state (state parks, wildlife management areas, critical areas, public access needs, trail opportunities), local (municipal parks and beaches), and private (conservation easements, preserves to insure natural diversity) interests. A thorough recreation-conservation program would include a mix of interests matched by the mixture of tools required to carry it out.

In putting together this report it was evident that to identify coastal sites for recreational use it was necessary to know existing and proposed sites. And to put this information into larger context of representative natural areas of statewide

significance, it was necessary to know of protected sites held by all types of bodies.

Supplementary then to the identification of new sites, an inventory of existing areas afforded some resource protection was compiled. This inventory shows the relative conservation responsibility of each sector or level of government. From the list of areas an assessment was made of apparent natural feature deficiencies. For the purposes of this document, natural features of the coastal area have been broken down into the following types (a glossary is presented as Appendix Exhibit):

sand beaches	forests
sand dunes	grasslands
cobble beaches	bogs and heaths
rocky headlands	fresh water marshes
hills	estuaries and salt marshes
lakes and ponds	sub-alpine habitats
rivers and streams	intertidal flats

Recreational preferences were synthesized from a review of four separate documents. No single survey on coastal outdoor recreation habits and needs has been undertaken in recent years.

Finally, recommendations based on the information gathered were made. These are set out here each with a map and a brief statement of explanation. Where the Bureau of Parks and Recreation was not the most logical agency to act on a given site it only made sense to suggest an alternative.

SITE ASSESSMENT

It is possible to evaluate sites with a spectrum of criteria related to the characteristics of each site. For analytical purposes characteristics can be separately discussed and perhaps assessed. Nevertheless, in many instances the criteria tend to merge and even overlap with one another. On the other hand sometimes they are mutually exclusive. Site assessment involves the variable weighing of criteria, for they are not all of equal importance, nor everywhere of the same relative importance. Some criteria can be independent while others are interdependent. Ideally, to gain a high priority, a site should rate highly according to as many criteria as possible. In actuality, few sites would rate highly in all aspects. Some sites would be high priority due to a combination of factors; others might possess a single outstanding attribute. A great deal depends on the selection to choose from and the information available. Judgements would be comparative, therefore relative, as well as limited by a lack of hard data and clearly defined standards.

In theory, a comparative assessment of sites could be made more objective by applying a scoring system to the criteria, so that the aggregate score for a site would be a measure of its overall quality. However, due to the lack of independence of criteria, the varying absolute and relative values of different criteria according to use, the varying quality and quantity of basic information, and other complexities, a scoring system could not be evenly applied for the entire coast. Nor is there a satisfactory logical basis for allocating actual score values to different site features. While these problems may eventually be solved, any attempt to quantify the process of assigning solid priorities could only provide a spurious objectivity.

Still, toward establishing a workable comparative evaluation process the following criteria are set out. There are, naturally, other factors which could be added and some of the criteria suggested could be refined. What can be done now is to apply a subjective assessment to grade sites into two categories: (1) sites whose recommendations deserve immediate attention, and (2) sites whose recommendations deserve long-term attention.

1. Extent

The importance of size can vary greatly depending upon the other characteristics of a site including type of cover, topography and natural boundaries. Larger sites are not always valued more highly than smaller ones if other qualities are not approximately equal. However, in general, an area of undeveloped land should be large enough to include a self-supporting system wherever possible.

2. Diversity of Values

Areas that contain the broadest diversity of values, both for conservation (i.e., biological, physiographical, historical)

and recreation, would receive the greatest consideration for protection. Most areas will possess a variety of values--many of them nonquantifiable and intangible--rather than a single one. This leads to the notion of multiple-value as opposed to multiple-use. According to this notion resources which afford benefits to wildlife and human psychic satisfaction are regarded with as much weight as those which can be "used" in the more traditional sense for, say, intensive recreation. Additionally, areas that present values for recreational use and resource conservation over several seasons of the year should rate greater consideration than those which present values during only one season.

3. Quality

Natural features that are the best representatives of their particular type should merit the greatest consideration for acquisition. The factors that affect quality are different for the various types of resources. Factors influencing the quality of biotic features and landforms include size, distribution, disturbance, age, relation to other coastal characteristic natural features, visual impact, scenic views, soil suitability, and so on.

4. Freedom of Modification

Naturalness is a difficult criterion to apply for it is often not easy to judge accurately the degree of modification of a site. Also, today some semi-natural or entirely artificial habitats are valued as highly or even more highly than wholly undisturbed ones. Moreover, where desirable, intrusions can usually be removed and a site allowed to return to its natural character. Consequently areas which have been modified but which have features which meet other criteria may be desirable for acquisition despite these modifications. Generally, areas that are the most natural and unmodified and that are as free as possible from artificial intrusion should receive the highest rating.

5. Scarcity

Scarcity may be taken to refer to the relative rarity of areas of a certain type. To some it means the presence of rare species or natural features and one or more rare species or features is considered to imbue a site with an importance lacking in others.

The presence of rare natural features may be in conflict with certain outdoor recreation activities. One must be careful then in assigning values to rare-and often vulnerable-sites. Still, in general, those areas with types of natural features which are in shortest supply should receive greatest consideration. Types of natural features which are scarce in Maine, New England, the nation, or the world would assume progressively greater significance.

6. Vulnerability

Vulnerability reflects the degree of sensitivity of habitats, species, communities, and landforms to environmental alteration.

Some ecosystems are intrinsically unstable; others, such as vegetational climax types, tend to be more inherently stable. Probably the two factors with the greatest effect on vulnerability are climate and human impact. The imminence of human impact, representing "threat", is the factor over which the most control can usually be exercised. All natural features are sensitive to human impact of one sort or another. Measures of vulnerability include regional population growth, suitability of a site for development uses, and intrinsic fragility. Sites may be rated on the basis of vulnerability to changes in resource use, appearance or quality which would degrade a site's natural features.

7. Persistence

The persistence of a site, the ability to retain natural and historic values over a long period of time is akin to vulnerability for both are affected by environmental changes. The history of a site, its current condition, and its anticipated future are all considerations in assessing persistence. When dealing with shore areas shore erosion is one of the most serious factors affecting resource persistence. Sites which exhibit the greatest persistence should generally be afforded highest priority.

8. Representation by Type of Natural Feature

While it is common and legitimate to set aside the best examples of particular ecosystems, it is also important to represent the typical and to have a balance of the various types of natural features. To achieve adequate representation of each type of natural feature, types which are lacking should receive higher priority than those which are already better represented. The apparent natural feature deficiencies discussed in this report provide an initial step toward identifying priorities.

9. Geographic Distribution

Toward achieving a geographical balance of sites with varying values, an attempt should be made to achieve as great a distribution of different features as possible within each of the six coastal units. Wide distribution makes the features available along different parts of the coast. At the same time, however, it must be noted that many features are unique to certain locations and simply are not physically available in all coastal regions. Distribution must be measured both in terms of availability within each region and within the entire coastal area.

10. Carrying Capacity

Areas where acquisitions would have the least adverse impact on inherent natural features should receive the greatest consideration. The natural features of every site have a definite tolerance to human use. Inasmuch as acquisition by the Bureau implies public use, acquisition which would overburden natural carrying capacities should be discouraged unless the tradeoff is deemed a social imperative.

11. Access

The accessibility of any given area is an important determinant of visitor use and resource protection. In general, it is desirable to have convenient vehicle access (usually this means by road) to the area but controlled access within the area to the natural attractions. Hence, areas which have the best road approaches but which have limited or controllable circulation within should be given the greatest consideration.

12. Manageability

Areas where the outstanding values represented offer the best opportunities for being perpetuated by either active or passive management should receive the greatest consideration. The factors which affect the viability of areas as management units vary according to type, but in general include size, adjacent resource uses, land ownership patterns, presence of buffer zones, etc.

13. History

The known past human use of a site is a factor of some importance. Sites of verified archeologic or historic significance often can be considered of higher value and interest than other areas. Of course some spots are of such significance that they should be protected entirely from the threat of human presence. Many others are enhanced by a sense of history.

14. Research and Education

Many areas of the Maine coast are very important for their research and educational values. While these may frequently be in conflict with recreation activities, in some instances the two are compatible, especially in areas for nature interpretation. The existence of a scientific record may particularly enhance the value of a site, for often the more that is known about the natural characteristics of a site the more they can be appreciated. Sites which have obvious or acknowledged importance in the preservation of research and educational values should receive the greatest consideration.

15. Critical Areas

Currently the State Planning Office is in the process of identifying and registering those natural features in Maine "of unusual natural, scenic, scientific, or historical significance." For the most part the nature of critical areas is such that they should not receive widespread publicity to ensure their protection. In some cases, however, it may be desirable to have the areas in public ownership. Therefore, areas which contain one or more registered critical areas or other documented rarities which would not be harmed by inclusion in a public park or natural area should merit the greatest consideration.

16. Demand/Need

While demand in the strict economic sense is a difficult concept to measure and deal with, need is often a more understandable, if less objective, measure of pressure for a resource. Even if clear indications of need can be agreed upon, however, the tradeoffs between present and future needs must be carefully weighed if scarce resources are to be allocated to priority areas. For example, should funds be expended in one region where immediate needs are pressing at the expense of acquisitions in a low need region where the resource is more outstanding? In general, other things equal, an area in a region with the highest perceived preferences and demands for the types of natural features available should receive the greatest consideration. Moreover, an area which offers values to meet the most pressing needs of recreation activity (hiking, swimming, interpretation, camping, etc.) should receive the greatest consideration.

17. Potential Community Impacts

The acquisition of areas which would be expected to cause the least negative social and economic impact on local communities should receive the greatest consideration. Although local municipalities often receive less income from the State for public lands than from property taxes extracted from private landowners, state parks may result in a local net positive economic impact. Likewise the conservation of natural areas can have a positive social impact.

18. Alternate Area Availability

Areas for which there are few or no alternate areas with similar natural features available should receive the greatest consideration. This guideline applies on both the regional and coastal level.

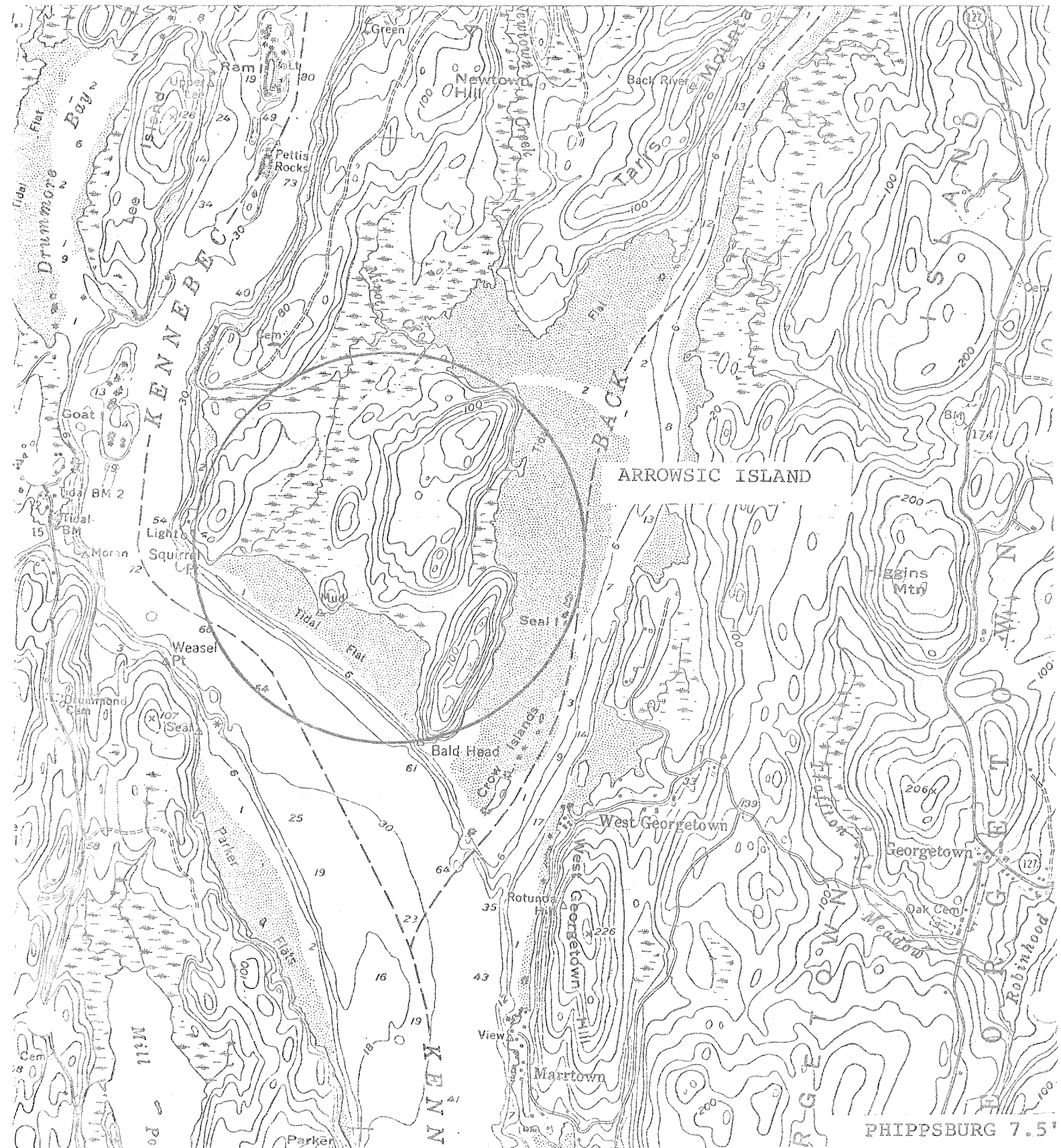
19. Market Availability

While areas should be evaluated for their conservation and recreation importance apart from any consideration of current availability of a parcel on the open market, availability can not be ignored altogether. In assigning acquisition priorities, all other things being equal, areas which are the most readily available for purchases should merit the greatest consideration.

20. Costs

Much like market availability, the costs of acquisition, development, and operation of a site are normally not considered in selecting areas for study. On the other hand, costs are, of course, a prime concern in choosing areas for acquisition. If fiscal responsibility is to be the rule it can be argued that areas should exhibit a favorable benefit to cost ratio when being considered for acquisition. Still, it should be remembered that

state parks are a form of public investment which provides opportunities for the public at large, many of which are socially desirable though not necessarily self-sustaining. There are many things which individuals can not afford for themselves and which the private sector does not provide. High quality public parks managed for long term protection and use are an example of a commodity which private entrepreneurs, with their interests in short term profit-making, are not inclined to provide. Moreover, parks usually offer amenities which do not lend themselves to easy quantification and are, many would say, priceless. It is clear, then, that individual parks can not in every case be expected to "pay their own way." It is even questionable whether the park system as a whole should be regarded as a breakeven operation.



ARROWSIC ISLAND

Site

ARROWSIC ISLAND

LocationCounty: Sagadahoc
Municipality: ArrowsicPresent Ownership

Private

Recommendation

The Bureau of Parks and Recreation should, with the Department of Inland Fisheries & Wildlife, study fee or easement acquisition of the southern portion of Arrowsic Island.

Rationale Summary

This is both an important historic and natural site at the confluence of the Back and Kennebec Rivers. Between 1679 and some time in the 19th century, at least three settlements prospered here. In 1679, following the end of King Philip's War, a colony was established at Butler's Cove (located directly east of the present Phippsburg town center) -- the earliest officially incorporated settlement in the Lower Kennebec region. There are no existing records for this "New Town", as it was called, but it is known that the settlement was exterminated with all but one house burned during King Williams' War in 1689. The land ended up as a French possession but was restored to the English after 1710.

The same location was recolonized in 1714. A fortified brick house, built at Green Point just north of Butler's Cove, was, by 1716, staffed by 46 soldiers. The same year a petition was sent to the General Court of Massachusetts to incorporate the settlement as "Georgetown." By 1722 there were thirty homes in the village. Mills were set up and commerce was carried on with the merchants of Boston. In 1717, an important 3 day conference between the Royal Governor of Massachusetts and the Indians of the region was held at the town. Interestingly the Indians won the concession of the raising of a wigwam at the site for future entertainment - the first recreation facility in that part of the New World. However, by 1722 peace between the Indians and colonists had again broken down. Although it appears that the settlers survived inside the Green Point fort, the entire settlement was laid to ruin.

A third settlement was established at the site about 1728. The original plan for the houselots and the town records of this settlement are still extant as is the cemetery in which several notable persons were buried. In short, this Arrowsic site has been described as in its way just as historic as the Popham Colony of 1607.

Today it is an area of high rocky promontories, salt marsh wetlands, tangled mixed growth and broad tidal flats. Deficiencies of protected natural features for the region include salt marshes. Arrowsic Island's steep undeveloped headlands were listed in the Maine Natural Areas Inventory. Also, there may be a stand of tupelo trees, which are uncommon in Maine, on the site. Verified specimens were collected at Little Bald Head in 1933. (L.M. Eastman, "Tupelo, NYSSA SYLVATICA Marsh, in Maine", Critical Areas Program, 1977, p. 10).

Like Merrymeeting Bay to the north, the site attracts migratory waterfowl. The most popular recreational use may be hunting although the area is also used for primitive canoe camping by groups from the Chewonki school in Wiscasset. Excellent views are available north up the Back River, west across to Phippsburg village and south down the Kennebec River to Popham. A gravel road runs to the site. However, considering its location in mid-coastal Maine the spot has an unusual sense of remoteness. Currently the only human use of the site is a Coast Guard light on Squirrel Point, in operation since about 1900. Nevertheless, the historic Butler's Cove is threatened by development. A 57-acre subdivision has been approved for the location; all lots have been sold though no development has yet taken place.

The Bureau of Parks and Recreation could take action to protect the historic portions of the site. The Department of Inland Fisheries and Wildlife could acquire the balance as a wildlife management area.



CASTINE 15 REDUCED

BLUE HILL 15 REDUCED

Site

BAGADUCE RIVER

Location

County: Hancock
 Municipalities: Brooksville, Castine, Penobscot,
 Sedgwick

Present Ownership

Private

Recommendation

The Bureau of Parks and Recreation should, with the Hancock Regional Planning Commission and the relevant towns, undertake a study of the Bagaduce River for potential designation as a national scenic and recreational river.

Rationale Summary

The Bagaduce, located in the towns of Castine, Brooksville, Penobscot and Sedgwick, is a tidal river running through one of the most picturesque and historically and ecologically important areas on the Maine coast. The town of Castine is steeped in colonial period history. The Bagaduce itself is a good example of a drowned coastal river (water classification SA). Nearly all of the upland along the river is rural agricultural land or forested shoreline. A variety of wildlife inhabits the site. At least three bald eagle nests are located along the river. Wading birds and osprey are frequent visitors. Striped bass, alewives, eels, and herring are found in the river and its coves. Northern Bay and Hatch Cove have important worm and clam flats and most of the deeper water below Rt. 175 is lobster habitat.

The entire river from Walker Pond to Castine can be canoed at any tide. Indeed, this was an important transportation route from Castine to Eggemoggin Reach for the Indians. Several Indian villages were located along the waterway.

Zoning of the shoreland of the river is variable among the four towns through which it flows: Sedgwick, Limited Residential; Brooksville, General Development (except one small section of Resource Protection); Penobscot, Limited Residential-Recreation and Resource Protection; Castine, Limited Residential-Recreation (except General Development along the built-up waterfront). As population pressures in the region grow, developments will threaten the water quality, habitat, and visual esthetics of the river valley.

Though less than 40 kilometers (25 miles) long, the entire river might be designated as "scenic-recreational" under the National Wild and Scenic River System. Protective action under this designation might include upgrading of the shoreland zoning along the river to curtail harmful development. This could be accomplished thru local ordinances overseen by the State as the area is of extra-local significance. In some areas conservation easements might be acquired to protect important wildlife and scenic spots.



Site

BLUE HILL

LocationCounty: Hancock
Municipality: Blue HillPresent Ownership

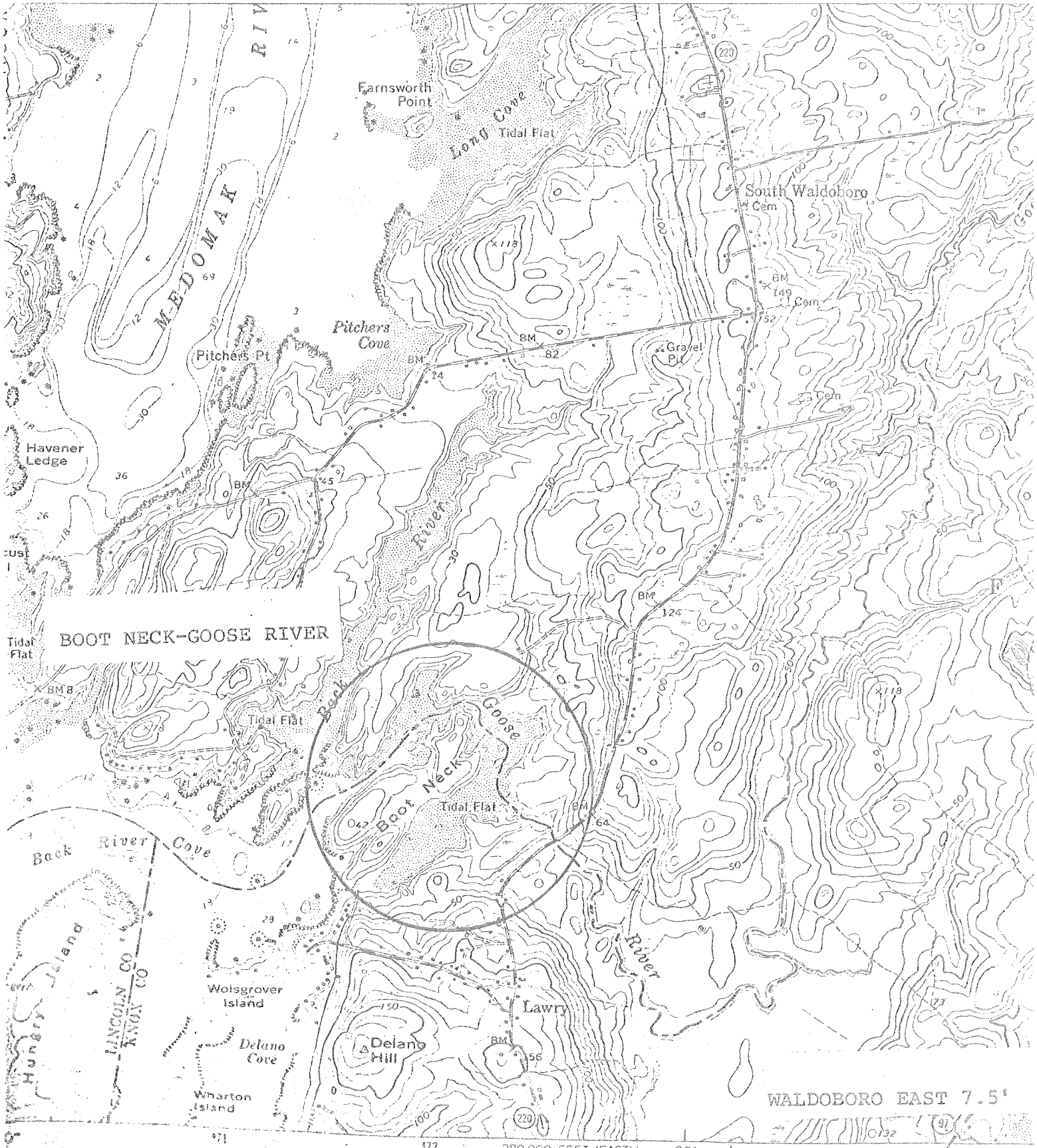
Private

Recommendation

The Bureau of Parks and Recreation should consider lease or acquisition (fee or easement) of the trail on and summit of Blue Hill if public use of the area is threatened by changes in land use or ownership.

Rationale Summary

Though less than 300 meters high (actual elevation 934 feet/285 m.) Blue Hill is one of the few monadnocks on the Maine coast. For centuries it has been a landmark to sailors. Due to the low elevation of the surrounding landscape, the Hill offers fine panoramic views, particularly of the Mt. Desert Island-Blue Hill Bay region. There is a staffed fire tower on the summit, but the hill is privately owned and the fire tower may be abandoned within three to five years. To preserve public use of the site, the Bureau should explore lease or acquisition of rights along the trail and summit of the hill.



WALDOBORO EAST 7.5'

Site

BOOT NECK-GOOSE RIVER

LocationCounty: Lincoln, Knox
Municipality: Waldoboro, FriendshipPresent Ownership

Private

Recommendations

The Bureau of Parks and Recreation should consider the acquisition of the Boot Neck-Goose River area for development as a multi-purpose day use park.

Rationale Summary

The Goose River divides Waldoboro in Lincoln County from Friendship in Knox County. At its mouth it is a scenic water coursing around Boot Neck and draining to flats at low tide. The upland surrounding the River sports a mix of cover: reverting fields, evergreen stands, hardwood growth. Apparent natural feature deficiencies in the area include grasslands and intertidal flats.

Boot Neck is an undeveloped spot which might be an ideal for the sort of trails laid out at Wolf Neck State Park. It has a great variety of microhabitats compressed into a small island-like area. The site would be suitable for walking, nature interpretation, picnicking, canoeing, open field activities. Excellent access is available from State Route 220.



CAPE SMALL-HERMIT ISLAND

Location

County: Sagadahoc
Municipality: Phippsburg

Present Ownership

Private, Federal

Recommendation

The Bureau of Parks and Recreation should undertake an indepth study of conservation and recreation in the Cape Small-Hermit Island area in Phippsburg.

Rationale Summary

This site is both an interesting historic and an important natural area. Hermit Island, first known as McIntire's Neck then as Morse's Head after previous owners, actually did support a hermit of sorts for a while. For years, mackerel pounds were anchored to Bald Head. Today an unused World War II observation tower still overlooks Casco Bay from the woods behind Bald Head. During the 1940's, an extensive sea moss processing plant was located on Head Beach. When Hermit Island was acquired by the Sewalls in 1950, the plant was converted into support buildings for the campground the Sewalls set up on the island. On Small Point Head itself an exclusive Boston Gunning Club was organized in the 1880's.

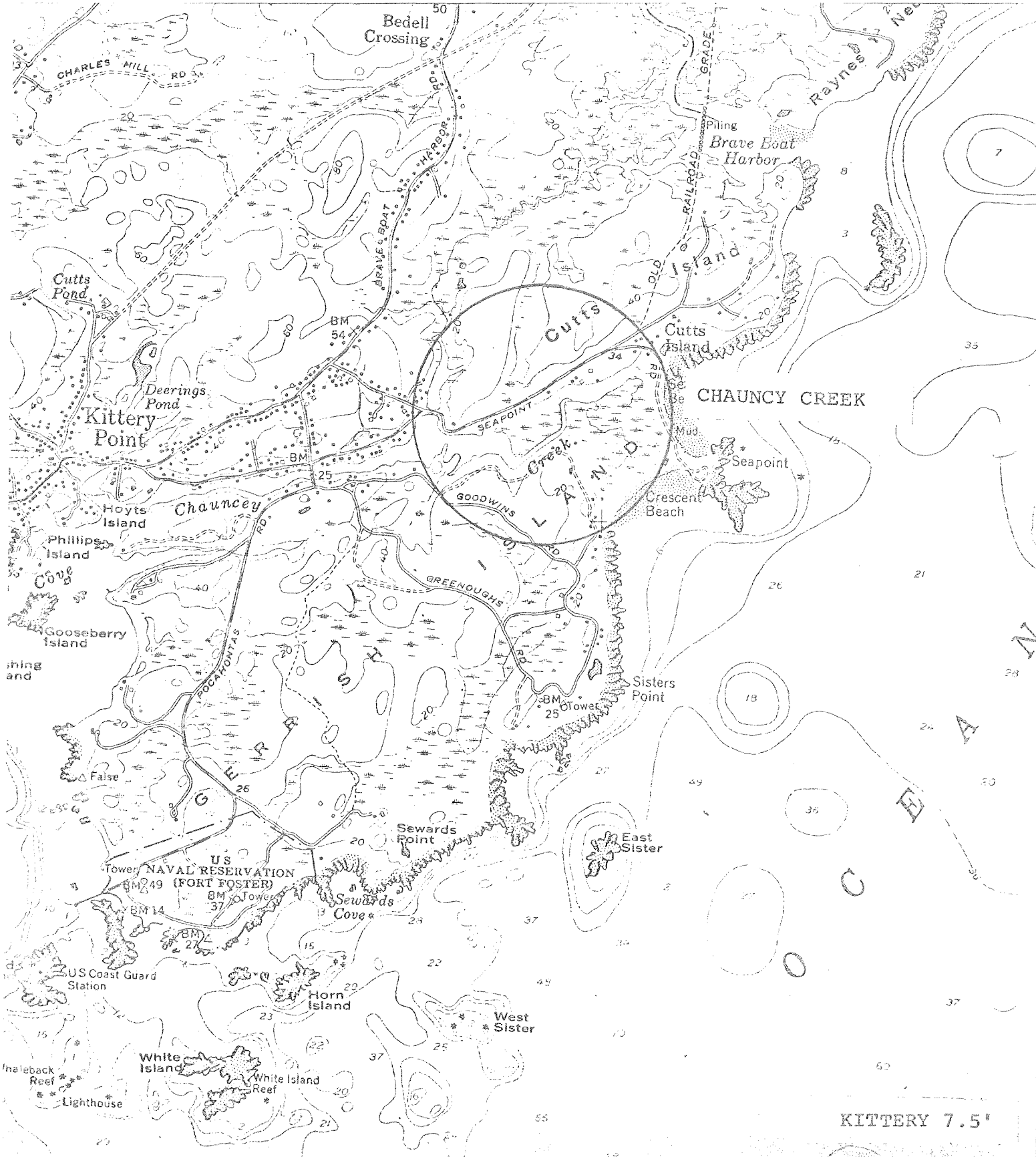
The Cape Small-Hermit Island area is the northern terminus of Casco Bay and includes, along with the adjacent Morse Mountain/Seawall Beach area which is protected through management by the Nature Conservancy and Popham Beach, the easternmost large sand dune complex in the United States. Bald and Small Points are also among the last remaining undeveloped rocky headlands on the western coast of Maine. Three separate areas of geological importance have been identified on Cape Small and are being studied for inclusion on the Registry of Critical Areas (Arthur M. Hussey, Significant Geologic Localities in the Casco Bay Group, Southern Maine, Critical Areas Program, 1977, pp. 42-46). These characteristics combined with a fresh water pond and upland area make this compact site one of the most geologically and ecologically diverse areas on the Maine coast. Presently part of the Cape Small section of the site is owned and used by the Navy as a RAKE (mine drop recording) site. Much of the balance of the land is believed to still be held in a large ownership pattern. Hermit Island, which actually is connected to the mainland by a fairly stable sand bar, is currently being utilized as a campground, a small base for fishing boats, and an anchorage for pleasure boats. Much of the island is undeveloped and is growing up to forest although the private campground on

the island is having a destructive effect on the dunes.

The entire area is threatened by the pressures of development which are fast spreading throughout the Bath-Brunswick coastal area. Changes in land use of the site are virtually inevitable unless action is taken to conserve the resource in the very near future. In terms of recreation the area would be suitable for camping, beach swimming/sunbathing, hiking, picnicking, scenic viewing, nature study, boating.

The area would appear to offer a real opportunity for protecting, in conjunction with the Morse Mountain parcel and Popham Beach State Park, an extensive stretch of coast with a great variety of landform and biological features within a very short distance of one of the most popular growth centers on the coast. Management may also be facilitated by the proximity to other Bureau properties, Popham Beach in particular.

What is needed as a first step is a detailed study of the site proposing various management options. Some of the site might be suitable for immediate acquisition by the Bureau. Other portions might be acquired at a later time: when the federal property becomes surplus, for instance, or if use or ownership changes threaten the private lands. Conservation agreements might be worked out on still other private lands in the area.



KITTERY 7.5'

Site

CHAUNCY CREEK

LocationCounty: York
Municipality: KitteryPresent Ownership

Private

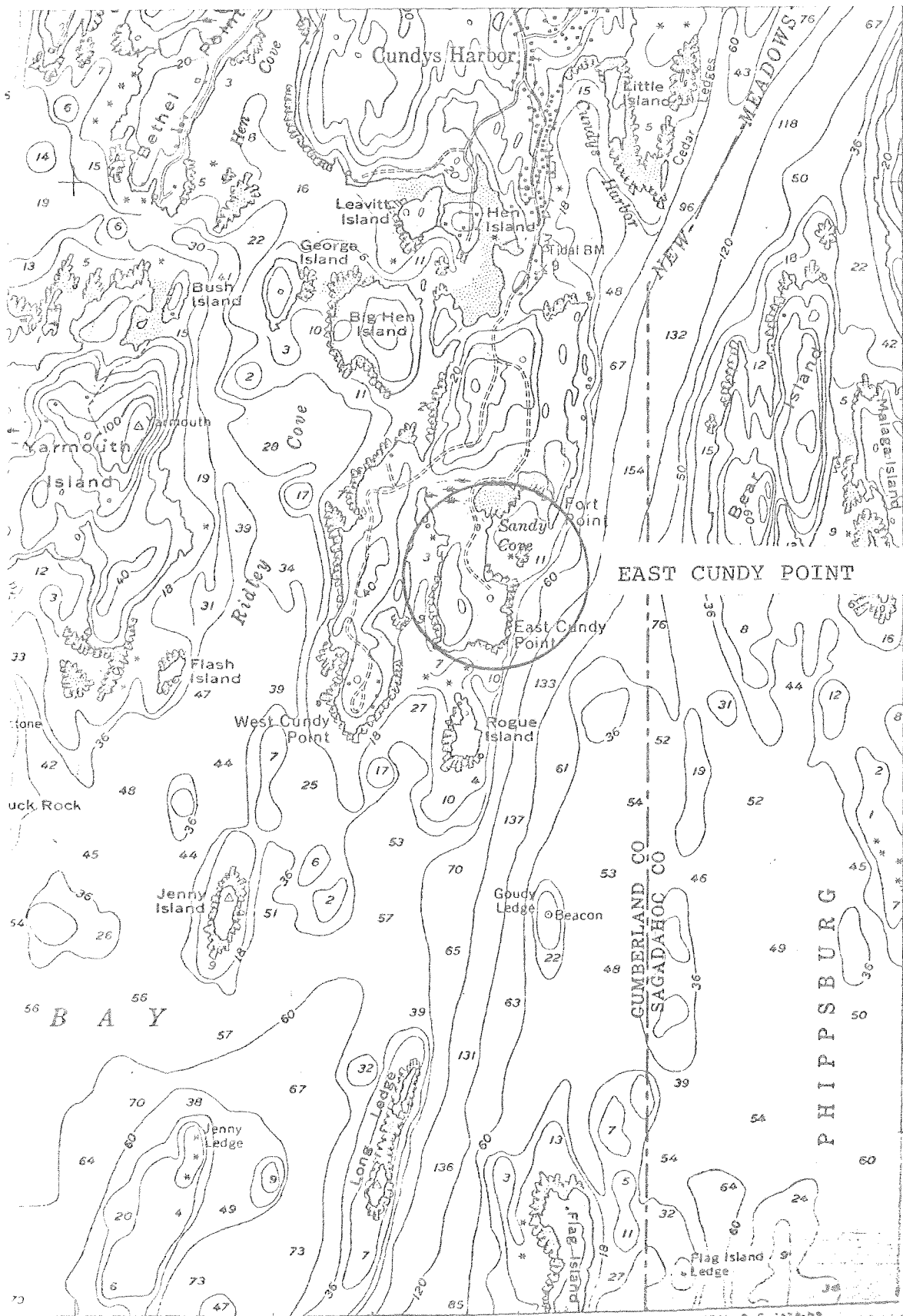
Recommendation

The Bureau of Parks and Recreation should urge the U. S. Fish and Wildlife Service to add the Chauncy Creek area to the Rachel Carson National Wildlife Refuge.

Rationale Summary

The Chauncy Creek wetland, a salt marsh-estuary which separates the Gerrish and Cutts Islands areas of Kittery, is located immediately south of the Brave Boat Harbor Division of the Rachel Carson National Wildlife Refuge. Protected from the Atlantic by Seapoint and Crescent-Seapoint Beaches, much of the Chauncy Creek marsh (water classification SB-1) is in the intermediate stages of ecological succession to forest. Shoreland zoning places the first 100 feet back from high water in a Resource Protection District; the next 150 feet is a Limited Residential-Recreational District.

In recent years, recreational pressures for the use of Crescent and Seapoint Beaches have increased. Additionally, a 33-lot subdivision has been proposed (local Planning Board approval granted, 1977) for Gerrish Island. Funded by a grant from the State's Coastal Program, a special committee has been appointed to study and formulate management recommendations for Seapoint and Seapoint Beach by early 1978.



47'30"

EAST CUNDY POINT

484500m N.

ORRS ISLAND 7.5'

53

Site

EAST CUNDY POINT

Location

County: Sagadahoc
Municipality: Harpswell

Present Ownership

Private

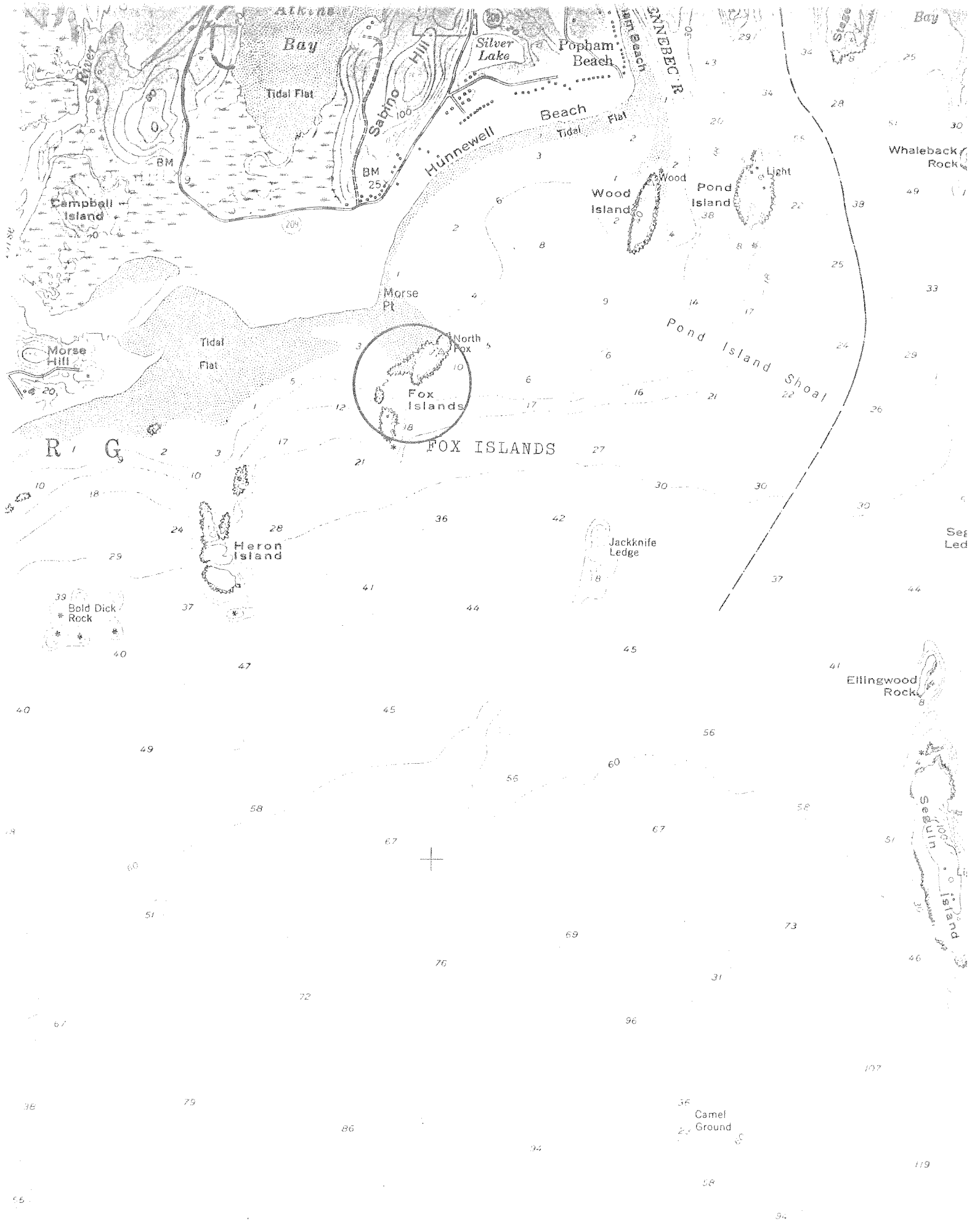
Recommendation

The Bureau of Parks and Recreation should consider acquisition of property at East Cundy Point in Harpswell to allow public access to the site.

Rationale Summary

Although possibly not as impressive in scenic importance, East Cundy Point might be considered as an alternative to acquisition of property at Lands End. The site includes an interesting diversity of landforms and floral types in a very compact area: sand beach, rocky ledge, salt marsh, open field, evergreen stand. Additionally the site may have some historic and archeological significance. An old cellar hole and a shell midden are evidences of former occupation. Also, there may have been a 19th century fortification at the site.

The site is one of the remaining few undeveloped parcels of such diversity on the western Maine coast. General public access is now prohibited; a private road runs to the site.



SMALL POINT 7.5

Site

FOX ISLANDS

LocationCounty: Sagadahoc
Municipality: PhippsburgPresent Ownership

Private

Recommendation

The Bureau of Parks and Recreation should consider fee or easement acquisition of the Fox Islands off Popham Beach State Park if public use becomes restricted.

Rationale Summary

The Fox Islands, because they are accessible at low tide via a sand bar, are used by many visitors of Popham Beach State Park. Though privately owned public use of the islands has never been restricted and indeed they would be of little value for anything other than recreational use. The Maine Coastal Nesting Seabird Inventory (1977 Draft) listed no nesting birds on the Fox Islands. Continued public use of the islands group in conjunction with the state park should be insured.



TUNK LAKE 15
 REDUCED

Site

GOULDSBORO HILLS

Location

County: Hancock

Municipality: Sullivan, T7 SD, T9 SD, T10 SD

Present Ownership

Private

Recommendation

The Bureau of Parks and Recreation should explore, with the landowners, other agencies, conservation alternatives which would protect the recreational, ecological and historic resources of the Gouldsboro Hills region of Hancock County.

Rationale Summary

The uniqueness of this area is primarily geological but wildlife and flora as well as an historic site in the area are important too. Tunk and Schoodic Mountains at an elevation of over 1000 feet each are among the highest points along the Maine coast, being overshadowed only by the hills of Mt. Desert and Camden. A variety of glacial evidences have been noted in this area including kames, sand beaches, chatter marks, surficial till deposits, large boulders, and bedrock outcrops. At 222 feet deep Tunk Lake is the second deepest lake in the State and a very good togue fishery resource. The other two major water bodies in this watershed, Donnell Pond and Spring River Lake, both have natural sand beaches, an oddity for glacially formed ponds. Tunk Stream is an important anadromous fish run.

The region is mostly heavily forested with outstanding mature stands of hemlock, oak, mountain laurel, red cedar, and spruce-fir within the watershed. A colony of gray squirrels at the northern edge of their tolerance range lives in the oak stand near Fox Pond. Among the larger mammals found in the area are moose, deer, bear, beaver, fisher, and mink.

Sites of both historic and prehistoric significance are located in the watershed. Admiral Byrd, famous explorer of the Anarctic, built his country estate, Wickyp, on the shore of Tunk Lake.

While access to the area is not difficult a good deal of the hilly land in the watershed is still apparently unscarred by roads. At least one major resort complex has been proposed for the area since 1965. At one point the Department of Inland Fisheries and Wildlife was contemplating a program of

GOULDSBORO HILLS (cont'd)

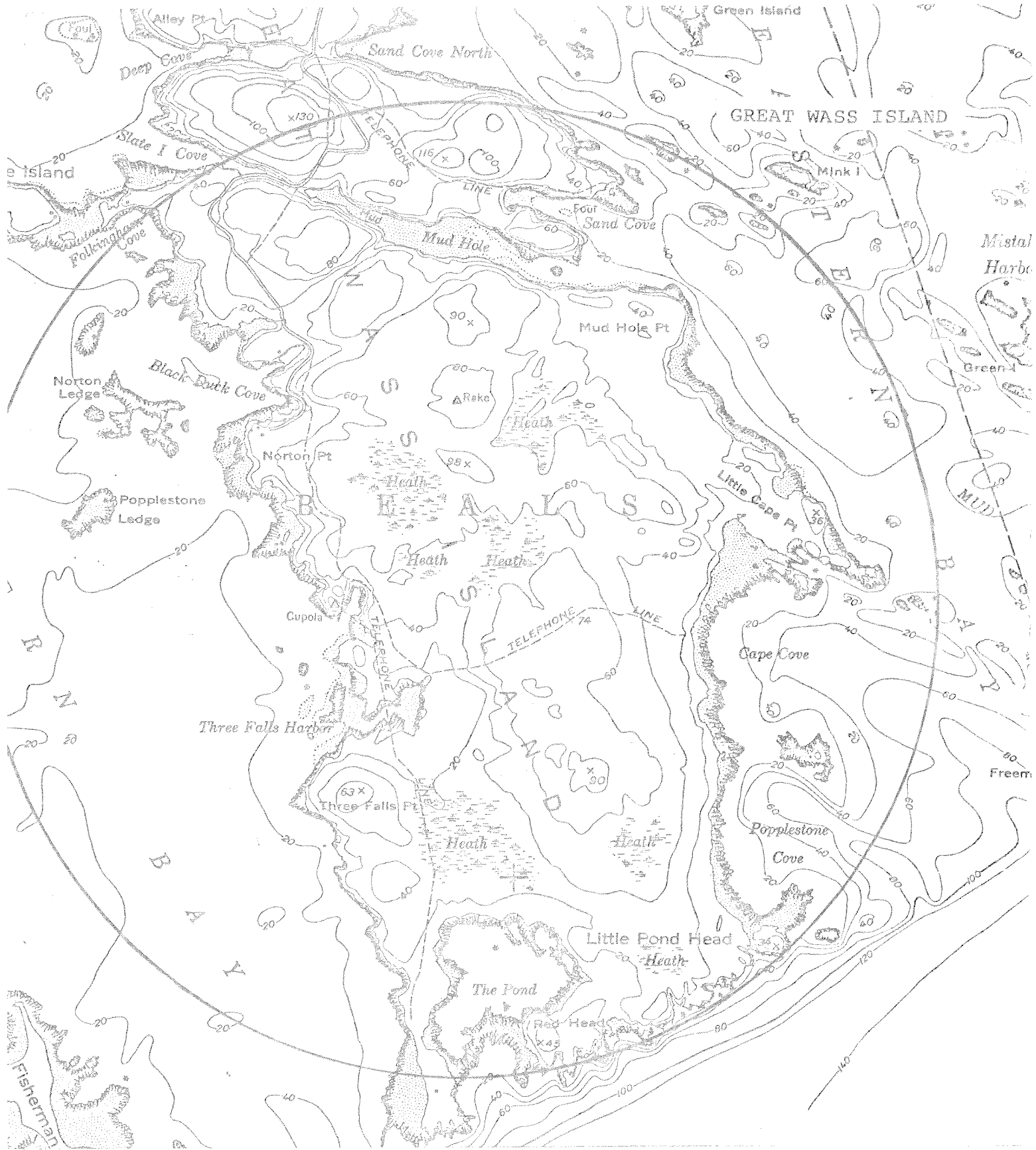
acquiring extensive easements in the area but abandoned the idea after only one easement was secured.

Hiking, swimming, boating, fishing, hunting, picnicking, scenic viewing are appropriate recreation activities for the area.

The State has made offers to acquire parts of the site.

The Bureau of Public Lands maintains a standing offer to exchange nearby public lots for land on Donnell Pond. Prentiss and Carlisle has said it will trade the Donnell Pond parcel it manages for woodlands of equal value. To date no suitable woodland tract has been found.

A joint management plan between the State and the landowners might be prepared to protect the resources of the site. At some time in the future, fee acquisition by the State (with, say, the Bureau of Parks and Recreation, the Department of Inland Fisheries and Wildlife and the Bureau of Public Lands cooperating could be a realistic alternative.



GREAT WASS ISLAND

Location

County: Washington
Municipality: Beals

Present Ownership

Private

Recommendation

The Bureau of Parks and Recreation should support the work of the Nature Conservancy to protect Great Wass Island; The American Land Trust, a special project of the Nature Conservancy, is exploring the possible preservation of the southern half of Great Wass as part of its program "to save outstanding examples of America's extraordinary natural heritage."

Rationale Summary

Great Wass Island is a marvelous geological/biological site. It has excellent scenic views, long unspoiled granite shores, mixed forests, a variety of wildlife, productive flats, and extensive sphagnum heaths. The Natural Areas Inventory lists a stand of jack pine, rare in Maine, and a thunder hole, "one of the best on the east coast," on Great Wass. The site would not be appropriate for high intensity public use and there are already five developed and undeveloped parks in coastal Washington County. Moreover, attracting a large number of people to Great Wass through the small town of Beals could have a significant social and environmental impact on the community. The island does, however, deserve protection. The American Land Trust is trying to negotiate a bargain sale of the southern portion of the island. The 2,000± acres (± 800 hectares) is nearly undeveloped and held in a large ownership pattern. The U.S. Fish and Wildlife Service has been approached as a possible management agency. Due to the significance of this site, The Bureau of Parks and Recreation should give strong support (short of acquisition) to the conservation of the property.



MACHIAS 7.5'

44°37'30"
290 000
FEET

M A C H I A S P O R T

ROQUE BLUFFS 7.5'

Site

HOWARD COVE BEACH

Location

County: Washington
Municipality: Machiasport

Present Ownership

Private

Recommendation

If land ownership or use changes threaten Howard Cove Beach, the Bureau of Parks and Recreation should assist in the protection of the beach and adjacent wetlands.

Rationale Summary

This site contains one of the longest and best developed active cobble barrier beaches on the Maine coast. The Natural Areas Inventory lists it as a beach composed of sea tumbled rhyolite stones with a variety of quartzized colorations backed by a marsh populated with shorebirds. Cobble beaches are quite rare in the United States and on a worldwide scale making this an important geological formation. The beach is easily reached from a paved road running by the Bucks Harbor Air Force Radar Station (a visual intrusion) and is frequented by tourists and local residents who walk the beach and collect stone specimens. There are good views from the beach seaward of the outer Machias Bay islands.

Public use is now at the discretion of the land-owners. Nevertheless, if ownership or use changes should endanger the beach or public use of the site, the Bureau should work alone or in cooperation with other agencies and organizations to protect the area.

OTT'S
HARBOR

South
Harpowell

rimcap

Tidal BM
10

Pinkham
Island

S. W. E. L. L.

Swallow
Island

Great Mark
Island

Monument
Light

MERRICONEAG

LANDS END

Mark Island
Ledge

Drunkers Ledge
Beacon

SOUND

Abner
Pt

Bailey
Island

Turnip
Island

Jaquish
Island

Mackerel
Cove

Bailey
Island

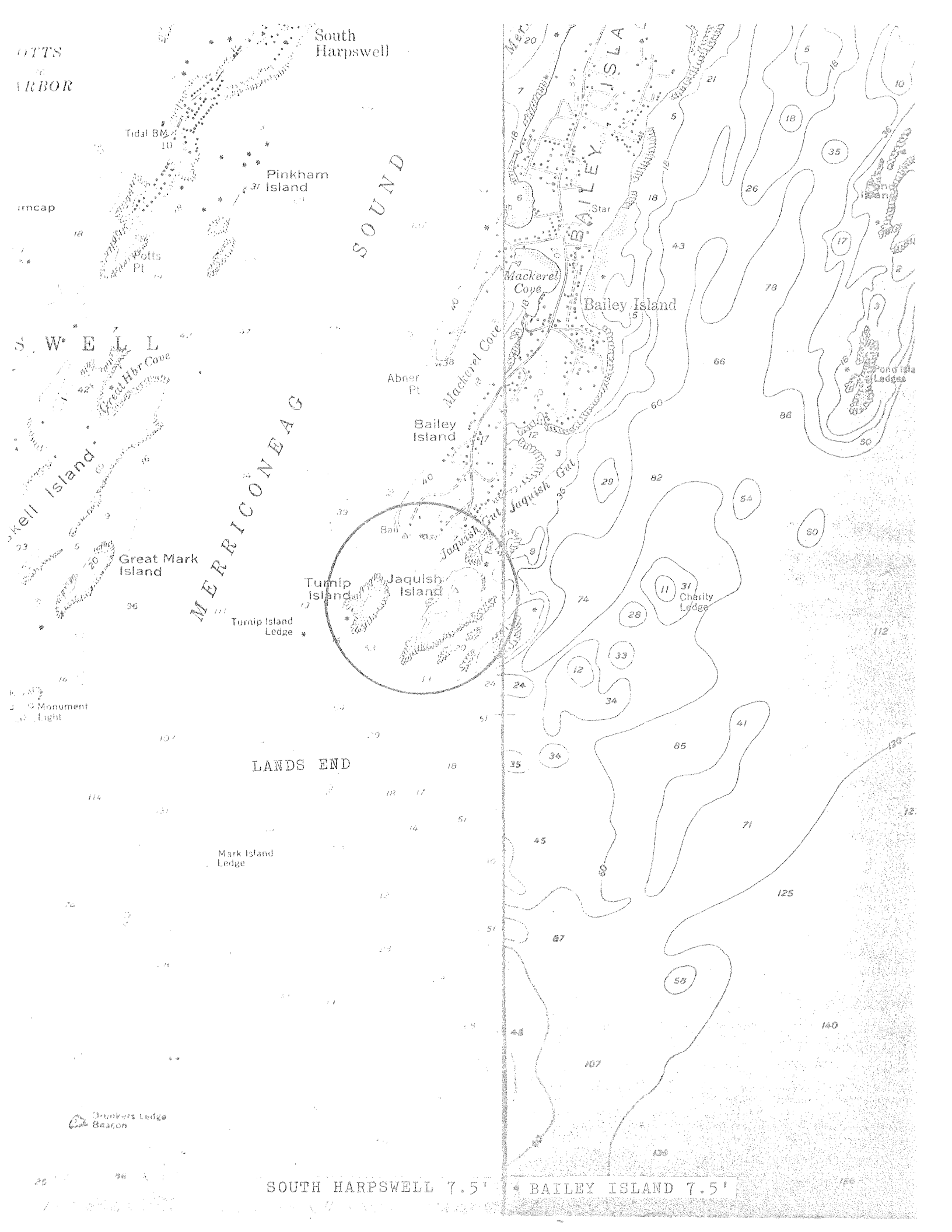
Jaquish
Cove

Jaquish
Cut

Charity
Ledge

Pond
Island
Ledges

SOUTH HARPSWELL 7.5' * BAILEY ISLAND 7.5'



Site

LANDS END

LocationCounty: Sagadahoc
Municipality: HarpswellPresent Ownership

Private

Recommendation

The Bureau of Parks and Recreation should consider acquisition of property of Lands End in Harpswell to guarantee public access to the ocean.

Rationale Summary

Being in the high growth Bath-Brunswick region public access to the shore in Harpswell is becoming a scarce good. For years, Lands End has been a popular seaside spot as it affords excellent views of Casco Bay to the east and west and the open ocean to the south. Nevertheless, parking is very limited and attempts to widen Route 24 along Bailey Island have met with stiff local opposition.

Structures on the site were destroyed by a storm during the winter of 1977-78, but plans are afoot to rebuild where the ocean's reach may yet again cause property damage. There apparently is a public right of way at the southern terminus of Route 24, however, access to most of the site is at the generosity of the property owners. Expanded access to the impressive headlands of the site could be guaranteed by a State presence.

In conjunction with Lands End, Turnip and Jaquish Islands could be protected to allow public use and to preserve the view from Bailey Island. Coastal boaters and canoeists visit these islands during the summer.



Blue Hill Harbor

LONG ISLAND

BLUE HILL

BAY

TREMONT

BLUE

TR

HI

MT. DESERT 15

BLUE HILL 15'

Site

LONG ISLAND

LocationCounty: Hancock
Municipality: Blue HillPresent Ownership

Private

Recommendation

The Bureau of Parks and Recreation should urge the National Park Service to study the acquisition and development of Long Island for resource protection and recreational use including primitive camping.

Rationale Summary

As part of the master planning process for Acadia National Park, the National Park Service intends to conduct a study of those islands in the Acadia archipelago which the Park Service will try to protect. Long Island in Blue Hill Bay has not been studied by the Park Service yet it is one of, if not the, largest remaining undeveloped islands on the Maine coast. There are no permanent inhabitants of the island and ownership remains with a small number of people. The island has interesting promontories, a varied shoreline and a well-developed forest cover. Presently it is reported to be scheduled for logging and subdivision.



MT. AGAMENTICUS

Location

County: York
Municipality: York, South Berwick

Present Ownership

Private

Recommendation

The Bureau of Parks and Recreation should work for the protection of the Mt. Agamenticus watershed area in cooperation with other interested agencies and groups.

Rationale Summary

The Agamenticus area is probably less significant for any unique values inherent to the site than because of the location of this unexpectedly large (20 mi./52 km.), relatively undeveloped forested area. Yet, these reasons alone make it important enough to be studied for conservation of the area's character, including the historical mythology associated with the mountain. Time and again since 1935, when the area was first proposed for inclusion in the Maine State Park System, studies have mentioned the area as suitable and appropriate for conservation with low intensity recreational use. Efforts to permanently protect the area have never come to fruition, however. And with the southwestern section of the State one of the fastest growing in Maine, the Mt. Agamenticus locale is unlikely to remain mostly undeveloped for very much longer. Already a ski area on the mountain itself and a proposed recreational/residential community astride the hill have fallen by the wayside. Unless conservation actions are taken very soon, changes in land use in the area are imminent. With regard to recreational use, the area would be suitable for camping, trail use, picnicking, scenic viewing, nature study, skiing (with snow making), and possibly swimming if a pond were formed, as one study has suggested, at the foot of the mountain. There is one registered Critical Area on Mt. Agamenticus - a single flowering dogwood, the lone survivor in Maine of two stands on the hill.

In March, 1977, the York Planning Board, York Conservation Commission and Agamenticus Advisory Board agreed that the area surrounding Mt. Agamenticus would not be developed for eighteen months. However, the Planning Board recently (12/77) granted preliminary approval for a housing subdivision on the fringe of the protected area.

A federally funded management study of the watershed is to be undertaken in 1978-79. The Bureau of Parks and Recreation should actively participate in the study.



MT. WALDO 124 AC.

BUCKSPORT 15

61

Site

MT. WALDO

Location

County: Waldo
Municipality: Frankfort

Present Ownership

Bureau of Parks and Recreation, Private

Recommendation

If public use is restricted or threatened, the Bureau of Parks and Recreation should consider acquisition of land on Mt. Waldo, including the summit; the mountain could be developed into a hiking-scenic viewing-historic area.

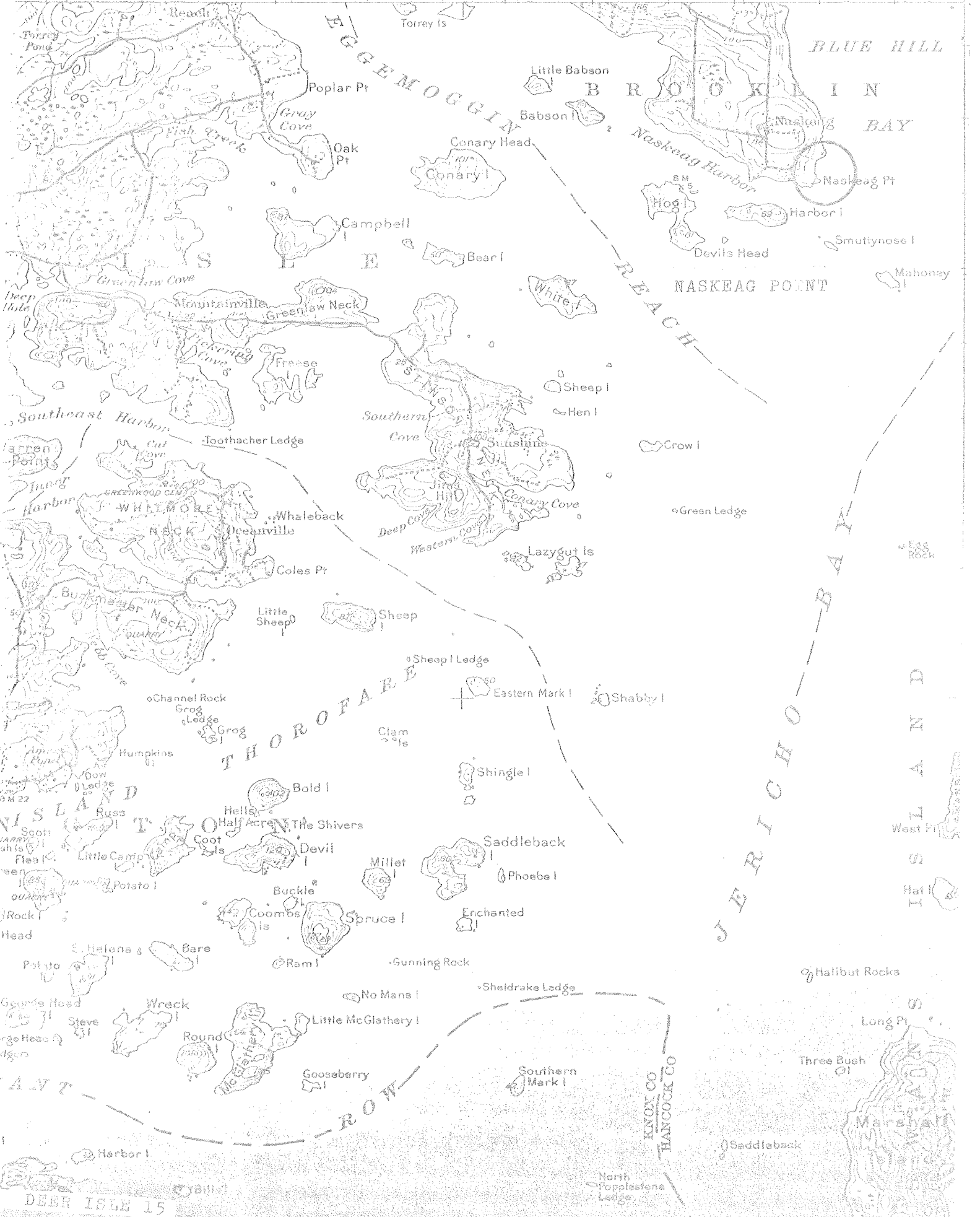
Rationale Summary:

The Bureau of Parks and Recreation now owns the historic granite quarries on Mt. Waldo in Frankfort. This area might eventually be developed into an historic site with appropriate interpretation. However, the entire hill is of interest for the excellent views of the mid-coast area it affords.

Because of the historic significance of the site the Mt. Waldo Granite Works have been named to the National Register of Historic Places. First worked about 1851, the Mount Waldo quarry supplied stone for some of the most famous structures built in America during the 19th century including the Brooklyn Bridge, the Library of Congress and the Philadelphia Mint.

It has been suggested that portions of the mountain, besides the land owned by the Bureau, be brought into the public domain. In 1977, for example, the Department of Inland Fisheries and Wildlife proposed the acquisition of the mountain as a state wildlife management area. All recent attempts for public acquisition of the mountain, however, have met with vocal local resistance. Still, the site is an important aesthetic and historic resource. In 1969, before the State acquired its property, a private multi-million dollar recreational complex was proposed for the mountain. Should other developments threaten the site the Bureau should consider expanding its holdings. The site can be developed as funds are available.

928 929 930 931 932 933 934 935 936 937 938 939



Location

County: Hancock
Municipality: Brooklin

Present Ownership

Private

Recommendation

The Bureau of Parks and Recreation should continue to pursue acquisition or other protection of the archeological digs at Naskeag Point.

Rationale Summary

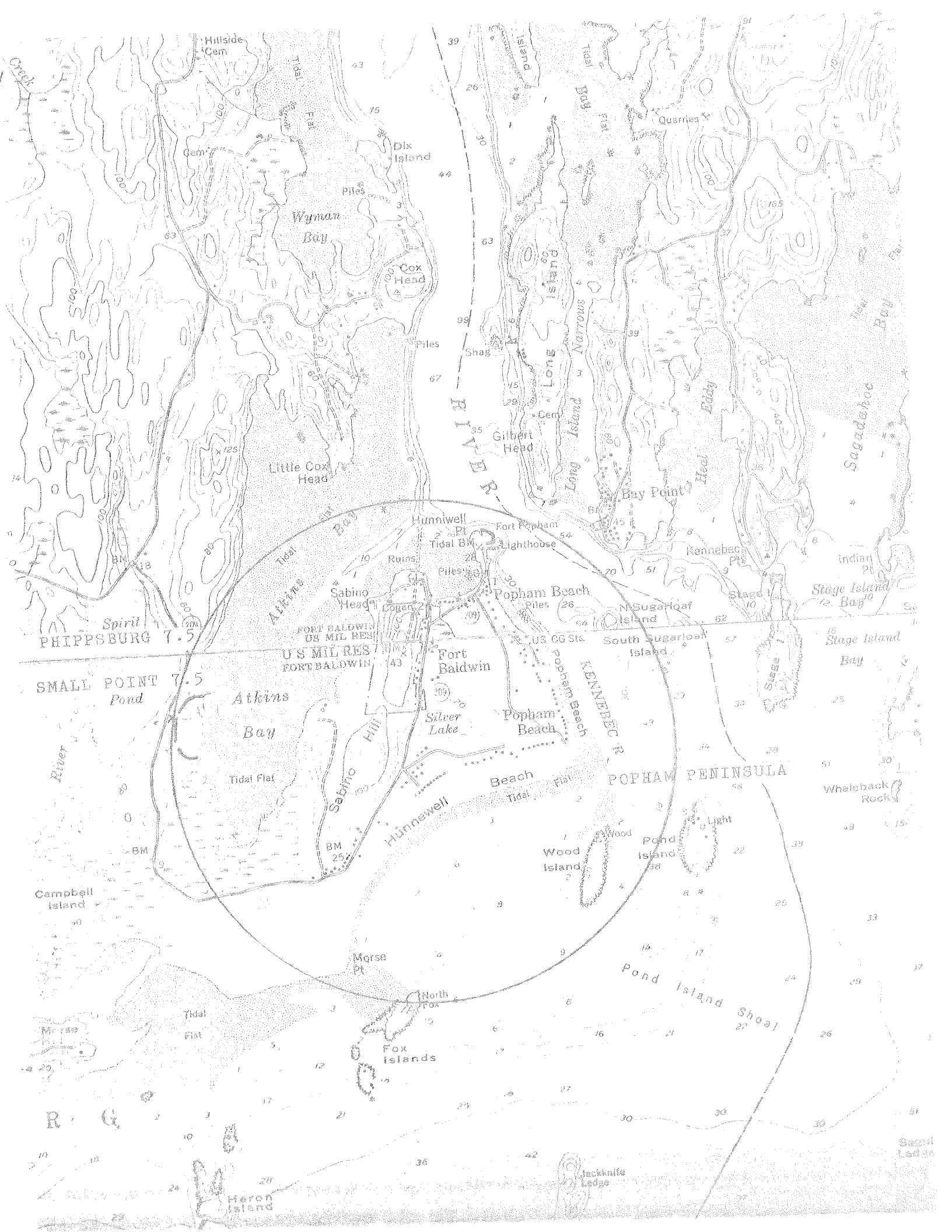
An important archeological site, this area could yield very significant data about Maine's early coastal cultures. The site is a large, unstratified shell-free midden containing hundreds of artifacts, particularly tools, which suggest intermittent occupation from about 6,000 B.P. There is also a large burial area containing red ocher and the remains of eleven individuals. Additionally, a single, European coin, believed to be at least 800 years old, has been found on the site.

Naskeag ("Place of the Shellfish") must have been visited by Native Americans thousands of years ago. It is an ideal campsite with beaches sheltered from the open sea by granite islands. The point itself is a large natural terrace backed by a promontory rising to 50 feet above sea level.

The attraction of the spot has been described by two archeologists who have done work on the site.

When it was originally established, it must have been during some distant era when Red Men of the North were making extensive foraging expeditions southward. Coming down the Penobscot to the ocean they discovered there an enchanting bay that offered not only great beauty, but great bounty. Salmon teemed in the river; game abounded along river banks and bay shores; spruce bordered the irregular coastline, and every cove had its incredible store of shellfish. (Guy Mellgreen and Ed Runge, "Goddard's" in Bulletin of The Massachusetts Archeological Society, Inc., XIX, No. 3, April 1958, p. 41)

For several years the Bureau has been interested in possible acquisition of the Naskeag site due to its natural and pre-historic significance. Inasmuch as public ownership would insure proper archeological exploitation of the site, the Bureau should continue to pursue acquisition alternatives.



PHIPPSBURG 7.5

SMALL POINT 7.5
Pond

Atkins Bay

FORT BALDWIN
US MIL RES
FORT BALDWIN

Fort Baldwin

Popham Beach

POPHAM PENINSULA

Pond Island Shoal

KENNEBEC RIVER

KENNEBEC R

SAGADAHOC BAY

Campbell Island

R G

Heron Island

Jackknife Ledge

Sagitt Ledge

Site

POPHAM PENINSULA

Location

County: Sagadahoc
Municipality: Phippsburg

Present Ownership

Private, Bureau of Parks and Recreation

Recommendation

Because of the unique natural and historic importance of the area the Maine Legislature should consider protecting the entire Popham peninsula.

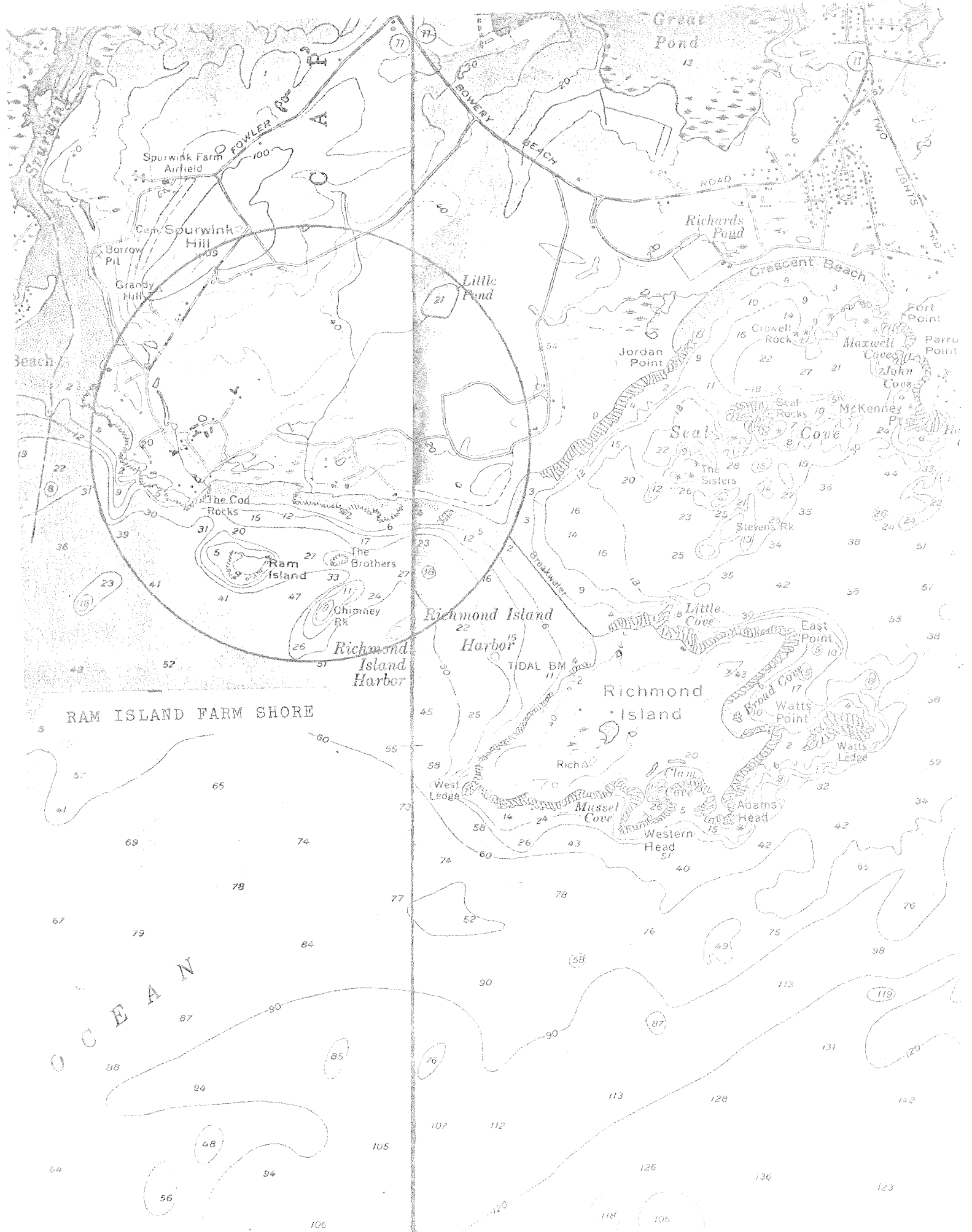
Rationale Summary

The Popham (Sabino) peninsula area is a natural complex of sand beaches/dunes, high promontories, salt ponds, tidal estuaries and rocky islands. It separates the Atlantic Ocean from the Kennebec River. Native Americans used the area long before European explorations. There is at least one significant "red paint cemetery" at Sabino Head attesting to early Indian occupation of the site. Records of European visitation to Sabino date at least from the late 16th century. One of the first attempts at colonization in the New World was the Popham Colony established in 1607. The first English ship built in North America, the Virginia, was launched the same year. Fort Popham is of Civil War vintage. Fort Baldwin was a 20th century attempt at coastal fortification. Today the Navy still maintains a RAKE (mine drop recording) station on Sabino Hill.

One method of achieving the goal of protection would be the establishment of a Popham Trust which would be a joint State-local venture in which landowners would be compensated for non-development. A special fund would allow the Trust to acquire private holdings on a willing seller, willing buyer basis. As an alternative, the Legislature could declare it to be the long term intent of the State to acquire all land on the peninsula as part of a large park. Current landowners could be granted life tenancy with further development restricted. However, the State would purchase fee interests from landowners wishing to sell. In conjunction with either of these plans the Atkins Bay area might be designated a National Estuarine Sanctuary.

There are already a number of protected parcels in the region. North and South Sugarloaf Islands, Popham Beach State Park, Fort Popham and Fort Baldwin Memorials are all held by the Bureau of Parks & Recreation. Pond and Sequin Islands are held by the federal government. The Seawall Beach - Morse Mountain area and the Heron Islands are managed by the Nature Conservancy. Nevertheless, additional development in the area can be expected. In 1974, a fifty acre, seven lot subdivision was approved by the Dept. of Environmental Protection between the Bureau's holdings near Spirit Pond. The subdividers, at least, reported that restrictive covenants running with the land in perpetuity would be placed on purchasers' deeds.

Prior to any action, a management plan should be prepared detailing all ownership interests and setting out specific alternative courses.



PROUTS NECK 7.5' , CAPE ELIZABETH 7.5'

Site

RAM ISLAND FARM SHORE

LocationCounty: Cumberland
Municipality: Cape ElizabethPresent Ownership

Private

Recommendation

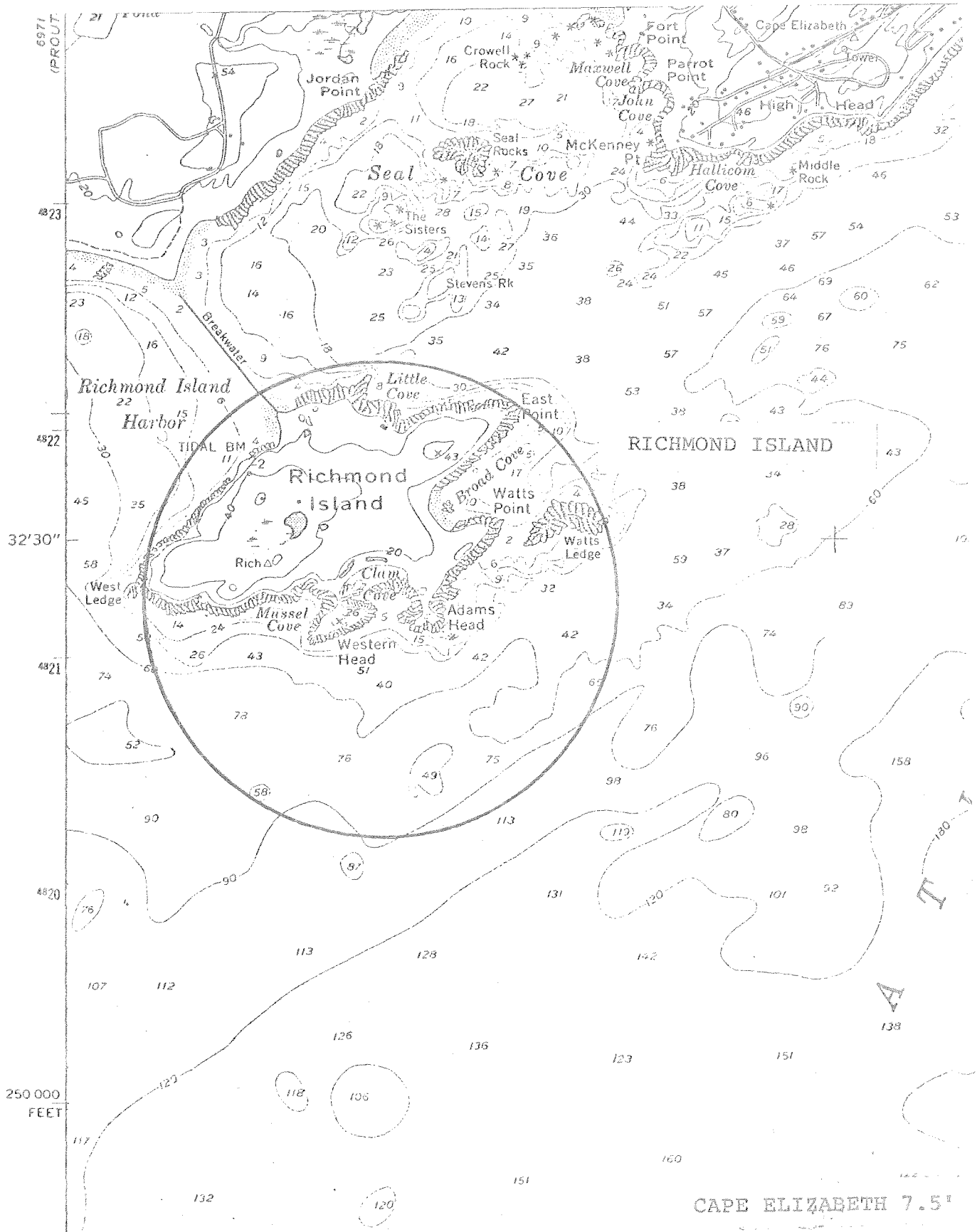
The Bureau of Parks and Recreation should cooperate with the State Critical Areas Program and the land-owners to protect the beaches and headlands at Ram Island Farm.

Rationale Summary

This site is composed of two adjacent but distinct geologic areas. One, a beach-dune-wetlands system, has been identified as among the least disturbed in southern Maine. The other, a stretch of seacliff, has been described as the best exposure of Casco Bay Group bedrock formations of the earliest set of deformation structures in the entire outcrop belt of these rocks. These features are important to geologists for the information they reveal about the events of past geological ages.

The site is in private ownership and public use is virtually non-existent though some geology field trips are allowed. The site is also part of a wildlife preserve. Both beaches and headlands are currently being studied for possible inclusion in the Maine Registry of Critical Areas.

Changes in land use or ownership could result in misuse of these important and fragile resources. Steps should be taken to protect the site for its scientific and educational significance.



Site

RICHMOND ISLAND

LocationCounty: Cumberland
Municipality: Cape ElizabethPresent Ownership

Private

Recommendation

The Bureau of Parks and Recreation should explore, with the owners of Richmond Island, conservation alternatives which would protect the scenic recreational and historic resources of the island.

Rationale Summary

Richmond Island, a coastal island of some 215 acres of gentle topography on the southern shore of Cape Elizabeth, is an area of both historical significance and present day aesthetic importance.

It is known through well established documentation that the island was an important 17th century English settlement site. Although the island was inhabited by various individuals down into the 20th century, today it remains uninhabited.

Over the past twenty years or so, Richmond Island has been suggested as a park site in a number of documents. The U. S. Department of the Interior recommended it as a park in 1955. The Maine State Park Commission likewise recommended it in 1956 as part of a park area to include the beach on either side of the breakwater connecting the island with the mainland.

Richmond Island has also been mentioned as having suitable characteristics to be a park in three Greater Portland COG open space and recreation plans.

Today part of the island is still farmed, while part is forested. There is a good beach on the northern side and some smaller beaches in the coves. A breakwater connects Richmond to the mainland but normal access is by boat only. The entire island has been designated a wildlife sanctuary by the Maine Department of Inland Fisheries and Wildlife. The island is an important aesthetic resource to three major state parks: Crescent Beach, Scarborough Beach and Two Lights.

In January 1977, the area was nominated to the National Register of Historic Places.

The island is owned by a private corporation which appears to be interested in conserving the site. Considering the historic importance of the island, it should not be developed for high intensity recreational use. Conservation alternatives should be explored which would preserve the historic amenities while improving public appreciation of the island through historic interpretation.



JONESPORT 7.5' (reduced x3)

ROQUE BLUFFS 7.5' (reduced x3)

Site

ROQUE ISLAND

LocationCounty: Washington
Municipality: JonesportPresent Ownership

Private

Recommendation

If land ownership or use changes threaten any of the islands in the Roque Island group, the Bureau of Parks and Recreation should work, alone or in cooperation with other agencies and organizations, to protect the islands.

Rationale Summary

The Roque Island archipeligo of islands off Jonesport in Englishman Bay is widely recognized as one of the most excellent anchorages on the Atlantic seaboard. Roque Island itself has a coastal interface ranging from fine white sandy beaches to 100 foot high granite cliffs. Several of the islands in the group are important sea bird nesting and migration stopover sites. Additionally, the area is one of the most productive herring fishery areas on the entire Maine coast. Duncan and Ware say that Roque "is the goal of many east-coast yachtsmen...to make a landfall on the back side of Roque is no feat for a mere church-steeple navigator." (A Cruising Guide to The New England Coast, NY: Dodd, Mead and Co., 1972, p. 513). The islands are also used by groups from the Hurricane Island Outward Bound School. In short, the Roque Island group has been described as a "combination of unspoiled forests, cliffs, fine sand beaches and sheltered harbor...unsurpassed in Maine." (Read & D'Andrea, Conservation Priorities Plan of the Coast of Maine (Draft), So. Gardiner, Me., 1973, p. IV-12).

The Roque Island group has been owned for over a century by a single family who apparently is interested in the continued conservation of the site. As public use is also permitted, it would seem that the islands could not be better managed, at least public coast, than under the current ownership. However, if ownership or land use changes threaten to degrade the resource or restrict public use, the State should take action to study and propose detailed conservation alternatives. A bond issue to finance acquisition of the islands might be appropriate.

WEST BUXTON 9 MI.
3.9 MI. TO U.S. 202

(BUXTON 1:62,500)

2'30"

6.5 MI. TO U.S. 202
5.1 MI. TO ME. 35



OLD ORCHARD BEACH 7.5'

Site

SACO HEATH

LocationCounty: York
Municipality: SacoPresent Ownership

Private

Recommendation

The Bureau of Parks and Recreation should urge the Saco Conservation Commission to undertake a study of the environmental significance and value of the Saco Heath to determine appropriate use and protection of the area; the integrity of the Heath is threatened by mining operations.

Rationale Summary

Although not of direct recreational potential, the Saco Heath is an important island wetland situated in the center of a high growth residential area. The roughly 200 acre heath is the source of a number of streams and serves as deer and waterfowl habitat. Mining of peat moss in the heath has been resumed recently with State and local approval. Yet assessment of the significance of the heath for water storage and purification as well as wildlife habitat may not have received adequate consideration.



SALT BAY

Location

County: Lincoln

Municipalities: Nobleboro, Newcastle, Damariscotta

Present Ownership

Private

Recommendation

The State Planning Office should study Salt Bay and the Upper Damariscotta River as a candidate for designation as a national estuarine sanctuary.

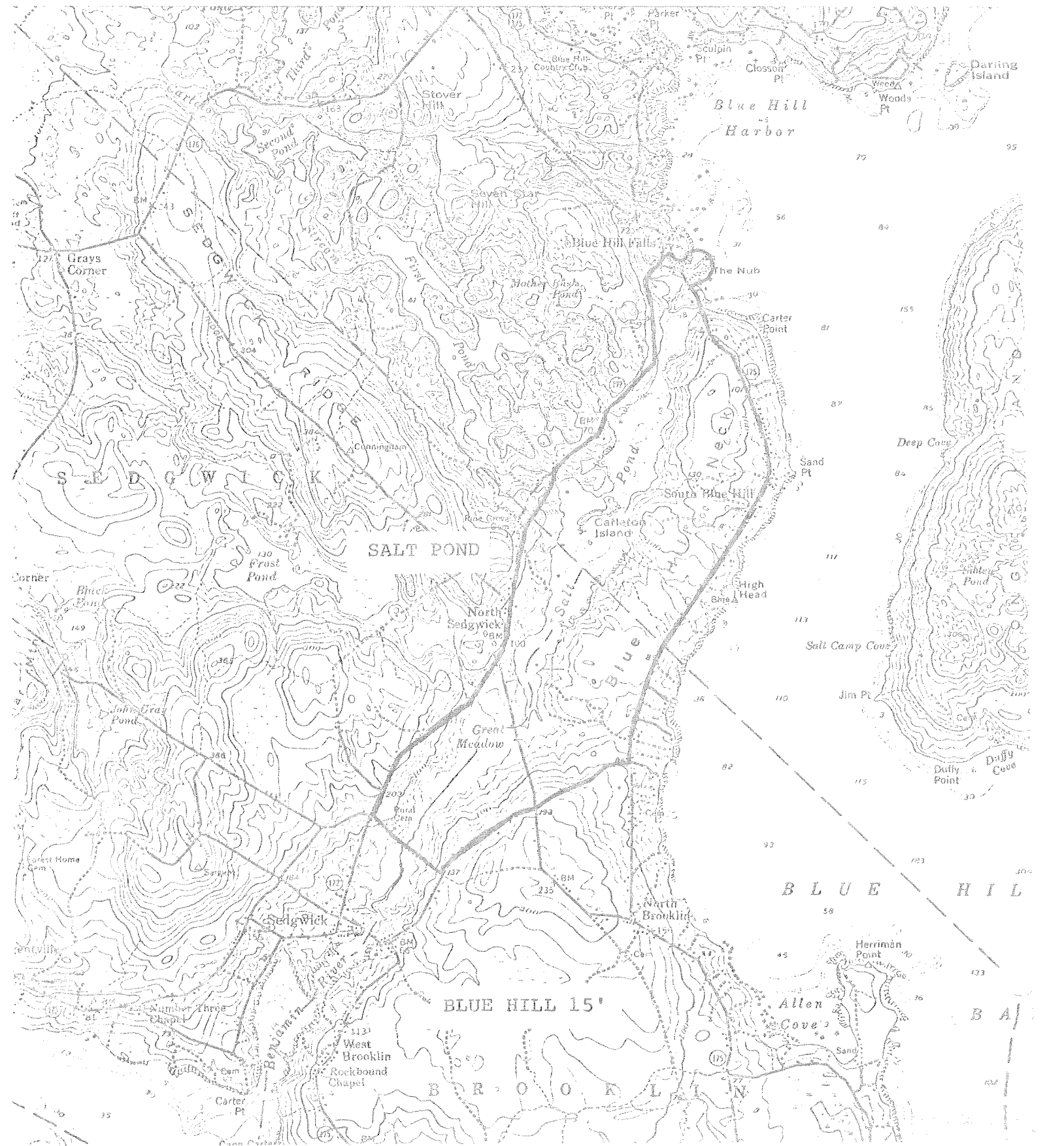
Rationale Summary

Salt Bay, linking Damariscotta Lake with Damariscotta River, is a large, shallow, estuarine embayment. Eelgrass grows lush near the shore. Great blue herons frequently fish the shallows and several active bald eagle nests are located on the shoreline of the bay. It has also been ranked as the most important breeding site of horseshoe crabs in Maine (John W. Born, Significant Breeding Sites of the Horseshoe Crab in Maine, Critical Areas Program 1977). Blueback herring, striped bass, alewives, and smelts run up the Damariscotta River into the Salt Bay (water classification SB-2).

Along the river banks immediately south of the bay is one of the largest and most remarkable deposits of oyster shells in the world. Laid down over the course of many centuries, the strata of and artifacts taken from the deposits suggest that they were left by separate prehistoric races who used the large oysters (up to 18 inches and more) as a food source. In the late 19th century, a portion of the shell heaps on the eastern shore of the river were mined for lime extraction (H.W. Castner, The Prehistoric Oyster Shell Heaps of the Damariscotta River, Waldoboro, 1950.) Part of this area is now owned by the Bureau of Parks and Recreation and is on the National Registry of Historic Places.

Considering its proximity to U.S. Route One, the shoreland of the Salt Bay and Damariscotta River is surprisingly undeveloped. Although during the 18th and 19th centuries nearly a dozen shipyards lined the Bay and upper river shore (H. W. Casner, The Great Salt Bay and Vaughan's Pond, Boothbay Harbor, 1950) today land use on the eastern shore of the Bay is predominantly agricultural. Route 215, which skirts the western shore, is lined with development. Shoreland residential zoning of the site would allow residential development on most of the bay and river shoreline; only small portions are in a Resource Protection District.

This site, including the river above the Town of Damariscotta and all of the Salt Bay, could be protected for its scenic, ecological and historic significance by designation as an estuarine sanctuary.



Site

SALT POND

Location

County: Hancock
Municipality: Blue Hill, Sedgewick, Brookline

Present Ownership

Private

Recommendations

The Bureau of Parks and Recreation should work with the Department of Inland Fisheries and Wildlife and other interested parties to acquire conservation easements on the land around the Salt Pond.

Rationale Summary

This site is composed of an estuary/tidal pond fed by several streams and a marsh-important wildlife habitats-located in a rural setting. Apparent natural feature deficiencies for this Unit include rivers and streams, estuaries and salt marshes. Blue Hill Falls, where the pond meets the sea, is one of the most impressive reversing falls on the Maine coast (Natural Areas Inventory M41, M1009). Canoeing and tubing on the rapids is a popular summer activity. The area is also of historic and pre-historic importance. The Nub at the mouth of the Salt Pond is where the founders of Blue Hill village, Joseph Wood and John Roundy, landed in 1762 and built their first homes. Stevens Bridge, a granite structure straddling Blue Hill Falls, is of some historic interest as well. Also bordering the Salt Pond, at the mouth of Carleton Brook is a prehistoric Indian village site called Grindle. When the site was excavated in 1963 middle to late Woodland Period (A.D. 300-1700) artifacts of several classes were found (Natural Areas Inventory #M0417). Indians used the Salt Pond as a favorite thoroughfare between Blue Hill Bay and Eggemoggin Reach, calling the Falls Kuladamitchwan ("mixed rapids"). Both American eels and smelts run the pond. Horseshoe crabs breed there. Clam, scallop, quahog and mussel beds line the bottom. Great blue herons and other wading birds frequent the wetlands at the southern end of the pond.

Access to the area is simple, perhaps too simple, from two state highways. Hancock County in general and the Blue Hill area in particular has been attracting a great many new residents in recent years. The Salt Pond should be protected from water quality degradation (current classification SB-1) and fish and wildlife habitat loss. Present shoreline zoning places the sections in Brookline and Sedgewick in Resource Protection Districts; all of the shoreline in Blue Hill is in a Limited Residential District.



SCARBOROUGH BEACH

Location

County: Cumberland
Municipality: Scarborough

Present Ownership

Bureau of Parks and Recreation, Private

Recommendation

The Bureau of Parks and Recreation should consider a long-term program of acquiring additional land at Scarborough Beach.

Rationale Summary

Scarborough Beach is both a significant natural and an interesting historic site. The beach itself is one of the largest, little developed beach-dune systems remaining in southern Maine. It is popular with those seeking an uncrowded beaching experience, particularly in the nonpeak hours and season. That is not to say the Bureau's property is not often used to capacity. Between 1972 and 1976, yearly public use of the park increased nearly two and one-half fold to more than 73,000 visits. On sunny summer days, the 300 car parking lot commonly fills very quickly and people spill over the boundaries of the Bureau's 67 feet of beach frontage.

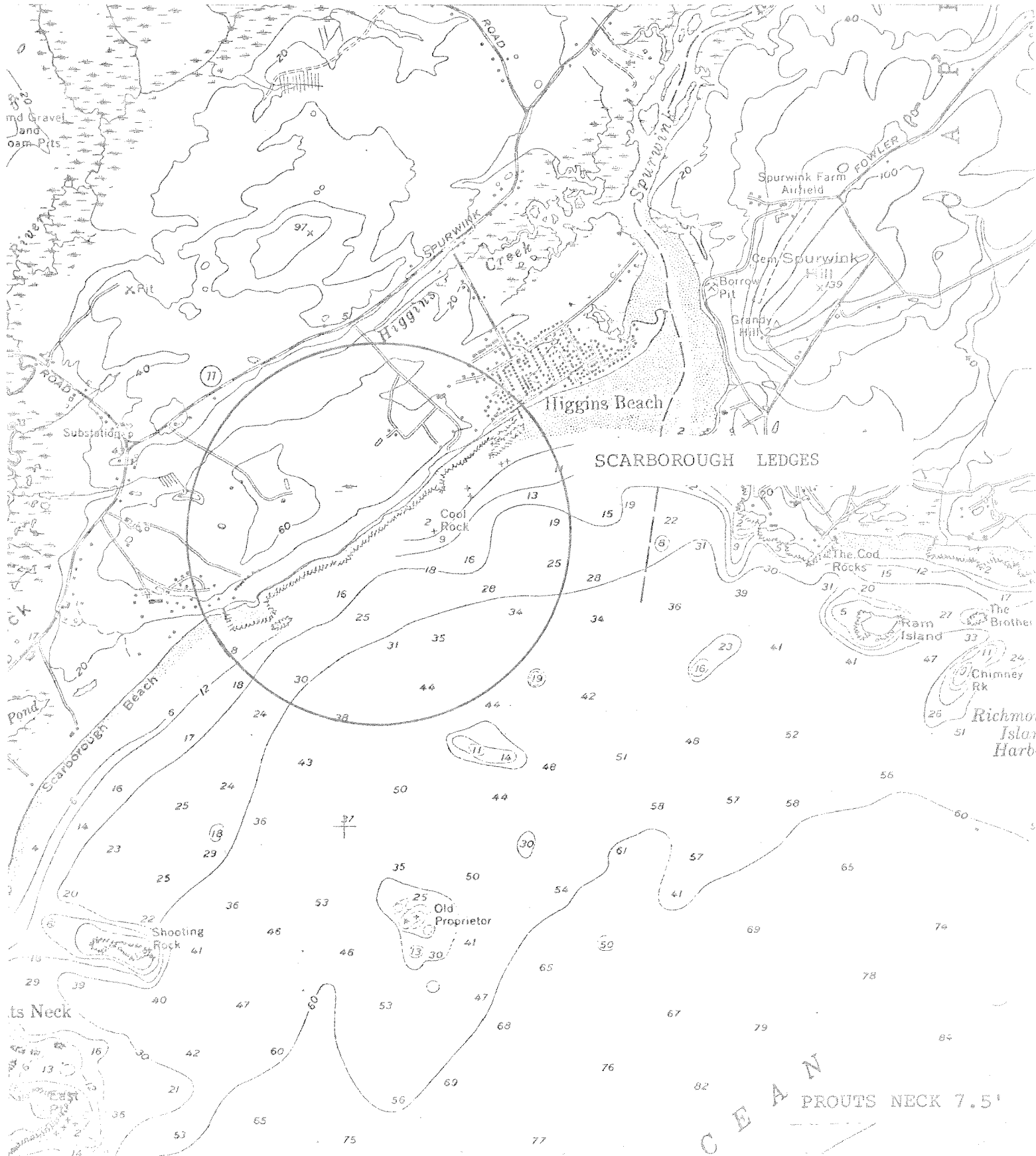
Nearby the Bureau's property is the site of a 17th century fortification built by one Captain Joshua Scottow of Boston in 1681 following the First Indian War of 1675. The fort provided a haven for settlers in times of peril during the Indian Wars of the 1600-1700's, though on at least one occasion it was captured by the Indian's. During the First and Second Indian Wars, few towns in New England suffered as many deaths as Scarborough. Nine-tenths of the settlers killed lived at the colony established at Black Point on Scarborough Beach. Perhaps that is the derivation of the name of Massacre Pond.

Today most of the beach is held in a single collective ownership. The Bureau of Parks and Recreation has made offers to purchase additional beach land but has been unsuccessful. From experience, it may be expected that at least in the short term, the beach-dune complex will be maintained as is by the present owners. The Bureau might do well to not acquire additional land at Scarborough Beach at this time and to maintain existing facilities for low intensity public beaching use. High intensity beaching can be accommodated at nearby Crescent Beach.

Nevertheless, Scarborough Beach is of such significance that it ought to be the long-term intention of the State to acquire more land for expanded public use, including the establishment of an interpretive trail network in the pond-dune area backing up the

SCARBOROUGH BEACH (continued)

beach. If land use or ownership changes threaten the Bureau should step in immediately. If more property is acquired at the beach, the Bureau could remove the existing road and parking lot near the beach itself, limiting all parking to lots by the road.



PROUTS NECK 7.5'

71

Site

SCARBOROUGH LEDGES

Location

County: Cumberland
Municipality: Scarborough

Present Ownership

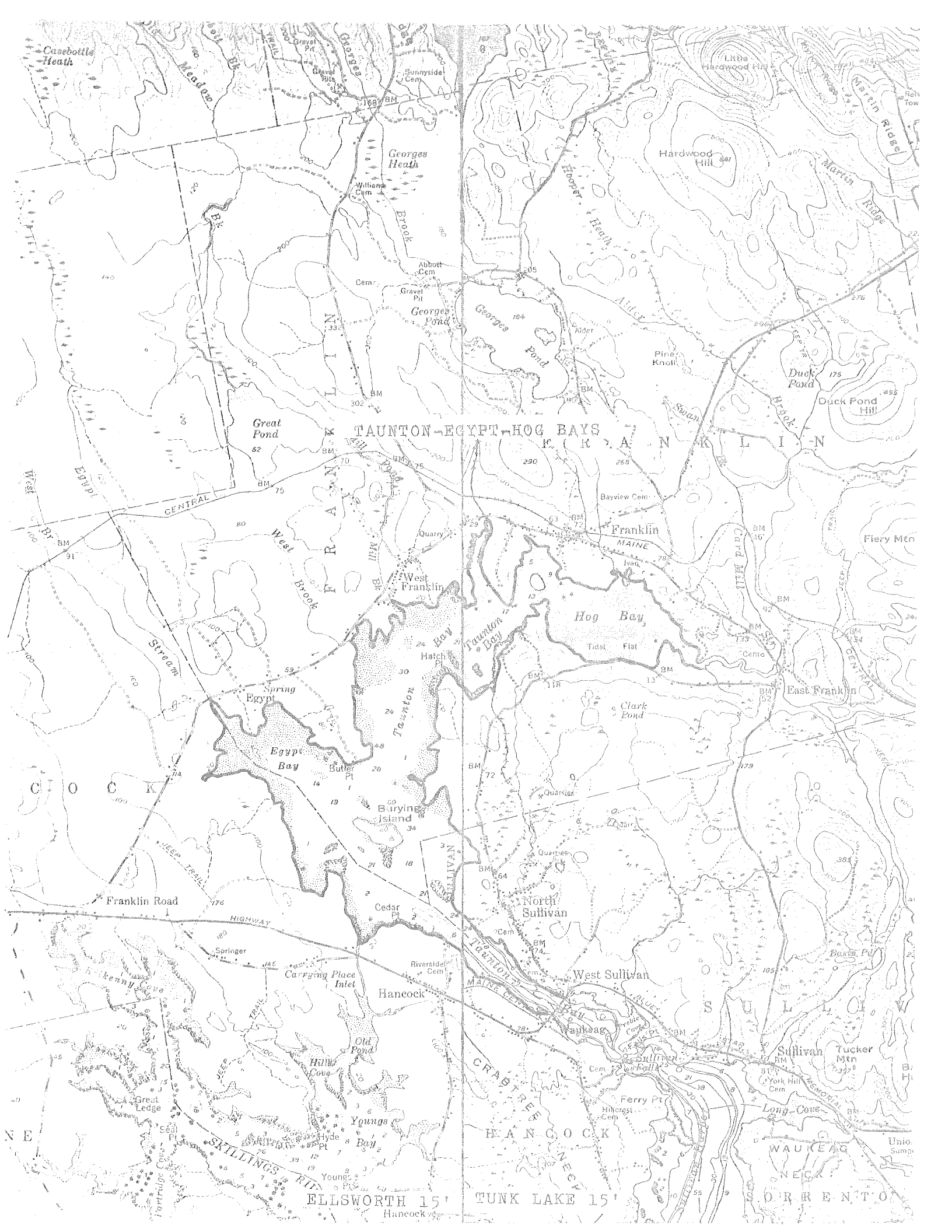
Private

Recommendation

The Bureau of Parks and Recreation should urge the Scarborough Conservation Commission to study how the rocky ledges between Scarborough and Higgins Beaches might be protected to preserve the natural beauty of the site.

Rationale Summary

The sea ledges connecting Scarborough and Higgins Beaches in Scarborough are of particularly colorful scenic quality. Recently, some obvious homes have been built just above the ledges. This entire stretch of shoreline should be protected from further obtrusive development. This remains, however, predominantly a local concern.



ELLSWORTH 15' TUNK LAKE 15'

WAUKEAG
NECK
S. ORR ENTO

TAUNTON-EGYPT-HOG BAYS

Location

County: Hancock
Municipalities: Franklin, Hancock, Sullivan

Present Ownership

Private

Recommendation

The Taunton-Egypt-Hog Bays area should be studied by the State Planning Office as a candidate for designation as a national estuarine sanctuary.

Rationale Summary

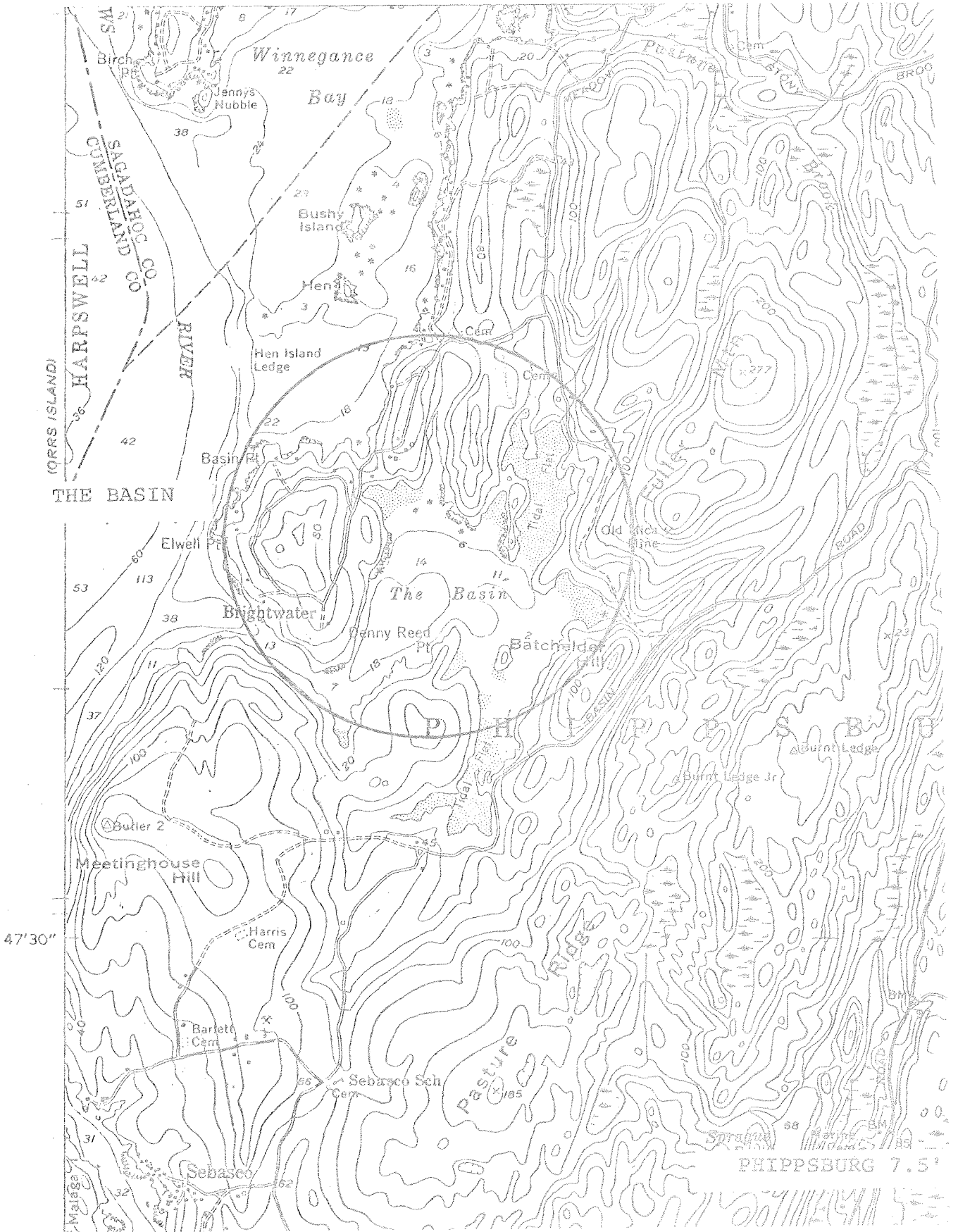
This site is a series of tidal bays draining into Sullivan Harbor at the head of Frenchman Bay. In addition to being an outstanding natural area the site also encompasses several localities of historic and archeological importance.

One spot in Hog Bay has been identified as of national significance as the northernmost breeding site of horseshoe crabs in the world (John W. Born, Significant Breeding Sites of Horseshoe Crab In Maine, Critical Areas Program, 1977). Several areas within the site boundaries, especially Hog Bay, are important worm flats. Two streams feeding the estuary are alewife and eel runs; smelts run in three streams. Several bald eagle nests are located along the shoreline of the Bays and the entire estuary is valuable waterfowl habitat (water classification SB-1).

One spot of particular prehistoric interest is Burrying Island in Taunton Bay. The island was used as a camp and burial site by early natives. Today it supports a large heron rookery. More recent use of the Bays region was for granite & silver extraction; several old quarries & mines line the shore.

Although located on the fringe of the eastern mid-coast growth center around Ellsworth, the shore of the Bays remains relatively undeveloped. One substantial subdivision is being developed at Dwelley Point in Franklin. Under shoreland zoning, most of the Bays shoreline is zoned for residential development.

The natural and ancient cultural resources of the Taunton-Egypt-Hog Bays system could be conserved from adverse development spiraling outward from the Ellsworth hub.



THE BASIN

Location

County: Sagadahoc
Municipality: Phippsburg

Present Ownership

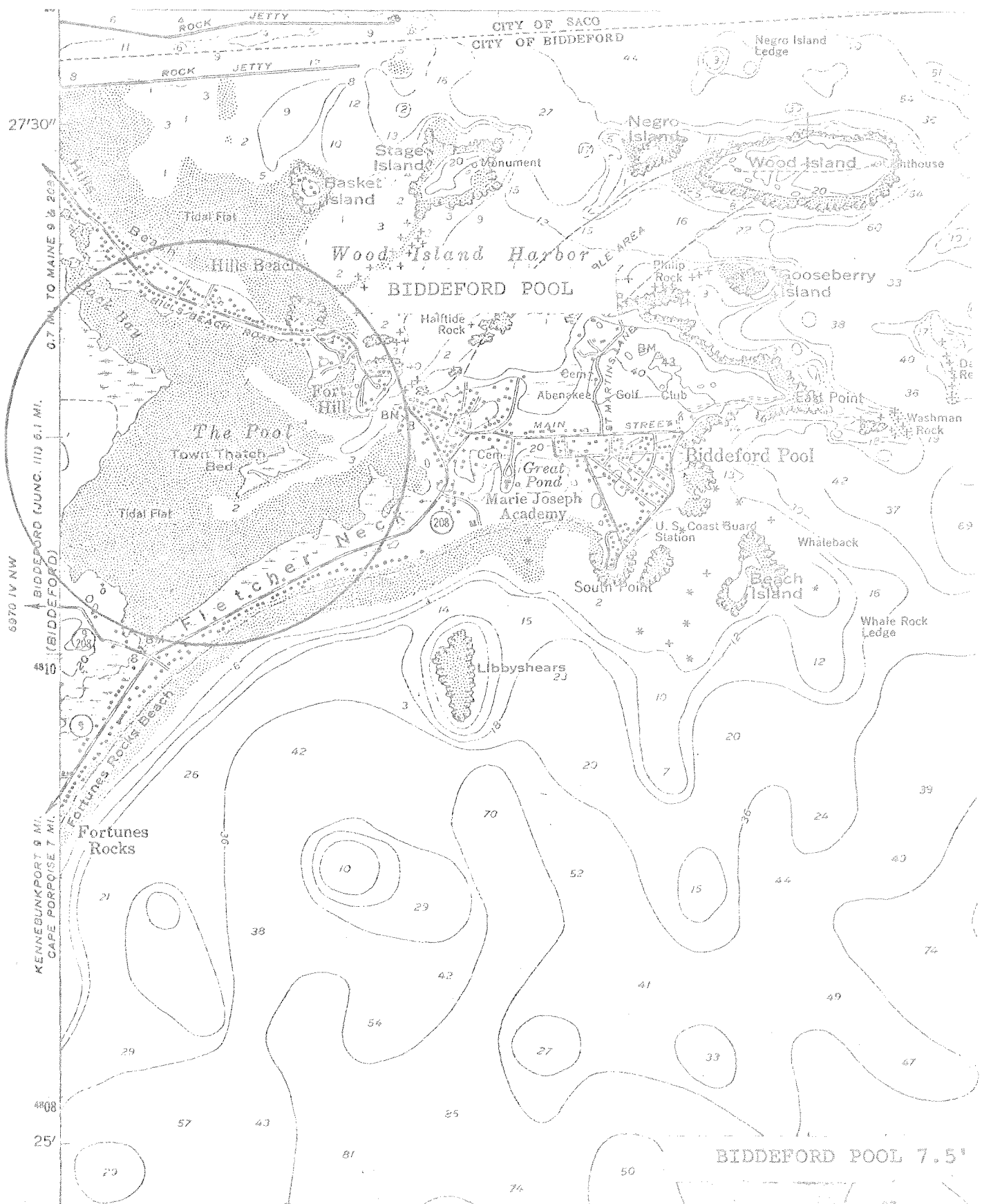
Private

Recommendation

The Bureau of Parks and Recreation should study with other agencies conservation alternatives for The Basin in Phippsburg; marina facilities might eventually be developed here; the site is threatened by residential subdivision.

Rationale Summary

The Basin is a salt water embayment connected to the New Meadows River by a gut called The Narrows through which flows a reversing tidal falls. Tidal flats are exposed at low tide in several of the coves lining The Basin. Most of the surrounding upland is well-developed forest. On the Brightwater side of The Basin is located an interesting Indian shell midden and an active osprey nest as well as a significant geological (garnet) locality. The Basin was listed in the Natural Areas Inventory as "a breeding and feeding area for a large spectrum of biota-clams, mussels, shore birds and a pair of American bald eagles being the most notable....Shingle beaches are also present." Duncan and Ware, in their A Cruising Guide to The New England Coast, write that "this is an attractive anchorage...and a favorite of many." (NY: Dodd, Mead & Co., 1972, p. 334). Recently road access to the site has been substantially improved. As a result, land surrounding The Basin is imminently threatened by subdivision development. A small number of owners control most of the shoreline around The Basin. Also, one island within The Basin (Coastal Island Registry #73-187) has been identified as the location of another midden and osprey nest. (Bureau of Public Lands, Management Plan for the Unregistered Coastal Islands of Maine, 1978, p. 69.)



27°30'

6970 IV NW
6.7 MI. TO MAINE 9 & 209
(BIDDEFORD)

KENNEBUNKPORT 5 MI.
CAPE PORPOISE 7 MI.

48°10'
25'

CITY OF SACO
CITY OF BIDDEFORD

Wood Island Harbor
BIDDEFORD POOL

BIDDEFORD POOL 7.5'

Site

THE POOL

Location

County: York
Municipality: Biddeford

Present Ownership

Private

Recommendation

The Bureau of Parks and Recreation should urge the U.S. Fish and Wildlife Service to consider adding the Biddeford Pool area to the Rachel Carson National Wildlife Refuge if land uses threaten.

Rationale Summary

The Pool in Biddeford it has been said "undoubtedly is the most significant area in Maine for migratory shorebird concentrations." (Center for Natural Areas, The Natural Regions of Maine (Draft), 1976, p. 15). The Pool is a tidal bay-estuary located near several divisions of the Rachel Carson National Wildlife Refuge. Nonetheless, no property at or near the site has been slated for inclusion in the Refuge. Some wetland areas surrounding the Pool have been built upon. Others are threatened as housing pressures in the region increase and land around the Pool is put up for sale. Water classification of the entire Pool is SB-1. The wetlands around the Pool are in a Resource Protection District 250' back from high water.



UPPER SHEEPSCOT ESTUARY

WISCASSET 15'

SCALE 1:62500

1 0 1 2 3 4 MILES

UPPER SHEEPSCOT ESTUARY

Location

County: Lincoln
Municipality: Alna, Wiscasset, Newcastle

Present Ownership

Private

Recommendation

The Bureau of Parks and Recreation should, with the Sheepscot Valley Conservation Association and the relevant towns, undertake a study of the Sheepscot River for potential designation as a national scenic and recreational river.

Rationale Summary

The Upper Sheepscot is important habitat for waterfowl, herring, mussels, marine worms, several species of anadromous fish including salmon, alwife and shad, and plankton, the food of many other marine life forms. There are also several beds of American oysters within the Estuary on the site which are considered to be of regional to national significance as they are the northernmost beds on the United States east coast. The site is a State registered critical area.

A large portion of the site has been nominated to the National Register of Historic Places. The Sheepscot Historic District encompasses not only significant archeological prehistoric and early historic sites, but an unusually well preserved post-Colonial, Federal, and 19th century village as well. Middens excavated thus far have indicated the presence of at least four prehistoric occupations. It appears that an undisturbed Red Paint cemetery - rare in Maine - is located on the site. In short, the area provides an unusual opportunity to study well preserved components of two early, little understood Indian cultures dating 5,300-3,800 B.P.

As an especially well preserved and documented 17th century settlement, Sheepscot Farms has been described as of primary significance because of the many structures and artifacts systematic excavation would yield. The settlement was destroyed in the Indian Wars of 1676 and 1689. English settlements of this period have received little study to date. Equally as interesting is the geographically and chronologically separate 18th and 19th century Sheepscot Village which survives as an anachronism of a very different age in Maine. This settlement has been described as a cohesive, homogenous grouping of post-Colonial, Federal, Greek Revival and Italianate and Gothic Revival buildings - all in one of the most spectacular natural settings in Maine.

It has been proposed that within the next few years U.S. Route One be rerouted around Wiscasset to relieve traffic congestion in the center of the town. One alternative route would put the highway through the Upper Sheepscot Estuary. In January 1978, the Maine Department of Transportation submitted to the State Legislature a supplement to the FY 1978-79 Highway and Bridge Improvement Program which included one million dollars for the Wiscasset-Edgecomb Bridge over the Sheepscot River. It was reported that significant funding will be required in future programs to complete the project, and that the present work was part of a "continuing effort."

Several spots along the Sheepscot River are particularly scenic, including the reversing falls at Sheepscot Village. The river is also a popular canoeing area. The Sheepscot Estuary is in a heavy growth region and a new road can be expected to induce additional development. The estuary should be vigorously guarded against visual intrusions, water contamination (current classification B-2), wetland loss, and other violations. Shoreland zoning of the estuary is variable. Some areas of shoreline have been placed in Resource Protection, some in Limited Residential. The Bureau of Parks and Recreation might eventually acquire some of the important archeological sites along the Upper Sheepscot for professional excavation and historical interpretation.

For the short term, the Bureau should carefully monitor the plans of the Maine Department of Transportation for the relocation of U.S. Route One around Wiscasset to guard the integrity of the Upper Sheepscot Estuary.

For the long term conservation of the Sheepscot Valley, the river should be studied for protection under the auspices of the National Wild and Scenic River System.

100VE

32

Brixham
Upper Corners
Cem

Brixham
Lower Corners

Payneton

MacIntire
Garrison
Cem

UPPER YORK RIVER

Rogers

Frost
Hill

Scotland

Coaks
Budge

Scotland
Bridge

Beech Ridge

ELIOT

YORK
Cider

Gravel
Pits

Gravel
Pit

YORK HARBOR 7.5'



Location

County: York
Municipality: York

Present Ownership

Private

Recommendation

The Bureau of Parks and Recreation should urge the U.S. Fish and Wildlife Service to add the Upper York River area to the Rachel Carson National Wildlife Refuge if land use charges threaten.

Rationale Summary

The U. S. Fish and Wildlife Service has for some time recognized the importance of maintaining the Upper York River area in York as unspoiled wetland. However, no sites north of U.S. Route One have been included in the authorized acquisition areas for the Rachel Carson National Wildlife Refuge due to the limited level of funding available for the Refuge.

The site is bordered by paved roads on all sides and at least one pit has been developed on the site for gravel extraction. While not remote, the Upper York River is an important habitat and open space area in a region of spiraling land use pressures. Recreational use of the area includes river canoeing. State classification of the river is SB-2. Shoreland zoning places the river shoreland in a Resource Protection District. Lining this is an additional Limited Residential District.

To promote protection of the entire York River the river should be studied for inclusion as a scenic and recreational river in the National Wild and Scenic River System. Already the York Conservation Commission has prepared a river policy plan to control pier and dock construction on the river. The Bureau could work with the Conservation Commission on a thorough study of the river.



SMALL POINT 7.5

WOOD ISLAND

Location

County: Sagadahoc
Municipality: Phippsburg

Present Ownership

Private

Recommendation

The Bureau of Parks and Recreation should work with the owners of Wood Island in Phippsburg to find a method by which the scenic and other resources of the island can be protected.

Rationale Summary

Wood Island, because of its proximity to Popham Beach, is an important scenic resource. Other than the nearby Fox Islands, it is the only island in Maine of any size connected by sand bar to a public sandy beach. The island has geological and microbiological forms of scientific interest. Several species of seabirds nest on the island. Small mammals and land snails are reportedly found in an abundance unmatched on the mainland. The island is used not only by walkers and field biologists, but also by sport fishing enthusiasts hunting the stripped bass and bluefish which run up the Kennebec River.

Wood Island has been for sale for some time and there is some fear it will be sold for development. The shoreland zoning of the island would allow construction of a permanent structure. State intervention in the matter, however, could draw heavy local resistance. The Planning Board has gone on record as saying that Wood Island is "an internal matter". Public fee or easement acquisition may not be desirable at this time. Nevertheless, the Bureau should monitor plans for the island and be ready to approach the owners if changes in land use are proposed. Wood Island could be managed concurrently with Popham Beach State Park and could be an important component of a larger Popham peninsula reserve (see Recommendation 63).

Not in the near run, surely, but sooner or later it is ideas that make the difference in how people live. We are all the captives of some defunct philosopher. Yet each of us prefers to go to hell his own way. That's what the struggle is all about.

If Maine is going to hell anyway, it may as well go on its own terms. And if it is not, it will be because Mainers themselves took events in hand, did what was necessary to turn them to their advantage, and somehow built a highroad for others to emulate between the excesses of exploitation and regimentation alike.

--Richard Barringer, A
Maine Manifest, 1972

IMPLEMENTATION

The recommendations of this report certainly will not be acted upon in whole or in part instantaneously. If they are acted upon at all it will be over some period stretching into the future as interest arises and funds are available. Toward guiding any action a few notes are offered here on some of the factors affecting implementation.

LAND PROTECTION CONSIDERATIONS

The 1977 Maine Statewide Comprehensive Outdoor Recreation Plan discusses five considerations relating to the setting aside of open space areas and the provision of outdoor recreation. These are worth mentioning here as they are important considerations for any action program of land reservation in Maine.

Maine's Rural Character

Balancing the provision of recreation facilities to serve the rural areas and the urban areas is a problem common to rural States. In Maine, there is a tendency on the part of many persons (usually those living in rural areas), to generally reject the possibility that there is a deficiency of public outdoor recreation areas and facilities, and to assume that the abundance of natural resources and recreational opportunities available to rural residents are available to urban residents as well. In reality, the urban resident often does not have available the outdoor opportunities the rural citizen utilizes. The urban citizen must, to a considerably greater extent, rely upon public recreation areas and public access. Fifty-four percent of Maine's population resides in municipalities of 5,000 or more people. Many of Maine's urban areas and municipalities have deficiencies for municipal and regional parks and facilities. Maine has an opportunity now, before urban growth accelerates, to acquire lands for the future and to avoid the critical open space problems now facing the more urbanized states to the south.

Maine's Population Composition and Growth Rate

Over the last few decades, Maine's population has increased slightly, from 969 thousand residents in 1960 to 993 thousand in 1970. Largely based on population predictions prepared by the State Planning Office, it is assumed that Maine's population will continue to grow at a slow rate. It is apparent, however, that in-migration to Maine is modifying the socio-economic characteristics of the average Maine citizen. The in-migrant to Maine tends to be better educated and influenced by urban values while the out-migrant from Maine has had less formal education and rural values. If this pattern continues, it can affect the type of open space areas and outdoor recreation programs and facilities desired.

Property Taxes

In Maine, the removal of valuable land from the local property tax rolls is often a source of concern to municipalities. This

situation has been alleviated somewhat, at least in the case of state park areas, with the passage of an act by the Maine State Legislature allocating 15 percent of the revenue taken in through state park entrance fees to the municipalities in which the parks are located, in lieu of taxes.

Allocating a percentage of such monies to municipalities assumes that state parks have a negative economic impact on the areas in which they are located. A 1967 study of Lily Bay State Park in Greenville indicated that the operation of that park had a positive economic impact in the area. No other similar studies have been done, however, concerning state parks. An economic impact study of day-use state parks should be undertaken through the Bureau of Parks and Recreation in order to gain a better understanding of the impact these facilities have on the area in which they are located and the surrounding communities.

Tourism

The absence of a cohesive tourism policy in Maine can affect what the State may or may not provide in the way of outdoor recreation areas and facilities. Many states and some Canadian Provinces have tourism policies that result in the development of elaborate, resort type facilities to attract the out-of-state visitor. Many states are directly involved in the administration of downhill ski areas, family campgrounds with electric hookups, cabins for rent, and place a great emphasis on historical restoration and interpretation. Maine has taken a very conservative approach in the provision of such areas and facilities. The State does follow some guidelines, but it leaves to the private sector the development of the majority of the more elaborate recreation areas. The State should continue to monitor tourism and the role and impact of state parks and memorials ought to be given thoughtful analysis in the development of a cohesive State policy.

Energy

Maine's tourism industry, from both in-state and out-of-state visitors, is obviously very dependent upon the availability of reasonably priced transportation to and from recreation areas. All indications from the early 1970's are that transportation costs will continue to rise in the future. Like most rural States, Maine must begin to consider these increasing transportation costs in the provision of new recreation areas and programs. The distance people are willing to travel to participate in certain recreation activities may decrease as transportation costs rise. The State and Local jurisdiction should actively consider busing or other transportation alternatives to public recreation facilities. Multiple use areas accessible by low cost transportation appear to present a realistic challenge for future planning efforts.

ROLES, RESPONSIBILITIES AND FUNDS

Each level of jurisdiction and each agency or organization has specific concerns and responsibilities. In many cases there is overlap, even competition or mutual avoidance of certain

responsibilities. The following concepts outline general responsibilities.

Federal jurisdiction - protection, acquisition, development and management of land and facilities of national importance;

State jurisdiction - protection, acquisition, development and management of land and facilities of statewide importance;

County or other mid-level jurisdiction - protection, acquisition, development, and management of land and facilities of regional importance;

Municipal jurisdiction - protection, acquisition, development, and management of land facilities of local importance;

Private jurisdiction - depending on the level of concern, protection, acquisition, development, and management of land of national, statewide or local importance.

Of course, there is cooperation among jurisdictions where, for instance, the federal government provides financial assistance for state and local programs as through the Land & Water Conservation Fund.

The provision of increased open space and outdoor recreation opportunities depends to a large extent upon adequate funding at all levels. The variety of actions and the lack of detailed information make it impossible to accurately estimate the funds that would actually be needed to carry through all the recommendations of this report. Nonetheless, it is germane to cite the major funding sources through which monies are available for recreation-conservation projects in coastal Maine.

Federal

A major source of federal funds for public recreation and open space projects in Maine is the Land and Water Conservation Fund (LAWCON) administered by the Heritage Conservation and Recreation Service. The State of Maine received \$1.75 million in LAWCON monies during fiscal year 1977. Beginning in FY 1980 Maine is expected to receive approximately \$4.7 million annually due to a recent amendment to LAWCON authorizing a total national expenditure of \$900 million annually. This new level means a major increase in matching funds available to the state. In addition, LAWCON monies can be matched with revenue sharing funds under Public Law 94-488. They can also be matched with Community Development Block Grants.

The U.S. Fish and Wildlife Service has three major refuges in coastal Maine, the Rachel Carson National Wildlife Refuge in

southern Maine and the Moosehorn and Petit Manan National Wildlife Refuges in Washington County. Additions, funded through the sale of "duck stamps" will be made to the Rachel Carson Refuge to round out the 4011 acre total authorized acquisition. Further funding may be available under recent amendments to the Land and Water Conservation Fund. The Service now has authority to purchase "nationally significant wildlife ecosystems" and "unique wildlife ecosystems." Increases in authorized LAWCON monies bring the national projected funding level to \$75-80 million per year for FY 1980-89. The Service may, in the near future, acquire one or more large coastal island properties in eastern Maine to add to its refuge holdings.

The National Park Service during the 1970's, has been preparing a master plan for Acadia National Park. This process continues and is expected to include a review of proposed island acquisitions in Hancock and Knox Counties.

In recent years the Economic Development Administration has financed a number of recreation projects in Maine including a small marina facility in Jonesport. Based on 1975 expenditures, it is expected that the EDA will continue to spend about \$600,000 annually in Maine statewide on recreation projects.

The U. S. Department of Transportation, Bureau of Public Roads, has some funds available for highway related recreation projects. Recreation facilities for which there is a demonstrated need as part of a highway project are funded at up to 100 percent. The types of facilities funded include urban trail system segments.

The Bureau of Public Roads can also assist state highway department in the control of outdoor advertising, and the screening of junk yards under the Highway Beautification Act of 1965. In addition, some financing is available under the Federal Highways Act of 1973 for bikeway construction.

The Office of Coastal Zone Management has funds for three types of relevant programs. Coastal Zone Management monies can be used for (1) state regional and local planning for coastal resource conservation and development, (2) the establishment of estuarine sanctuaries, and (3) the acquisition of lands to provide access to public coastal areas, particularly beaches, and to preserve coastal islands.

While not a direct funding program, federal surplus properties should also be mentioned. Several military service branches, including the Air Force, Navy and Coast Guard, hold important pieces of real estate on the Maine coast. If and when these become available as surplus properties, the State or local governments could acquire them for recreation and open space.

State

The principal source of funds for outdoor recreation areas at the state level is the Maine Bureau of Parks and Recreation. As of November 1977, the Bureau had \$3.2 million remaining from two land acquisition bond issues and \$1.8 million from a

development bond issue approved in referendum. Much of the acquisition money will be used to purchase land inland at Bigelow Mountain under a referendum mandate approved by Maine voters in 1976. Besides these bond issue funds, the Bureau anticipates a \$25,000 legislative appropriation in matching funds during FY 1979 for community recreation projects. Finally, \$16,050 remains in a non-lapsing account available on a 50 percent matching basis to local conservation commissions for open space and recreation planning.

There are a number of considerations which affect the funds needed and available for development of unimproved properties currently held by the Bureau of Parks & Recreation. Pending litigation over the ownership of public lot grass and timber rights is one variable. If the State does not win its claim to ownership of the rights, the Bureau may be able to use the donated value of the rights as the State's share to apply for matching LAWCON monies. Another unknown factor is the cost of development of some presently undeveloped holdings. Estimates have been made for most but not all of these parcels. Third, development costs of many projects are not matched 50-50, state-federal, since some improvements are not eligible for federal reimbursement. The match is often closer to 60-40, state-federal.

All of these considerations aside, it is estimated that through 1980 the State will be able to come up with funds sufficient to match only about 40 percent of the Land & Water Conservation Fund monies allocated to Maine as potential matching funds for both state and local recreation projects.

When both acquisition and development expenditures are considered, it appears that between now and 1980 about \$4.8 million of LAWCON funds will remain unobligated. Additional money is needed to aid in meeting outdoor recreation deficiencies across the state.

Acquisition and development costs are not the only expenses required to maintain land holdings and recreation facilities. In recent years, as inflation has become of increasing concern, keeping up with operations and maintenance costs has also become more of a problem.

To finance new coastal acquisitions by the Bureau of Parks and Recreation, appropriations may be required from the Legislature or a bond referendum may have to be presented to the voters of Maine.

Aside from the Bureau of Parks and Recreation, the two state agencies with funding for land conservation and recreation are the Department of Inland Fisheries & Wildlife and the Department of Transportation.

In 1974 a \$4 million referendum was approved by voters for acquisitions by the Maine Department of Inland Fisheries and Wildlife. Justification for the bond included a ten percent proportion for coastal bird nesting island habitat. However, to date only one coastal island has been acquired from the

\$4,000,000 bond; approximately \$1.3 million remains. Some of this balance may in the future be spent for coastal wildlife habitat.

In addition to budgeting money for highway rest areas, the Maine Department of Transportation also assists in the development of bikeway projects. About \$100,000 may be expected annually for each of these programs through 1990.

Regional

In Maine there is a painful gap between the local and the state jurisdictions for recreational development and open space conservation. County governments do not have clear authority to undertake recreation projects and regional planning agencies do not hold land.

One of the few regional bodies which is authorized to acquire property is the Saco River Corridor Commission. According to the statutes creating the Commission,

The Commission may acquire conservation easements or other interests in real estate in the name of the State by gift, purchase, grant, bequest, devise or lease...

To date the Commission has neither acquired any land nor has any money been appropriated for acquisition.

There is one regional public park in Maine, Mattawamkeag Wilderness Park in Penobscot County. Although leased, administered and subsidized by the County as a regional facility, the County holds no title to any part of the park.

Local

According to the 1977 Maine Comprehensive Outdoor Recreation Plan, through 1990 communities in Maine are expected to provide approximately \$23 million for acquisition of land for outdoor recreation statewide. Local funds are provided through municipal recreation committees and/or conservation commissions.

Private

A number of private conservation organizations have ongoing land acquisition programs. These properties are acquired primarily for resource protection; recreation is incidental, or in some cases, restricted. The total financial reserves set aside for these purposes for coastal Maine is unknown. In any case, many acquisitions are the result of project fund raising drives or land donations.

New Sources

There are a number of anticipated and potential sources of funds for coastal recreation and protection. At the federal

level, 1976 amendments to the Coastal Zone Management Act authorized the Secretary of Commerce "to make 50% grants to any coastal State to acquire lands to provide access to public beaches and other public coastal areas of environmental, recreational, historical, esthetic, ecological, or cultural value, and to preserve islands." To meet these ends, an annual appropriation of \$25 million was made through FY 1980, though no money has yet been authorized.

A second possible source of federal funding for the inventory and acquisition of outstanding sites representative of our country's rich natural diversity is a proposed Natural Diversity Act. Legislation to establish a national policy and program for maintaining examples of the few relatively undisturbed ecosystems, biological communities, and rare species habitats that remain in America has been introduced into Congress. According to the bill's sponsors, "altogether the fifty states need an estimated \$10 million annually in federal assistance for data collection and program planning, and \$100 million a year for the protection of priority sites...A 70:30 ratio of funds (federal:state) should be considered." If this legislation is enacted, a substantial sum could be available for land acquisition in Maine.

At the state level there are no concrete programs on the horizon which will provide new funding. It is conceivable that registration fees for pleasure boaters could be increased since as coastal users, they depend on the continued management of coastal resources for recreational enjoyment. More likely a bond issue to fund a variety of coastal protection projects could be proposed.

Most promising perhaps is the concept of raising the real estate transfer tax from \$.55 to \$1.00 per \$500 valuation. Revenues from the increase would be dedicated for open space acquisition and recreation facility development. A bill to do just this was passed by the Maine Legislature in 1977 but was vetoed by the Governor.

PAST AND FUTURE STUDIES

In recent years several planning studies have been completed which bear directly on the concerns of this report. In putting the report together, it was found that lack of information, and in some cases, coordination, spoke to the need for other studies. Both completed and proposed studies are briefly discussed here.

Completed Plans and Studies

Some of the more important reports issued since 1970 are the following:

1. Islands of America (1970), Bureau of Outdoor Recreation.
2. National Estuary Study (1970), Fish & Wildlife Service.
3. Regional & National Demands on the Maine Coast (1970),
New England River Basin Commission,

4. National Shoreline Study (1971), U.S. Army Corps of Engineers.
5. Natural Areas Inventory of Maine (1972), Natural Resources Council of Maine.
6. Abandoned Railroads in Maine (1973), Bureau of Parks and Recreation.
7. Conservation Priorities Plan of the Coast of Maine (1973), Center for Natural Areas.
8. Maine, An Appraisal by the People (1973), State Planning Office.
9. Bicycling in Maine (1974), Bureau of Parks and Recreation.
10. Tourism in Maine: Analysis and Recommendations (1974), Maine Vacation Travel Analysis Committee.
11. Citizen Evaluation of Public Policy in the Coastal Zone (1975), State Planning Office.
12. A Preliminary Study of the Coastal Islands in the Land Use Regulation Commission's Jurisdiction (1976), Land Use Regulation Commission.
13. Maine Statewide Comprehensive Outdoor Recreation Plan (1972, 1977), Bureau of Parks and Recreation.
14. Maine Resident Recreation Use & Preference Survey (1977), Bureau of Parks and Recreation.
15. Acadia National Park Master Plan (1978), National Park Service.
16. Inventory and Study of Ocean Beaches (1978), Sea Grant Program.

This list is in no way intended to be comprehensive. It merely includes some significant recreation and conservation reports relating to coastal planning. A more complete list is presented in the References & Sources section at the end of this report.

Future Studies

It is something of a cliché that decision-makers never have as much information as they might like and so many reports end with a call for further study in this area or that. This report will not break that circuit. The fact is that, aside from indepth study of the sites identified here, there are a number of topics which stand out as requiring additional attention including boating, trails, wild and scenic rivers, visual access, estuarine sanctuaries, and open space.

The statewide comprehensive outdoor recreation plan deals with virtually all types of popular outdoor recreation. However, it

cannot deal with each of them in great detail. One activity which deserves more attention is coastal boating. This includes private power boating and canoeing as well as sailing. It also includes charter and head boats for hire for sport fishing as well as sightseeing cruise boating. Some information has been collected on the supply of facilities available. Much more needs to be learned of demand in this apparent growth industry.

Trails are another topic which deserve additional study. The analysis of trail activities in the statewide comprehensive outdoor recreation plan has shown that there are needs for marked and maintained trail systems to meet the desires of hikers, riders, nature walkers and bicyclists. Due to its outstanding natural resources, Maine is recognized as an excellent area in which to participate in land trail activities. A statewide trail system study has been proposed for 1978-79. Any such study should give serious consideration to pilot coastal bikeway trails, reclamation of abandoned coastal railways for trails and the establishment of a Kittery to Lubec coastal heritage trail.

Related to land trails are waterway trails. A third need is for further study of coastal rivers for inclusion in the National Wild and Scenic River System or as greenway projects. The Wild and Scenic River System is generally limited to rivers and streams over 25 miles (40 km) in length. While there are a number of rivers wholly or partially in the Maine coastal basin which meet this criterion, length should not be of overriding concern. The Bureau of Parks and Recreation expects to undertake a statewide wild and scenic river study in the early 1980's. All substantial rivers draining the Maine coastal basin should be screened for possible inclusion in the national system. Those which do not qualify should be studied as greenway projects by municipalities or by Regional Planning Commissions.

Although physical access to the sea is essential for many activities, often times all people need is to be able to see the ocean. Visual access, then, can be as important as physical. The Department of Transportation has provided some excellent scenic reststops along the coast. Still, much more could be done in this regard. The State could preserve and enhance this resource by mandating a program highway of vista improvement. As a start, an inventory could be undertaken of all existing and potential roadside scenic views along the coast.

While most of the sites recommended for protective action in this report are land based, a few are water sites. That is not to say that a thorough study has been made of coastal water resources. The sites included here have obvious values worthy of conservation and development. What is needed is a comprehensive study of coastal water based ecosystems. Maine appears to have some of the most productive and undisturbed estuarine systems on the entire US Atlantic seaboard. At least one or two may qualify as national estuarine sanctuaries. These should be identified and protected for future scientific study and where appropriate, recreational development.

Much mention of open space resources has been made in this report. Yet little is actually known of coastwide open space needs. The state has no clearly defined, long-term program of open space conservation for recreational use and resource protection. The inventory information presented in the Appendix is an initial step towards a complete inventory and evaluation of outdoor recreation opportunities and open space deficiencies in the entire Maine coastal area. A program of open space supply and demand analyses backed up by a fund to finance protection projects is a next logical step.

IMPLEMENTATION TECHNIQUES

There is a considerable variety of techniques to be called upon to implement the recommendations of this report. Some proposals would require simple agency action, others major financial investments, a few would need legislative action. Outlined here are some of the most widely used tools for effecting open space protection.

Acquisition

Fee simple ownership represents the highest combination of rights or interest one can hold in land. It is the soundest technique for assuring complete protection and development control. It is also the most costly. Several approaches are used to acquire land in fee:

Installment Purchase - purchaser agrees to buy a specified number of acres each year from an owner at a negotiated per acre price; allows acquisition without large initial expenditures and gives tax break to owner.

Bargain Sale - parcel is sold at less than appraised fair market value and seller can take tax deduction on difference between value and sales price.

Long Term Lease with Option to Buy - negotiation of lease price in the conditions for eventual purchase of parcel.

Donation - may include grant of life occupancy to donor, reversion on a condition subsequent or other condition.

Purchase and Leaseback - leasing of strategic acquisitions to an owner subject to certain land use restrictions.

Pre-emptive Purchase is the technique of buying parcels within a larger plot to hinder the development of adjacent parcels.

Condemnation - taking of property with compensation of fair market value for clearly defined public purpose; right of eminent domain is exercised only

if fee simple acquisition is not possible at a fair price and if owner is reluctant to sell under any circumstances.

Use and Development Rights

At times it is desirable to acquire less than full interests in land. Conservation restrictions and conservation easements each involve the restricted transfer of rights in real estate. Under Maine law a conservation restriction is a right by or on the behalf of a landowner appropriate to the retaining of land or water areas predominantly in their natural, scenic, open or wooded condition, or as fish and wildlife habitat. Conservation easements are a legal means by which a landowner can voluntarily set permanent limitations on the future use of property to protect particular natural attributes.

Voluntary agreements can be used to limit land use practices affecting private property or land under the ownership or administration of public agencies. Such agreements are effective only for achieving short-term objectives.

Transfer or Purchase of Development Rights involves the shifting of development interests in real estate from parcels tagged as suitable for conservation to others identified for development. "Certificates of value" may be sold by owners of land delineated for protection to others desiring to develop in areas zoned for development.

Cluster Development is a concept which encourages grouped housing construction designed to fit into the natural terrain with large open space areas preserved.

Purchase and Resale, the reselling of acquired land for private use subject to certain land use restrictions.

Taxation

Maine has two tax statutes which aid directly in the protection of open space and natural areas by preferential assessment. The first, the Farm Productivity and Open Space Land Law, provides for the classification of certain lands as "farmland" or as "open space land" and for the taxation of lands so classified on the basis of current use rather than on potential "highest and best" (development) use. The second statute, the Tree Growth Tax Law, allows for the current use valuation of classified forestland.

In some cases open space land can also be secured by foreclosure on tax delinquent properties. Also, the granting of conservation easements may reduce or at least check increases of real property taxes.

Too, land acquired by public agencies does not necessarily imply a full loss of tax revenues for local governments. The Bureau of Parks and Recreation, for instance, has a policy of allocating to municipalities within which it holds real estate, fifteen percent of state park and memorial entrance fee revenues. The Department of Inland Fisheries and Wildlife returns one-half of the profit from revenue yielding projects such as tree harvesting to towns within which it owns land purchased in whole or in part with federal funds. At the federal level the

National Park Service is authorized to make payments in lieu of taxes to towns and counties affected by park acquisitions. The U.S. Fish & Wildlife Service makes available to counties for roads and schools compensation based on .75 percent of the update cost of acquired land or a share of revenues from refuge holdings whichever is greater.

Zoning

While zoning by itself does not guarantee the availability of land for outdoor recreation, it is an important tool for protecting natural areas. Zoning at the local level, accompanied by a comprehensive plan, can help guide community development and aid in the setting aside of areas not suitable for intensive development. At the state level, in Maine, zoning has been used in the establishment of land use controls for unorganized regions of the state as well as for our shoreland areas 250 feet back from high water.

Several variations on the concept of zoning can be used in controlling land use including floodplain, open space, selling, compensable, agricultural, unmapped and floating zoning.

Other

In addition to acquisition, use and development rights, taxation and zoning techniques there are a variety of methods which can be used to protect land.

Community Land Trusts are nongovernmental, nonprofit corporations formed to hold land as a community resource in perpetuity subject to the conditions written into the trust. The trust leaves land to users who have explicit rights to use the land to build their own community.

Conservation Land Trusts are nonprofit corporations organized to accept or acquire parcels of land for interim protection of a resource area such as a watershed. Although nonprofit, conservation trusts must still pay property taxes.

Land Banking involves the purchase of land at going market prices and placing it into a public or private nonprofit "space-bank" as an approach for planning the growth of an area and then leasing or selling the land to private interest who agree to use it consistent with land bank policies.

Mutual covenants can be an effective way for neighboring landowners to control land use. The landowners sign an agreement containing mutually beneficial protective covenants. The agreement is recorded in the Registry of Deeds and is binding upon future as well as current owners of the land.

While many of the techniques mentioned here are available to local governments in Maine, there has historically been a general reluctance on the community level to implement land use controls.

This despite the fact that both private and public interests in private property exist, and that the real enemy of freedom and private property rights is unrestricted land use. What Delogn and Gregory wrote in Planning & Law in Maine in 1969 is already coming to pass; namely, that either the tools of effective land use control must be more effectively used by local governments than in the recent past, or the use of these tools will shift to the state and federal governmental levels.

Some hard decisions are going to have to be made regarding the future of the fragile resources in and near the coastal area of the State of Maine. And the condition of these natural resources and the people they are or ought to have been supporting in the year 2000 is going to be largely, if not wholly, determined by what is decided in the present.

--Jym St. Pierre, "A
Look at the Future of
Maine's Marine Resources", 1975

PROGRAM RECOMMENDATIONS

1. The Department of Conservation should, in cooperation with the State Planning Office and other relevant agencies, take an active, initiating role in the managed conservation of open space sites and natural features of statewide and regional significance through the implementation of a clearly defined coastal open space and resource conservation program.
2. A state level open space conservation fund should be established expressly for the purpose of providing monies to State agencies and on a matching basis to local and regional bodies and perhaps some private charitable organizations for the protection of coastal open space areas.
3. The establishment of a Maine Coastal Island Reserve System should be considered to conserve the islands for recreational and other use. (See pages 59 - 60 for additional island recommendations)
4. The imposition of an interim moratorium on construction on all coastal beach systems and the undertaking of a comprehensive review of beach erosion and coastal flood plain management should be considered. (See pages 56 - 58 for additional recommendations for improving beach use and conservation)
5. The State Planning Office should undertake a study of estuaries on the Maine coast for potential designation as marine sanctuaries.
6. The Bureau of Parks and Recreation should explore opportunities for expanding the use of cooperative agreements with recreation and conservation organizations to further mutual objectives.
7. If the Bureau of Parks and Recreation provides additional coastal camping sites it should consider concentrating on primitive facilities in the southern and mid-coastal regions.
8. The Bureau of Parks and Recreation should study the establishment of a private park certification program.
9. The Bureau of Parks and Recreation should undertake a study of potential wild, scenic and recreational rivers in the Maine coastal basin.
10. The Bureau of Parks and Recreation should take a leading role in the establishment of a Maine Coast Heritage Trail.
11. The Bureau of Parks and Recreation should explore the use of abandoned railway rights-of-way as demonstration trails.
12. The Bureau of Parks and Recreation should explore with the Maine Department of Transportation the construction of demonstration

bikeways within and connecting state parks, starting with a bicycle path connecting downtown Portland with Two Lights, Crescent Beach and Scarborough Beach State Parks.

13. The Bureau of Parks and Recreation should urge the Maine Department of Transportation to undertake a study of scenic coastal highways.

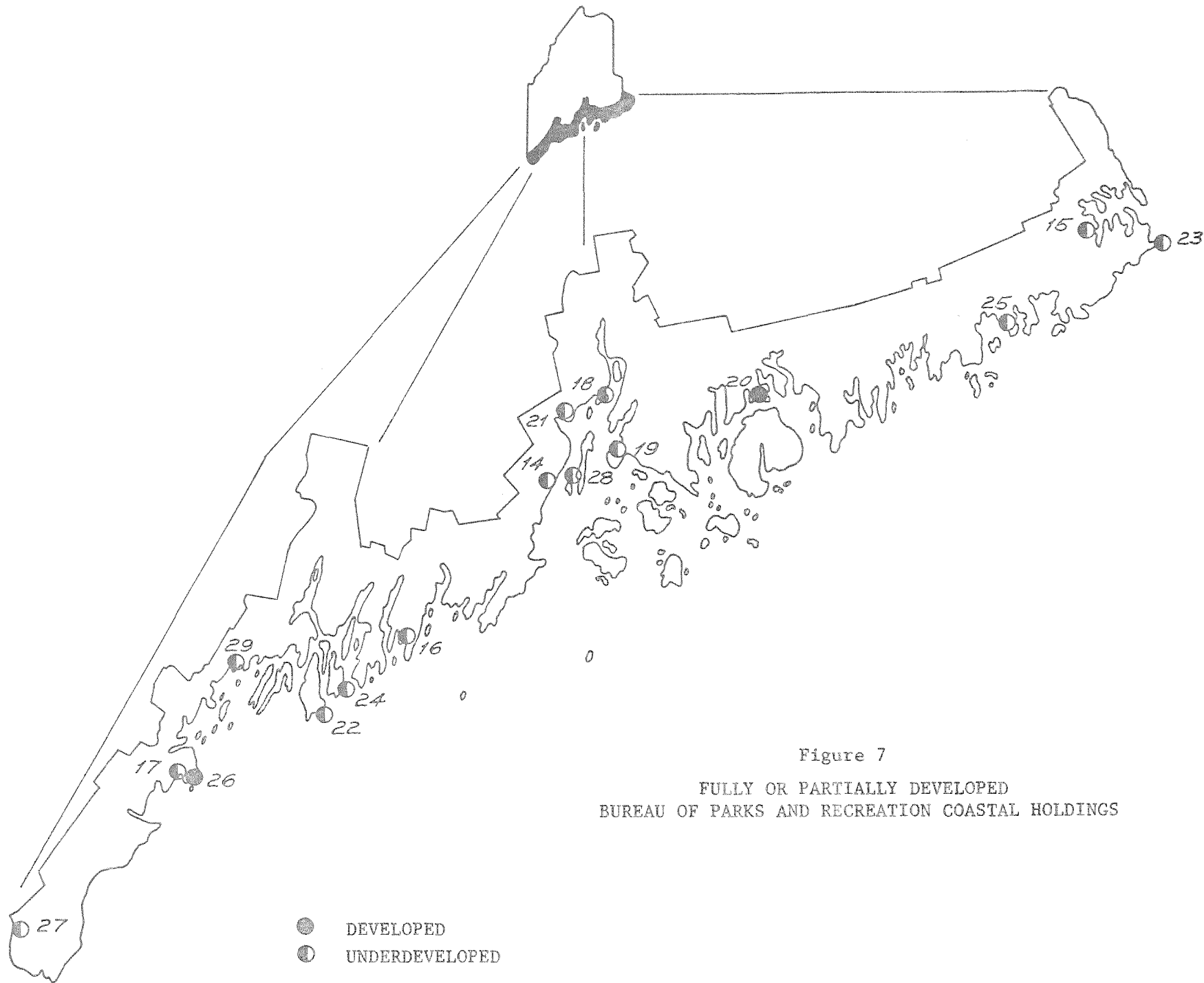


Figure 7
FULLY OR PARTIALLY DEVELOPED
BUREAU OF PARKS AND RECREATION COASTAL HOLDINGS

BUREAU OF PARKS AND RECREATION DEVELOPED COASTAL HOLDINGS

The Bureau of Parks and Recreation should consider the following actions regarding its fully or partially developed coastal holdings:

<u>Number</u>	<u>Site</u>	<u>Unit</u>	<u>Suggested Action</u>
14	Camden Hills State Park	Southern D	Establish pack-in campsites
15	Cobscook Bay State Park	Eastern E	Continue operation
16	Colonial Pemaquid	Southern D	Intensify diggings
17	Crescent Beach State Park	Southern B	Continue operation
18	Fort Point State Park	Southern D	Develop trails
19	Holbrook Island Sanctuary	Eastern W	Improve picnic sites and parking
20	Lamoine State Park	Eastern W	Continue operation
21	Moose Point State Park	Southern D	Develop trails
22	Popham Beach State Park	Southern C	Solve parking problem
23	Quoddy Head State Park	Eastern E	Expand trails
24	Reid State Park	Southern C	Develop trails
25	Roque Bluffs State Park	Eastern E	Develop trails
26	Two Lights State Park	Southern B	Continue operation
27	Vaughn Woods Memorial Park	Southern B	Continue operation
28	Warren Island State Park	Southern D	Build shelters, provide boat transportation
29	Wolf Neck State Park	Southern A	Expand trails

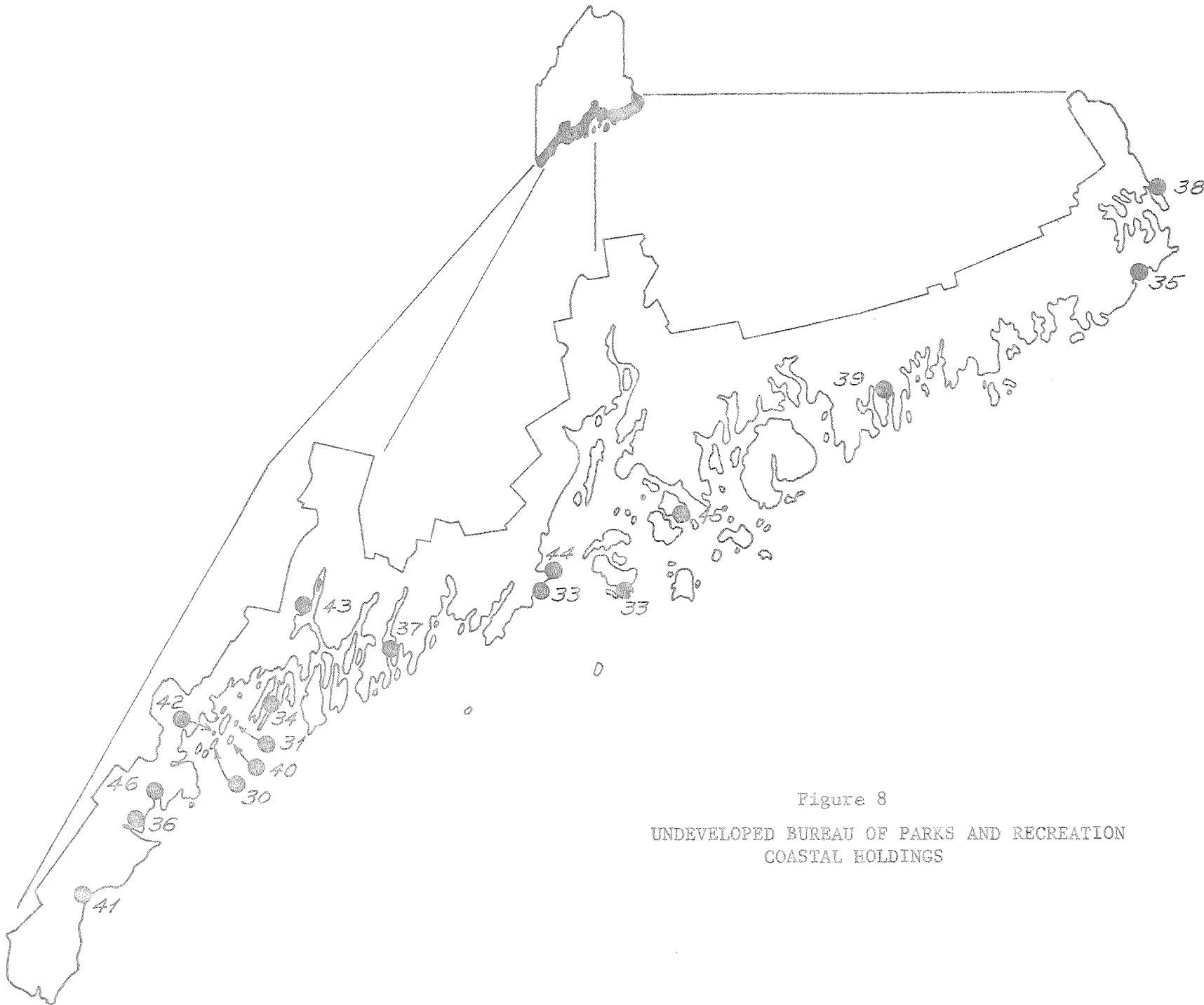


Figure 8
UNDEVELOPED BUREAU OF PARKS AND RECREATION
COASTAL HOLDINGS

BUREAU OF PARKS AND RECREATION UNDEVELOPED COASTAL HOLDINGS

The Bureau of Parks and Recreation should consider the following actions regarding its undeveloped coastal holdings:

<u>Number</u>	<u>Site</u>	<u>Unit</u>	<u>Suggested Action</u>
30	Andrews Beach	Southern B	Develop facilities
31	Bangs Island	Southern A	Transfer to Fish & Wildlife
32	Birch Point Beach	Southern D	Develop as day use regional park
33	Carvers Island	Southern D	Transfer to Fish & Wildlife
34	Clark Cove	Southern C	Transfer to local or regional
35	Eastern Head	Eastern E	Study appropriate development
36	Ferry Beach	Southern B	Decide on development
37	Fort Island	Southern C	Develop as funds become available
38	Gleason Point	Eastern E	Hold on to
39	Good's Point	Eastern E	Transfer or lease
40	Jewell Island	Southern B	Develop for day use and camping
41	Laudholm Farm	Southern B	Develop as day use state park
42	Little Chebeague Island	Southern B	Develop as day use state park
43	Merrymeeting Bay	Southern C	Establish nature center
44	Owls Head Light	Southern D	Improve access
45	Pickering Cove	Eastern W	Develop as funds become available
46	Scarborough River	Southern B	Consummate leasing

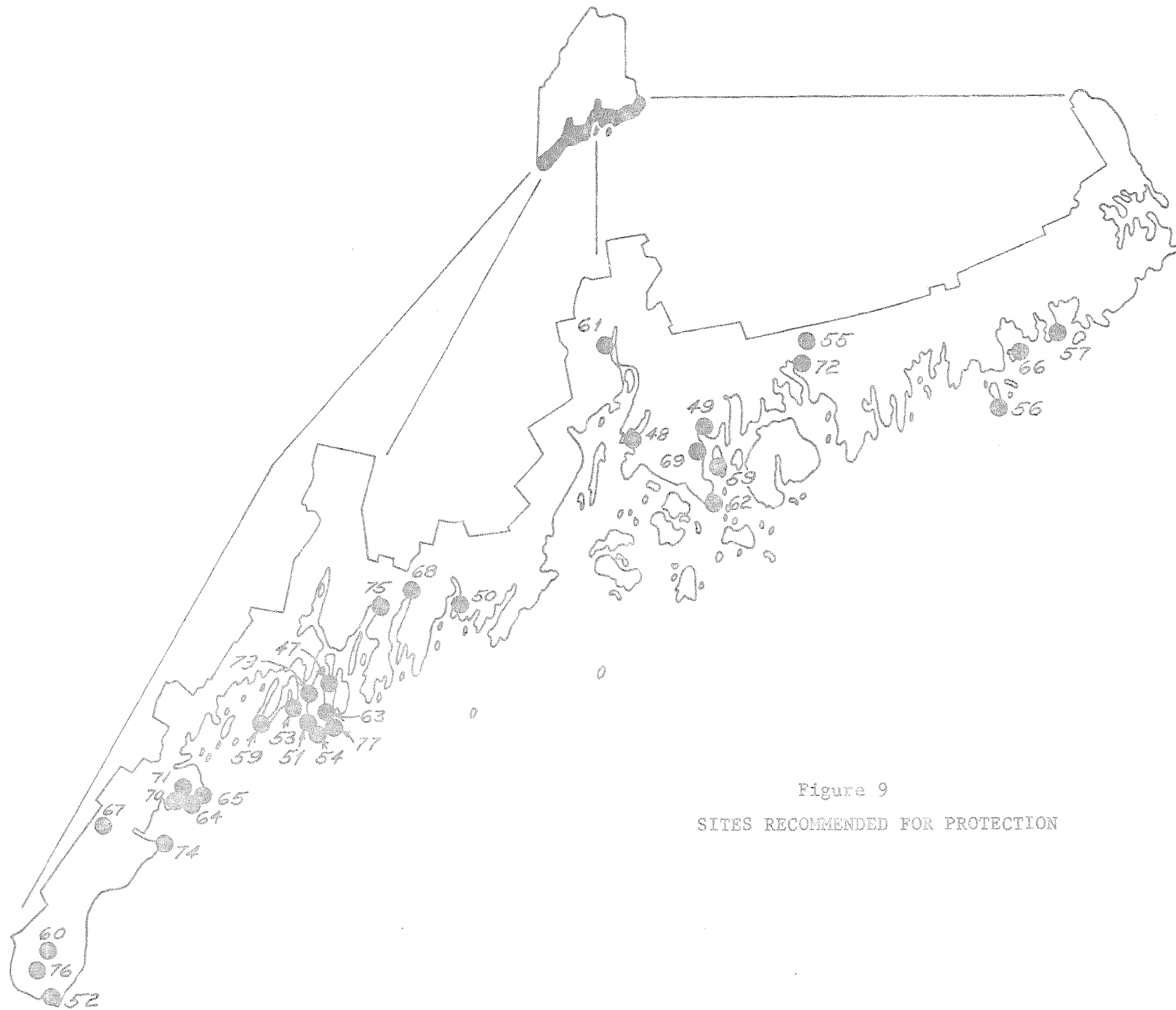


Figure 9
SITES RECOMMENDED FOR PROTECTION

COASTAL SITES DESERVING PROTECTION

The Bureau of Parks and Recreation should work to protect the following coastal sites:

<u>No.</u>	<u>Site</u>	<u>Unit</u>	<u>Suggested Action</u>	<u>Proposed Management Agency</u>
47	Arrowsic	Southern/C	Acquisition	BPR, IFW
48	Bagaduce River	Eastern/W	Study as Scenic River	BPR, RPC, Towns
49	Blue Hill	Eastern/W	Insure summit access	BPR
50	Boot Neck	Southern/D	Acquisition	BPR
51	Cape Small	Southern/C	Study	BPR, Others
52	Chauncy Creek	Southern/B	Acquisition	FWS
53	East Cundy Pt.	Southern/C	Acquisition	BPR
54	Fox Islands	Southern/C	Acquisition if threatened	BPR
55	Gouldsboro Hills	Eastern/W	Study	BPR, Others
56	Great Wass Island	Eastern/E	Acquisition	FWS
57	Howard Cove Beach	Eastern/E	Acquisition if threatened	BPR
58	Lands End	Southern/C	Acquisition	BPR
59	Long Island	Eastern/W	Study acquisition	NPS
60	Mt. Agamenticus	Southern/B	Study	BPR, Others
61	Mt. Waldo	Southern/D	Acquisition if threatened	BPR
62	Naskeag Point	Eastern/W	Acquisition	BPR
63	Popham Peninsula	Southern/C	Study	BPR, RPP, Towns
64	Ram Island Farm	Southern/B	Protection	BPR, SPO
65	Richmond Island	Southern/B	Study	BPR, Others
66	Roque Island	Eastern/E	Acquisition if threatened	BPR, Others
67	Saco Heath	Southern/B	Study	C/C
68	Salt Bay	Southern/D	Estuarine Sanctuary	SPO, RPC, Towns

<u>No.</u>	<u>Site</u>	<u>Unit</u>	<u>Suggested Action</u>	<u>Proposed Management Agency</u>
69	Salt Pond	Eastern/W	Conservation Easements	BPR, IFW
70	Scarborough Beach	Southern/B	Acquisition	BPR
71	Scarborough Ledges	Southern/B	Study	C/C
72	Taunton Bay	Eastern/W	Estuarine Sanctuary	SPO, RPC, Towns
73	The Basin	Southern/C	Study	BPR, Others
74	The Pool	Southern/B	Acquisition	FWS
75	Upper Sheepscot	Southern/D	Study as scenic river	BPR
76	Upper York River	Southern/B	Acquisition	FWS
77	Wood Island	Southern/C	Study	BPR, Others

KEY
Management Agency

BPR - Bureau of Parks & Recreation	NPS - National Park Service
C/C - Conservation Commission	RPC - Regional Planning Commission
FWS - US Fish & Wildlife Service	SPO - State Planning Office
IFW - Dept. of Inland Fisheries & Wildlife	

REFERENCES AND SOURCES

REFERENCES AND SOURCES

- Appalachian Mountain Club. "AMC Lands in Maine." 1978
(unpublished information).
- Bangor, Maine Comprehensive Plan. 1969
- Bucheister, Carl W. Prelude in Maine Paradise. N.Y.: Viking Press, 1972.
- Bureau of Outdoor Recreation, North Atlantic Regional Water Resources Study: Appendix M, Outdoor Recreation. United States Department of Interior, May, 1972.
- _____. The 1970 Survey of Outdoor Recreation Activities. United States Department of Interior. Feb. 1972.
- _____. Islands of America. United States Department of the Interior, 1970.
- _____. Island Study, Phase III Report on Casco Bay, Maine. United States Department of the Interior, 1967.
- _____. Island Study, Phase III, Vinalhaven, Maine. USDI, 1967.
- _____. The 1965 Survey of Outdoor Recreation Activities. United States Department of the Interior, Oct. 1967.
- Bureau of Sport Fisheries and Wildlife. National Estuary Study. United States Department of the Interior, January, 1970.
- California Department of Parks and Recreation. California Coastline Preservation and Recreation Plan. August, 1971.
- Campobello Island Provincial Park Master Plan, July, 1974.
- Carson, Rachel. The Edge of The Sea. Boston: Houghton Mifflin. 1955.
- Center for Natural Areas. A Preliminary Listing of Noteworthy Natural Features in Maine. South Gardiner, Maine: prepared for the Maine Critical Areas Program, June, 1976.
- _____. The Natural Regions of Maine (Draft). South Gardiner, Maine: prepared for the Maine Critical Areas Program, June, 1976.
- Commission on Maine Science, Engineering and Resources. Our Nation and the Sea. 1969.
- Community Planning Service. Open Space Plan: A Report prepared for the Bath/Brunswick Regional Planning Commission. March, 1973.

- Comparative Economics of Development and Conservation, The.
Prepared by the Allagash Environmental Institute and Maine
Association of Conservation Commissions. 1977.
- Corps of Engineers. National Shoreline Study, North Atlantic
Region. United States Army, 1971.
- Davis, R.B. Spruce Fir Forest of the Coast of Maine. Ecol.
Mono. 36:79.
- Darnell, Reyneat M, et.al. Impacts of Construction Activities
in Wetlands of the United States. Prepared by the Tereco
Corporation for the U.S. Environmental Protection Agency.
April, 1976.
- Ducsik, Dennis. Shoreline for the Public. Cambridge: The MIT
Press, 1974.
- _____. Teaching Coastal Zone Management. Cambridge: The
MIT Press, 1974.
- Dickson, William. Recreation Element of the Kittery Comprehen-
sive Plan. Prepared for the Kittery, Maine Planning Board.
Nov. 1966.
- Eckbo, Dean, Austin & Williams. State Open Space Conservation
Program for California. Prepared for the California Legis-
lature Joint Committee on Open Space Lands. April, 1972.
- Erickson, R.R. An Analysis of Maine/Maritime Vacation Travel.
Maine Department of Commerce and Industry, July, 1973.
- Fish and Wildlife Service. National Wildlife Refuges in the
Northeast. United States Department of the Interior.
August, 1975.
- Frankel, Moses M. Law of Seashore, Waters and Water Courses:
Maine and Massachusetts. 1969.
- Greater Portland Council of Governments. Open Space and Rec-
reation Plan. June, 1972.
- Greater Portland Regional Planning Commission. Regional Parks.
1965.
- Hendler, Bruce. Maine's Coast: Special Consideration for the
Municipal Planning Process. Prepared for the Maine State
Planning Office. 1976.
- Henry, Harriet Putnam. Coastal Zone Management in Maine: A
Legal Perspective: Maine State Planning Office, December,
1973.
- Hunter, Malcolm L. Maine Ecosystems. South Gardiner, Maine:
Center for Natural Areas. August, 1976.

- James W. Sewall Co. Comprehensive Plan for Biddeford, Maine. 1963.
- Jorgensen, Neils. A Guide to New England's Landscape. Barre, Massachusetts: Barre Publishers, 1971.
- King, Ron. Open Space Protection Techniques. Society for the Protection of New Hampshire Forests, 1974.
- Land Development Plan, Portland, Maine. 1974.
- Land Use Consultants, Inc. Recreation Master Plan Town of Searsport, Maine. November, 1975.
- Lyman, F.W., et.al. The Sheepscot River Watershed: A Resource Analysis. Prepared by the Regional Field Service, Harvard University, Graduate School of Design, Department of Landscape Architecture. June, 1974.
- Maine Audubon Society. Properties of the Maine Audubon Society. March, 1977.
- Maine Bureau of Forestry. Town Owned Land Information of Organized Towns - Town Owned and Water Company Land. Department of Conservation. April, 1977. (unpublished).
- Maine Bureau of Parks and Recreation. Maine Comprehensive Outdoor Recreation Plan. Department of Conservation. July, 1977.
- _____. Draft Maine State Parks System Plan. Department of Conservation. 1977 (unpublished).
- _____. Municipal Recreation Inventory of Organized Towns of 2,500 Population or More. Department of Conservation. 1977 (unpublished).
- _____. Public Facilities For Boats Plan. Department of Conservation. January, 1976.
- _____. 1975 Visitor Use Survey: Day Use State Parks and Coastal Municipal Beaches from Portland to Kittery. Department of Conservation. September, 1975.
- _____. 1975 Coastal Beach Analyses-Kittery to Portland. May, 1975.
- Maine Bureau of Taxation. "1976 Municipal Valuation Return Part IV Land Classification" (Farm Land and Open Space Land). Department of Finance and Administration. June, 1977. (unpublished).
- _____. "1971 Municipal Valuation Return Part III Tree Growth". Department of Finance and Administration. June, 1977 (unpublished).

- Maine Coast Heritage Trust. Conservation Easements Granted.
Updated to 1978. (unpublished).
- Maine Coastal Islands Workshop: Summary of Proceedings. Feb. 1975.
- Maine Coastal Planning Group. An Introduction to the Maine Coastal Plan. November, 1974.
- _____. The Penobscot Bay Resource Plan plus Appendix.
August, 1972.
- _____. Maine Coastal Development Plan Phase I Report.
June, 1970.
- Maine Department of Inland Fisheries and Wildlife. Land Owned by the Department of Inland Fisheries and Wildlife. Updated to February, 1978.
- _____. Twenty-Third Biennial Revision of the Inland Fisheries and Wildlife Laws.
- Maine Department of Parks and Recreation. Abandoned Railroads In Maine, their potential for trail use. with the assistance of the Massachusetts Audubon Society. September, 1973.
- _____. 1972 Maine Statewide Comprehensive Outdoor Recreation Plan. January, 1972.
- _____. Camping Survey Recap. 1972.
- Maine Land Use Regulation Commission. Comprehensive Land Use Plan for the Plantations and Unorganized Townships of the State of Maine. Department of Conservation. September, 1976.
- _____. A Preliminary Study of the Coastal Islands in the Land Use Regulation Commission's Jurisdiction. April, 1976.
- Maine State Park and Recreation Commission. 1971 Boating Plan. Waterways Division. 1971.
- _____. Outdoor Recreation For Maine. in cooperation with the University of Maine. November, 1966.
- Maine State Planning Office. Excluded (Coastal Area) Federal Lands. January, 1977 (unpublished).
- _____. Position Papers Submitted for the Maine Coastal Conservation Conference. September, 1976 (unpublished).
- _____. Maine Coastal Resources Renewal plus Appendix. 1971.
- Maine Vacation Travel Analysis Committee. Tourism in Maine: Analysis and Recommendations. prepared by Northeast Markets, Inc., Arthur D. Little, Inc., and Wm. R. Farthergill, May, 1974.

- Mandell, L., A. Johnson, and R. Beard. A Study of the Impact of Acadia National Park on Mt. Desert Island. Prepared by the Social Science Research Institute of the University of Maine at Orono for the Maine State Planning Office. 1974.
- McKee, John. "Coastal Development: Cost Benefit Models" Reprint from Maine Townsman (July, 1969).
- Monks, John Peabody. History of Roque Island, Maine. Diana Whitehill Laing (ed). Boston: The Colonial Society of Massachusetts, 1964.
- National Audubon Society. National Audubon Society Sanctuaries in Maine. Updated to 1978.
- National Park Service. Draft Master Plan: Acadia National Park. United States Department of Interior, May, 1976.
- _____. Decisions Paper: Master Plan. United States Department of the Interior. June, 1977.
- _____. Draft Environmental Statement: Acadia National Park. United States Department of the Interior. 1976.
- _____. Draft Master Plan: Acadia National Park. United States Department of Interior. July, 1972.
- _____. Acadia National Park, A Master Plan Proposal. United States Department of Interior. May, 1971.
- _____. Parks for America. United States Department of the Interior. 1964.
- _____. Our Vanishing Shoreline. United States Department of Interior. 1955.
- National Ocean Survey. United States Coast Pilot I: Atlantic Coast Eastport to Cape Cod. United States Department of Commerce, NOAA, published annually.
- Nature Conservancy, The. Preserves of the Nature Conservancy in Maine. Maine Chapter. 1978.
- New England River Basins Commission. A Comprehensive Water and Related Land Resource Planning Program for the Maine-New Hampshire Coastal Basin. June, 1973.
- New England River Basins Commission. Regional and National Demands on the Maine Coastal Zone. January, 1971.
- Northeast Markets, Inc. Maine, An Appraisal By The People. Prepared for the Maine State Planning Office. September, 1973.

- Office of Coastal Zone Management. Coastal Recreation: A Handbook for Planners and Managers. United States Department of Commerce, National Oceanic & Atmospheric Administration, January, 1976.
- O'Leary, Wayne. Planning for the Maine Coast: The Historical Background. Prepared for the State Planning Office, 1974. (unpublished).
- Outdoor Recreation Study Team, University of Maine. Outdoor Recreation In Maine. a report to the Governor's Advisory Council on Outdoor Recreation and the Maine State Park and Recreation Commission. May, 1966.
- _____. Outdoor Recreation In Maine. a study of the supply of and the demand for outdoor recreation. (Summary Report). August, 1966.
- Parks, Richard B. Public and Private Rights to Maine Tidal Waters, Maine Fish and Game. (Summer, 1967)
- Portland Council of Governments. Parks and Open Space Report. no date.
- Public Affairs Research Center. The Economic Importance of Recreation Along the Maine Coast. Prepared for the Maine State Planning Office. February, 1971.
- Public Investment Plan. Recreation Component (Cycle 4) Maine State Planning Office, 1971.
- Reed and D'Andrea. Merrymeeting Bay. South Gardiner, Maine: prepared for Maine Department of Conservation, December, 1975.
- _____. Salt Marsh Relocation Restoration in Maine. South Gardiner, Maine. Prepared for the Maine Department of Conservation, 1974.
- _____. Conservation Priorities Plan of the Coast of Maine. South Gardiner, Maine prepared under the auspices of the Smithsonian Institutions Center for Natural Areas, September, 1973.
- _____. Natural Areas in Maine. South Gardiner, Maine: prepared for the Natural Resources Council of Maine, 1972.
- Report of the Group Work and Recreation Task Force. Portland: United Way, Inc. July, 1975.
- Report of the Governor's Task Force on Energy, Heavy Industry, and the Maine Coast. September, 1972.

Saltonstall, Richard Jr. Maine Pilgrimage. Boston: Little, Brown & Company. 1974.

Simmons, Melvin H. Report on Island Titles Along the Coast of Maine. (no date).

Social Science Research Institute. Citizen Evaluation of Public Policy in the Coastal Zone. Prepared for Maine State Planning Office, May, 1975.

Socioeconomic and Environmental Inventory of the North Atlantic. Prepared by TRIGOM for the U.S. Bureau of Land Management,

Soil Conservation Service; Resource Conservation and Development Project. Time & Tide: Program of Action. United States Department of Agriculture. March, 1974.

_____. Threshold to Maine: RC & D Plan. United States Department of Agriculture. June, 1970.

St. Pierre, James A. "A Look at the Future of Maine's Marine Resources" Orono, Maine: University of Maine. May, 1975. (unpublished).

Stelling, Lord-Wood & Van Swetendael. The Area: Penobscot Bay-Mt. Desert. Prepared for Department of Economic Development. November, 1962.

_____. General Development Plan, Pen Bay-Mt. Desert Region. November, 1962.

Technical Planning Associates. Regional Plan for Recreational Open Space. Portland. Prepared for the Greater Portland Regional Planning Commission, March, 1967.

_____. Report on the Proposed Acadia Resort Development. Prepared for the United States Department of Commerce, Economic Development Administration, September, 1965.

"Third Interim Report of the Special Commission Established to Make an Investigation and Study Relative to the Management, Operation and Accessibility of Public Beaches Along the Sea Coast and Any Other Related Matters." (Massachusetts House No. 6611) August 21, 1975.

United States Department of Transportation. Recreation Access Study. 1975.

Waite, G. Graham. "Public Rights in Maine Waters." Maine Law Review. Vol. 17, p. 161. 1965.

Waterway Guide 77 - Northern Edition, Annapolis, Maryland: Marine Annuals, Inc., published annually.

York City Regional Planning Commission: Progress Report 1968.

_____, Progress Report 1967.

ADDENDUM

Bureau of Outdoor Recreation. Protecting Nature's Estate: Techniques for Saving Land. USDI, 1975.

Delogn, O.E. and D.D. Gregory. Planning and Law in Maine. University of Maine, Agricultural Experiment Station, 1969.

Governor's Advisory Committee on Coastal Development and Conservations. State of Maine: Travel Development Study. Prepared by Economics Research Associates, Boston, 1978.

_____. Where Should Heavy Industry Be Sited in Coastal Maine? Prepared by Maine Department of Conservation and Maine Office of Energy Resources, 1978.

_____. Cumulative Impact of Incremental Development on the Maine Coast. Prepared by Land Use Consultants, Inc., Portland, 1978.

Kline, Elizabeth. Protecting Open Space: A Guide to Selected Protection Techniques. Concord, N.H.: Society for the Protection of New Hampshire Forests, 1975.

Nature Conservancy, The. San Juan County, Washington, Inventory of Natural Areas on Private Lands. Portland, Oregon, 1975.

Nelson, Bruce W. and L. Kenneth Fink, Jr. Geological and Botanical Features of Sand Beach Systems in Maine. Prepared for the Maine Critical Areas Program, March 1978.

New Hampshire Office of Comprehensive Planning. Wild, Scenic and Recreational Rivers for New Hampshire. 1977.

Milne, Janet E. The Landowner's Options: a guide to the voluntary protection of land in Maine. Maine Critical Areas Program and Maine Coast Heritage Trust, 1977.

Peskin, Sarah. Guiding Growth and Change. Lincoln, MA: Massachusetts Audubon Society, 1976.

Ratcliffe, D.A. (ed). A Nature Conservation Review. Cambridge: Cambridge University Press, 1977.

Redlich, Susan. Guiding Growth. Concord, N.H.: Society for the Protection of New Hampshire Forests, 1974.

Siehl, George H. Recreation and the Coastal Zone. Congressional Research Service, Library of Congress, 1977.

Stewardship: Modern methods of land preservation used by "good steward" landowners. New York: Open Space Institute, 1965.

"Techniques for Preserving Open Space." Harvard Law Review, 75 (1972).

Center for Resource Studies. The Maine Coast, Prospects and Perspectives. Brunswick: Bowdoin College, 1967.

Maine Law Affecting Marine Resources. Vol. I-V. Prepared under the joint sponsorship of the University of Maine School of Law and the National Science Foundation. 1969.

Shoreline Recreation Resources of the United States. Prepared by the George Washington University for the Outdoor Recreation Resources Review Commission. 1962.

St. Pierre, James A. "Countryside Recreation and Conservation in Great Britain." February 1978.

_____. Shoreland Zoning in Maine: one perspective. Orono: University of Maine, ARE 267, September 1975.

Maine Bureau of Public Lands. A Management Plan for the Unregistered Coastal Islands of Maine. Prepared by Philip W. Conkling and Barry S. Timson. April 1978.