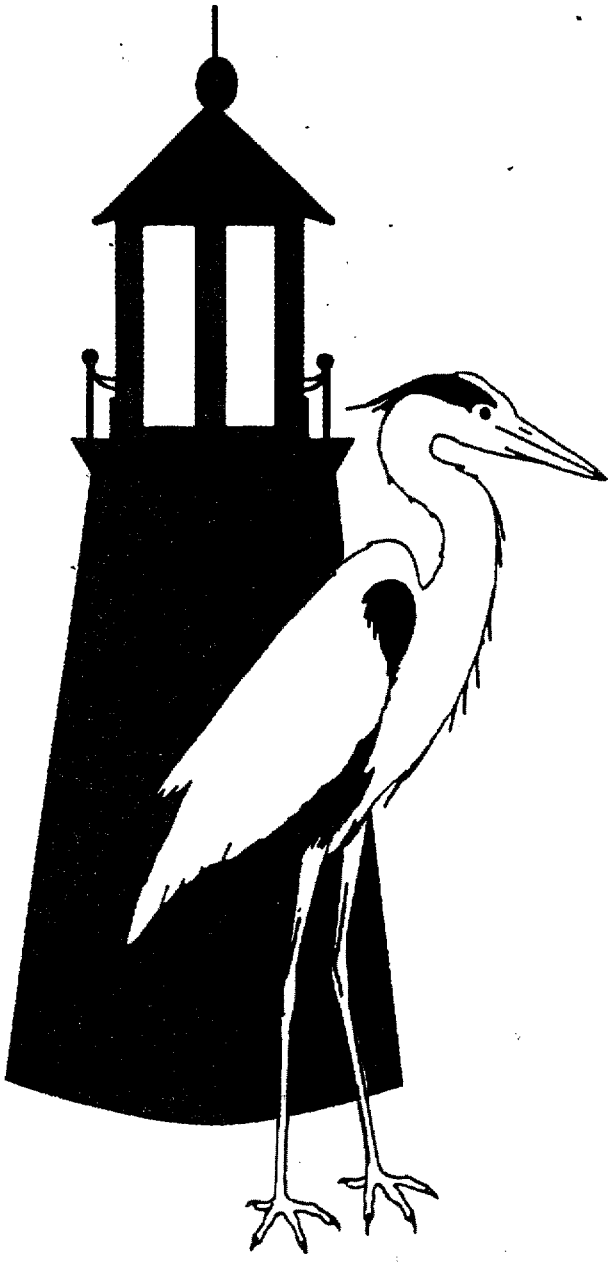

# STATE OF GEORGIA

# COASTAL MANAGEMENT PROGRAM and

# DRAFT ENVIRONMENTAL IMPACT STATEMENT

## August 1997

Prepared By:

National Oceanic and Atmospheric Administration
Office of Ocean and Coastal Resource Management

Georgia Department of Natural Resources
Coastal Resources Division

**UNITED STATES DEPARTMENT OF COMMERCE**
**Office of the Under Secretary for**
**Oceans and Atmosphere**
Washington, D.C. 20230

AUG 28 1997

Dear Reviewer:

In accordance with the provisions of Section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA), we enclose for your review and consideration the Georgia Coastal Management Program Document/Draft Environmental Impact Statement (P/DEIS) on the approval of the Georgia Coastal Management Program by the National Oceanic and Atmospheric Administration (NOAA), pursuant to the Federal Coastal Zone Management Act of 1972, as amended (CZMA).

This P/DEIS is prepared pursuant to NEPA to assess the environmental impacts associated with NOAA approval of the Georgia Coastal Management Program (GCMP). The P/DEIS contains an overview of the GCMP and describes how it meets the requirements of the CZMA (Part I), a detailed description of the GCMP (Part II), and expected environmental impacts associated with approving, delaying, or denying approval of the program (Part III). Also, this P/DEIS will form the basis for the Final Environmental Impact Statement that NOAA will prepare.

Any written comments you may have should be submitted to the responsible official identified below by October 20, 1997. Also, one copy of your comments should be sent to me in Room 5805, PSP, U.S. Department of Commerce, Washington, D.C. 20230. A public hearing on this DEIS is scheduled for September 24, 1997 at 7:00 P.M. at the Holiday Inn at the junction of Rt. 17 and I-95 in Richmond Hill, Georgia.

RESPONSIBLE PERSON
Joseph A. Uravitch
Chief, Coastal Programs Division
SSMC4, Room 11537
1305 East-West Highway
Silver Spring, MD 20910
(301) 713-3155, extension 195

For additional information on this document, please contact Joshua Lott at (301) 713-3117, extension 178.

Sincerely,

for Susan B. Fruchter
Acting NEPA Coordinator

Enclosure

**United States Department of Commerce**

# Combined Coastal Management Program and Draft Environmental Impact Statement for the State of Georgia

**August 1997**

*Prepared by:*

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National Oceanic and Atmospheric Administration
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*The preparation of this publication was financed by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration through award #NA67OZ0310 under the Coastal Zone Management Act of 1972, as amended.*

## ABSTRACT

DESIGNATION: Draft Environmental Impact Statement

TITLE: Proposed Federal Approval of the Georgia Coastal Management Program

ABSTRACT: The State of Georgia has submitted its Coastal Management Program to the Office of Ocean and Coastal Resource Management for approval pursuant to section 306 of the Federal Coastal Zone Management Act of 1972, as amended (CZMA), 16 U.S.C. §§ 1451 *et seq.* Approval would allow program administrative grants to be awarded to the state and would require that Federal actions be consistent with the program. This document includes a copy of the program, which is a comprehensive management program for coastal land and water use activities. It consists of numerous policies on diverse management issues which are administered under Georgia laws and is the culmination of several years of program development. The Georgia Coastal Management Program promotes the beneficial use of coastal resources, prevents their impairment, and manages major activities that substantially affect numerous resources. The program will enhance decision-making processes used for determining the appropriateness of actions in the coastal area.

Approval and implementation of the program will enhance governance of Georgia's coastal land and water uses according to the coastal policies and standards contained in Georgia's statutes, authorities and rules. Federal alternatives to program approval include delaying or denying approval if certain requirements of the Coastal Zone Management Act have not been met. The state could modify parts of the program or withdraw its application for Federal approval if either of the above Federal alternatives results from circulation of this document.

APPLICANT: State of Georgia, Department of Natural Resources

LEAD AGENCY: U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Office of Ocean and Coastal Resource Management

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| COMMENTS: | Comments on the Draft Environmental Impact Statement are due to NOAA 45 days after the date of publication. |

## NOTE TO READERS

The National Environmental Policy Act (NEPA) requires that an environmental impact statement be prepared as part of the review and approval process by Federal government agencies of major actions which may significantly affect the quality of the human environment. The Federal action contemplated is approval of the Georgia Coastal Management Program under section 306 of the Federal Coastal Zone Management Act of 1972, as amended (CZMA). It is the general policy of the Federal Office of Ocean and Coastal Resource Management (OCRM) to issue combined environmental impact statements and program documents.

Part I of this Draft Environmental Impact Statement (DEIS) was prepared jointly by the Office of Ocean and Coastal Resource Management and the State of Georgia, and provides summary information concerning the Georgia Coastal Management Program (GCMP), including how the state has addressed the requirements of the CZMA. Part II of the DEIS is a description of Georgia's Coastal Management Program and was prepared by the state. It has been reviewed by OCRM and is relied upon as a description of the proposed action for purposes of the NEPA. Part III fulfills the remaining NEPA requirements for a DEIS and was prepared by the Office of Ocean and Coastal Resource Management with assistance from the State of Georgia.

An immediate effect of federal approval of the Georgia program is the qualification of the state for Federal matching funds for use in administering the program. In addition, the CZMA provides a procedure for the state to review Federal actions for consistency with its approved coastal management program.

For purposes of reviewing this proposed action, the key questions are:

-- Whether the Georgia program is consistent with the objectives and policies of the national legislation;

-- Whether the award of Federal funds under section 306 of the Federal Act will help Georgia to meet those objectives;

-- Whether Georgia management policies and authorities are adequate to implement the program; and

-- Whether there will be a net environmental gain as a result of program approval and implementation.

OCRM has made a preliminary determination that the answers to these questions are affirmative.

# GEORGIA COASTAL MANAGEMENT PROGRAM
# AND
# DRAFT ENVIRONMENTAL IMPACT STATEMENT

## TABLE OF CONTENTS


ABSTRACT ..... i

NOTE TO READERS ..... iii

PART I: OVERVIEW ..... I - 1
- Summary of the Georgia Coastal Management Program ..... I - 1
  - Mission Statement ..... I - 1
  - Boundary ..... I - 1
  - Organization ..... I - 1
  - Enforceable Policies ..... I - 4
  - Uses Subject to Management ..... I - 4
  - Special Management Areas ..... I - 5
- Changes the Program Will Make ..... I - 6
  - Simplify Government ..... I - 6
  - Improve Enforcement and Compliance ..... I - 7
  - Enhance Environmental Science and Understanding ..... I - 8
  - Increase Public Education and Outreach ..... I - 9
  - Initiate Coastal Incentive Grants ..... I - 9
  - Effects of Federal Approval ..... I - 9
- The Federal Coastal Zone Management Act ..... I - 11
- Cross Reference to Program Requirements ..... I - 14

PART II: DESCRIPTION OF THE GEORGIA COASTAL MANAGEMENT PROGRAM ..... II - 1
- Letter from Governor Zell Miller ..... II - 1
- Chapter One: Overview of the Georgia Coastal Management Program ..... II - 3
  - The Coastal Management Network ..... II - 5
    - The Coastal Area ..... II - 5
    - Network Participants ..... II - 7
    - Coastal Management Policies ..... II - 8
    - Simplifying Government ..... II - 8
    - Public Participation ..... II - 9
  - Coastal Management Issues ..... II - 9
  - Implementing the Georgia Coastal Management Program ..... II - 10

Activities Performed Directly by the Coastal Resources Division ..... II - 11
Activities Implemented Through the Coastal Management Network ..... II - 12
The Federal Coastal Zone Management Program ..... II - 13
Chapter Two: Georgia's Coast ..... II - 15
Introduction ..... II - 17
History ..... II - 17
Natural Environment and Climate ..... II - 20
Coastal Economy ..... II - 23
Population Characteristics ..... II - 25
Coastal Land Use ..... II - 26
Chapter Three: Goals and Objectives ..... II - 29
Mission Statement ..... II - 31
Program Goals ..... II - 31
Resource Goals ..... II - 34
Chapter Four: Boundary and Organization ..... II - 37
Coastal Area Boundary ..... II - 39
Seaward Boundary ..... II - 39
Interstate Boundary ..... II - 39
Inland Boundary ..... II - 39
Areas Excluded from the Boundary ..... II - 41
Program Implementation ..... II - 43
State Legal Authorities and Networking ..... II - 43
Project Evaluation Procedures of State Authorities ..... II - 52
Enforcement and Compliance of State Legal Authorities ..... II - 61
Water and Air Quality Standards ..... II - 61
Program Amendment Procedures ..... II - 62
Conflict Resolution ..... II - 63
Local Government Coordination ..... II - 64
Recognition of Local Governments ..... II - 64
Local Government Involvement ..... II - 64
Local Level Program Implementation ..... II - 65
Public Participation ..... II - 68
Federal Coordination ..... II - 72
Chapter Five: Policies and Management Authority ..... II - 75
Georgia Coastal Management Program Policies ..... II - 77
Introduction ..... II - 77
Policy Statements and General Description ..... II - 78
Other Management Authorities ..... II - 111
Table of Management Authorities ..... II - 113
State Programs ..... II - 123
State Agencies, Authorities, and Commissions ..... II - 125
Federal Authorities ..... II - 128

Federal Programs ..... II - 136
Chapter Six: Uses Subject to Management ..... II - 137
Consideration of the National Interest ..... II - 139
Introduction ..... II - 139
Management for Facilities and Resources in the National Interest ..... II - 140
Activities of Regional Benefit ..... II - 143
Activities Subject to Management ..... II - 145
Development and Manufacturing ..... II - 147
Transportation Facilities ..... II - 153
Agriculture and Silviculture ..... II - 158
Recreation and Tourism ..... II - 163
Marine Related Facilities ..... II - 168
Fisheries, Aquaculture, and Wildlife ..... II - 171
Public Services and Facilities ..... II - 176
Dredging ..... II - 182
Energy Facility Planning ..... II - 184
Energy Facilities in Georgia ..... II - 184
Projected Energy Supply and Demand ..... II - 189
Energy Planning, Applicable Laws, and Regulations ..... II - 190
Public Involvement in the Energy Planning Process ..... II - 192
Policies ..... II - 193
Description ..... II - 193
Chapter Seven: Special Management Areas ..... II - 195
Areas of Particular Concern ..... II - 198
Areas of Historic, Archaeological, Cultural, and Paleoentological Significance ..... II - 199
Barrier Islands ..... II - 200
Marsh Hammocks ..... II - 201
Aquifer Management and Protection ..... II - 202
Economic Development Areas ..... II - 204
Public Access and Open Space ..... II - 205
Freshwater Wetlands ..... II - 207
Navigational Channels ..... II - 208
Beaches, Dunes, and Sand-Sharing System ..... II - 209
Rivers and Adjacent Wetlands ..... II - 210
Shorebird Nesting Areas ..... II - 212
Ocean Management ..... II - 213
Areas of Preservation and Restoration ..... II - 215
Heritage Trust Program Lands ..... II - 216
State Wildlife Management Areas ..... II - 216
State Parks and Historic Sites ..... II - 217
Jekyll Island ..... II - 217
Sapelo Island National Estuarine Research Reserve ..... II - 218

Shorefront Access and Protection Planning ..... II - 220
Georgia's Barrier Islands ..... II - 220
Access to Non-Beach Shorefront and Marsh Areas ..... II - 224
Planning for Beach and Shorefront Access ..... II - 225
The Role of Georgia's Coastal Management Program ..... II - 226
Shoreline Erosion and Hazard Mitigation Planning ..... II - 229
Chapter Eight: Federal Consistency ..... II - 233
Federal Consistency Procedures ..... II - 237
Direct Federal Activities and Development Projects ..... II - 238
Federal License or Permit Activities ..... II - 241
Outer Continental Shelf Permits or Licenses ..... II - 243
Federal Financial Assistance Activities ..... II - 244
Appeals and Conflict Resolution Procedures ..... II - 246
Appeals for State Permits ..... II - 246
Secretarial Mediation of Disputes ..... II - 246
Informal Negotiation of Disputes ..... II - 246
Appeals to the Secretary of Commerce ..... II - 247
List of Federal Actions Subject to Federal Consistency ..... II - 248
Direct Federal Activities and Development Projects ..... II - 248
Federal Licenses or Permits ..... II - 249
Federal Assistance Programs ..... II - 251

PART III: REQUIREMENTS OF THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) ..... III - 1
Purpose and Need for Action ..... III - 1
The Coastal Zone Management Act (CZMA) ..... III - 1
Alternatives to the Proposed Action ..... III - 3
Federal Alternatives ..... III - 3
Alternative 1: Approve the GCMP ..... III - 3
Alternative 2: Deny Approval of the GCMP ..... III - 3
Alternative 3: Delay Approval of the GCMP ..... III - 4
State Alternatives Considered During Program Development ..... III - 5
Consultation and Coordination ..... III - 6
Description of the Affected Environment ..... III - 7
Overview ..... III - 7
Coastal Area ..... III - 7
Physical and Natural Environment ..... III - 7
Socioeconomic Characteristics ..... III - 10
Environmental Quality ..... III - 17
Environmental Consequences ..... III - 21
Positive Impacts Directly Resulting from Federal Approval ..... III - 21
Positive Impacts Directly Attributable to GCMP Approval ..... III - 24
Impacts Resulting from Denying Federal Approval ..... III - 28
Impacts Resulting from Delaying Federal Approval ..... III - 28

Unavoidable Adverse Environmental Effects ..... III - 29
Relationship between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity ..... III - 29
Irreversible and Irretrievable Commitments of Resources ..... III - 30

PART IV: LIST OF PREPARERS ..... IV - 1

PART V: LIST OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS RECEIVING COPIES OF THE DEIS ..... V - 1

PART VI: REFERENCES ..... VI - 1

APPENDIX I: THE GEORGIA COASTAL MANAGEMENT ACT ..... AI - 1

APPENDIX II: DRAFT DEPARTMENT OF NATURAL RESOURCES RULES TO IMPLEMENT THE GEORGIA COASTAL MANAGEMENT ACT ..... AII - 1

APPENDIX III: THE GEORGIA COASTAL MARSHLANDS PROTECTION ACT ... AIII - 1

APPENDIX IV: THE GEORGIA SHORE PROTECTION ACT ..... AIV - 1

APPENDIX V: MEMORANDUM OF AGREEMENT BETWEEN THE GEORGIA ENVIRONMENTAL PROTECTION DIVISION AND THE GEORGIA COASTAL RESOURCES DIVISION ..... AV - 1

APPENDIX VI: SAMPLE MEMORANDUM OF AGREEMENT BETWEEN OTHER AGENCIES AND THE GEORGIA COASTAL RESOURCES DIVISION ..... AVI - 1

APPENDIX VII: DESCRIPTION OF GEORGIA'S COASTAL NONPOINT SOURCE PROGRAM ..... AVII - 1
Introduction ..... AVII - 1
Coordination with Existing State Programs ..... AVII - 2
Determination of 6217 Management Area ..... AVII - 2
Identification and Implementation of Additional Management Measures ..... AVII - 2
Technical Assistance ..... AVII - 3
Public Participation ..... AVII - 3
Administrative Coordination ..... AVII - 3
Identification of Enforceable Policies and Mechanisms ..... AVII - 3
Monitoring ..... AVII - 7
Implementation of Management Measures in Conformity with (g) guidance .... AVII - 7
Letter from Mr. Duane Harris to Mr. Jeffrey Benoit ..... AVII - 15

APPENDIX VIII: PUBLIC TASK FORCE RECOMMENDATIONS ..... AVIII - 1
Fish & Wildlife Task Force ..... AVIII - 3

Agriculture & Silviculture Task Force ..... AVIII - 5
Public Service Facilities ..... AVIII - 5
Marine Related Facilities ..... AVIII - 9
Transportation Task Force ..... AVIII - 12
Areas of Special Concern Task Force ..... AVIII - 14
Manufacturing Task Force ..... AVIII - 20
Residential, Commercial, and Industrial Development Task Force ... AVIII - 22
Tourism and Recreation Task Force ..... AVIII - 25

APPENDIX IX: GLOSSARY ..... AIX - 1

APPENDIX X: LIST OF PARTICIPANTS ..... AX - 1

# Part I

# OVERVIEW

# PART I:
# OVERVIEW

## A. Summary of the Georgia Coastal Management Program

Recognizing that the coast of Georgia comprises a vital natural resource system, the State of Georgia created the Georgia Coastal Management Program in order to balance economic development with preservation of coastal resources. Developed through an extensive public process, the Georgia Coastal Management Program addresses the economic development concerns and natural resource issues identified by the citizens of Georgia. Administered by the Department of Natural Resources, Coastal Resources Division, the Coastal Management Program uses existing state resource laws and establishes a network among agencies with management authority in the eleven-county coastal area. The Georgia Coastal Management Act provides the authority for state agencies to network and coordinate activities, and for the state to enter the national coastal zone management program.

### 1. Mission Statement

It is the mission of the Georgia Coastal Management Program to balance economic development in Georgia's coastal zone with preservation of natural, environmental, historic, archaeological, and recreational resources for the benefit of Georgia's present and future generations.

### 2. Boundary

The influence of the ocean on Georgia's coastal plain extends approximately 60 miles inland. Georgia's eight-foot tidal range pushes seawater up the coastal rivers twice daily. This salty tidal water influences the plants, fish, and ecology of the coastal rivers and, consequently, human activity. The coastal area is important economically for a number of industries including shrimping, crabbing, recreational fishing, tourism, and manufacturing. For effective coastal management, the Georgia Coastal Management Program encompasses all tidally influenced water bodies and all areas economically tied to coastal resources. Georgia's coastal area therefore includes the following eleven counties: Brantley, Bryan, Camden, Charlton, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Wayne. Including each of these eleven counties in the Management Program ensures that all of Georgia's coastal population, industry, and resources are addressed. Using county boundaries also simplifies the relationship with local governments and ensures that other programs and agencies in the coastal network can relate to the coastal area boundaries.

### 3. Organization

The Georgia Coastal Management Program is a networked program implemented by the Department of Natural Resources, Coastal Resources Division and other agencies with

management authority in the coastal area. As lead agency for the Coastal Management Program, the Coastal Resources Division conducts several functions including resource management, ecological monitoring, permitting, technical assistance, and federal consistency review. Local, state, and federal agencies perform their respective functions in accordance with the Georgia Coastal Management Program and coordinated with the Coastal Resources Division.

*a. Activities Performed Directly by the Coastal Resources Division*

*i. Resource Management:* The Coastal Resources Division manages marine resources by conducting research and surveys, monitoring saltwater fish stocks, enhancing marine access, constructing inshore artificial reefs, and educating coastal residents on fisheries issues. Research and monitoring activities focus on spotted sea trout and red drum. Enhancing marine access includes construction of fixed and floating docks at existing boat ramp sites, maintenance of boat ramps, and conversion of existing shoreside structures into public piers. Staff are actively involved in marine education with field demonstrations and presentations to school groups, civic groups, and conservation associations.

*ii. Ecological Monitoring:* The Coastal Resources Division monitors coastal water quality and implements the National Shellfish Sanitation Program for the State of Georgia. These responsibilities include labeling areas open and/or closed to shellfishing, analyzing water quality, issuing shellfish harvest permits, educating the public on shellfishing safety issues, and implementing other programs that monitor and improve coastal water quality.

*iii. Direct Permit Authorities:* The Coastal Resources Division administers several State authorities. With the approval of the Coastal Marshlands Protection Committee and the Shore Protection Committee, the Division issues Marsh Permits, Shore Permits, and the Revocable License. The Division also executes leases for state owned water bottoms. In addition, the Division makes recommendations on 401 Water Quality Certification issuance for projects that affect the coastal area. Together, these programs give direct management authority over critical coastal habitats such as saltwater marshlands, beaches and the dynamic dune field, tidal waterbottoms, and navigable waters.

*iv. Technical Assistance:* In order to minimize adverse impacts and coordinate the permitting process, the Coastal Resources Division provides technical assistance for projects. The Division provides information on Best Management Practices and technical guidance on planning, construction, and design as well as information on habitat and endangered species. The Division also maintains a list of contacts in various agencies and institutions so that applicants and project designers can consult with local experts and design their projects appropriately. The Division serves as a liaison among agencies and provides forums for prospective applicants and developers to discuss potential issues and permit requirements with the appropriate agencies. The goals of this service are to promote quality development, to address resource issues, and to simplify the permit process and requirements for applicants.

*v. Federal Consistency Review:* With a federally approved Coastal Management Program, the Coastal Zone Management Act gives the State of Georgia authority to review federal permits and licenses, federal projects, and federally funded projects that impact the coastal area. The Coastal Resources Division reviews these activities to ensure that they are consistent with the Georgia Coastal Management Program.

*b. Activities Implemented Through the Coastal Management Network*

*i. Local governments* include each of the eleven coastal counties and the 32 incorporated municipalities in these counties. Local governments create local comprehensive plans, establish zoning rules and regulations, and set overall land use guidelines. Local governments, assisted by chambers of commerce and economic development authorities, also promote the benefits of living, working, and visiting in the coastal area. Through the Georgia Coastal Management Program, the Coastal Resources Division assists local governments by providing technical assistance and expertise in addressing planning, coastal, and natural resource issues, and by administering Coastal Incentive Grants.

*ii. State agencies* in Georgia implement a wide range of programs managing coastal resources and development. Groundwater withdrawals, energy facility regulation, regional planning, and port development are just a few activities administered at the state level. The Georgia Coastal Management Program establishes a network among state agencies to provide better and more consistent service to the public, increase coordination and communication, provide assistance in project planning, and increase monitoring and enforcement. Through Memoranda of Agreement, state agencies commit to working together to coordinate their coastal management activities. This increased coordination helps applicants during the project planning process and the permit application process. The Coastal Resources Division acts as a liaison between private individuals and state agencies to help identify the necessary permits required for a project, provide consultation about potential project limitations, and suggest possible alternatives. State agencies involved in the Georgia Coastal Management Program network include the following.

DNR Coastal Resources Division
DNR Environmental Protection Division
DNR Historic Preservation Division
DNR Parks, Recreation, and Historic Sites Division
DNR Wildlife Resources Division
Department of Community Affairs
Department of Human Resources
Georgia Department of Transportation
Georgia Forestry Commission
Georgia Ports Authority
Jekyll Island Authority
Office of the Secretary of State
Public Service Commission

*iii. Federal agencies* conduct many projects and activities in Georgia's coastal area. The federal government also owns land, such as military bases, that are managed by federal agencies. These agencies administer federal laws and programs such as national defense, endangered species protection, navigational channel maintenance, and shipping safety standards establishment. Usually, federal projects and activities are exempt from State laws and regulations. With a federally approved Coastal Management Program, however, federal law

allows the Coastal Resources Division to review federal activities for consistency with state laws. Through increased cooperation and this consistency review, federal-state coordination ensures that the state has input into federal activities in the coastal area. Federal agencies involved in the coastal management network include the following.

Army Corps of Engineers
Bureau of Lands Management
Coast Guard
Department of Agriculture
Department of Defense
Environmental Protection Agency
Federal Aviation Administration
Federal Emergency Management Agency
Federal Energy Regulatory Commission
Federal Highway Administration
Federal Law Enforcement Training Center
Fish and Wildlife Service
General Services Administration
Minerals Management Service
National Marine Fisheries Service
National Park Service
Nuclear Regulatory Commission

## 4. Enforceable Policies

The policies of the Georgia Coastal Management Program are contained within the enforceable provisions of the following 34 state laws and associated regulations. These laws were identified based on policy recommendations provided by the public through the program development process. Implementation of Program policies is accomplished by state, local, and federal agencies through the coastal management network. The Coastal Resources Division has direct authority for programs that regulate activities in salt marshlands, beaches and the dynamic dune field, and tidal water bottoms.

Georgia Coastal Management Act
Coastal Marshlands Protection Act
Department of Natural Resources Authority
Endangered Wildlife Act
Game and Fish Code
Georgia Aquaculture Development Act
Georgia Air Quality Act
Historic Area Act
Georgia Boat Safety Act
Georgia Administrative Procedures Act (Revocable License Program)
Georgia Comprehensive Solid Waste Management Act
Georgia Environmental Policy Act
Georgia Erosion and Sedimentation Act
Georgia Fisheries Law Pertaining to Shellfish
Georgia Hazardous Waste Management Act
Georgia Heritage Trust Act
Georgia Natural Areas Act
Georgia Oil and Gas and Deep Drilling Act
Georgia Safe Dams Act
Georgia Safe Drinking Water Act
Georgia Scenic Rivers Act
Georgia Scenic Trails Act
Georgia Surface Mining Act
Georgia Underground Storage Tank Act
Georgia Water Quality Control Act
Groundwater Use Act
Licenses to Dig, Mine, and Remove Phosphate Deposits
Protection of Tidewaters Act
Right of Passage Act
River Corridor Protection Act
Title 31 - Health (Septic Tank Law)
Shore Protection Act
Water Wells Standards Act
Wildflower Preservation Act

## 5. Uses Subject to Management

Georgia's coast is an area of abundant natural resources. Many activities and industries depend upon these resources for their economic well-being. Coastal activities, however, are not

all mutually compatible. Furthermore, certain activities may impact coastal resources. The Georgia Coastal Management Program addresses the following activities.

Development and Manufacturing
Transportation Facilities
Agriculture and Silviculture
Recreation and Tourism
Marine Related Facilities
Fisheries, Aquaculture, and Wildlife
Public Service Facilities
Dredging
Energy Facilities

## 6. Special Management Areas

Special Management Areas are those areas or resources of such special importance and concern that the state has established regulatory and/or management controls over them. They include Areas of Particular Concern and Areas of Preservation and Restoration. The following Areas of Particular Concern were identified by the public as unique and environmentally fragile or economically significant to the coastal area and the state.

Areas of Historic, Archaeological, Cultural, and Paleontological Significance
Barrier Islands
Marsh Hammocks
Aquifer Management and Protection
Economic Development Areas
Public Access and Open Space
Freshwater Wetlands
Navigational Channels
Beaches, Dunes, and Sand-Sharing System
Rivers and Adjacent Wetlands
Shorebird Nesting Areas
Ocean Management

The following were identified as Areas of Preservation and Restoration.

Heritage Trust Program Lands
State Wildlife Management Areas
State Parks and Historic Sites
Jekyll Island
Sapelo Island National Estuarine Research Reserve

## B. Changes the Program Will Make

The Georgia Coastal Management Program will enhance the state's ability to manage coastal resources. Specifically, the Program will bring about the following benefits.

1. Simplify Government

One of the primary goals of the Georgia Coastal Management Program is to simplify bureaucratic processes and serve the public more efficiently. During Program development, the Coastal Resources Division identified many possibilities for improving government service. Some of the following simplifications have already been implemented. Some will be enhanced and some will be initiated once the Program receives federal approval. As the Program is implemented, the Division will continue to seek other areas for improvement.

*a. Revocable License:* Required for private use of state owned tidal water bottoms, all Revocable Licenses are issued for projects in the coastal area. This license is often issued in conjunction with a Marsh Permit or Shore Permit. The Revocable License was formerly administered in Atlanta, far from the coast, while the Coastal Resources Division in Brunswick reviewed similar information for Marsh and Shore permits. Through the coastal management evaluation process, staff discerned the Revocable License could more effectively and efficiently be administered at the Coastal Resources Division, thereby eliminating duplication of effort. Issuance of the License was subsequently transferred to the Coastal Resources Division.

*b. State Programmatic General Permit for Recreational Docks:* The U.S. Army Corps of Engineers, working with local building officials, is authorized to issue general permits for constructing recreational docks in the coastal area. This permit requires review very similar to the process for Marsh Permits and the Revocable License. To eliminate duplication of effort and paperwork, a permit issued by the Army Corps of Engineers to the Coastal Resources Division allows the Division to issue this State Programmatic General Permit for Recreational Docks. This delegation of authority removes the Corps from the process and reduces the regulatory burden on the public.

*c. Technical Assistance Initiative:* The Coastal Resources Division provides guidance to local governments, property owners, developers, and the public to clarify regulations, identify agency contacts, advise on minimizing environmental impacts of proposed projects, and provide expertise on coastal issues. Upon implementation of the Georgia Coastal Management Program, the Division will expand this effort. The goal of the technical assistance initiative is to create a central source of information on coastal management issues and regulations.

*d. Project Review Service:* Though not required, the Coastal Resources Division encourages applicants in the eleven-county coastal area to submit preliminary development plans for consultation. Upon implementation of the Georgia Coastal Management Program, Division

staff will review plans for potential conflicts with the Program's enforceable policies and provide technical assistance to help modify proposals and resolve conflicts. The staff will identify any required permits, licenses, and/or certifications relative to specific projects submitted for consultation and will also make every effort to expedite application processes.

*e. Project Coordination Meetings:* Upon implementation of the Georgia Coastal Management Program, the Coastal Resources Division will offer project coordination meetings. These occasional meetings of permitting agencies will be convened at the request of applicants to discuss project proposals. The purpose of the meetings is to foster agency coordination and cooperation with respect to specific projects, and is not intended as an additional public review of the merits of the proposed project. Project coordination meetings allow applicants to meet relevant state and federal permitting agencies during the project planning process, and also allow permitting agencies to provide input during this planning and design phase. This helps the applicant avoid delays during construction, helps agencies avoid conflict between respective recommendations, and helps applicants and agencies avoid last-minute change requests.

*f. Interagency Coordination Meetings:* Upon implementation of the Georgia Coastal Management Program, the Coastal Resources Division will organize quarterly meetings of all state, local, and federal permitting agencies exercising regulatory authority and/or management or planning authority in the coastal area. Representatives from all agencies in the coastal management network shall be invited and urged to attend these meetings. The purpose of the meetings is to foster agency coordination with respect to agency policies and procedures, discuss issues, and improve cooperation. The meetings are not intended to review individual projects.

*g. 401 Water Quality Certification Review:* The Coastal Resources Division will assist the Environmental Protection Division with its administration of Section 401 Water Quality Certification within the eleven-county coastal area. The purpose of this cooperation is to make administrative procedures more efficient by providing technical expertise in the coastal area.

*h. Savannah Site Office:* As described in Section 2 below, the Coastal Resources Division will open a site office in Savannah to provide better service to citizens in Chatham County and surrounding areas. In addition, opening the Savannah site office will allow associates in the Brunswick office to provide better service to the rest of the coast.

2. Improve Enforcement and Compliance

Permits and authorizations have little effect if not adequately monitored and enforced. Another goal of the Georgia Coastal Management Program is to improve enforcement of and compliance with existing environmental regulations. The Coastal Resources Division will take the following actions towards this goal, and will encourage other agencies to improve enforcement and compliance of authorizations within their jurisdiction.

*a. Establish Site Office in Savannah:* In order to improve service to applicants and monitoring of permits and licenses in the northern part of the Georgia Coast, the Coastal Resources Division established a site office in Savannah, Chatham County. The permit coordinator hired to staff the site office provides technical assistance to permit applicants, conducts site inspections, and enforces permits and licenses issued by the Division. The addition of another permit coordinator to the Divisions regulatory staff allows associates to provide better enforcement and monitoring of the coast. Improved enforcement leads to improved compliance.

*b. Simplify Government:* Improved administrative and regulatory processes, as described in Section 1 above, allow Coastal Resources Division staff to spend less time in the office processing paperwork and more time in the field conducting site inspections and enforcing permits and licenses.

*c. Increase Technical Assistance and Public Education:* The Coastal Resources Division's technical assistance initiatives and public outreach and education initiatives, described in Sections 1 and 4 of this part, will improve the public's understanding of permit requirements and rationale. Improved understanding leads to improved compliance.

3. Enhance Environmental Science and Understanding

Through the Georgia Coastal Management Program, the Coastal Resources Division seeks to enhance environmental science and understanding.

*a. Public Health Program:* The Coastal Resources Division monitors coastal water quality and implements the National Shellfish Sanitation Program for the State of Georgia. These responsibilities include labeling areas open and/or closed to shellfishing, analyzing water quality, educating the public on shellfishing safety issues, and implementing other programs that monitor and improve coastal water quality. While the Division has always administered the Georgia Shellfish Program, implementation of the Georgia Coastal Management Program increases funding for monitoring projects.

*b. Cooperative Projects:* Coastal Resources Division staff members cooperate formally and informally with agencies, universities, and other organizations regarding environmental science and monitoring projects. Upon implementation of the Georgia Coastal Management Program, the Division will seek additional partnerships to improve scientific understanding of Georgia's coastal environment.

*c. Coastal Incentive Grants:* Through the Coastal Incentive Grants described in Section 5 below, the Coastal Resources Division will fund coastal environmental research and monitoring projects that further the goals of the Georgia Coastal Management Program.

*d. Public Education:* Improvements made in public outreach and education, described in Section 4 below, will increase the public's understanding of coastal environmental science.

4. Increase Public Education and Outreach

*a. Public Education and Outreach Coordinator:* Throughout the development of the Georgia Coastal Management Program, the public placed a high priority on improving public education. As a result, the Coastal Resources Division is hiring a public education and outreach coordinator to inform the public about coastal resource issues.

*b. Coastal Ark:* The Coastal Resources Division is developing "The Coastal Ark," a public and local government outreach and technical initiative. The Ark is a mobile resource platform that will be driven to local communities to provide information and management tools directly to resource users and local decision-makers. Although funded through alternative sources, the Ark is an important component of the Georgia Coastal Management Program's outreach efforts.

*c. Technical Assistance:* As described in Section 1 above, the additional resources gained upon implementation of the Georgia Coastal Management Program will allow the Coastal Resources Division to increase the level of technical assistance provided to permit applicants, local governments, organizations, and the public. This will improve public knowledge and education about coastal issues.

5. Initiate Coastal Incentive Grants

While the Coastal Resources Division and other agencies in the coastal management network implement the regulatory authorities of the Georgia Coastal Management Program, these agencies have few resources for non-regulatory projects. In order to enhance the coastal area and further the goals of the Coastal Management Program proactively and creatively, the Division will initiate a program to provide "Coastal Incentive Grants." The Division will award these grants on a competitive basis to local governments, educational and research institutions, and state agencies for projects of local and regional significance. Through this funding program, coastal issues and concerns will be defined at the grass-roots level and local communities and organizations will be provided with the financial resources to research, develop, and implement solutions.

6. Effects of Federal Approval

Although some of the above changes are not dependent on federal approval of the Georgia Coastal Management Program, others may be implemented only with a federally approved program. Following is a summary of the additional benefits of federal approval.

*a. Funding:* Upon implementation of the Georgia Coastal Management Program, Georgia will become eligible for approximately $950,000 annually in federal program implementation funds. In addition, after the first year the state may take advantage of an additional $200,000 (approximately) annually in federal program enhancement funds to improve the Coastal Management Program.

*b. Technical Assistance:* With an approved Coastal Management Program, Georgia may take better advantage of technical service initiatives provided by federal agencies. For example, the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management provides information and technical support, and also relates coastal issues to the Administration. A uniformed service of the Administration, the NOAA Corps provides research vessels, equipment, and technical staff. The NOAA Coastal Services Center in Charleston, South Carolina provides technical support to develop projects such as Geographic Information Systems and resources such as Environmental Sensitivity Index maps.

*c. Federal Consistency:* While federal agencies and activities are usually exempt from state laws, states with federally approved coastal management programs gain review authority over federal activities. The federal Coastal Zone Management Act is the only law that provides this power to the states. This authority also gives states an equal voice with respect to interstate issues. Upon federal approval of its Coastal Management Program, Georgia will gain this important state's right authority.

## C. The Federal Coastal Zone Management Act

In 1972, in response to intense pressure on coastal resources, and because of the importance of coastal areas of the United States, Congress passed the Coastal Zone Management Act (CZMA), 16 U.S.C. §§ 1451, *et seq.* The CZMA authorizes a federal program to encourage coastal states and territories to develop comprehensive coastal management programs. The CZMA has been reauthorized on several occasions, most recently in 1996 with the enactment of the Coastal Zone Protection Act of 1996 (P.L. 104-150). The program is administered by the Secretary of Commerce, who in turn has delegated this responsibility to the National Oceanic and Atmospheric Administration's (NOAA) National Ocean Service (NOS). Currently, 31 states and territories have coastal programs approved by the Assistant Administrator of the National Ocean Service.

The CZMA affirms the national interest in the effective protection and careful development of the coastal zone by providing assistance and encouragement to coastal states to voluntarily develop and implement management programs for their coastal areas. To provide coastal states and territories with the means for achieving these objectives, the CZMA authorizes financial assistance grants under Section 305 for program development and under Section 306 for program implementation. The Section 305 program development grants were reauthorized by Congress in the 1990 amendments to the CZMA (P.L. 101-508) and in the 1996 amendments to the CZMA (P.L. 104-150). The NOAA Office of Ocean and Coastal Resource Management (OCRM) awarded the Georgia Department of Natural Resources (DNR) a Section 305 grant of $135,000 on October 1, 1992 to begin development of the GCMP, with subsequent grants of $200,000 in 1993 and $150,000 in both 1995 and 1996.

Sections 305, 306, and 307 of the CZMA and implementing regulations published on June 28, 1996, as codified at 15 C.F.R. Part 923, provide the requirements and procedures for state management program development and federal approval. In summary, the requirements for program approval are that a state develop a management program that achieves the following.

1. Identifies and evaluates those coastal resources recognized in the Act that require management or protection by the state or territorial government;

2. Reexamines existing policies or develops new policies to manage these resources. These policies must be specific, comprehensive, and enforceable, and must provide an adequate degree of predictability as to how coastal resources will be managed;

3. Determines specific uses and special geographic areas that are to be subject to the management program, based on the nature of identified coastal concerns. Uses and areas subject to management should be based on resource capability and suitability analyses and socioeconomic considerations;

Section 312 directs the Secretary to evaluate the performance of state coastal management programs on a continuing basis. OCRM formally reviews the implementation of each state program on a three year cycle.

Section 315 establishes a National Estuarine Research Reserve System to preserve representative estuarine areas for long-term scientific and educational purposes. The Sapelo Island National Estuarine Research Reserve in Georgia was designated in 1976.

The Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) established a new Coastal Nonpoint Pollution Control Program (CNPC), in addition to updating the CZMA. The State of Georgia has agreed to submit an approvable CNPC to NOAA and the U.S. Environmental Protection Agency (EPA) within 30 months of program approval. After Georgia submits its coastal nonpoint program, NOAA and EPA will make a final determination regarding its compliance with Section 6217.

4. Identifies the inland and seaward areas subject to the management program;

5. Provides for consideration of the national interest in planning for the siting of facilities; and

6. Includes sufficient legal authorities and organizational structure to implement the program and to ensure conformance to it.

In arriving at these substantive aspects of the management program, states are obligated to follow an open process that involves providing information to and considering the interests of the general public, interest groups, local governments, and regional, state, interstate, and federal agencies.

Section 303 of the CZMA provides guidance on specific national objectives that warrant full consideration during the implementation of approved state coastal management programs.

Section 305 of the CZMA authorizes up to four annual grants to states desiring to develop a coastal management program. After its management program receives federal approval, the state is then eligible for annual grants under Section 306 to implement the program. Section 306A of the CZMA also provides that states may use a portion of their Section 306 awards for low cost construction projects that result in the preservation of important natural areas, improved public access, or renewal of urban waterfronts.

Section 307 contains the Federal Consistency provisions of the CZMA to ensure that federal actions are consistent with the state's federally approved management program. Paragraphs (1) and (2) of Section 307(c) require that federal activities and federal development projects in or affecting the coastal zone be consistent, to the maximum extent practicable, with a federally approved state management program. Subparagraphs (A) and (B) of Section 307(c) require that federally licensed and permitted activities affecting the coastal zone also be consistent with federally approved state management programs. Section 307(d) requires federal assistance to state and local governments for projects affecting the coastal zone to be consistent with federally approved state management programs. Federal regulations implementing Section 307 are found at 15 C.F.R. Part 930.

Section 309 establishes a coastal enhancement grant program. This section provides that a portion of Section 306 funds is available to states to develop program changes that strengthen their coastal zone management programs' ability to address particular coastal issues. State efforts to seek such improvements are meant to focus on priorities based on a self-assessment of the nine objectives listed in Section 309. These objectives include, among others, stronger wetland protection, improved management of coastal hazards, and additional public access.

## D. Cross Reference to Program Requirements

The following table summarizes how the Georgia Coastal Management Program meets the requirements of the Coastal Zone Management Act.

| CZMA Section | Requirements | CZMA Approval Regulations (15 C.F.R. Section) | DEIS Part II |
|---|---|---|---|
| 306(d)(1) | Full participation/program adequacy | 923.3 | Full document |
| 306(d)(2)(A) | Boundaries | 923.31 - 923.34 | Ch. 4, Sec. I |
| 306(d)(2)(B) | Uses subject to management | 923.11 | Ch. 6 |
| 306(d)(2)(C) | Areas of particular concern | 923.21, 923.22 | Ch. 7, Sec. I |
| 306(d)(2)(D) | Means of control | 923.41 | Ch. 4, 5 |
| 306(d)(2)(E) | Guidelines on priorities of uses | 923.21 | Ch. 7, Sec. I, II |
| 306(d)(2)(F) | Organizational structure | 923.46 | Ch. 4, Sec. II |
| 306(d)(2)(G) | Shorefront planning process | 923.24 | Ch. 7, Sec. III |
| 306(d)(2)(H) | Energy facility planning process | 923.13 | Ch. 6, Sec. IV |
| 306(d)(2)(I) | Erosion planning process | 923.25 | Ch. 5, Sec. I; Ch. 7, Sec. III |
| 306(d)(3)(A) | Plan Coordination | 923.56 | Ch. 4 |
| 306(d)(3)(B) | Continuing consultation mechanisms | 923.57 | Ch. 4, Sec. III, IV |
| 306(d)(4) | Public Hearings | 923.58 | Ch. 4, Sec. III, IV |
| 306(d)(5) | Gubernatorial review and approval | 923.48 | Gubernatorial Letter |
| 306(d)(6) | Designation of recipient agency | 923.47 | Gubernatorial Letter |
| 306(d)(7) | Organization | 923.46 | Ch. 4, Sec. II |

| CZMA Section | Requirements | CZMA Approval Regulations (15 C.F.R. Section) | DEIS Part II |
|---|---|---|---|
| 306(d)(8) | Adequate consideration of national interests | 923.52 | Ch. 6, Sec. I |
| 306(d)(9) | Areas for preservation/restoration | 923.22 | Ch. 7, Sec. II |
| 306(d)(10)(A) | Administer regulations; control development; resolve conflicts | 923.41 | Ch. 4, Sec. II; Ch. 5 |
| 306(d)(10)(B) | Powers of acquisition, if necessary | 923.41 | Ch. 6, Sec. II |
| 306(d)(11) | Techniques of control | 923.41 - 923.44 | Ch. 4, Sec. II; Ch. 5 |
| 306(d)(12) | Uses of regional benefit | 923.12 | Ch. 6, Sec. II |
| 306(d)(13) | Inventory and designation of coastal resources of national significance and enforceable policies to protect such resources | No Regulations | Ch. 6, Sec. I |
| 306(d)(14) | Public participation in permitting consistency and other similar decisions | No Regulations | Ch. 5, Sec. I; Ch. 8 |
| 306(d)(15) | State agency adherence to program | No Regulations | Ch. 4, Sec. II; Ch. 5 |
| 306(d)(16) | Enforceable policies to implement Coastal Nonpoint Source Program required by CZARA § 6217 | 6217 Guidance issued Jan. 1993 | Ch. 4, App. VII |
| 307(b) | Consideration of federal agency views | 923.51 | Ch. 4, Sec. V |
| 307(c)&(d) | Federal consistency procedures | 923.53 | Ch. 8 |
| 307(f) | Incorporation of federal air and water quality standards | 923.45 | Ch. 4, Sec. II; Ch. 5, Sec. I |

# Part II

# DESCRIPTION OF THE GEORGIA COASTAL MANAGEMENT PROGRAM

STATE OF GEORGIA

OFFICE OF THE GOVERNOR

ATLANTA 30334-0900

Zell Miller
GOVERNOR

April 21, 1997

Dr. D. James Baker
Under Secretary for Oceans and Atmosphere and
Administrator, National Oceanic and Atmospheric Administration
Herbert C. Hoover Building, Room 5128
14th and Constitution Avenue, N.W.
Washington, D.C. 20230

Dear Dr. Baker:

On behalf of the State of Georgia, I hereby submit the Georgia Coastal Management Program to the National Oceanic and Atmospheric Administration for approval under the Coastal Zone Management Act.

The accompanying Program Document describes the organization, authority and policies of the State of Georgia for balancing economic development in Georgia's coastal zone with preservation of natural, environmental, historic, archeological, and recreational resources. The Program Document has been developed with full public participation and with careful consideration of comments by the National Oceanic and Atmospheric Administration on Draft Program Documents.

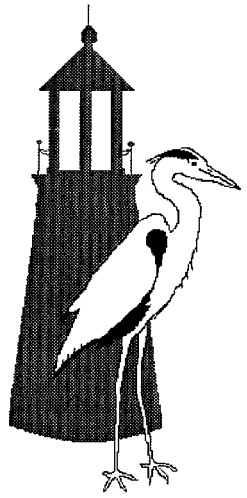
I have reviewed and certify that the State of Georgia has the authority and the organization capabilities to implement the Georgia Coastal Management Program. I further designate the Department of Natural Resources as the agency to receive and administer grants under the Coastal Zone Management Act.

If you have any questions, please contact Lonice Barrett, Commissioner, Department of Natural Resources at 404-656-3500. I look forward to continued cooperation with the National Oceanic and Atmospheric Administration as we work to manage our coastal resources.

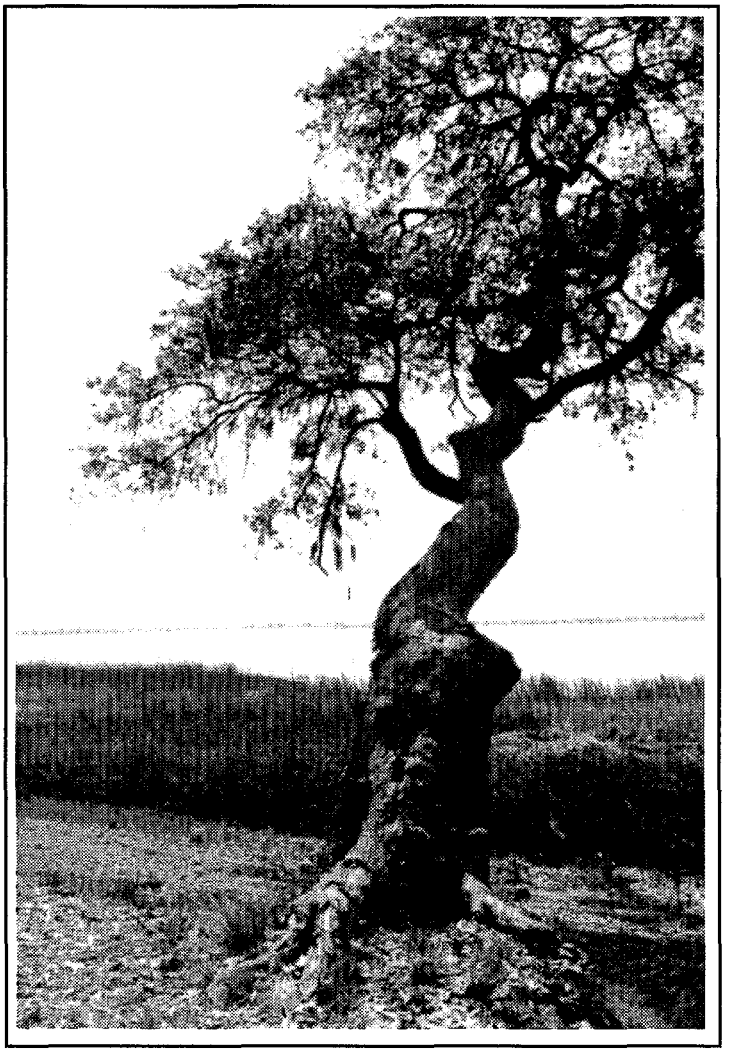
Sincerely,

Zell Miller

ZM/jlc
cc: Lonice Barrett
Jeff Benoit, Director, NOAA/OCRM



# CHAPTER ONE:
# OVERVIEW OF THE GEORGIA COASTAL MANAGEMENT PROGRAM



When the "study of the household" (ecology) and the "management of the household" (economics) can be merged, and when ethics can be extended to include environmental as well as human values, then we can be optimistic about the future of humankind. Accordingly, bringing together these three "E's" is the ultimate holism and the great challenge for our future.

Eugene P. Odum
*Ecology and Our Endangered Life-Support Systems*

***Mission Statement:***

*It is the mission of the Georgia Coastal Management Program to balance economic development in Georgia's coastal zone with preservation of natural, environmental, historic, archaeological, and recreational resources for the benefit of Georgia's present and future generations.*

# SECTION I:
# THE COASTAL MANAGEMENT NETWORK

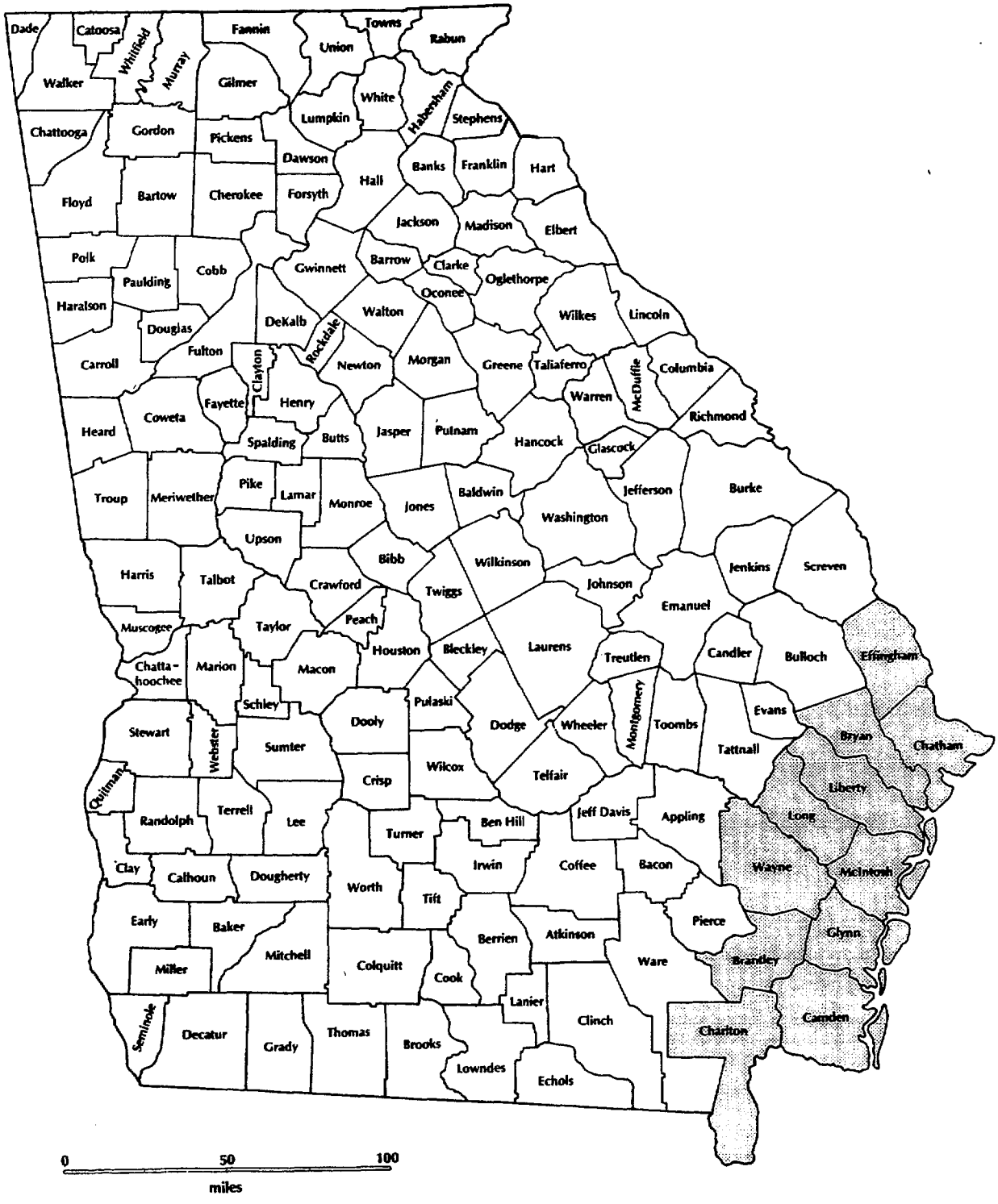
The Georgia Coastal Management Program addresses the economic development concerns and natural resource issues identified by the citizens of Georgia. Administered by the Coastal Resources Division of the Georgia Department of Natural Resources, the Program is a network of local, State, and federal agencies addressing coastal issues. By establishing this network, there is more coordination among agencies, better service provided to the taxpayers, and improved management of coastal resources.

## A. The Coastal Area

The influence of the ocean on Georgia's coastal plain extends approximately 60 miles inland. Georgia's eight-foot tidal range pushes seawater up the coastal rivers twice daily. This salty tidal water influences the plants, fish, and ecology of the coastal rivers and, consequently, human activity. The coastal area is important economically for a number of industries, including shrimping, crabbing, recreational fishing, tourism, and manufacturing.

For effective coastal management, the Georgia Coastal Management Program encompasses all tidally-influenced water bodies and all areas economically tied to coastal resources. Georgia's coastal area therefore includes the following eleven counties: Brantley, Bryan, Camden, Charlton, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Wayne. Within these eleven counties, all waters of the state including the coastal ocean to the limit of state jurisdiction (three miles), and all submerged lands are part of the coastal area. Including each of these eleven counties in the Management Program ensures that all of Georgia's coastal population, industry, and resources are addressed. Using county boundaries also simplifies the relationship with local governments and ensures that other programs and agencies in the coastal network can relate to the coastal area boundaries.

*FIGURE 1.1: Map of the Georgia Coastal Area*



## B. Network Participants

Local governments create local comprehensive plans, establish zoning rules and regulations, and set overall land use guidelines. Local governments are also active in promoting the benefits of living, working, and visiting in the coastal area. The importance of local governments in planning and setting the pace of development is paramount. The Coastal Resources Division's role in the Georgia Coastal Management Program is to assist local governments by providing technical assistance and expertise in addressing planning and coastal issues, and by administering pass-through grants.

State agencies in Georgia implement a wide range of programs managing coastal resources and development. Groundwater withdrawals, energy facility regulation, regional planning, and port development are just a few activities administered at the State level. With so many programs and agencies working separately, sometimes management efforts are not coordinated or are contradictory. These problems are confusing to the public and do not effectively manage our resources. The Georgia Coastal Management Program establishes a network among State agencies to provide better and more consistent service to the public, increase coordination and communication, provide assistance in project planning, and increase monitoring and enforcement.

Through the State network and formal agreements called "Memoranda of Agreement," the Coastal Resources Division ensures that State agencies work together and coordinate their management programs. This increased coordination helps applicants during the project planning process and the permit application process. The Coastal Resources Division acts as a liaison between private individuals and the other State agencies to help identify the necessary permits required for a project, provide consultation about potential project limitations, and suggest possible alternatives.

Federal agencies conduct many projects and activities in Georgia's coastal area. The federal government also owns land, such as military bases, that are managed by federal agencies. These agencies administer federal laws and programs such as national defense, endangered species protection, the dredging of navigational channels, and setting shipping safety standards. Usually, federal projects and activities are exempt from State laws and regulations. With a federally approved Coastal Management Program, however, federal activities that are reasonable likely to affect any coastal use or resource must be conducted consistent to the maximum extent practical with Georgia's Coastal Management Program, and federal law allows the Coastal Resources Division to review federal activities for consistency with State laws. Through increased cooperation and this consistency review, federal-State coordination ensures that the State has input into federal activities in the coastal area.

## C. Coastal Management Policies

The policies of the Georgia Coastal Management Program are contained in existing State laws and rules and regulations. The implementation of the policies is accomplished through a network of local, State, and federal agencies. The Coastal Resources Division has direct authority for programs that regulate activities in marsh areas, beach areas, and tidal water bottoms.

Coastal management policies are categorized to address the following issues:

| | |
|---|---|
| Public Involvement | Public Service Facilities |
| Development and Manufacturing | Dredging |
| Transportation Facilities | Energy Facilities |
| Agriculture and Silviculture | Special Management Areas |
| Recreation and Tourism | Shorefront Access and Protection |
| Marine Related Facilities | Shoreline Erosion and Hazard |
| Fisheries, Aquaculture, and Wildlife | Mitigation Planning |

Issues identified by the general public through nine task forces generated over 350 recommendations. These recommendations provide the basis for identifying existing management authorities applicable in the coastal area. These recommendations are included verbatim in this document (See Appendix VIII) and are considered when developing annual themes and funding criteria for Coastal Incentive Grants.

## D. Simplifying Government

One of the main goals of the Georgia Coastal Management Program is to simplify the bureaucratic process and to serve the public more efficiently. During the development of the Program, a review of the various programs and requirements was completed. Many possibilities for improving service were identified. The simplifications listed below have already been implemented. Others are dependent upon the implementation of an approved Coastal Management Program.

Revocable License: This license is issued for private use of State-owned tidal water bottoms; all of these licenses are issued for projects in the coastal area. This license is often issued in conjunction with a Marsh Permit or Shore Permit, which are evaluated by Coastal Resources Division of the Department of Natural Resources. The Revocable License was formerly administered in Atlanta, far from the coast, while the staff at the Coastal Resources

Division reviewed similar information for Marsh and Shore permits in Brunswick. Through the coastal management evaluation process, staff discovered the Revocable License could more effectively and efficiently be administered at the Coastal Resources Division, eliminating this duplication of effort.

State Programmatic General Permit for Recreational Docks: The Army Corps of Engineers, together with local building officials, is authorized to issue general permits for construction of recreational docks in the coastal area. This process requires paperwork and review very similar to the process for Marsh Permits and the Revocable License. Since this is a duplication of effort and paperwork, a permit issued by the Army Corps of Engineers to the Coastal Resources Division allows the Division to issue this State Programmatic General Permit, thereby removing the Corps from the process and reducing the regulatory burden on the public.

Technical Assistance Initiative: The Coastal Resources Division provides guidance to local governments, property owners, and developers during the project planning stages to clarify what the regulations are, what permits may be needed, who the agency contacts are, and to provide advice on project alternatives to minimize impacts. The goal of this initiative is to create a central source of information on coastal management issues and regulations, and to simplify the permit process.

### E. Public Participation

Public participation in the development and implementation of coastal management is critical to its success. Throughout the development of the Georgia Coastal Management Program, public comments were accepted and public meetings were held to seek input from the Georgia citizens. The Coastal Resources Division has an active public education and outreach program to educate the public on coastal issues. The Division utilized an appointed citizen's Coastal Advisory Committee, public Task Forces, and public meetings to solicit public comment. Additionally, a quarterly newsletter, speeches and presentations, and printed materials have been developed to educate the public on coastal issues.

## SECTION II:
## COASTAL MANAGEMENT ISSUES

Georgia has a beautiful coastal area with extensive marshes and attractive beaches. Economic growth has been healthy and Georgia's coast is considered an ideal place to live, work, and visit. Coastal Georgia's popularity, however, affects its resources and, potentially, the quality

of life on the coast. Activities in the coastal area are not all mutually compatible. Conflicts and resource limitations are already affecting coastal communities. Coastal issues need to be addressed through a comprehensive management program that considers all aspects of coastal resource use. Issues important to Georgia's coast that have been addressed in the Georgia Coastal Management Program are listed below.

| | |
|---|---|
| Water Supply Limitations | Declining Fishery Populations |
| Identification of Historic Sites | Increased Population Growth |
| Impacts to Endangered Species | Dredging and Material Disposal |
| Beach Erosion and Hazard Problems | Lack of Beach Access |
| Water Quality Degradation | Need for Energy Planning |

As Georgia grows in population, these issues become more pressing. The Georgia Coastal Management Program is designed to provide a comprehensive management framework for addressing coastal issues by bringing together relevant private parties, agencies, and the public. Many of these issues are interrelated and are, therefore, more logically managed by a comprehensive program. Since a number of different people and programs manage the various coastal resources and sites, they must communicate and understand each other's objectives. The Coastal Management Program network establishes this communication among interested parties and provides a forum to resolve conflicts of use.

## SECTION III: IMPLEMENTING THE GEORGIA COASTAL MANAGEMENT PROGRAM

The Georgia Coastal Management Program is a networked program implemented by the Department of Natural Resources, Coastal Resources Division and other State agencies with management authority in the coastal area. As lead agency for the Coastal Management Program, the Coastal Resources Division conducts several functions including resource management, ecological monitoring, permitting, technical assistance, and federal consistency review. Local, State, and federal agencies perform their respective functions in accordance with the Georgia Coastal Management Program and coordinated with the Coastal Resources Division. Research institutions and other organizations assist in information gathering and analysis of coastal resource issues.

### A. Activities Performed Directly by the Coastal Resources Division

Resource Management: The Coastal Resources Division manages marine resources by conducting research and surveys, monitoring saltwater fish stocks, enhancing marine access, constructing inshore artificial reefs, and educating coastal residents on fisheries issues. Research and monitoring activities focus on spotted sea trout and red drum. Enhancing marine access includes construction of fixed and floating docks at existing boat ramp sites, maintenance of existing boat ramps, and conversion of existing shoreside structures into public piers. Staff are actively involved in marine education with field demonstrations and presentations to school groups, civic groups, and conservation associations.

Ecological Monitoring: The Coastal Resources Division monitors coastal water quality and implements the National Shellfish Sanitation Program for the State of Georgia. These responsibilities include labelling areas open and/or closed to shellfishing, analyzing water quality, educating the public on shellfishing safety issues, and implementing other programs that monitor and improve coastal water quality. While the Coastal Resources Division has always administered the Georgia Shellfish Program, implementation of a federally-approved Coastal Management Program increases funding and staff dedicated to monitoring projects.

Direct Permit Authorities: The Coastal Resources Division administers several State authorities. With the approval of the Coastal Marshlands Protection Committee and the Shore Protection Committee, the Division issues Marsh Permits, Shore Permits, and the Revocable License. The Division also executes leases for State-owned water bottoms. In addition, the Division makes recommendations to the Environmental Protection Division on 401 Water Quality Certification issuance for projects that affect the coastal area. Marsh Permits and Shore Permits have always been administered at the Coastal Resources Division, while the Revocable License was previously administered by the Department of Natural Resources in Atlanta. Together, these programs give direct management authority over critical coastal habitats such as marshlands, beaches, navigable waters, and freshwater wetlands.

Technical Assistance: The Coastal Resources Division provides technical assistance for projects to minimize adverse impacts and coordinate the permitting process. The Division provides information on Best Management Practices; technical guidance on planning, construction, and design; and, information on habitat and endangered species. The Division also maintains a list of contacts in various agencies and institutions so that applicants and project designers can consult with local experts and design their projects appropriately. The Division serves as a liaison among agencies and provides forums for prospective applicants and developers to discuss potential issues and permit requirements with the appropriate agencies. The goals of this service are to promote quality development, to address resource issues, and to simplify the permit process and requirements for applicants. Implementation of a federally-approved Coastal Management Program involves significant increases in staff time and resources devoted to pre-project consultations, interagency coordination, and local government assistance.

Federal Consistency Review: With a federally-approved Coastal Management Program, the Coastal Zone Management Act gives the State of Georgia authority to review federal permits and licenses, federal projects, and federally-funded projects that affect the coastal area. The Coastal Resources Division reviews these activities to ensure that they are consistent with the Georgia Coastal Management Program. If a federal agency disagrees with the Division's consistency decision, a formal conflict resolution process may be used to settle the dispute.

### B. Activities Implemented Through the Coastal Management Network

Local Governments: Local governments assist in long-term planning, economic development, and natural resource protection through preparation and implementation of their respective comprehensive plans, local laws and zoning regulations, as well as through their chambers of commerce and economic development authorities. Through the Georgia Coastal Management Program, the Coastal Resources Division provides technical assistance to local governments to assist in their planning efforts and address natural resource issues. Local governments include the counties listed below, and the municipalities in these counties.

| | | |
|---|---|---|
| Brantley | Chatham | Long |
| Bryan | Effingham | McIntosh |
| Camden | Glynn | Wayne |
| Charlton | Liberty | |

State Agencies: State agencies continue to administer their respective coastal management efforts as defined by existing Georgia State law. Memoranda of Agreement between the Coastal Resources Division and other State agencies with regulatory authority in the coastal area help ensure that all agencies act in accordance with the policies of the Georgia Coastal Management Program. The following State agencies are involved in the Georgia Coastal Management Program network.

| | |
|---|---|
| Coastal Resources Division | Historic Preservation Division |
| Department of Community Affairs | Jekyll Island Authority |
| Department of Human Resources | Office of the Secretary of State |
| Environmental Protection Division | Parks, Recreation, and Historic Sites Division |
| Georgia Department of Transportation | Public Service Commission |
| Georgia Forestry Commission | Wildlife Resources Division |
| Georgia Ports Authority | |

Federal Agencies: Federal agencies continue to administer their respective programs as they are reviewed for consistency with the Georgia Coastal Management Program. On-going coordination efforts between the Coastal Resources Division and federal agencies is conducted to ensure communication and consistency. The following federal agencies are involved in the coastal network.

| | |
|---|---|
| Army Corps of Engineers | Federal Highway Administration |
| Bureau of Lands Management | Federal Law Enforcement Training Center |
| Coast Guard | Fish and Wildlife Service |
| Department of Agriculture | General Services Administration |
| Department of Defense | Minerals Management Service |
| Environmental Protection Agency | National Marine Fisheries Service |
| Federal Aviation Administration | National Park Service |
| Federal Emergency Management Agency | Nuclear Regulatory Commission |
| Federal Energy Regulatory Commission | |

## SECTION IV:
## THE FEDERAL COASTAL ZONE MANAGEMENT PROGRAM

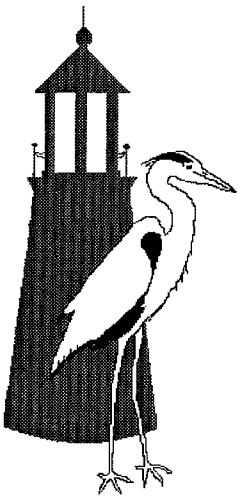
The federal Coastal Zone Management Act of 1972 created a voluntary program for states to develop and administer coastal management programs. This Act set broad guidelines and approval criteria for states' management programs. Individual states are given the responsibility of identifying priority issues for their respective coasts, and implementing their program using State laws and regulations. General concerns such as consideration of national defense and interstate transport must be addressed to ensure that a management program does not unduly hamper these activities.

Almost all of the eligible states developed approved coastal management programs by 1990. Each state's program is unique -- the policies and administration reflect the state's individual priorities and laws. As one of the last coastal states to develop a coastal management program, Georgia has benefitted from the experiences of the other states with federally-approved management programs. The decision to submit Georgia's Coastal Management Program for federal approval is made by the Governor. Implementation and administration of the Georgia Coastal Management Program is performed by the State of Georgia and its agencies. States with federally-approved management programs have the option of withdrawing from the voluntary federal program at any time. The federal Coastal Zone Management Program provides Georgia with several significant benefits.

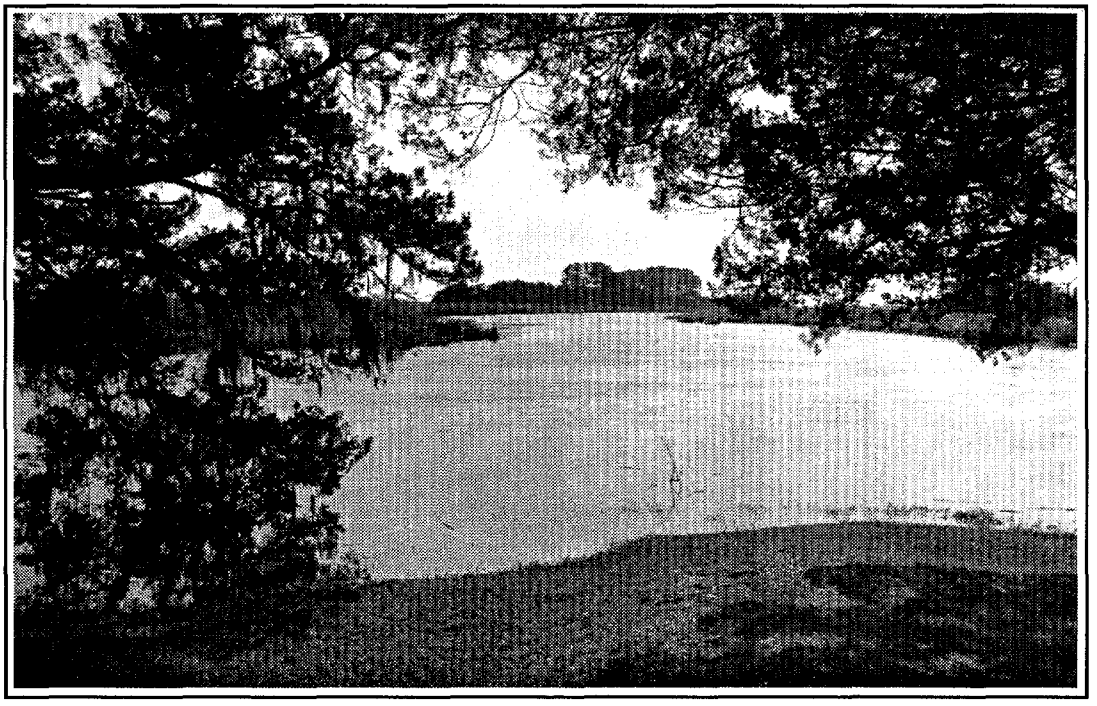
Federal Consistency: While federal agencies and activities are usually exempt from state laws, states with federally-approved coastal management programs gain review authority over federal activities. The Coastal Zone Management Act is the only law that provides this power to the states. This authority also gives states an equal voice with respect to interstate issues. Without a federally-approved coastal management program, Georgia forfeits its consistency review authority over federal projects, as well as its "seat at the table" of national coastal management.

Funding: Congress appropriates funds every year for approved coastal management programs under the Coastal Zone Management Act. Georgia is entitled to a portion of these funds with an approved program. If Georgia receives federal funding for coastal management, the funds will be used to sponsor monitoring, enforcement, technical assistance, public education, and research on coastal management issues.

Technical Assistance: The National Oceanic and Atmospheric Administration (NOAA), Office of Ocean and Coastal Resource Management provides assistance to state coastal programs in the form of information, technical support, and relating coastal issues to the Administration. A uniformed service of the Administration, the NOAA Corps provides research vessels, equipment, and technical staff. The NOAA Coastal Services Center in Charleston is a regional office providing technical support and other coastal services to states participating in the national coastal management program.



# CHAPTER TWO:
# GEORGIA'S COAST



And now from the Vast of the Lord will the waters of sleep
Roll in on the souls of men,
But who will reveal to our waking ken
The forms that swim and the shapes that creep
Under the waters of sleep?
And I would I could know what swimmeth below when the tide comes in
On the length and the breadth of the marvelous marshes of Glynn.

Sydney Lanier
*The Marshes of Glynn*

# SECTION I:
# INTRODUCTION

Across the United States, over 50% of the population lives along the coast in an area of land that comprises only 18% of the nation's total land area. Coastal populations are expected to increase 15% -- to 127 million people -- by the year 2010. This population growth creates increased and often conflicting demands for commercial, residential, industrial, and recreational development, thereby placing tremendous pressure on the nation's coastal resources.

The situation in Georgia is very similar. With over 2,344 linear miles of coastline, Georgia's coastal area is enriched with abundant marshes, barrier islands, beaches, river corridors, maritime forests, and uplands. To date, the Georgia coast has been relatively undeveloped, due to the fact that many of Georgia's barrier islands are not easily accessible and much of the available developable land is currently being managed for timber production. Pressures from increasing population and development, however, are threatening the quality of life on the coast. The population of coastal Georgia is growing at approximately 20% per decade. Along with this increased population growth comes the pressure to develop environmentally sensitive areas such as wetlands, floodplains, and barrier islands. A long-range resource management plan is needed to continue an acceptable level of protection while providing for compatible economic development. Thoughtful resource management will ensure that future generations also have the opportunity to enjoy the Georgia coast.

In order to be successful, any comprehensive planning effort must take into account many factors including history, natural environment and climate, economy, population and demographics, and regional land uses. An overview of these factors in the Georgia coastal area follows.

# SECTION II:
# HISTORY

The Native Americans were the first known settlers of coastal Georgia, over 10,000 years ago. Changes in sea level have made it difficult to obtain archaeological evidence for an exact date of the first human habitation. A band of the Creek Indian tribe inhabited most of the Georgia coast at the time of Spanish arrival in 1540. The Creeks lived off of the land, farming and fishing for subsistence. Large shell middens, composed mainly of oyster shells, can be found on most of Georgia's barrier islands. The oldest shell midden is located on Sapelo Island and has been dated back 5,800 years.

Following the formal conquest of Florida by De Soto in 1539, the Spanish occupied the Georgia coast from 1540 to 1680, building missions and attempting to convert the Indians to Christianity. They called the area Guale (pronounced "wally"), after a Native American who received the Spanish hospitably on St. Catherine's Island. Missions were established first on St. Catherine's Island around 1566 and then on St. Simons in the late 1590s. These missions began to disappear toward the end of the 1600s due to Indian uprisings and disease. The Spanish are credited with introducing fruits (figs, pomegranates, oranges) and domesticated hogs and goats, as well as the durable "tabby" building material. A mixture of crushed oyster shells, water, and sand, "tabby" was molded and used by the Spaniards to construct missions and other buildings. In the late 1600s, as the British and Native American tribes invaded the area from colonies at Charleston, South Carolina, the Spanish retreated to Florida.

The area remained largely uninhabited from 1690 until the 1720s, with the notable exception of the famous pirate Edward Teach, otherwise known as "Blackbeard." He used the Georgia coast as his refuge, and roamed the coasts of the Carolinas, Florida, and the West Indies until his capture and execution in 1718. According to local legend, buried treasure remains undiscovered on Georgia's Blackbeard Island to this day.

In the early 1700s, the British began to establish permanent colonies in coastal Georgia when the region was ceded to General James Oglethorpe as a buffer between the Spanish colonies in Florida and the British colonies in South Carolina. In 1721, Colonel John Barnwell began construction of Fort King George near Darien. In 1733, Oglethorpe settled Savannah and built Fort Frederica. He built Fort St. Simons on St. Simons Island three years later. Formed from lands ceded from South Carolina, the new colony was named Georgia in honor of King George II. English citizens were offered free passage, a land grant, and three years of support to settle in the new colony. Scottish Highlanders, mostly from the McIntosh clan, were offered the same opportunity as the English, and many accepted. The Scottish settled the town of Darien at the mouth of the Altamaha River. A few large plantations were established to grow cotton, indigo, and rice. Many of the citizens hunted and trapped the abundant wild game (deer, wild turkey, and furbearers) in the area.

The Spanish were not pleased with the English colonization efforts, and demanded that all of Georgia be returned to Spain. Britain declared war on Spain in December of 1739, and the Spanish attacked St. Simons Island in 1742 with over 50 ships and over 5,000 men. Oglethorpe, with only 650 men including Scottish Highlanders from the Altamaha River area and Creek Indians, repelled the Spanish in the Battle of Bloody Marsh. Thus, England took control of the Georgia territory and all points north.

Slavery began in the 1740s in coastal Georgia, despite being vehemently opposed by the Scottish Highlanders. Oglethorpe returned to England in 1743 and passed away in 1785 at the

age of 89. Fort Frederica was destroyed by fire in 1758, and was abandoned. Much of the property on St. Simons was given to British soldiers for their service in the military, but most returned to England at the beginning of the Revolutionary War. Those that remained purchased slaves and began to clear and dike off large tracts of river swamp land to grow rice and cotton. During the Revolutionary War, much of coastal Georgia was ravaged by the British army. Homes were looted and burned, and people were murdered by troops loyal to the Crown of England. The coast would soon recover economically due to abundant timber and the introduction of sea-island cotton from the West Indies.

The period from the late 1700s up to the Civil War was marked by the production of naval stores (tar, pitch, turpentine) and the cultivation and harvest of live oak timber, rice, indigo, and cotton. The naval stores and timber were needed for the growing shipbuilding industry. Live oak, which grew on the Georgia coast, was the ideal lumber for building ships because of its strength and resistance to rotting. With the Industrial Revolution going on in England, cotton was in great demand to supply the cotton gins and textile mills. Due to the fertile soils and suitable climate, the Georgia coast provided the ideal conditions to grow high quality cotton. Many large plantations were established on coastal islands to cultivate this highly valuable sea island cotton. Vast areas of forest and swamp were cleared and drained for the timber and for land to cultivate. Timber, indigo, and cotton cultivation and harvest began to decline in the late 1800s, signalling the end of the plantation period. Most of the live oak forests had been harvested by this time. At the same time, the demand and price for indigo and cotton in England declined and the boll weevil decimated existing crops. Rice production reached its peak just prior to the Civil War in 1860. Coupled with the onset of the Civil War and the loss of slave labor, the plantation period in Georgia came to an end. After the Civil War, freed slaves populated many areas of the Georgia coast, particularly Sapelo Island. The coast quickly went from one of the most prosperous regions of the country to one of the poorest.

From the 1870s to the 1900s, during Reconstruction, the region tried to recover from the economic decline. Lumber mills began to appear on the Georgia coast. With most of the live oak already harvested, the mills sawed cypress, pine, and other oaks into lumber for export to Europe. The timber was floated down the Satilla and Altamaha rivers to the mills at Darien and St. Simons. Many of the small marsh hammock islands in the vicinity of the old sawmills were formed from the discarded ballast stones of the old schooners used to transport lumber to Europe.

During the early 1900s, people began to discover coastal Georgia as an ideal resort destination. Savannah, St. Simons Island, Jekyll Island, and Cumberland Island were home to the cottages and summer villas of the nation's wealthiest families such as the Pulitzers, Carnegies, Reynolds, and Staffords. The cities of Savannah and Brunswick played an important role in national defense during World War II by building liberty ships. The Eighth Army Air

Force, an important contingent in the European air battle during Word War II, was formed in the City of Savannah. The coast continues to support national defense today, with Fort Stewart Army Base in Hinesville, Hunter Army Air Field in Savannah, and Kings Bay Naval Submarine Base in St. Marys.

Continuing the trends of the past few decades, the Georgia coast is growing at a rapid pace. Timber, agriculture, and related manufacturing plants dominate the coastal economy. Tourism and related service industries are increasing, and the Georgia coast also is a popular area for permanent residence. Many of the coastal counties have seen exponential growth in population due to the influx of tourism and the placement of military bases in the area. There remain areas of the coast where culturally and historically significant communities exist. Hog Hammock on Sapelo Island is one such community that carries on the traditions and heritage of the early African American inhabitants of Georgia. Many other historic sites enrich the Georgia coast, such as Fort Frederica, the Battle Site at Bloody Marsh, Fort Pulaski, Fort King George, and numerous historic districts, neighborhoods, commercial areas, homes, schools, and churches. A well-balanced, conscientious planning effort is needed to ensure that these historical resources remain in place for future generations.

## SECTION III:
## NATURAL ENVIRONMENT AND CLIMATE

The Georgia coast is an interrelated system of productive coastal marine waters, barrier islands, estuaries, coastal marshlands, rivers, and associated upland areas. The westernmost portion of the United States on the Atlantic seaboard, Georgia's coast is located approximately in the center of the South Atlantic Bight. The broad, gentle slope of the continental shelf stretches 95 miles off the shoreline. On the shelf, many hard and soft bottom habitats can be found. "Live bottom" areas occur naturally where limestone outcroppings are exposed on the seafloor, allowing marine animals and plants to settle and colonize. The Gray's Reef National Marine Sanctuary, located approximately 15 miles east of Sapelo Island, is a natural reef community with an abundance of live bottom habitat in 60 to 70 feet of water on the continental shelf. Artificial reef communities have been created in some areas by sinking barges, World War II liberty ships, and other material that encourages reef organisms to settle and grow. The coastal marine waters off of Georgia provide habitat for many oceanic birds, sea turtles, marine mammals, crustaceans, and fishes. Marine wildlife includes endangered right whales, manatees, sea turtles (Kemp's ridley, hawksbill, and leatherback), and least terns. Many commercially-important species, such as snapper and grouper, live and breed in these waters.

A chain of eight main groups of barrier islands, stretching over 100 miles from northernmost Tybee Island near the South Carolina border south to Cumberland Island near the Florida border, buffers the marshes and mainland from the forces of the Atlantic Ocean. These islands have built up over the past forty thousand years due to shifting sand, creating over 94 linear miles of beachfront. Wave energy on the Georgia coast is generally low due to the broad, shallow continental shelf offshore. Most of this wave energy is dissipated by friction across the bottom of the shelf as waves move toward shore. Sand bars and shoals also help reduce wave energy close to shore, protecting against erosion and property damage. The islands and their associated dune, live oak, pine forest, and marsh communities also support an abundance of wildlife. Loggerhead, green, and leatherback sea turtles use Georgia beaches for nesting habitat. Ospreys, brown pelicans, egrets, shorebirds, and many species of sea gulls are a common sight in this area.

Six major watersheds terminate at the Georgia coastline, forming an extensive estuarine ecosystem. When freshwater from rivers mixes with and dilutes saltwater from the ocean, both water bodies contribute their own chemical and physical characteristics. This combination of properties creates a richly diverse and highly productive natural habitat. About 75% of commercially important fish and shellfish in the nation are estuarine-dependent. These species rely on estuaries and upper reaches of tidal rivers and streams for early life-state food, migration, and spawning. Georgia's coastal estuaries and associated aquatic ecosystems form a critical component in the life cycles of sport fishes such as spotted seatrout and red drum; commercial species such as shrimp, blue crabs, and oysters; and endangered species such as manatees and shortnose sturgeon. Fragile estuarine ecosystems establish the foundation for the interrelationship of many marine plants and animals with their environment. Without estuaries, that life could not exist.

Moving inland, a broad band of coastal marshlands covering 378,000 acres separates the barrier islands from the mainland. Poet Sidney Lanier immortalized these marshes in his famous poem, "The Marshes of Glynn." Measuring three to five miles wide in some places, Georgia's marshlands constitute one-third of the remaining salt marsh along the U.S. Atlantic coast. The marshes are dominated by cordgrass (Spartina alterniflora), which supports a highly productive food chain. High nutrient levels are transported in and out of the system by daily tidal cycles, thus supporting a rich habitat for fish, birds, crustaceans, and other wildlife. Herons, egrets, redwing blackbirds, oysters, red drum, sea trout, blue crabs, and white shrimp are common here. The area experiences an average tidal range of 6 to 8 feet, with tides of 9 to 11 feet possible on spring tides. These tidal ranges are several feet larger than the adjacent states of Florida, South Carolina, and North Carolina due to Georgia's location in the center of the South Atlantic Bight. This wide tidal range is the main reason Georgia has such an abundance of salt marsh.

Further to the west, brackish and freshwater marshes and swamps extend inland up rivers and streams. This area is generally flat and occupied by live oak, tupelo gum, and cypress swamps. These marshes and swamps serve to recharge the shallow groundwater aquifer and reduce the duration and magnitude of flood events. Wetlands function like sponges to retain floodwaters, filter out sediment and other contaminants, and slowly release the water over time to the rivers. These swamps also provide important habitat for wildlife, including endangered and threatened species such as the bald eagle and wood stork. Large numbers of migratory waterfowl (scaup, mergansers, mallards, coots) and wading birds (snipe, woodcock, yellowlegs) use these places as "staging" (resting and feeding) areas on the way to their wintering grounds in Central and South America. Several major coastal plain rivers feed these wetlands, including the Savannah, Ogeechee, Canoochee, Altamaha, Satilla, and St. Marys. Most of these rivers provide critical habitat for the endangered shortnose sturgeon and anadromous fish stocks. All of Georgia's coastal rivers carry large amounts of sediments to the sea, helping to build new land and to keep up with sea level rise over time.

Much of the coastal mainland is heavily forested with slash, spruce, loblolly, and longleaf pines. Forests that are less managed are populated with a mixture of pines, hardwoods, and other species such as oak, hickory, magnolia, bay, palmetto, and dogwood. The pine and hardwood forests are home to many bird species, such as the endangered red-cockaded woodpecker and many birds of prey, such as red-tailed hawks, turkey vultures, and great horned owls. Many game species, such as feral hogs, whitetail deer, black bear, wild turkey, and bobwhite quail, can also be found in these forested communities.

The marine subtropical climate of the Georgia coast is heavily influenced by the Atlantic Ocean and other meteorological and climatic features common to the southerly latitudes. The climate is moderate, with short, mild winters and long, humid springs and falls. Temperatures in the region average 52 degrees Fahrenheit in the winter, 65 degrees Fahrenheit in the spring, 80 degrees Fahrenheit in the summer, and 67 degrees Fahrenheit in the fall. Ocean and sea breezes tend to moderate temperatures along the coast. Rainfall averages 30 to 50 inches per year, half of which comes from summer thunderstorms. During the summer, the area is dominated by a large high-pressure system called the Bermuda High that diverts most of the continental frontal storms away from the southeast.

The Bermuda High disintegrates in late summer, allowing frontal passages to return. May through November is considered hurricane season. Historically, tropical storms and hurricanes impact the Georgia coast on the average of once every ten years. Coastal flooding resulting from hurricane-induced storm surges and long-term beach erosion poses a substantial danger to life and property on the low-lying barrier islands and mainland. The storms cost many lives and result in millions of dollars in property damage in the coastal zone due to high winds, flooding, and rainfall. Strong northeasters impact the coast more frequently than hurricanes and supply much of the rain in late fall, winter, and spring.

# SECTION IV:
# COASTAL ECONOMY

The coast of Georgia enjoys a dynamic and diverse economy based largely on the region's abundant resources, including natural waterways, groundwater, pine forests, fisheries, and natural and historic features. Regional unemployment figures (1991) ranged from a high of 7.6% in Brantley County to a low of 3.6% in Camden County. The eleven-county average of 5.4% unemployment is in line with the Georgia statewide unemployment figure of 5.0%. Median income figures for the area ranged from a high of $29,443 in Effingham County to a low of $18,802 in Long County. Per capita incomes ranged from $17,776 in Chatham County to $8,080 in Long County.

The average median income and per capita income for the region during 1989-1990 was $24,381 and $12,630 respectively. Both averages are approximately 20% lower than the Georgia statewide average median income of $29,021 and average per capita income of $17,045. In 1989, 17.3% of the region's citizens were below the poverty level ($12,674 for a family of four) versus the state average of 14.7% below the poverty level. Camden County had the lowest poverty level of 11.5%, while Long County had the highest at 23.7%.

The eleven-county coastal area accounted for $6.2 billion in total buying power, about 6% of the Georgia State total of $97 billion. Seventy percent of that buying power ($4.3 billion) came from Chatham and Glynn counties. These figures show the wide range of wealth in the Georgia coastal area, and the tendency for that wealth to be clustered near the population centers of Savannah and Brunswick and the military facilities of Camden and Liberty counties, and absent from the rural counties of Brantley, Charlton, Long, McIntosh, and Wayne.

Extensive plantings of pine forests signify the importance of the timber industry in coastal Georgia. Timber activities include forestry management and harvesting, paper pulp processing, distilling pine products, and timber production. The long summer growing periods, plentiful rainfall, fertile soils, and access to large quantities of groundwater make the coastal area very conducive to timber growth and processing. Commercial forests cover much of the land area in the Georgia coastal area and produced a total income (from sawtimber and pulpwood) of $110.5 million in 1993. Georgia Pacific pulp mill employs 850 people, and the Hercules plant, which distills pine oils, employs 544 people. Union Camp Corporation in Savannah employs 2,800 people. Riceboro Interstate Paper Corporation, ITT Rayonier (Jesup), Stone Container Corporation (Savannah), and Fort Howard Paper Corporation (Rincon) collectively employ another 3,200 people.

Other major manufactures in the Savannah area include Gulfstream Aerospace (jet aircraft), Great Dane Trailers (truck trailers), Savannah Sugar Refinery (refined sugar), and Kemira, Incorporated (Titanium Dioxide). Major manufacturing operations in the Savannah area provided a total of 15,800 jobs in 1993.

Row crop agriculture as well as livestock and poultry operations are also an important economic activity, especially in the second tier of coastal counties (Effingham, Long, Wayne, Brantley, and Charlton). In 1987, the eleven coastal counties contained 1195 individual farms, encompassing 7.3% of the total coastal land area. Tobacco is the most important row crop, along with corn, soybeans, peanuts, and cotton. Approximately 19,000 head of cattle are raised in the coastal zone, along with about 17,800 hogs and pigs and several million chickens.

Water-borne commerce and associated port development provides significant employment and revenue in coastal Georgia due to protected waterways, suitable physical port locations, and attractive local and regional markets. Savannah and Brunswick are the two major ports in Georgia that possess modern docking, storage, and land transportation facilities. Kings Bay Naval Submarine Base also has significant dockage facilities, but it is used exclusively by the U.S. Navy. In 1989, Savannah and Brunswick handled almost 15 million tons of cargo. Products landed and shipped from Georgia ports range from automobiles and wood products to grains and gypsum. The 138 mile long Georgia segment of the Atlantic Intracoastal Waterway supports substantial barge and other commercial traffic. While economically important, commercial port operations may also affect the coastal natural and recreational environment due to the need for dredging, competing shoreline uses, water quality degradation, and reduced water safety.

The commercial fishing and seafood processing industry is yet another important economic factor on the Georgia coast. In 1995, there were approximately 2,500 commercial fishers in Georgia, principally trawling for shrimp. Blue crabs, whelks, clams, and oysters are also commercially-important species. In 1995, approximately 7 million pounds of shrimp valued at $27 million, approximately 9 million pounds of blue crabs valued at $5 million, and approximately 1.3 million pounds of all other species (snapper, grouper, oysters, clams, and other finfish and shellfish) valued at over $1.3 million were landed in Georgia. In that same year, 1,131 people were employed in 11 seafood packing and processing houses, along with 50 wholesale seafood dealers employing over 100 people. Rich-Sea Pak and King and Prince, two large seafood processing houses, employ approximately 800 and 600 people, respectively.

Recreation and tourism is also an integral component of the coastal economy. The natural, relatively undisturbed shorelines and beaches of Georgia coupled with the temperate climate make coastal Georgia an attractive vacation destination. Abundant natural and historic resources, such as the National Historic Landmark districts in Savannah and Jekyll Island,

Cumberland Island National Seashore, Fort Frederica National Historical Monument, top-class golf courses, and abundant recreational fisheries, add to the allure of the area. Four State Parks and four State Historical Sites are operated by the State of Georgia and are open to the public. A 1994 survey estimated 443,717 anglers participate in saltwater fishing in Georgia. These fishers catch over three million fish, creating an expenditure of $53.4 million annually, as well as a total economic value of over $250 million annually. Other popular activities include tennis, golfing, sailing, and scuba diving. Boating and fishing are other popular recreational activities, with almost 25,000 boats registered in coastal Georgia and over 40 marinas and 36 public boat ramps to serve them.

Savannah area visitors totalled 5.4 million in 1993, generating almost $616 million in spending and supporting 18,000 full-time jobs. In Glynn County in 1995, 1.53 million tourists spent over $699,874,553 dollars, supporting 15,322 full-time jobs annually. The total impact from tourism in the Georgia coastal area was estimated at around $1.39 billion in 1993. Tourism continues to grow each year, and more people are choosing coastal Georgia as a place to retire. A comprehensive planning effort is needed for any future development and resource utilization to protect the natural and historic resources from environmental, aesthetic, and economic damage.

National defense-related complexes are another major component of the coastal Georgia economy. These facilities employ a large number of personnel, which results in economic growth of the surrounding communities. Camden County and Liberty County have both experienced tremendous growth from Kings Bay Naval Submarine Base and Fort Stewart Army Base, respectively. The Kings Bay facility is home for 5 to 10 Trident nuclear submarines and employs 9,000 people. Fort Stewart, which is the largest Army base east of the Mississippi, had 19,000 employees in 1993. Also in 1993, Hunter Army Air Field in Savannah employed 4,800 personnel. United States Coast Guard personnel in Savannah and Brunswick are economically important to their communities. The Federal Law Enforcement Training Center (FLETC) in Brunswick trains law enforcement personnel for over 70 federal agencies, employing approximately 1,300 people and graduating 25,000 people annually.

## SECTION V:
## POPULATION CHARACTERISTICS

The eleven-county coastal area of Georgia has a combined population of 460,233 people according to the 1990 Census. At that time, approximately 66.9% were white, 31.2% were black, 1.7% were Hispanic, and 1.9% were of other descent. The population is mainly centered around the Savannah area (Chatham, Effingham, and Bryan Counties), with smaller centers around Brunswick (Glynn County) and Kingsland/St. Marys (Camden County). The overall population

of the region, however, is largely rural (66.8%). With 430 people per square mile, only Chatham County's population density exceeds the State average of 112 people per square mile. The emigration of people out of Chatham County, along with the immigration of people to surrounding Effingham and Bryan Counties, suggests that people are moving out of metropolitan Savannah to the suburbs.

The coastal population continues to grow from tourism on Tybee Island, Sea Island, St. Simons Island, and Jekyll Island, and from military bases in Camden, Liberty, and Long counties (Kings Bay Naval Submarine Base and Fort Stewart Army Base). According to the 1990 Census, a substantial 23% increase from 1990 is predicted for coastal Georgia in the future. This increase continues a trend in population growth on the coast which has exceeded 200% since 1930 in some counties. Liberty County and Camden County have experienced a remarkable 547% and 376% increase in population respectively since 1930, due largely to the placement of military bases in those counties.

## SECTION VI: COASTAL LAND USE

The eleven-county coastal area of Georgia encompasses approximately 6,409 square miles (4,101,952 acres), with an average population density of 82 people per square mile. Of the total area, 5,637 square miles (3,611,661 acres) is land, and 772 square miles (494,080 acres) is water. Seventy-five percent (4313 square miles or 2,760,455 acres) of the land area is forested, and only 25% (1330 square miles or 851,216 acres) is non-forested. Although there are clusters of intense development, much of the Georgia coast remains relatively undeveloped. As of the mid-1980s, only 4% (less than 100,000 acres) of the coast was considered developed. Of that, 3.3% (80,000 acres) was classified as residential, 0.3% (6,000 acres) as commercial, and 0.4% (11,000 acres) as industrial. There is no shortage of developable land (currently estimated at 32% of the total land area); however, there is a need for better management of growth and better planning for development to insure that the region retains its growth potential and habitability.

Georgia has more acres in forest management than any other state, and forestry activities account for 71% (4,005 square miles or 2,563,294 acres) of the total acreage in the Georgia coastal area. Approximately 49% of the timberland is owned by industry, 39% is privately-owned, and 12% is owned by the government. The soils and climate of the area also make it conducive to growing crops due to the long growing season and ample rainfall. The second-tier coastal counties account for most of the conventional agricultural activities, such as row crop cultivation and livestock husbandry.

Commercial and industrial development along the Georgia coast is also an important land use with many positive economic benefits. Ports and waterborne commerce-related facilities, gypsum and sheet rock plants, pulp and paper mills, and public utility companies are a few examples of industries along the coast. The coastal area of Georgia has been attractive to industry for many reasons, including the proximity to water transportation, high quality groundwater resources, and nearby natural resources and raw materials. Manufacturing and other industry are beneficial to the coastal economy, however, there can be drawbacks. Improper or unplanned development can result in waste disposal problems, toxic and hazardous waste, and water and air pollution if not properly managed. The electricity provided by utility companies in the area is generated by hydroelectric, nuclear, coal, oil, and natural gas powered plants throughout the state. However, there are no nuclear or hydroelectric plants within the eleven-county coastal area.

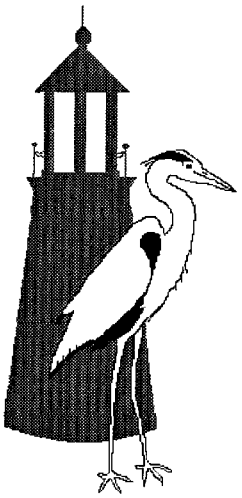
In fiscal year 1992-1993, the eleven-county coastal area received $64.5 million in federal, State, and local funds to construct and maintain over 6,500 miles of public roads and highways for its citizens. In addition to roads and highways, there are several airports capable of servicing a wide variety of aircraft sizes, including major airports (Savannah International Airport and the Glynco Jetport in Brunswick), and many smaller airfields throughout the coastal zone. The area is also served by railways such as AMTRAK, CSX, and Norfolk-Southern. In addition, the entire Georgia coastal area is within two hours of the Jacksonville, Florida or the Charleston, South Carolina metropolitan area.

There is a large military and national defense presence in coastal Georgia. The Kings Bay Naval Submarine Base, Hunter Army Air Field, and Fort Stewart Army Base are the three major installations in the area.

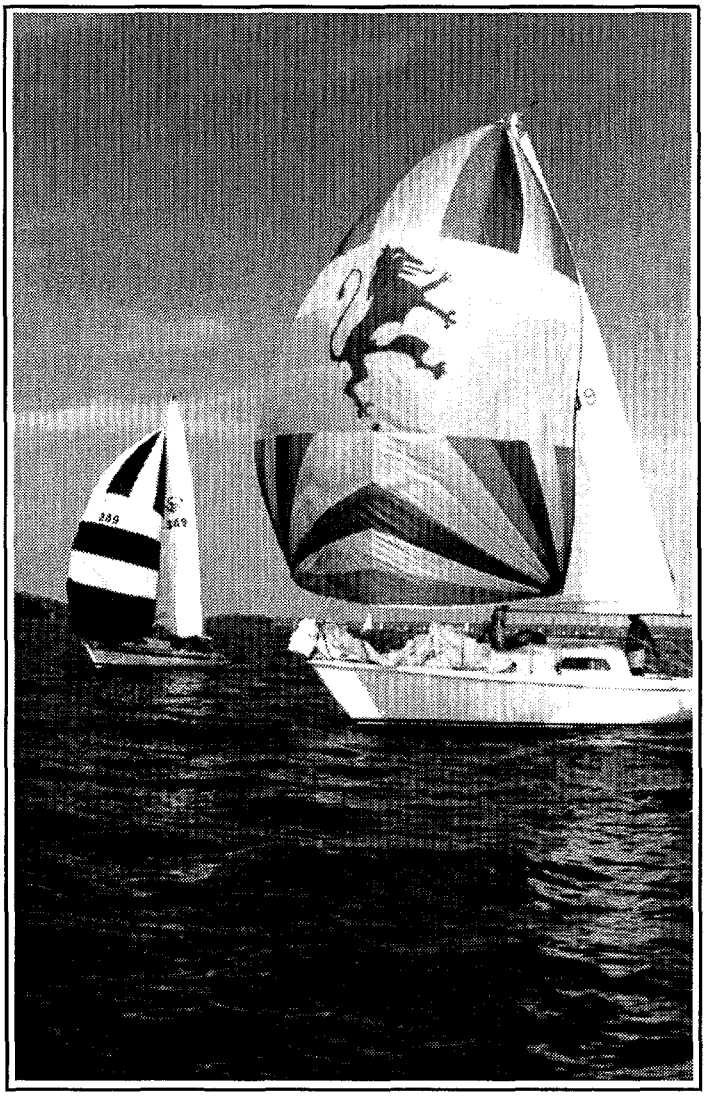
State and federal government entities own a wide variety of lands in coastal Georgia. Many of these areas are maintained as natural areas, and are very important to the ecological health of the area. These areas provide habitat for wildlife, control and abate floodwaters, recharge groundwater supplies, and improve surface water quality. The federal government owns and maintains many national parks, monuments, wildlife refuges, and other natural areas, including Cumberland Island National Seashore, Wassaw Island National Wildlife Refuge, Harris Neck National Wildlife Refuge, Gray's Reef National Marine Sanctuary, Fort Frederica National Monument, Fort Pulaski National Monument, Bloody Marsh National Monument, Wolf Island National Wildlife Refuge, Savannah National Wildlife Refuge, and Blackbeard Island National Wildlife Refuge. The Georgia Department of Natural Resources maintains parks and recreational areas at Skidaway Island and Crooked River; Wildlife Management Areas (WMAs) at the Altamaha River, Richmond Hill, Ossabaw Island, Paulks Pasture (lease), Sapelo Island (Richard J. Reynolds WMA), and Sansavilla (lease); State Heritage Preserves and Historic Sites at Fort King George, Fort McAllister, Wormsloe, Sunbury, Richmond Hill, Little Tybee Island, Cabbage Island and Hofwyl-Broadfield Plantation.

Many educational, medical, and other public facilities are located within the coastal area. Georgia Southern University, Savannah State College, Armstrong State College, Coastal Georgia Community College, and several other regional schools and technical colleges are all located on or near the coast. The Southeast Georgia Regional Medical Center in Brunswick; Candler, St. Josephs, and Memorial Hospitals in Savannah; and Camden Medical in St. Marys are a few of the major facilities that provide medical care to the citizens of the coast. In addition to schools and hospitals, a multitude of civic centers, theaters, museums, and other public facilities are also located throughout the eleven-county area.

All of these locations and facilities, with the exception of portions of the military bases, are available for the use and enjoyment of the general public.



# CHAPTER THREE:
# GOALS AND OBJECTIVES



When there is no dream, the people perish.
Proverbs 29:18

This chapter describes the mission, goals, and objectives of the Georgia Coastal Management Program. Goals and objectives of the Program are categorized as either Program Goals or Resource Goals. Program Goals were developed by the Department of Natural Resources, Coastal Resources Division with the concurrence of the Coastal Zone Advisory Committee. Resource Goals were developed by the Coastal Zone Advisory Committee.

When developing goals, the Coastal Zone Advisory Committee recognized a number of common threads in their discussions. Despite differing viewpoints on coastal issues, all committee members agreed on the following points. A coastal management program for Georgia should: provide a mechanism for conflict resolution; promote and enhance educational programs that increase the awareness and understanding of the value of our resources; promote and enhance information links to the citizenry and user groups; recognize the complexities of private property rights; improve and enhance coastal resource related tourism; address cumulative impacts; result in better enforcement and monitoring of existing regulations; and provide and enhance managed public access to the resources; and provide a simplified and efficient process for permitting, that allows for ample and early review of significant projects.

**MISSION STATEMENT**

**It is the mission of the Georgia Coastal Management Program to balance economic development in Georgia's coastal area with preservation of natural, environmental, historic, archaeological, and recreational resources for the benefit of Georgia's present and future generations.**

## PROGRAM GOALS

**Goal: Develop and implement a management program that balances sustainable economic development and natural resource conservation in coastal Georgia.**

**Objectives:**

1. Encourage and assist natural and social scientific research in coastal Georgia, in order to develop a comprehensive database of the area.

2. Promote increased recreational opportunities in coastal areas and increased public access to tidal waters in a manner that protects coastal resource quality, public health, and public safety.

3. Develop and institute a comprehensive erosion policy that identifies critical erosion areas, evaluates the long-term costs and benefits of erosion control techniques, seeks to minimize the effects on natural systems (both biological and physical), and avoids damage to life and property.

4. Encourage new coastal development to locate in existing developed areas capable of accommodating additional growth, and in areas determined to be more environmentally and economically suitable for development.

5. Resolve conflicts and minimize potential conflicts among activities through improved coastal management that reflects the public's desires, the capacity of natural resources, and expected costs and benefits.

6. Encourage new facilities to locate in areas where adverse social, economic, and environmental impacts can be minimized, and encourage planning that prioritizes water-dependent uses along shoreline areas.

7. Promote the use of impact assessments which incorporate energy-saving benefits, economic effects, and social and environmental factors as the basis for decisions on development of energy facilities; and ensure that affected local governments obtain sufficient financial and technical assistance to cope with these impacts.

8. Support the wise commercial development of harbors, rivers, and waterways for trade and commerce in locations and using methods that maintain the environmental integrity of the coastal region.

9. Protect and, where possible, restore or enhance the resources of the State's coastal area for this and succeeding generations.

10. Develop a coastal program with flexibility for revision and improvement as knowledge and experience in managing coastal resources evolves.

**Goal: Simplify the permitting system for activities in the coastal area in a manner that implements the goals and objectives of the Management Program and promotes the public interest.**

**Objectives:**

1. Simplify the permitting system for activities in the coastal area in a manner that maintains the integrity and purpose of the Management Program.

2. Ensure that permits approved for coastal area activities are designed to minimize negative impacts on water quality, marine productivity, beach and shoreline stability, and other environmental aspects.

3. Give full consideration to the Rules and Regulations for permitting, with thorough and comprehensive reviews of all permit applications.

4. Provide guidance on environmentally suitable methods of design, construction, and development in the coastal area, and assist permit applicants to incorporate these environmentally suitable alternatives in their proposals where feasible.

**Goal: Promote intergovernmental coordination and public participation in the development and implementation of the Georgia Coastal Management Program.**

**Objectives:**

1. Provide full opportunity for participation by federal, State, and local government agencies, concerned organizations, and the general public in developing, implementing, and improving the Georgia Coastal Management Program.

2. Increase public awareness and encourage public participation during development of and decisions made pursuant to the Georgia Coastal Management Program.

3. Strengthen the planning and decision-making capabilities of cities and counties in the coastal area by providing financial, technical, and other assistance; and provide for coordination of local comprehensive plans and ordinances with the policies of the Georgia Coastal Management Program.

4. Promote coordination and use of existing State programs to minimize duplication of efforts, conflicting actions, and permit processing delays, and achieve coastal management objectives and policies.

5. Provide adequate representation of the interests of the State of Georgia in federal agency decisions and actions affecting the coastal area.

## RESOURCE GOALS

**Goal: Protect and sustain the unique character of life on the Georgia coast that is reflected in its cultural, historical, archeological, and aesthetic values by providing management of its resources.**

**Objectives:**

*Fisheries*

1. Provide a coastal zone with finfish, crustaceans, and shellfish populations that will support commercial and sport fisheries on a sustainable basis.

*Wildlife*

2. Provide a coastal zone that maintains diverse indigenous wildlife populations at viable and sustainable levels.

3. Provide a coastal zone in which wildlife species listed as special concern, threatened, or endangered are recovered to healthy, viable populations.

4. Provide a coastal zone that attracts and sustains historic migratory bird populations.

*Plants*

5. Provide a coastal zone in which diverse indigenous plant populations are maintained at viable and ecologically balanced levels.

*Historic and Archeological*

6. Provide a coastal zone in which all significant archeological and historic sites and artifacts are preserved.

*Cultural*

7. Provide a coastal zone in which the unique cultural entities are recognized and protected.

*Scenic Vistas*

8. Provide a coastal zone in which marsh, river, and other natural scenic vistas, such as highway and river corridors, are free of visual obstructions and blight.

*Minerals*

9. Provide a coastal zone in which extraction and utilization of mineral resources will not detrimentally impact other coastal resources.

*Surface Water*

10. Provide a coastal zone in which surface waters of the State meet or exceed recreation-use water quality standards.

*Groundwater*

11. Provide a coastal zone in which the water supply aquifers are managed at levels needed to provide adequate, potable drinking water in perpetuity.

12. Provide a coastal zone in which the groundwater is managed to meet demands other than drinking water on a sustainable basis, while achieving some restoration of the resource.

*Tidal, Marsh, and Submerged Lands*

13. Provide a coastal zone in which the scenic quality and biological productivity of tidal resources is maintained.

*Freshwater Wetlands*

14. Provide a coastal zone in which the area and functional integrity of wetlands that impact the coastal region of Georgia are maintained.

*Barrier Islands*

15. Provide a coastal zone in which the natural systems of barrier islands are preserved and protected.

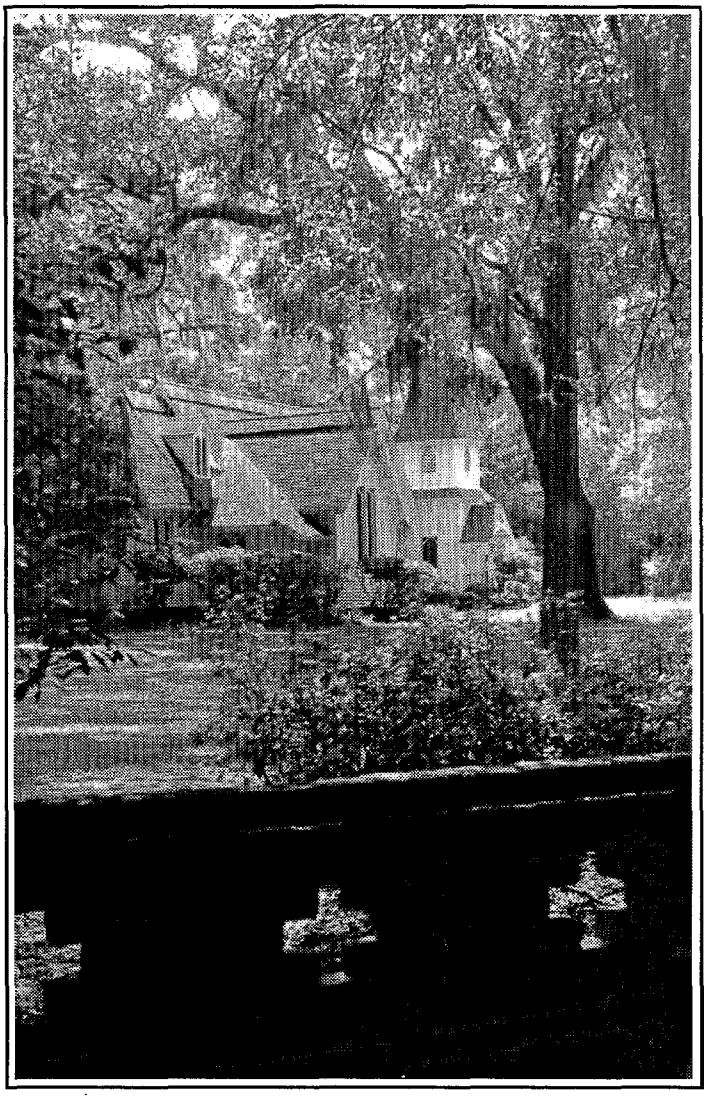
*Beaches*

16. Provide a coastal zone in which the integrity and functioning of the sand-sharing system is maintained.

*Farmlands and Woodlands*

17. Provide a coastal zone in which the productivity of woodlands and farmlands is maintained, with management practices that preserve water quality and biodiversity.

# CHAPTER FOUR:
# BOUNDARY AND ORGANIZATION



Our entire society rests upon -- and is dependent upon -- our water, our land, our forests, and our minerals. How we use these resources influences our health, security, economy, and well-being.

John F. Kennedy

# SECTION I:
# COASTAL AREA BOUNDARY

There are four elements to a state's coastal area boundary: the seaward boundary, the interstate boundary, the inland boundary, and areas excluded from the boundary. The area within the boundary includes those lands necessary to control the shorelands, the uses of which have a direct and significant impact on the coastal waters. This section describes the boundaries of the coastal area subject to the Georgia Coastal Management Program.

## A. Seaward Boundary

The seaward boundary of Georgia's coastal area extends to the outer limits of State jurisdiction, which is three nautical miles seaward from the mean low watermark. Included within the coastal area are both waters of the state and submerged lands.

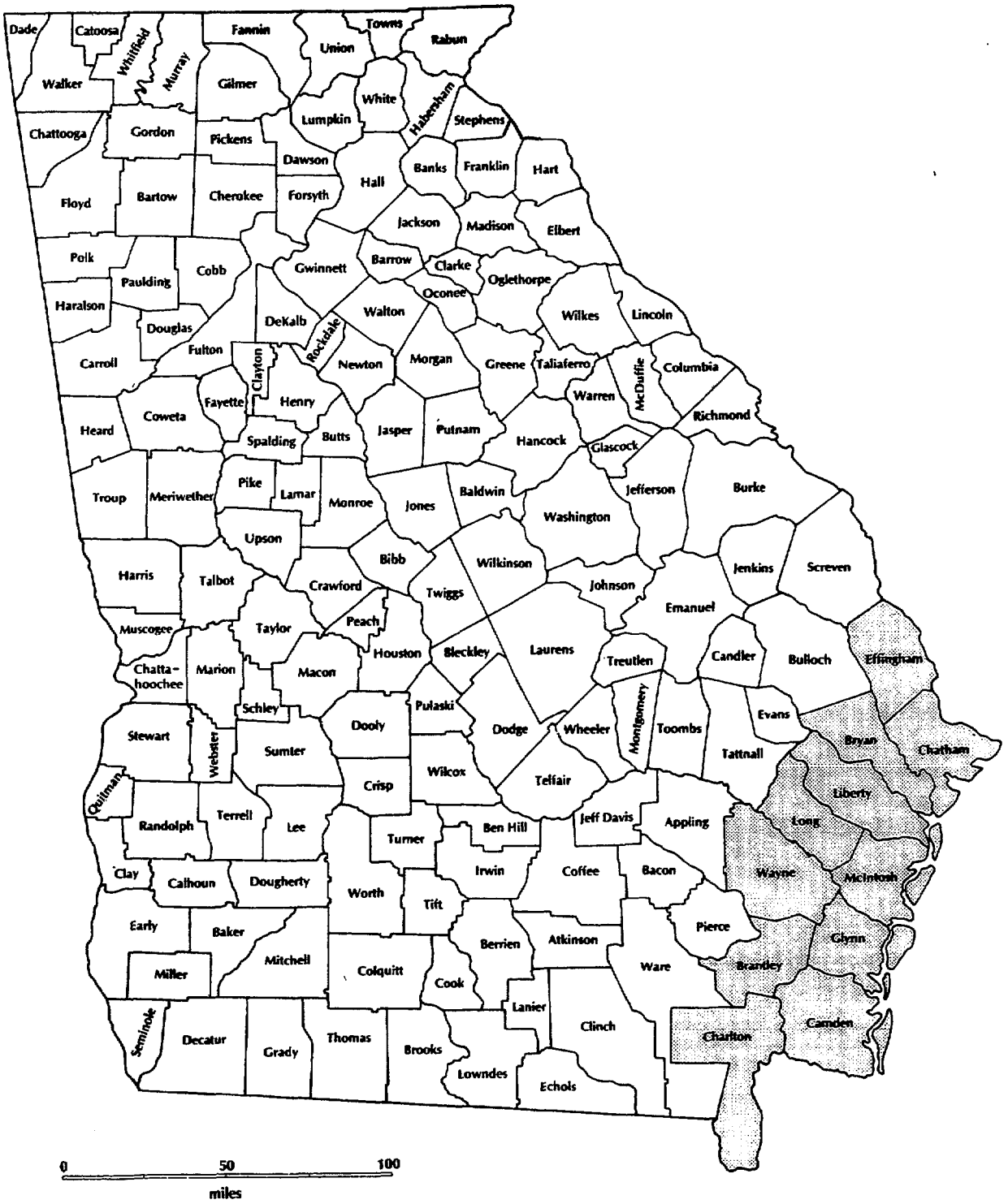
## B. Interstate Boundary

Georgia's coastal area interstate boundaries include the South Carolina state border on the north and the Florida state border on the south. Georgia's coastal area boundary extends farther inland than South Carolina's. The entire state of Florida is included in the Florida coastal zone. Consultations with coastal management program officials from South Carolina and Florida have revealed no problems with the compatibility of the interstate boundaries of either state.

## C. Inland Boundary

The inland boundary of Georgia's coastal area is the political boundaries of the eleven counties: Effingham, Chatham, Bryan, Liberty, Long, McIntosh, Wayne, Glynn, Brantley, Camden, and Charlton. Encompassed within this boundary are all upland areas in these eleven counties, as well as all waters of the state and all submerged lands within the defined coastal area. The eleven counties described by the coastal management area contain all of the tidally-influenced waters of the State, which was the rationale used to determine this inland boundary. Figure 4.1 depicts the area that falls within the jurisdiction of the Georgia Coastal Management Program.

*FIGURE 4.1: Georgia's Coastal Area*



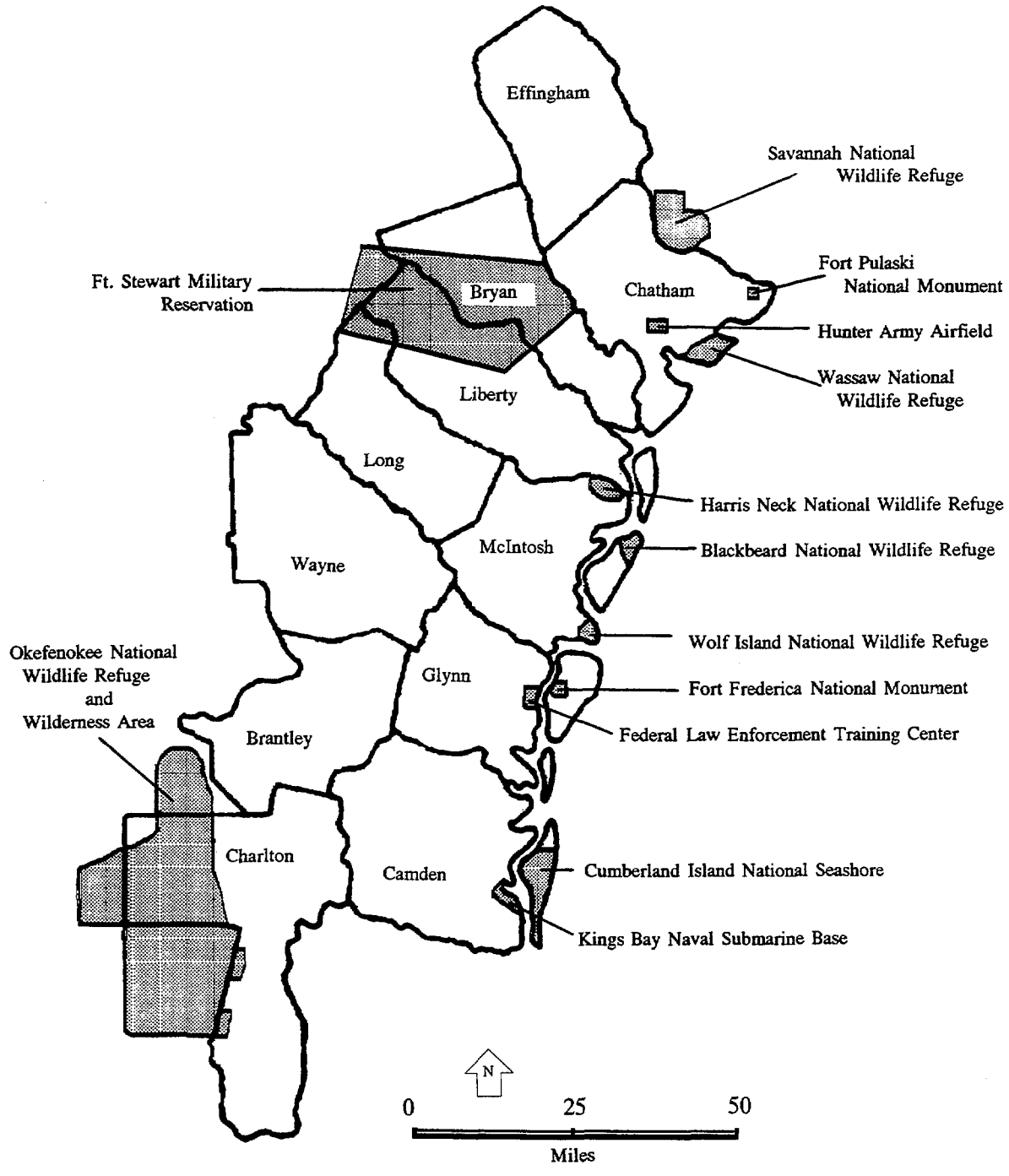
## D. Areas Excluded from the Boundary

The jurisdiction of the Georgia Coastal Management Program does not include lands that are subject solely to the discretion of, or held in trust by, the federal government. Federal land areas are not subject to the direct management authority of the Management Program and are generally exempt from State permits and other regulation. However, activities occurring on federal lands that affect any land or water use or natural resource of the coastal area must be consistent with the Georgia Coastal Management Program (See Chapter Eight, "Federal Consistency").

*TABLE 4.1: Major Federal Land Holdings in Coastal Georgia*

| | | |
|---|---|---|
| 1. | **Savannah National Wildlife Refuge**<br>Department of the Interior, U.S. Fish and Wildlife Service | Chatham / Effingham<br>11328.8 acres |
| 2. | **Wassaw National Wildlife Refuge**<br>Department of the Interior, U.S. Fish and Wildlife Service | Chatham<br>10049.0 acres |
| 3. | **Hunter Army Airfield**<br>Department of Defense, U.S. Army | Chatham<br>5372.0 acres |
| 4. | **Fort Pulaski National Monument**<br>Department of the Interior, National Park Service | Chatham<br>5365.0 acres |
| 5. | **Fort Stewart Army Base**<br>Department of Defense, U.S. Army | Bryan / Liberty / Long<br>280279.0 acres |
| 6. | **Harris Neck National Wildlife Refuge**<br>Department of the Interior, U.S. Fish and Wildlife Service | McIntosh<br>2691.3 acres |
| 7. | **Blackbeard National Wildlife Refuge**<br>Department of the Interior, U.S. Fish and Wildlife Service | McIntosh<br>5617.6 acres |
| 8. | **Wolf Island National Wildlife Refuge**<br>Department of the Interior, U.S. Fish and Wildlife Service | McIntosh<br>5125.8 acres |
| 9. | **Fort Frederica National Monument**<br>Department of the Interior, National Park Service | Glynn<br>210.7 acres |
| 10. | **Federal Law Enforcement Training Center**<br>Department of the Treasury | Glynn<br>1525.6 acres |
| 11. | **Cumberland Island National Seashore**<br>Department of the Interior, National Park Service | Camden<br>12688.0 acres |
| 12. | **Kings Bay Naval Submarine Base**<br>Department of Defense, U.S. Navy | Camden<br>16250.0 acres |
| 13. | **Okefenokee National Wildlife Refuge**<br>Department of the Interior, U.S. Fish and Wildlife Service | Charlton<br>178776.7 acres |

*FIGURE 4.2: Major Federal Land Holdings in Coastal Georgia*



# SECTION II:
# PROGRAM IMPLEMENTATION --
# STATE AUTHORITIES, NETWORK, AND PROCEDURES

## A. State Legal Authorities and Networking

Administered by the Department of Natural Resources, Coastal Resources Division, the Georgia Coastal Management Program is implemented and enforced through State laws, rules and regulations, and programs. The Coastal Management Program is a *networked* program that relies on existing authorities to execute the full range of policies and management techniques identified as necessary for coastal management purposes. Each party exercising statutory authority that is part of the Program is bound to conformance with relevant policies by State law (Georgia Coastal Management Act, O.C.G.A. 12-5-320, *et seq.*) and through a Memorandum of Agreement.

The Coastal Resources Division has the direct authority over certain programs and permits. Additional authorities necessary to implement the networked Coastal Management Program are administered by other State agencies as described in Chapter Five. Memoranda of Agreement between agencies help ensure cooperation and coordination of activities. Regular interagency meetings provide an open forum for communication. Coastal Resources Division staff provides technical assistance to cooperating agencies to ensure their full understanding of the Georgia Coastal Management Program. This section describes the direct permit authorities and the networked authorities of the Georgia Coastal Management Program. It also explains the administration of program authorities and describes the interagency coordination process.

Created through the Georgia Coastal Management Act (O.C.G.A. 12-5-260), the legal framework for the Georgia Coastal Management Program involves three methods of implementation. First, the Coastal Resources Division, through the Shore Protection Committee and the Coastal Marshlands Protection Committee, has direct permitting authority for any alteration within the jurisdictions of the Shore Protection Act (O.C.G.A. 12-5-230) and the Coastal Marshlands Protection Act (O.C.G.A. 12-5-280). The Division also has permitting authority under the Revocable License Program (O.C.G.A. 50-16-61). Second, all agencies exercising regulatory authority or management or planning authority within the coastal area are required to be consistent with the Georgia Coastal Management Program (O.C.G.A. 12-5-236), and may be networked through Memoranda of Agreement. Third, authorized agencies patrol and enforce applicable laws and rules and regulations within the eleven-county coastal area. Interagency meetings help coordinate these legal activities.

1. Coastal Resources Division: Direct Permitting Authority

Specific areas of the coastal environment are more vulnerable to the effects of human activities than others. Environmentally-sensitive areas of Georgia's coast include the beaches, dynamic dune fields, submerged shoreline lands, salt marshlands, all tidally-influenced waters, and tidal water bottoms. The Coastal Resources Division, through the Coastal Marshlands Protection Committee and the Shore Protection Committee, has direct authority to issue permits for any alterations of these environmentally critical areas.

*a. Coastal Marshlands Protection Act*

The Coastal Resources Division, through the Coastal Marshlands Protection Committee, has the direct authority to permit or deny any alteration to, or construction on or over, the marshlands or water bottoms within the estuarine area of the State.

The Coastal Marshlands Protection Act states:

> No person shall remove, fill, dredge, drain, or otherwise alter any marshlands or construct or locate any structure on or over marshlands in this state within the estuarine area thereof without first obtaining a permit from the committee or, in the case of minor alteration of marshlands, the Commissioner of the Department of Natural Resources. A permit may authorize the construction or maintenance of the project proposed in the application. After construction, pursuant to a permit, a project may be maintained without a permit so long as it does not alter the natural topography or vegetation at the project site (O.C.G.A. 12-5-286).

The jurisdiction of the Coastal Marshlands Protection Act encompasses over 700,000 acres and includes all salt marsh, as defined by presence of specified vegetation, intertidal areas, mudflats, and tidal water bottoms within the estuarine area of the State. The estuarine area of the State is defined as all tidally-influenced waters, marshes, and marshlands lying within a tide-elevation range from 5.6 feet above mean tide level and below.

The Coastal Marshlands Protection Act created the Coastal Marshlands Protection Committee which is composed of three members: the Commissioner of the Department of Natural Resources and two other persons from the coast who are selected by the Board of Natural Resources. This committee is empowered to issue all orders and grant, deny, revoke, and amend all permits and leases required by the provisions of the Coastal Marshlands Protection Act. The Committee has delegated their enforcement authority directly to the Coastal Resources Division.

Marinas requiring leases of State-owned marshlands and/or water bottoms require a special type of lease as provided by the Coastal Marshlands Protection Act (O.C.G.A. 12-5-287). Marina leases are issued by the Coastal Marshlands Protection Committee and administered by the Coastal Resources Division.

The Coastal Marshlands Protection Act provides both criminal and civil penalties for violations of the provisions, rules, and regulations of the Act. The criminal provisions establish any violation of the act as a misdemeanor which, in the State of Georgia, carries a penalty of a maximum $1,000 fine and/or up to 12 months imprisonment. The civil penalty provisions for violations of the act are civil fines not to exceed $10,000 for each violation and $10,000 for each day such violation continues as well as liability for any actual or projected costs and expenses incurred by the State in restoring as nearly as possible the natural movement of the waters in the marshlands and replacing the vegetation and aquatic life destroyed by the illegal activity. The Coastal Marshlands Protection Committee may also issue cease and desist orders for activities in violation of the Coastal Marshlands Protection Act.

Since 1970, the Coastal Marshlands Protection Act has well served the intended purpose to protect the marshlands. Georgia has about one-third of the remaining salt marsh on the eastern coast of the United States. Extensive case law exists, and appeals to the Coastal Marshlands Protection Act have been pursued all the way to the State Supreme Court. All appeals litigated under the Coastal Marshlands Protection Act have been resolved in the favor of the State including those claiming that the Act constitutes a taking of property.

The Coastal Marshlands Protection Act permit application requirements, permit evaluation procedures, and appeals process are explained in Part B of this Section, "Project Evaluation Procedures."

*b. Shore Protection Act*

The Coastal Resources Division, through the Shore Protection Committee, has the direct authority to permit or deny any alteration to or construction on or over the dynamic dune fields and submerged shoreline lands of the State.

The Georgia General Assembly enacted the Shore Protection Act in 1979. The jurisdiction of the Shore Protection Act includes the beaches and dynamic dune fields located on Georgia's barrier islands and the submerged shoreline lands adjacent to such beaches and dynamic dune fields extending seaward to the limit of the State's jurisdiction in the Atlantic Ocean. The landward boundary of the jurisdiction is defined as the first occurrence of either a live native tree 20 feet in height or greater or of a structure existing on July 1, 1979.

The Shore Protection Act, in Code Section 12-5-237, states:

(a) No person shall construct or erect any structure or construct, erect, conduct, or engage in any shoreline engineering activity or engage in any land alteration which alters the natural topography or vegetation of any area within the jurisdiction of this part, except in accordance with the terms and conditions of a permit therefore issued in accordance with this part. A permit may authorize the construction or maintenance of the project proposed in an application. After construction of a project pursuant to a permit, the project may be maintained without a permit so long as it does not further alter the natural topography or vegetation of the site or increase the size or scope of the project.

(b) No permit shall be required for a structure, shoreline engineering activity, or land alteration which exists as of July 1, 1979, provided that a permit must be obtained for any modification which will have a greater adverse effect on the sand-sharing system or for any addition to or extension of such shoreline engineering activity, structure, or land alteration; provided, further, that, if any structure, shoreline engineering activity, or land alteration is more than 80 percent destroyed by wind, water, or erosion as determined by an appraisal of the fair market value by a real estate appraiser certified pursuant to Chapter 39A of Title 43, a permit is required for reconstruction.

The Shore Protection Act also makes unlawful the operation of any motorized vehicle or other motorized machine on, over, or across the dynamic dune field or beaches except as authorized by the permit issuing authority. The storage or parking of sailboats, catamarans, or other commercial or recreational marine craft in any dynamic dune field is prohibited without proper authorization.

The Shore Protection Act created the Shore Protection Committee which is composed of three members: the Commissioner of the Department of Natural Resources and two other persons appointed by the Board of Natural Resources. This committee is empowered to issue all orders and grant, deny, revoke, modify, suspend, and amend all permits required by the provisions of the Shore Protection Act.

The Shore Protection Committee may issue cease and desist orders for activities in violation of the Shore Protection Act and require corrective action to return the sand dunes, beaches, and submerged lands to their condition prior to the violation. The Shore Protection Act establishes civil penalties for violations of the provisions, rules, and regulations in the form of monetary fines up to $10,000 for each violation and $10,000 for each day such violation continues. Any actual or projected costs and expenses incurred by the State in restoring the natural topography of the sand-sharing system and replacing the vegetation destroyed by an illegal alteration of the dynamic dune field or submerged lands are recoverable in civil actions. Violations of the provisions which prohibit the operation of motorized vehicles on or over the dynamic dune fields or beaches and the provisions prohibiting the parking or storing of marine craft in the dune field are misdemeanors under Georgia law and carry a maximum penalty of $1000 fine and/or 12 months imprisonment.

The Shore Protection Act has legally protected Georgia's beach and dune areas since 1979. The importance of the Act is evident when considering that over 80% of Georgia's beach and dune areas are located on undeveloped barrier islands where human activities have not extensively altered the natural sand-sharing system. Extensive case law exists that supports the provisions of the Shore Protection Act. The courts have determined that the provisions of the Shore Protection Act do not constitute a taking of property.

The Shore Protection Act permit application requirements, permit evaluation procedures, and appeals process are explained in Part B of this Section, "Project Evaluation Procedures."

*c. Revocable License*

The Coastal Resources Division has the direct authority to issue Revocable Licenses. Section 50-16-61 of the Official Code of Georgia Annotated establishes the State's authority to require a Revocable License for encroachment upon State-owned lands, and establishes the Governor's responsibility to protect State-owned lands. Based on Old English Common Law that provides owners of land adjacent to water the riparian rights of access to such water, this authority requires a Revocable License that grants permission for property owners to transgress on State-owned lands and water bottoms in order to facilitate riparian access. The license does not convey any rights, title, estate, interest, or easement with regard to the licensed premises. The license merely provides the licensee a privilege subject to revocation, cancellation, or termination at the pleasure of the State.

The Coastal Resources Division has the authority to issue, deny, and repeal the Revocable License required for projects that encroach on State-owned lands and tidal water bottoms within the coastal area. The authority to issue Revocable Licenses is delegated to the Coastal Resources Division by the Governor, through the Commissioner of the Department of Natural Resources.

Permit applications pursuant to the Coastal Marshlands Protection Act can serve as joint applications for a Revocable License. Although private docks are exempt from the requirements of the Coastal Marshlands Protection Act, they do require a Revocable License when they occur over State-owned water bottoms. The Revocable License provides the Coastal Resources Division a mechanism to address the issue of cumulative environmental and aesthetic impacts resulting from the proliferation of private docks within specific areas. The Revocable License also provides the State authority over other activities such as pipelines, power lines, mooring dolphins, bridges, and other activities that require the use of the water bottoms of the State. The requirement for a Revocable License applies unless an original King's land grant can be demonstrated.

Although recreational docks are exempt from the requirement for Marsh Permits under the Coastal Marshlands Protection Act, they do require a State Programmatic General Permit. In order to minimize paperwork and decrease the time required for issuance, the administration of this permit has been delegated to the Coastal Resources Division by the Army Corps of Engineers. A State Programmatic General Permit for the construction of recreational docks can be obtained in conjunction with a Revocable License. The application and review criteria are similar and a joint application is more efficient.

The Revocable License application requirements and evaluation procedures are explained in Part B of this Section, "Project Evaluation Procedures."

2. Section 401 Water Quality Certification

The Georgia Water Quality Control Act (O.C.G.A. 12-5-20, *et seq.*) designates the Environmental Protection Division of the Georgia Department of Natural Resources as the State agency authorized to regulate water quality control program. The Coastal Resources Division assists the Environmental Protection Division in administering the Section 401 Water Quality Certification for projects within the coastal area. Created through the federal Clean Water Act, the intent of the Section 401 Water Quality Certification is to provide states with the ability to review and control the type of federal licenses or permits issued within the boundaries of the state. Therefore, any federal license or permit issued by a federal agency that may result in a discharge to the waters of the United States is required to receive the applicable Section 401 Water Quality Certifications from the state before it is valid. The waters of the United States include rivers, streams, lakes, and wetlands.

Through a Memorandum of Agreement, the Coastal Resources Division provides technical assistance to the Environmental Protection Division in administering the Section 401 Water Quality Certification within the eleven-county coastal area of Georgia. Through the 401 Certification process, each federal permit or license application undergoes a comprehensive review process based upon State water quality standards and other applicable state laws. By law, this certification and other State authorities are issued in a manner that is consistent with the policies of the Georgia Coastal Management Program (O.C.G.A. 12-5-326).

Examples of federal permits requiring a Section 401 Water Quality Certification are the following.

- Clean Water Act, Section 404 Wetlands Dredge and Fill Permits;
- Federal Energy Regulatory Commission Permits for Hydro Power Projects;
- Sections 9 and 10, Rivers and Harbors Act of 1899;
- Coast Guard Permits for Bridges Spanning Navigable Waters;

- Certain Nationwide and State Programmatic General Permits; and,
- Any other applicable federal licenses or permits.

3. State Agency Coordination: Networking Through Memoranda of Agreement

The Georgia Coastal Management Program is a networked program relying on a number of State agencies to implement and enforce coastal resource policies. By law, all State agencies exercising regulatory authority or management or planning authority in the coastal area shall administer such authority in a manner consistent with the Georgia Coastal Management Program (O.C.G.A. 12-5-326). The Coastal Resources Division, lead agency for the Coastal Management Program, functions within this network to coordinate activities among agencies. In its role as lead agency and coordinator, the Coastal Resources Division acts as a clearing house for information and ensures that all relevant State permits are issued prior to federal activities (See Chapter Eight, Federal Consistency). The Coastal Resources Division also sponsors regular interagency meetings to foster coordination and cooperation. This coordination is formalized through Memoranda of Agreement signed between the Coastal Resources Division and agencies exercising State statutory authority within the coastal area. The effect of this networking process is to unify the implementation and enforcement of individual authorities into a comprehensive framework. This framework creates a comprehensive management program to assess and control the direct and significant impacts of activities on coastal land and water resources.

*a. Agencies Networked Through Memoranda of Agreement*

A number of State agencies exercise regulatory and/or planning/management authority for activities which will have reasonably foreseeable effects upon land use, water use, or natural resources of the coastal area. Responsible agencies include the following.

- DNR Coastal Resources Division
- DNR Environmental Protection Division
- DNR Historic Preservation Division
- DNR Parks, Recreation, & Historic Sites Division
- DNR Wildlife Resources Division
- Department of Community Affairs
- Department of Human Resources
- Department of Transportation
- Georgia Forestry Commission
- Georgia Ports Authority
- Jekyll Island Authority
- Office of the Secretary of State
- Public Service Commission

Memoranda of Agreement are implemented between the Department of Natural Resources, Coastal Resources Division and these agencies to coordinate the permit and regulatory activities cited in the following list.

*Georgia Department of Natural Resources -- Environmental Protection Division*

- Permit for air emissions (Georgia Air Quality Act, O.C.G.A. 12-9-2, *et seq.*)
- Permit for solid waste disposal facilities siting, design, construction, and operation (Georgia Comprehensive Solid Waste Management Act, O.C.G.A. 12-8-20, *et seq.*)
- Permit for hazardous waste facility construction and operation (Georgia Hazardous Waste Management Act, O.C.G.A. 12-8-60, *et seq.*)
- Permit for ground-water withdrawal in excess of 100,000 gallons per day (Groundwater Use Act, O.C.G.A. 12-5-90, *et seq.*)
- Permit for surface water withdrawal, diversion, or impoundment in excess of 100,000 gallons per day (Georgia Water Quality Control Act, O.C.G.A. 12-9-1, *et seq.*)
- Permit for wastewater systems disposing sewage, industrial wastes, or other wastes into any waters of the State (Georgia Water Quality Control Act, O.C.G.A. 12-9-1, *et seq.*)
- Permit for public water systems (Georgia Safe Drinking Water Act, O.C.G.A. 12-5-170, *et seq.*)
- Permit for surface mining operations (Georgia Surface Mining Act, O.C.G.A. 12-4-70, *et seq.*)
- Permit for drilling for exploration or production of oil and gas, any well for exploration or production of other minerals greater than 1800 feet in depth, or any well for exploration or production of any mineral located within the coastal area which is drilled to a depth sufficient to penetrate the fresh water aquifer system (Georgia Oil and Gas and Deep Drilling Act, O.C.G.A. 12-4-40, *et seq.*)
- Permit for any land change that may result in soil erosion from water or wind and the movements of sediments into state waters (Georgia Erosion and Sedimentation Act, O.C.G.A. 12-7-1, *et seq.*)
- Permit for construction, operation, or removal of certain dams and artificial barriers that impound or divert water (Georgia Safe Dams Act, O.C.G.A. 12-5-370, *et seq.*)
- Permit for certain municipal and industrial storm water discharges (delegated by EPA -- federal Clean Water Act, 33 U.S.C. § 1251, *et seq.*)
- National Pollutant Discharge Elimination System (NPDES) permits (delegated by EPA -- federal Clean Water Act, 33 U.S.C. § 1251, *et seq.*)
- Section 401 Water Quality Certification pursuant to the federal Clean Water Act -- review and recommendations are made by the Coastal Resources Division to the Environmental Protection Division for those activities located within the eleven-county coastal area (33 U.S.C. § 1251, *et seq.*)
- Management authority for State-wide program regulating design, construction, installation, and substances stored in underground tanks (Georgia Underground Storage Tank Act, O.C.G.A. 12-13-1, *et seq.*)
- Authority for oil or hazardous material spills notification requirements and clean up procedures (Oil or Hazardous Materials Spills or Releases, O.C.G.A. Title 12, Chapter 14)

*Georgia Department of Natural Resources -- Parks, Recreation, and Historic Sites Division*

- Permit to recognize scientific institutions or qualified individuals to conduct field archeological research on State properties (O.C.G.A. 12-3-52)
- Permit for investigation, survey, or recovery operations of submerged cultural resources (O.C.G.A. 12-3-82)
- Authority to construct, maintain, operate, and control uses of all State parks and historic sites in the State (O.C.G.A. Title 12, Chapter 3)
- Authority to identify and plan a scenic trails system, to acquire land, and to construct, manage, and maintain the system (O.C.G.A. 12-3-110)

*Georgia Department of Natural Resources -- Historic Preservation Division*

- Responsible for: establishing, maintaining, and expanding an inventory and register of historic places in the State known as the Georgia Register of Historic Places which shall include all properties listed in the National Register of Historic Places pursuant to the National Historic Preservation Act; conducting a survey of historic and archeological resources; reviewing all federally-funded, -licensed, or -permitted projects in Georgia for effects to historic resources; and conducting information and education programs (O.C.G.A. 12-3-50.2)

*Georgia Department of Natural Resources -- Wildlife Resources Division*

- Registration of any person engaged in aquaculture activities (Georgia Aquaculture Development Act)
- Responsible for the protection of the State's natural wildlife resources through promulgation, administration, and enforcement of laws, rules, and regulations pertaining to hunting, fishing, boating, endangered species, and litter control; issues licenses to hunters and persons harvesting fish or wildlife for commercial purposes; issues licenses to recreational anglers utilizing fresh waters of the State; issues permits for scientific collecting (O.C.G.A. Title 27, Chapters 1-5 and Title 52, Chapter 7)
- Authority to acquire, manage, operate, and control uses of Wildlife Management Areas and Public Fishing Areas (O.C.G.A. Title 27, Chapter 1)

*Georgia Department of Human Resources -- Through County Health Departments*

- Authority to promulgate State-wide minimum standards for individual sewage management systems (septic tanks) for adoption and enforcement by each county board of health (O.C.G.A. Title 31)

*Office of the Secretary of State*

- License to dig, mine, or remove phosphate deposits from the navigable streams or waters of the State, or from any public lands on the banks or margins thereof (O.C.G.A. 12-4-100)

*Jekyll Island Authority*

- Authority to manage and control uses of Jekyll Island (O.C.G.A. 12-3-232)

*Georgia Ports Authority*

- Authority to acquire, construct, maintain, operate, develop, and manage the port facilities and harbors of the State (O.C.G.A. 52-2-4)

*Georgia Department of Transportation*

- Responsible for the systematic planning, construction, maintenance, and operation of the State highway system (O.C.G.A. Title 32)

*Georgia Forestry Commission*

- Responsible for the management of State forests and woodlands and with advising and cooperating with private land owners in the promotion of forest management practices (O.C.G.A. Title 12, Chapter 6)

*Georgia Public Service Commission*

- Regulates railroads, public transit systems, telephone and telegraph companies, and gas or electric light and power companies in the State (O.C.G.A. Title 46).

*Georgia Department of Community Affairs --*
*Coastal Georgia Regional Development Center*
*Altamaha-Georgia Southern Regional Development Center*
*Southeast Georgia Regional Development Center*
- Responsible for assisting local governments in meeting the requirements of the Georgia Planning Act including the process for reviewing proposed development projects likely to create regional impacts (O.C.G.A. Title 50, Chapter 8)

*b. Description of Agreements*

Memoranda of Agreement (MOAs) are negotiated among the State agency participants in the Georgia Coastal Management Program network. These MOAs are used to coordinate the relevant authorities of State agencies, thus establishing the cooperative networking process necessary to implement and enforce the Program. Participating agencies recognize that the Program is based upon State laws and rules and regulations, and that coordination of activities helps maximize resources and improve coastal management. Each agency administers its coastal resource protection responsibilities as designated by Georgia State law, and cooperates with the Coastal Resources Division to implement Program policies. In return, the Coastal Resources Division provides information and technical assistance to agencies and to permit applicants about the networked program, and may provide additional enforcement of Georgia law. The Coastal Resources Division also hosts regular interagency meetings to air issues and discuss activities. Sample Memoranda of Agreement may be found in Appendices V and VI.

## B. Project Evaluation Procedures of State Authorities

The Coastal Resources Division implements the Georgia Coastal Management Program through direct permitting authorities and through Memoranda of Agreement as described in the previous section. The Division hosts regular interagency meetings to coordinate activities among agencies. In addition, the Division may concur with or object to a consistency certification or determination made by an applicant for a federal permit or by a federal agency (See Chapter Eight). Finally, the Division provides technical assistance to facilitate permitting processes.

This section describes the permit application evaluation process for activities within the jurisdictions of the Coastal Marshlands Protection Act and the Shore Protection Act, and the issuance of the Revocable License required for activities encroaching upon State-owned water bottoms. Two key components of the project evaluation procedure are the optional project review service and the optional interagency coordination meetings. The Coastal Resources Division encourages people and agencies to take advantage of the technical expertise within the Division through participation in these services. These benefits are also described in Part 4, "Technical Assistance for Project Development."

1. General Project Review Procedure

Each agency with permitting authority in the coastal area reviews permit applications based on that agency's legal criteria for evaluation. Through the cooperative process established by the Georgia Coastal Management Program, networked agencies are encouraged to apply the following considerations as appropriate.

(1) Consider the extent to which the project will have adverse impacts on the environmentally sensitive areas within the jurisdiction of the Shore Protection Act and the Coastal Marshlands Protection Act (beaches, dynamic dune fields, tidally-influenced waters, salt marshlands, and submerged shoreline lands), the Revocable License (State-owned tidal water bottoms), and the Section 401 Water Quality Certification Program (waters of the U.S.).

(2) Consider the extent to which the project will protect, maintain, or improve water quality, particularly in coastal aquatic areas of special resource value, for example, wildlife spawning areas or shellfish areas.

(3) Consider the extent to which the project will meet existing State and federal requirements for protection of inland wetlands and for waste discharges, specifically point sources of air and water discharge.

(4) Consider the extent to which the project takes into account the maintenance or improvement of the economic stability of coastal communities.

(5) Consider the extent to which the project is in compliance with local or regional zoning and/or comprehensive plans.

(6) Consider the possible long-range, cumulative effects of the project, both positive and negative, when reviewed in the context of other possible development.

(7) Consider the extent and significance of negative impacts on Special Management Areas (SMAs). The determination of negative impacts is made in each case with reference to the priorities of use for the particular SMA.

(8) Consider the extent and significance of impacts on the quality or quantity of unique natural features such as endangered wildlife and vegetation, significant marine species, and existing water quality standards.

(9) Consider the extent to which the project is in the national and/or regional interest.

2. Project Evaluation Procedures: Coastal Resources Division

The procedures for obtaining permits required by the Coastal Marshlands Protection Act and the Shore Protection Act as well as the process for obtaining a Revocable License are explained in this section. These permits and licenses are issued directly by the Coastal Resources Division through the Coastal Marshlands Protection Committee, the Shore Protection Committee, or Division staff. Applicants should refer to cited statutes for specific information on permit requirements. Determinations on approval or denial of permit applications are based on the individual merits of each application. In general, Coastal Resources Division staff apply the following considerations.

(1) Consider the extent to which the project requires a waterfront location.

(2) Consider the extent to which the project would harmfully obstruct the natural flow of navigable water.

(3) Consider the extent to which the project would affect the production of fish, shrimp, oysters, clams, crabs, or any marine life or wildlife or other natural resources in a particular area including, but not limited to, water and dissolved oxygen supply.

(4) Consider the extent to which the project could cause erosion, shoaling of channels, or creation of stagnant water.

(5) Consider the extent to which the project could affect existing public access to tidal and submerged lands, navigable waters, beaches, and other recreational coastal resources.

(6) Consider the extent to which the project could affect the habitats for rare and endangered species of wildlife or irreplaceable historic and archeological sites of Georgia's coastal area.

(7) Consider the extent of any adverse environmental impact which cannot be avoided by reasonable safeguards.

(8) Consider the extent to which all feasible safeguards are taken to avoid adverse environmental impacts resulting from the project.

(9) Consider the extent to which the project could affect the value and enjoyment of adjacent riparian owners.

For direct permitting authorities, the Coastal Resources Division staff has a regular, established process for project review. Each staff member with review responsibility completes an evaluation sheet for each permit application or review and certification project. This evaluation becomes part of the permanent application file. Evaluations are made by biologists, planners, engineers, or other professional staff. The evaluation sheets require that information be compiled and issues addressed to develop a comprehensive review of each project, including project description, site analysis, applicable program policies, rules and regulations, and possible impacts of the proposal on coastal land or water resources. On-site inspections are made by professional staff for all project proposals within the direct permitting authority of the program and for projects requiring review. Staff reviewing projects hold regular meetings to discuss all direct permit applications and review projects at or near completion before permit or certification decisions are made.

The Coastal Resources Division encourages the submission of development plans for preliminary review by staff, and assists in expediting the filing of applications for all necessary permits. Applications for Coastal Marshlands Protection Act permits, Shore Protection Act permits, and Revocable Licenses are filed with Coastal Resources Division staff.

*a. Coastal Marshlands Protection Act Permits*

Activities that require a permit pursuant to the Coastal Marshlands Protection Act also require a Revocable License for use of State-owned lands and often require a Section 404 permit from the U.S. Army Corps of Engineers, Savannah District. Certain projects also require a Section 401 Water Quality Certification. The Coastal Resources Division utilizes a joint application form that meets the application requirements of the Coastal Marshlands Protection Act, the Corps of Engineers, the Revocable License, and the Section 401 Water Quality Certification. Projects that do not meet the enforceable policies of the Georgia Coastal Management Program are not issued permits.

Refer to O.C.G.A. 12-5-283 and 12-5-286 for application requirements, public notice requirements, permit conditions, and the appeals process for permit applications. In general, projects requiring a Coastal Marshlands Protection Act permit must submit to the Coastal Resources Division the following: an application form, site map or survey, landfill/hazardous site determination letter, zoning letter, soil and erosion control letter, plan with jurisdiction, copy of deed with plat, adjoining landowner notice, fees, and any other applicable leases, licenses, or certifications. Technical assistance in completing permit applications is available from the Coastal Resources Division.

*b. Shore Protection Act Permits*

The Coastal Resources Division receives applications for permits pursuant to the Shore Protection Act. The staff identifies projects within the jurisdiction of the Shore Protection Act which may also require a Revocable License, a Section 404 permit from the Corps of Engineers, Savannah District, and/or a Section 401 Water Quality Certification issued by the Environmental Protection Division. Projects that do not meet the enforceable policies of the Georgia Coastal Management Program are not issued permits.

Refer to O.C.G.A. Sections 12-5-238, 12-5-239, and 12-5-244 for application requirements, public notice requirements, permit conditions, and the appeals process for permit applications. In general, projects requiring a Shore Protection Act permit must submit to the Coastal Resources Division the following: an application form, site map or survey, landfill/hazardous site determination letter, zoning letter, soil and erosion control letter, plan with jurisdiction, copy of deed with plat, adjoining landowner notice, fees, plans with jurisdiction and all improvements, architect's certification, and signed Revocable License. Technical assistance in completing permit applications is available from the Coastal Resources Division.

*c. Revocable License Program & State Programmatic General Permit for Recreational Docks*

The Coastal Resources Division has the authority to issue, deny, and revoke the Revocable License required for projects that encroach on State-owned lands and tidal water bottoms within the eleven-county coastal area. Permit applications pursuant to the Coastal Marshlands Protection Act, the Shore Protection Act, and the Section 401 Water Quality Certification also serve as joint applications for a Revocable License. In general, other projects requiring a Revocable License must submit to the Coastal Resources Division the following: an application for a Joint Army Corps of Engineers/State of Georgia Marshlands Protection Permit or a State Programmatic General Permit for Private Docks, signed Revocable License application form, copy of deed with plat, plan or drawing of proposal and manner or method proposal will be accomplished, project plans, and adjoining landowner notice if applicable. Technical assistance in completing license and permit applications is available from the Coastal Resources Division.

Applications for Revocable License are evaluated concurrently with other necessary permit applications, including marina leases and applicable State Programmatic General Permits. Coastal Resources Division staff may conduct site visits to ascertain riparian rights of access before recommending issuance of the Revocable License. Individuals have no legal rights to encroach on State-owned lands or water bottoms and, therefore, have no right to appeal a denial or revocation of a license other than legal action brought directly in the courts against the State.

Through this process, a State Programmatic General Permit for recreational docks may be issued by the Division. The criteria for these permits are: (1) the walkway width must be six feet or less; (2) the total area of a fixed dock must be 576 square feet or less; (3) the total area of a floating dock must be 288 square feet or less; and (4) the maximum distance into the waterway is 25 feet or one-third the width of the channel, whichever is less. The administration of the State Programmatic General Permit has been delegated to the Coastal Resources Division by the Army Corps of Engineers to minimize paperwork and to decrease the time required to issue these permits. Applications for State Programmatic General Permits for recreational docks are reviewed in conjunction with Revocable License applications.

*d. Appeal Procedures for Direct Permitting Authorities*

If the applicant for any of the Coastal Resources Division's direct permitting authorities disagrees with the Division's finding, there is a formal appeal process available. The appeal process varies, depending upon the type of permit, license, lease, or certification in question. These appeal processes are described below:

(a) For decisions involving permits of the Coastal Marshlands Protection Act or the Shore Protection Act any person or agency who is aggrieved or adversely affected by any order or action, upon petition within 30 days after the issuance of such order or taking of such action, has a right to a hearing before an administrative law judge. The hearing before the administrative law judge shall be conducted in accordance with O.C.G.A. Chapter 13 of Title 50, the "Georgia Administrative Procedure Act." The decision of the administrative law judge shall constitute the final decision and any party to the hearing, including the Committee, shall have the right of judicial review thereof in accordance with O.C.G.A. Chapter 13 of Title 50.

(b) For those matters under the provisions of the Revocable License, there is no provision of administrative law judge review. Instead, persons have access to the State court process, as defined by Georgia law.

3. Project Evaluation Procedures: Policies Implemented by Other Agencies

In addition to the direct authorities of the Coastal Resources Division discussed in the section above, some Georgia Coastal Management Program authorities are administered by other State agencies. The Georgia Coastal Management Act as well as the Memoranda of Agreement with applicable State agencies include a provision that State agencies will issue authorizations only to projects that are consistent with the policies of the Coastal Management Program.

*a. Notification of Coastal Management Activities*

For projects in the coastal area, the Coastal Resources Division receives notification of activities requiring authorization through several sources. The Memorandum of Agreement with each permitting agency stipulates the process whereby the Coastal Resources Division receives notice of each permit or other authority issued. Projects may also be brought up and discussed prior to issuance of authorization at the interagency meetings hosted by the Coastal Resources Division.

The Coastal Management Program also receives project notifications through the Executive Order 12372 Review Process, a Statewide clearinghouse for comments administered by the Georgia Office of Planning and Budget. Other sources of project notification are the Environmental Impact Statement required for major federal or federally-funded projects by the National Environmental Policy Act, and the Environmental Effects Report required for major State and State-funded projects by the Georgia Environmental Policy Act.

*b. Review Procedure*

The Coastal Resources Division is not required to review projects being permitted by other State agencies, although it may provide technical assistance to other agencies at their request. Each State agency with permitting authority in the coastal area includes as part of its review process a check for consistency with Georgia State law under its authority. The Georgia Coastal Management Act requires all State agencies with regulatory authority or management or planning authority in the coastal area to administer such authority in a manner consistent with the Coastal Management Program (O.C.G.A. 12-5-326). Memoranda of Agreement between the Division and other State agencies with responsibility in the coastal area help ensure that all parties understand their responsibilities for compliance and enforcement under the Coastal Management Program. Thus, consistency with the Georgia Coastal Management Program is achieved through State agency adherence to Georgia State law, including the Coastal Management Act, and through adherence to the Memoranda of Agreement with the Coastal Resources Division. Regular interagency meetings allow cooperating agencies to coordinate activities. Each State agency conducts its project evaluation procedure in accordance with State law. The Coastal Resources Division provides coordination among agencies, serving as a clearinghouse to notify other agencies (including federal) and the applicant when all permits have been issued (or denied). Refer to Chapter Five for a description of management authorities.

*c. Appeal Procedures for Projects Authorized by Other Agencies*

The appeal process for those authorities issued through other State agencies networked with the Georgia Coastal Management Program is defined by State law for the applicable permit or regulatory process. Refer to Chapter Five for a description of management authorities.

4. Technical Assistance for Project Development

The Coastal Resources Division provides technical assistance to individuals through its preliminary project review service and project coordination meetings, and to other agencies through quarterly interagency coordination meetings and occasional project coordination meetings. In addition, any person or agency requiring technical expertise with regard to coastal resource issues may contact the Division at any time for assistance or referral.

*a. Project Review Service*

Though not required, the Coastal Resources Division encourages people to submit preliminary development plans for consultation. Division staff reviews plans for potential conflicts with the policies of the Georgia Coastal Management Program, and provides technical assistance to help modify proposals and resolve conflicts. The staff also identifies any required permits, licenses, or certifications relative to specific projects submitted for consultation and makes every effort to assist in expediting the application process for necessary permits, licenses, and/or certificates. This consultation project review service is available for any proposed development or activity within the eleven-county coastal area.

*b. Interagency Coordination Meetings*

On a quarterly basis, the Coastal Resources Division hosts an interagency coordination meeting to allow agencies with regulatory and/or management or planning authority in the coastal area to coordinate policy and procedures, air issues, and improve coordination. The purpose of these meetings is to foster agency coordination and improve cooperation. The meetings are not intended to review individual projects.

The following State agencies with regulatory and/or management authority in the eleven-county coastal area are invited to attend.

- DNR Coastal Resources Division*
- DNR Environmental Protection Division*
- DNR Historic Preservation Division*
- DNR Parks, Recreation, & Historic Sites Division
- DNR Wildlife Resources Division*
- Department of Community Affairs
- Department of Human Resources*
- Department of Transportation*
- Georgia Forestry Commission
- Georgia Ports Authority
- Jekyll Island Authority
- Office of the Secretary of State
- Public Service Commission*

** Denotes agency with regulatory authority.*

In addition to State agencies, the following federal agencies with regulatory and/or management authority in coastal Georgia are invited to attend.

- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service

Since they hold key regulatory authority, every effort is made to ensure that representatives from the Department of Natural Resources Environmental Protection Division, the Department of Natural Resources Historic Preservation Division, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, and the U.S. Fish and Wildlife Service are present at the quarterly meetings.

In addition to the above-mentioned agencies, any federal, State, regional, or local agencies with an interest in coastal resource management are encouraged to attend the interagency coordination meetings. The Coastal Resources Division publicizes meetings in advance, and welcomes participation from other agencies.

*c. Project Coordination Meetings*

The Coastal Resources Division organizes occasional interagency meetings, at the request of applicants, to discuss project proposals. The purpose of the meetings is to foster agency coordination and cooperation with respect to specific projects, and is not intended as an additional public review of the merits of the proposed project. Project coordination meetings allow potential applicants to meet relevant State and federal permitting agencies during the planning process for their project. The meetings also allow permitting agencies to provide input during the planning and design phase of a project. This helps the applicant avoid delays during construction, helps avoid conflict between agency recommendations, and helps avoid "last-minute" change requests to the various agencies.

*d. Other Technical Services*

The Coastal Resources Division makes every effort to educate individuals and other agencies about permit requirements and coastal resource issues. Any individual or agency may contact the Division during normal working hours to receive technical assistance. To the extent possible given limited staff and resources, the Division promotes and supports education and outreach activities.

### C. Enforcement and Compliance of State Legal Authorities

Each of the policies of the Georgia Coastal Management Program is based on a legal authority that is enforceable under Georgia law. The law cited for each policy has a concomitant penalty for violation of law or the rules and regulations implementing that law. Officers and conservation rangers of the Department of Natural Resources are authorized to enter property and to inspect activities for adherence to promulgated requirements and compliance with permit conditions as defined by the applicable Georgia law.

The Coastal Resources Division has an enforcement and compliance function which includes State-certified law enforcement officers. Division staff, with support from the Wildlife Resources Division's Law Enforcement Section, conducts compliance inspections of permitted activities within the eleven-county coastal area. Individuals with enforcement responsibility also seek out activities in violation of Georgia Coastal Management Program policies and the rules and regulations of the State through routine air, water, and land patrols.

Public awareness and involvement in the protection of Georgia's coastal resources is a top priority of the enforcement and compliance officers. The initial emphasis of the enforcement and compliance staff is public education through dissemination of information on the Georgia Coastal Management Program requirements and the underlying Georgia law.

### D. Water and Air Quality Standards

The Georgia Department of Natural Resources, Environmental Protection Division is the State agency responsible for implementing the requirements of the federal Clean Water Act (33 U.S.C. § 1251, *et seq.*) and federal Clean Air Act (42 U.S.C. § 7401, *et seq.*). For federal permits or licenses issued for activities within the coastal area or significantly impacting coastal resources, the Coastal Resources Division assists the Environmental Protection Division with its administration of the Section 401 Water Quality Certification. The Georgia Air Quality Act (O.C.G.A. 12-9-1, *et seq.*) and Georgia Water Quality Control Act (O.C.G.A. 12-5-20, *et seq.*), administered by the Environmental Protection Division, establish the criteria necessary to meet the mandated requirements of the federal Clean Air Act and federal Clean Water Act.

The Coastal Resources Division and the Environmental Protection Division are within the same State agency, the Department of Natural Resources, with the same governing body, the Board of Natural Resources. Although administered by the Coastal Resources Division, Georgia's Coastal Management Program relies on the support, input, and cooperation provided by the Environmental Protection Division. The Memorandum of Agreement between the Coastal Management Program and the Environmental Protection Division addresses the requirement for

incorporating the mandates of the federal Clean Air Act and federal Clean Water Act into the Coastal Management Program.

## E. Program Amendment Procedures

Due to the dynamic nature of the coastal area, even a flexible management program requires periodic updating. Upon implementation of the Georgia Coastal Management Program, the efficiency and effectiveness of the organizational structure, policies and other authorities, and the procedural processes of the program must be continually evaluated by those associated with or impacted by the Coastal Management Program including the Coastal Resources Division staff, the Board of Natural Resources, the General Assembly, the general public, special interest groups, and federal, State, regional and local agencies. In addition, changes in coastal resources concerns, evolving coastal issues, and changes in public priorities and expectations may necessitate modifications to the Coastal Management Program. The following procedures for program amendments and refinements provide for such modifications related to: (1) uses subject to management; (2) special management areas; (3) boundaries; (4) authorities and organization; and (5) coordination, public involvement, and the national interest.

Proposals for any change in the Georgia Coastal Management Program may originate within the Department of Natural Resources, within a federal, State, or local government unit, within a special interest organization, or with the general public. In all instances, the Coastal Resources Division may consider the proposal for a period of 30 days before determining whether modification procedures should be initiated. Upon decision that a proposed program modification is warranted, the Coastal Resources Division staff will determine whether the proposed change constitutes an amendment or a routine program change, according to federal criteria (C.F.R. 15 §§ 923.80-923.84). The National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management has the ultimate authority to decide whether a proposed program change is a routine program change or an amendment.

Amendments to the Coastal Management Program will require review and approval of the Commissioner of the Department of Natural Resources. Amendments also require at least one public hearing preceded by a 30 day public notice period. Since policies within the Coastal Management Program are State laws, these may only be changed by an act of the Georgia General Assembly and are initiated following regular legislative processes. All substantive changes to the Georgia Coastal Management Program must also be approved by the Office of Ocean and Coastal Resource Management (C.F.R. 15 §§ 923.80-923.84).

## F. Conflict Resolution

While the Georgia Coastal Management Program seeks to improve interagency cooperation and coordination, occasionally interagency conflicts may arise. Disagreements among agencies in the coastal management network may occur, for example, over terms or implementation of a Memorandum of Agreement, or if one agency believes the other is not adequately complying with the Coastal Management Act. Every effort shall be made to resolve potential interagency conflicts during informal interagency meetings. If, however, there is a disagreement that cannot be resolved informally, the Attorney General's office has the authority to investigate the matter and render a decision.

# SECTION III:
# LOCAL GOVERNMENT COORDINATION

## A. Recognition of Local Governments

The Coastal Resources Division recognizes the importance of extensive local government input and coordination in the development and implementation of the Georgia Coastal Management Program. Representatives from the eleven counties and municipal governments within the coastal area are included on the Coastal Management Program mailing list. These representatives receive notices of all Coastal Advisory Committee meetings, as well as general program information. In addition, local governments are offered a seat on the Coastal Advisory Committee.

All county and municipal governmental units within the coastal area were provided a copy of the draft Coastal Management Program Document. Local government comments and recommendations were incorporated into the Management Program wherever feasible. Coastal Resources Division staff made individual contacts with each local government within the coastal area in order to present information about the Georgia Coastal Management Program.

Each county and city within the coastal area is represented by at least one member on the Coastal Advisory Committee, to ensure direct participation by local interests in development of the Georgia Coastal Management Program.

## B. Local Government Involvement

Through the Georgia Coastal Management Program, the Coastal Resources Division has established a mechanism for continuing consultation and coordination with local governments, interstate agencies, regional agencies, and other agencies within the coastal area, in order to ensure full participation of local governments and agencies in program development and implementation.

The Coastal Georgia Regional Development Center, the Heart of Georgia Regional Development Center, and the Southeast Georgia Regional Development Center are an integral part of the Coastal Management Program's coordination with local governments within the coastal area. The Georgia Planning Act established the Department of Community Affairs as the principal department for local government affairs within the executive branch of State government. Seventeen Regional Development Centers were created as the mechanism to provide local governments, on both an individual and regional basis, with professional technical assistance in meeting the Act's requirements. Under the Georgia Planning Act, local

governments are required to prepare comprehensive plans using State minimum planning standards promulgated by the Department of Community Affairs.

The Regional Development Centers are responsible for reviewing these plans, as well as large-scale projects known as "developments of regional impact" that may have adverse effects beyond the jurisdiction of the city or county in which they occur. A Memorandum of Agreement between the Coastal Resources Division, the Department of Community Affairs, and the Regional Development Centers within the coastal area establishes a procedure for reviewing local government comprehensive plans to identify conflicts with the policies of the Coastal Management Program and eliminate duplication of efforts.

Headquartered in Brunswick, the Coastal Georgia Regional Development Center encompasses eight of the eleven counties of the coastal area (Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long, and McIntosh). The Heart of Georgia Regional Development Center includes one second tier coastal county -- Wayne County. The Southeast Georgia Regional Development Center contains two second tier counties -- Brantley and Charlton.

The Regional Development Centers assist in disseminating Coastal Management Program information to local governments. Coordination with each of the three Regional Development Centers occurred during program development, and the Coastal Georgia Regional Development Center in particular has been extensively involved. The completed draft document describing the Coastal Management Program was provided to each of the three Regional Development Centers for review, comment, and recommendations.

In the process of educating people about the Coastal Management Program, Coastal Resources Division staff met with all local governments in the coastal area. Subsequently, many of these local governments passed resolutions indicating their support of the Program. As representatives of the citizens of coastal Georgia, local government officials recognize the importance of balancing economic development with natural resource protection, and view the Georgia Coastal Management Program as a mechanism to further that goal.

### C. Local Level Program Implementation

Through the Georgia Coastal Management Program, the Coastal Resources Division encourages the development and implementation of local capabilities for managing growth and development. The Coastal Resources Division encourages local planning, permitting, and administrative functions to be conducted in concert with the policies of the Georgia Coastal Management Program by providing technical assistance directly to local governmental entities and to Regional Development Centers. Coastal Incentive Grants are awarded on a competitive

basis to local governments and state agencies (including Regional Development Centers) to fund projects that address specific local coastal needs or problems.

The management approach described in the Georgia Coastal Management Program Document addresses the potential impacts of coastal activities on coastal resources rather than the general land uses with which certain coastal activities are associated. The legal framework and policies of the Program encourage, support, or establish conditions for specific coastal activities on the basis of actual or potential effects on coastal land and water resources -- they do not dictate or establish land use or zoning classifications. Land use planning and zoning continue to be the responsibility of local governments. While the Georgia Planning Act requires municipal and county governments to develop comprehensive plans that address natural and historic resources, there is no requirement for implementation and enforcement of such plans.

Under the Erosion and Sedimentation Act (O.C.G.A. 12-7-1 *et seq.*), local governments are responsible for adopting comprehensive ordinances establishing procedures governing land-disturbing activities. Complying local governments are delegated authority to issue Erosion and Sedimentation, or "land-disturbing," permits. To date, eight of the eleven counties and 20 of the 32 municipalities have adopted such ordinances within the coastal area. Therefore, the Erosion and Sedimentation Act is implemented at the local level throughout the majority of the coast. The Environmental Protection Division continues to implement the program in areas that have not yet adopted ordinances. Refer to the paragraphs describing Erosion and Sedimentation in Chapter Five for additional information. While Erosion and Sedimentation permits are issued at the local level, variances to these permits are issued by the State Environmental Protection Division.

The permit process outlined in the Georgia Coastal Management Program Document is coordinated with local governments. Permits administered directly by the Coastal Resource Division through its direct permitting authorities are described in Chapter Four. Private recreational dock projects, which are exempt from the Coastal Marshlands Protection Act, are required to obtain a Revocable License from the Coastal Resources Division for encroachment upon State-owned lands and water bottoms. Local municipalities and counties are forwarded notification of any Revocable License issued within their jurisdiction.

These procedural requirements of the Georgia Coastal Management Program ensure coordination and communication between the Coastal Resources Division and local regulatory authorities. Coordination between the Regional Development Centers and the Georgia Coastal Management Program also establish strong local relationships. Local government units and the Regional Development Centers may initiate, through the Coastal Resources Division, amendments and modifications to the Management Program using the procedures outlined in Chapter Four.

The Coastal Incentive Grants available through the Georgia Coastal Management Program are directed at addressing specific information needs or projects that are local and regional priorities. Annual themes and funding criteria are developed by the Coastal Advisory Committee, as described in Appendix VIII. Projects must fulfill the goals of the Program as stated in Chapter Three, and priority is given to projects that address Public Task Force recommendations listed in Appendix VIII. Many resource issues, including groundwater concerns, historic resource identification, beach access, and others can best be solved through education and outreach rather than regulations. Project funding through Coastal Incentive Grants provides a mechanism to address these types of local and regional issues, thereby fulfilling the goals of the Coastal Management Program proactively.

The Coastal Resources Division is developing "the Coastal Ark," a public and local government outreach and technical assistance initiative. The Ark is a mobile resource platform that will be driven to local communities to provide information and management tools directly to resource users and local decision-makers. The Ark is an important component of the Georgia Coastal Management Program's efforts to provide technical assistance to local governments.

In summary, local governments have special needs and priorities specific to their communities. With the Georgia Coastal Management Program, the role of the Coastal Resource Division is to provide technical assistance to local governments in order to address priority issues. Many concerns and information needs are most appropriately addressed at the local level. Through technical assistance and Coastal Incentive Grants, the Coastal Resources Division uses Coastal Management Program resources to support local projects. The Coastal Management Program does not change the authority of local governments over zoning and land use planning; rather, it enhances the ability of local governments to address local issues by facilitating funding and technical support.

# SECTION IV:
# PUBLIC PARTICIPATION

The Georgia Coastal Management Program was developed with full participation by all interested parties, public and private, including State agencies, local governments, regional organizations, and port authorities. The Georgia Department of Natural Resources Commissioner, upon Georgia's re-entry into the coastal management program development process in October 1992, stated that the development of the Program would be guided and directed by a consensus of the citizens of coastal Georgia and the State.

Several methods have been used to make available general information regarding the Program's design, content, and status throughout the development process. The initial efforts of the Coastal Resources Division staff were focused on acquainting the public with the concepts and basic premises of coastal management, on a state and national basis, in order to build a strong and active public participation component. A brochure entitled "Georgia's Coastal Management Program," which explains the history, need, basic requirements, benefits, and the State's concept of coastal management was developed and widely distributed. The Coastal Resources Division staff made presentations to a variety of citizens groups in order to explain the Program.

In October 1992, the Governor appointed a 25-member Coastal Zone Advisory Committee which represented a diverse cross-section of the coastal Georgia citizenry. The primary function of this committee was to provide a mechanism for public participation and input during program development. Advisory Committee meetings were held at least quarterly at locations throughout the coastal area, and were open to the public. Notice of Advisory Committee meetings were provided at least ten days in advance to over fifty media contacts throughout the State, including radio stations, television stations, and newspapers located in coastal Georgia and north Florida. Notices were also sent to everyone on the Coastal Management Program mailing list. As of August 1997, this mailing list includes approximately 1,100 individuals.

Coastal Zone Advisory Committee meetings provided updates on the progress and general direction of the Management Program, and opportunities for public comment and recommendations. The Coastal Zone Advisory Committee formed three subcommittees (Land Resource Goals Subcommittee, Water Resource Goals Subcommittee, Associated Resource Goals Subcommittee) to develop public consensus on broad goals for the Management Program's resource protection policies. These Resource Goals Subcommittees consisted of over fifty citizens representing business, industry, government, environmental groups, regional development centers, and the general public. Resource Policy Citizen Task Forces, using the resource goals developed by the three Subcommittees and the draft Coastal Management

Program resource policies, recommended over 330 resource policies on the activities identified to impact coastal land and water resources.

When the two-year appointment of the Coastal Zone Advisory Committee ended in September of 1994, the committee sunsetted. In November 1994, the Commissioner of the Department of Natural Resources appointed a new committee called the Coastal Advisory Committee. All members of the previous Advisory Committee were offered the opportunity to continue service. Individuals declining reappointment were replaced with others who represented their county or general constituency. The primary role of this Committee is to review the draft Program Document, to assist with public education and outreach activities throughout the development process, and to provide technical assistance. In June, 1997, the Coastal Advisory Committee was expanded to increase participation from local governments. Their function in the future will be to develop annual themes and funding criteria for Coastal Incentive Grants.

In November 1995, the draft Georgia Coastal Management Program Document was made available to the public for review. Formal public notice was posted and several public meetings were held. These sessions provided interested parties the opportunity to comment on the Program and the Program Document. In addition to the public meetings, the Coastal Advisory Committee reviewed the Program Document and provided written comments.

In response to public input, the Georgia General Assembly passed a resolution in March, 1996 creating a Joint House/Senate Coastal Management Study Committee. The purpose of the Study Committee was to decide whether or not to pursue a federally-approved coastal management program in Georgia. Committee members were appointed in July 1996.

In September 1996, the Joint House/Senate Coastal Management Study Committee met for an informational meeting presented by individuals from the Coastal Resource Division, the National Oceanic and Atmospheric Administration, and the Coastal Advisory Committee. This meeting was to educate the Study Committee about the history of coastal management in Georgia, existing management efforts, the public process, the federal program, how Georgia meets federal guidelines, the enabling legislation, and the benefits of the program to Georgia. Members of the Coastal Advisory Committee and the public had the opportunity to voice opinions about the Coastal Management Program.

The November, 1996 draft Georgia Coastal Management Program Document was available for public comment from October 28, 1996 to January 6, 1997. Two public hearings were held, in Brunswick on November 6 and in Richmond Hill on November 13. Public response was overwhelmingly supportive of the Program. On November 26, 1996, the Legislative Study Committee met in Atlanta to review public comments and make their recommendation. The Committee voted unanimously that enabling legislation for the Georgia

Coastal Management Program should proceed to the full General Assembly for consideration. On December 3, 1996, Governor Zell Miller announced his endorsement of the Program, based on public support, Advisory Committee support, and the Study Committee recommendation. The Governor included the proposed Georgia Coastal Management Act as part of his legislative package for the 1997 session of the General Assembly.

Regarding other public outreach efforts, the Coastal Resources Division employs a full-time public outreach and education specialist. This position's responsibilities include developing educational and technical materials for the public and for specific audiences. In response to the need for public outreach and education on coastal issues, various information materials were produced. These materials include: a Georgia Coastal Management Program brochure, Fact Sheets, a portable display, and a quarterly newsletter. The newsletter, entitled "The Georgia Sound," informs the public on Program developments and coastal issues and events; it is distributed free of charge to everyone on the mailing list.

Another public outreach initiative is the annual "CoastFest" fair hosted by the Coastal Resources Division. A public celebration of Georgia's coastal resources, this educational event features programs involving live animals and expert biologists, as well as displays representing environmental organizations, commercial fishing industries, recreational fishing clubs, sea kayaking companies, and other federal, State, and local organizations. In 1996, 17 organizations participated in CoastFest, and approximately 800 people, including hundreds of local school children, attended the festival.

Throughout the implementation of the Coastal Management Program, public outreach and education activities will continue to be developed and improved. The Coastal Resources Division is developing a "Coastal Ark" mobile resource platform that will carry technical assistance and educational materials to local governments, classrooms, public festivals, and other events throughout the State. This project will require a cooperative effort between federal agencies (e.g., the National Oceanic and Atmospheric Administration and the U.S. Environmental Protection Agency), State agencies (e.g., the Coastal Resources Division, the Historic Preservation Division, and the University of Georgia), and local agencies. Corporate and non-profit sponsorship will also be needed. Staff will operate the mobile classroom, provide technical and logistical support, develop educational materials, collect and maintain specimens, schedule events, and coordinate with other educational entities. The Coastal Ark is envisioned to be the focal point of a coastal technical assistance initiative and environmental education curriculum.

In addition to outreach and education activities, the public is directly involved in policy-making through the public hearing process required by State law. Under the Georgia Administrative Procedures Act, agencies must provide methods whereby the public may obtain information or make submissions or requests. Agencies must adopt rules of practice setting forth

the nature and requirements of all formal and informal procedures available, including a description of all forms and instructions. Agencies must make available for public inspection all rules and other written statements of policy or interpretations formulated, adopted, or used in the discharge of agency functions. Also, agencies must make available for public inspection all final orders, decisions, and opinions except those expressly made confidential or privileged by statute (O.C.G.A. 50-13-3). Through the Georgia Coastal Management Program, the Coastal Resources Division will facilitate public involvement by hosting interagency meetings and working to coordinate State agencies.

This commitment of personnel, along with a long term outreach and technical assistance strategy, reflects the Coastal Resources Division's commitment to keeping the public informed and involved in the development and implementation of the Georgia Coastal Management Program.

# SECTION V:
# FEDERAL COORDINATION

Every effort has been made to involve federal agencies in the Program and to ensure a thorough understanding of the policies and procedures of the Program. Federal agency participation ensures their active role in program development. Active federal agency participation during program development and implementation is necessary to establish the level of coordination required for a successful management program. Through the Georgia Coastal Management Program, the Coastal Resources Division has endeavored to establish close ties with relevant federal agencies in order to facilitate a mutual understanding of each other's programs, goals, and procedures, and to develop workable arrangements that will accommodate the needs of all concerned.

Those federal agencies that are affected by, or have an influence on, coastal management in Georgia were identified early in the program development process. The following federal agencies have been identified as having an interest in Georgia's coastal area.

- Department of Agriculture
  - -- Farm Service Agency
  - -- Rural Economic and Community Development
  - -- Forest Service
  - -- Natural Resource Conservation Service
- Department of Commerce
  - -- National Marine Fisheries Service (NOAA)
  - -- Office of Ocean and Coastal Resource Management (NOAA)
  - -- South Atlantic Fishery Management Council (NOAA)
- Department of Defense
  - -- Department of the Army
  - -- Department of the Army, Corps of Engineers, Savannah District
  - -- Department of the Navy
- Department of Energy
- Department of Health and Human Services
- Department of Housing and Urban Development
- Department of the Interior
  - -- Bureau of Land Management
  - -- Fish and Wildlife Service
  - -- Geological Survey
  - -- National Park Service
  - -- Minerals Management Service
  - -- Office of Surface Mining
- Department of Justice

- Department of Transportation
  - -- Federal Highway Administration
  - -- Federal Railroad Administration
  - -- Maritime Administration
  - -- United States Coast Guard
- Department of Treasury
  - -- Federal Law Enforcement Training Center
- Environmental Protection Agency
- Federal Aviation Administration
- Federal Emergency Management Agency
- Federal Energy Regulatory Commission
- Federal Maritime Commission
- General Services Administration
- Interstate Commerce Commission
- National Aeronautics and Space Administration
- Nuclear Regulatory Commission

To ensure that federal agencies with an interest in Georgia's coastal area were kept informed during program development, a contact person was designated within each agency. The federal agency contacts are included on the Coastal Management Program's mailing list and have thus received notification of all Coastal Advisory Committee meetings, public meetings, and public hearings. They have also received copies of the Coastal Management Program Document, permitting rules and regulations, and other pertinent data relevant to the Program as they developed.

A consultation meeting between relevant federal agency representatives, Coastal Resources Division staff, and Office of Ocean and Coastal Resource Management officials was held in Atlanta, Georgia in July 1993. The primary purpose of this meeting was to develop mutual arrangements and understandings regarding each federal agency's participation and input during program development. In an attempt to ascertain what federal agencies perceive to be their own, as well as the national interest in the coastal area, the Coastal Resources Division sent federal agency contacts an information-gathering questionnaire early in the program development process. Federal agency contacts were asked to list activities and projects as well as their primary functions and responsibilities in the coastal area. Responses were used to further the staff's understanding of national interest considerations and coordination needs.

Throughout the development of the Georgia Coastal Management Program input was sought from affected federal agencies. Coordination with federal agencies is critical to the success of a federally-approved program. Meetings and communication with affected federal agencies will continue throughout the implementation of the Coastal Management Program.

# CHAPTER FIVE:
# POLICIES AND MANAGEMENT AUTHORITY

The ultimate challenge of the exploited ocean is clear. It is political. What is "conquered" by technology must be governed, and in this respect an ocean subjected is no different from a nation subdued. This will be true of the coastal ocean and the high seas.

Wesley Marx
*The Frail Ocean*

**Section I** of this chapter describes the policies of the Georgia Coastal Management Program and the underlying statutes that provide their enforceability. **Section II** of this chapter describes other enforceable authorities by which the Georgia Coastal Management Program can implement its responsibilities to provide resource protection while nurturing sustainable development. These other authorities are not necessarily policies of the Program; rather they are procedural mechanisms by which the Program can fulfill its responsibilities. **Section III** provides a table for quick reference to all management authorities cited in the previous two Sections. **Section IV** provides a quick description of various State Programs that are used in the coastal area. **Section V** provides a thumbnail sketch of various State Agencies and Commissions. **Section VI** describes some of the federal authorities by which coastal resources are managed. **Section VII** provides a short list of federal programs that influence coastal resources.

# SECTION I:
# GEORGIA COASTAL MANAGEMENT PROGRAM POLICIES

## A. Introduction

The goals of the Georgia Coastal Management Program are attained by enforcement of the policies of the State as codified within the Official Code of Georgia Annotated. "Policy" or "policies" of the Georgia Coastal Management Program means the enforceable provisions of present or future applicable statutes of the State of Georgia or regulations promulgated duly thereunder (O.C.G.A. 12-5-322). The statutes cited as policies of the Program were selected because they reflect the overall Program goals of developing and implementing a balanced program for the protection of the natural resources, as well as promoting sustainable economic development of the coastal area. The inclusion of these authorities is also based on the recommendations provided by citizens from the coastal area who served as members of the Coastal Zone Advisory Committee and associated Task Forces. Each recommendation of the Coastal Zone Advisory Committee was considered during the development of this document, and the corresponding authorities that most closely relate to the Committee's recommendations are cited here as policies of the Georgia Coastal Management Program.

For each of the coastal resource and use areas of concern listed below, a policy statement is provided with a direct citation to Georgia law. The laws are not cited in their entirety; rather, the purpose of the statute, or a pertinent section of the statute, is cited. The Program policies are the enforceable provisions of the laws cited. A policy statement for each law describes the spirit of the law, directly cited from statements set out in the particular law. In each case, the citation

for the statement is provided. The particular statements may or may not be enforceable as written, but the laws to which they relate contain enforceable provisions that have been enacted by the Georgia General Assembly to implement the policies as stated. The policies cited here are, therefore, supported by legally binding laws of the State of Georgia, through which Georgia is able to exert control over impacts to the land and water uses and natural resources in the coastal area. The statutes referenced herein can be found in the Official Code of Georgia Annotated (O.C.G.A.), copies of which are located in headquarters offices of State and local agencies, most public libraries, local courthouses, and numerous other public offices.

A General Description is set out after each cited policy and is provided for the reader to use as a quick reference to the relevant provisions of the law. The General Description is not intended to be, nor should it be interpreted as, law, policy, or restatement of the law. It is merely provided for the convenience of the reader to gain an initial concept as to the content of the related law. The reader is advised to refer to the actual law cited, and not to rely on the General Description as a basis for a legal interpretation of the law on any particular issue.

## B. Policy Statements and General Description

### -- Aquaculture --

**Policy Statement**

***Georgia Aquaculture Development Act (O.C.G.A. 27-4-251, et seq.)***

**27-4--254. Duty of commission to develop aquaculture development plan; contents of plan; meetings of commission; staff support.**

(a) The commission shall make a thorough study of aquaculture and the potential for development and enhancement of aquaculture in the state. It shall be the duty of the commission to develop, distribute, and, from time to time, amend an aquaculture development plan for the State of Georgia for the purpose of facilitating the establishment and growth of economically viable aquaculture enterprises in Georgia. (Code 1981. § 27-4-254, enacted by Ga. L. 1992, p. 1507, § 8.)

***General Description***

The Georgia Aquaculture Development Act was enacted in 1992 to study aquaculture development in Georgia. A 14-member Aquaculture Development Commission composed of industry representatives, scientists, agency representatives, and others is created. The Department of Natural Resources, with assistance from the Department of Agriculture and the Department of Industry, Trade, and Tourism provides staff support for the Commission.

## -- Air Quality --

**Policy Statement**

***Georgia Air Quality Act (O.C.G.A. 12-9-1, et seq.)***

***12-9-2. Declaration of public policy.***

It is declared to be the public policy of the State of Georgia to preserve, protect, and improve air quality and to control emissions to prevent the significant deterioration of air quality and to attain and maintain ambient air quality standards so as to safeguard the public health, safety, and welfare consistent with providing for maximum employment and full industrial development of the state. (Code 1933, 88-901, enacted by Ga. L. 1967, p. 581, § 1; Ga. L. 1978, p. 275, § 1; Ga. L. 1992, p. 918, § 2; Ga. L. 1992, p. 2886, § 1.)

***General Description***

The Georgia Air Quality Act provides authority to the Environmental Protection Division to promulgate rules and regulations necessary to abate or to control air pollution for the State as a whole or from area to area, as may be appropriate. Establishment of ambient air quality standards, emission limitations, emission control standards, and other measures are necessary to provide standards that are no less stringent than the federal Clean Air Act are mandated. The Act also requires establishment of a program for prevention and mitigation of accidental releases of hazardous air contaminants or air pollutants, training and educational programs to ensure proper operation of emission control equipment, and standards of construction no less stringent than the federal Act. The Environmental Protection Division administers the Georgia Air Quality Act throughout the State. The Memorandum of Agreement between the Georgia Coastal Resources Division and the Environmental Protection Division ensures cooperation and coordination in the achievement of the policies of the Program.

## -- Boating Safety --

**Policy Statement**

***Georgia Boat Safety Act (O.C.G.A. 52-7-1. et seq.)***

***52-7-2. Declaration of policy.***

It is the policy of this state to promote safety for persons and property in and connected with the use, operation, and equipment of vessels and to promote the uniformity of laws relating thereto. (Ga. L. 1973, p. 1427, § 2)

**General Description**

The Georgia Boat Safety Act provides enforceable rules and regulations for safe boating practices on Georgia's lakes, rivers, and coastal waters. This Act establishes boating safety zones for a distance of 1,000 feet from the high-water mark on Jekyll Island, Tybee Island, St. Simons Island, and Sea Island. All motorized craft, including

commercial fishing vessels, jet skis, and power boats, are prohibited from these waters, except at certain pier and marina access points. This Act defines "abandoned vessels" as any left unattended for five days and provides for their removal. The Law Enforcement Section of the Georgia Department of Natural Resources, Wildlife Resources Division and the Georgia Bureau of Investigation enforces these regulations.

## -- Coastal Management --

### Policy Statement

***Georgia Coastal Management Act (O.C.G.A. 12-5-320, et seq.)***

***12-5-321. Legislative purpose.***

The General Assembly finds and declares that the coastal area of Georgia comprises a vital natural resource system. The General Assembly recognizes that the coastal area of Georgia is the habitat of many species of marine life and wildlife which must have clean waters and suitable habitat to survive. The General Assembly further finds that intensive research has revealed that activities affecting the coastal area may degrade water quality or damage coastal resources if not properly planned and managed. The General Assembly finds that the coastal area provides a natural recreation resource which has become vitally linked to the economy of Georgia's coast and to that of the entire state. The General Assembly further finds that resources within this coastal area are costly, if not impossible, to reconstruct or rehabilitate once adversely affected by human-related activities and it is important to conserve these resources for the present and future use and enjoyment of all citizens and visitors to this state. The General Assembly further finds that the coastal area is a vital area of the state and that it is essential to maintain the health, safety, and welfare of all the citizens of the state. Therefore, the General Assembly declares that the management of the coastal area has more than local significance, is of equal importance of all citizens of the state, is of state-wide concern, and consequently is properly a matter for coordinated regulation under the police power of the state. The General Assembly further finds and declares that activities and structures in the coastal area must be regulated to ensure that the values and functions of coastal waters and natural habitats are not impaired and to fulfill the responsibilities of each generation as public trustees of the coastal waters and habitats for succeeding generations.

***General Description***

The Coastal Management Act provides enabling authority for the State to prepare and administer a coastal management program. The Act does not establish new regulations or laws; it is designed to establish procedural requirements for the Department of Natural Resources to develop and implement a program for the sustainable development and protection of coastal resources. It establishes the Department of Natural Resources as the State agency to receive and disburse federal grant monies. It establishes the Governor as the approving authority of the program and as the person that must submit the program to the federal government for approval under the federal Coastal

Zone Management Act. It requires other State agencies to cooperate with the Coastal Resources Division when exercising their activities within the coastal area.

## -- Coastal Marshlands --

### Policy Statement

***Coastal Marshlands Protection Act (O.C.G.A. 12-5-280, et seq.)***

***12-5-281. Legislative findings and declarations.***

The General Assembly finds and declares that the coastal marshlands of Georgia comprise a vital natural resource system. It is recognized that the estuarine area of Georgia is the habitat of many species of marine life and wildlife and, without the food supplied by the marshlands, such marine life and wildlife cannot survive. The General Assembly further finds that intensive marine research has revealed that the estuarine marshlands of coastal Georgia are among the richest providers of nutrients in the world. Such marshlands provide a nursery for commercially and recreationally important species of shellfish and other wildlife, provide a great buffer against flooding and erosion, and help control and disseminate pollutants. Also, it is found that the coastal marshlands provide a natural recreation resource which has become vitally linked to the economy of Georgia's coastal zone and to that of the entire state. The General Assembly further finds that this coastal marshlands resource system is costly, if not impossible, to reconstruct or rehabilitate once adversely affected by man related activities and is important to conserve for the present and future use and enjoyment of all citizens and visitors to this state. The General Assembly further finds that the coastal marshlands are a vital area of the state and are essential to maintain the health, safety, and welfare of all the citizens of the state. Therefore, the General Assembly declares that the management of the coastal marshlands has more than local significance, is of equal importance to all citizens of the state, is of state-wide concern, and consequently is properly a matter for regulation under the police power of the state. The General Assembly further finds and declares that activities and structures in the coastal marshlands must be regulated to ensure that the values and functions of the coastal marshlands are not impaired and to fulfill the responsibilities of each generation as public trustees of the coastal marshlands for succeeding generations. (Code 1981, § 12-5-281, enacted by Ga. L. 1992, p. 2294, § 1.)

### *General Description*

The Coastal Marshlands Protection Act provides the Coastal Resources Division with the authority to protect tidal wetlands. The Coastal Marshlands Protection Act limits certain activities and structures in marsh areas and requires permits for other activities and structures. Erecting structures, dredging, or filling marsh areas requires a Marsh Permit administered through the Coastal Management Program. In cases where the proposed activity involves construction on State-owned tidal water bottoms, a Revocable License issued by the Coastal Resources Division may also be required. Marsh Permits and Revocable Licenses are not issued for activities that are inconsistent with the Georgia Coastal Management Program.

The jurisdiction of the Coastal Marshlands Protection Act extends to "coastal marshlands" or "marshlands", which includes marshland, intertidal area, mudflats, tidal water bottoms, and salt marsh area within estuarine area of the state, whether or not the tidewaters reach the littoral areas through natural or artificial watercourses. The estuarine area is defined as all tidally influenced waters, marshes, and marshlands lying within a tide-elevation range from 5.6 feet above mean high-tide level and below. Exemptions from the jurisdiction of the Act include: Georgia Department of Transportation activities, generally; agencies of the United States charged with maintaining navigation of rivers and harbors (See Chapter Eight, "Federal Consistency"); railroad activities of public utilities companies; activities of companies regulated by the Public Service Commission; activities incident to water and sewer pipelines; and, construction of private docks that don't obstruct tidal flow.

Any agricultural or silvicultural activity that directly alters lands within the jurisdictional areas of the Coastal Marshlands Protection Act must meet the permit requirements of the Act and must obtain a permit issued by the Coastal Resources Division on behalf of the Coastal Marshlands Protection Committee. Permits for marinas, community docks, boat ramps, recreational docks, and piers within the jurisdiction of the Coastal Marshlands Protection Act are administered by the Coastal Resources Division. To construct a marina, a marina lease is required. Private-use recreational docks are exempt from the Coastal Marshlands Protection Act but must obtain a Revocable License and a State Programmatic General Permit.

## -- Dams --

### Policy Statement

***Georgia Safe Dams Act (O.C.G.A. 12-5-370, et seq.)***

***12-5-371. Declaration of purpose.***

It is the purpose of this part to provide for the inspection and permitting of certain dams in order to protect the health, safety, and welfare of all the citizens of the state by reducing the risk of failure of such dams. The General Assembly finds and declares that the inspection and permitting of certain dams is properly a matter for regulation under the police powers of the state. (Ga. L. 1978, p. 795, § 2)

***General Description***

The Georgia Safe Dams Act provides for the inspection and permitting of certain dams to protect the health, safety, and welfare of Georgia residents. The Environmental Protection Division of the Georgia Department of Natural Resources is responsible for inspecting and certifying dams.

## -- Department of Natural Resources --

**Policy Statement**

***12-2-3. Departmental purposes.***

It shall be the objectives of the department:

(1) To have the powers, duties, and authority formerly vested in the Division of Conservation and the commissioner of conservation;

(2) By means of investigation, recommendation, and publication, to aid:

(A) In the promotion of the conservation and development of the natural resources of the state;

(B) In promoting a more profitable use of lands and waters;

(C) In promoting the development of commerce and industry; and

(D) In coordinating existing scientific investigations with any related work of other agencies for the purpose of formulating and promoting sound policies of conservation and development;

(3) To collect and classify the facts derived from such investigations and from the work of other agencies of the state as a source of information accessible to the citizens of the state and to the public generally, which facts set forth the natural, economic, industrial, and commercial advantages of the state; and

(4) To establish and maintain perfect cooperation with any and every agency of the federal government interested in or dealing with the subject matter of the department. (Ga. L. 1937, p. 264, § 4; Ga. L. 1949, p. 1079, § 1; Ga. L. 1992, p. 6, § 12.)

***General Description***

The authority for the Department of Natural Resources is found at O.C.G.A. 12-2-1, *et seq.* The objectives for the Department are described, including to aid: in promoting the conservation and development of the State's natural resources; in promoting a more profitable use of lands and waters; in promoting the development of commerce and industry; and in coordinating existing scientific investigations with related work of other agencies for the purpose of formulating and promoting sound policies of conservation and development. The Act also requires the Department to "establish and maintain perfect cooperation with any and every agency of the federal government interested in or dealing with the subject matter of the department."

The powers of the Department are established, including: investigations of the natural mining industry and commercial resources of the State and promotion of the conservation and development of such resources; the care of State parks and other recreational areas now owned or to be acquired by the State; examination, survey, and mapping of the geology, mineralogy, and topography of the State, including their industrial and economic utilization; investigation of the water supply and water power of the State with recommendations and plans for promoting their more profitable use and promotion of their development; investigations of existing conditions of trade, commerce, and industry in the State, with particular attention to the causes that may hinder or

encourage their growth, and recommendations of plans that promote the development of their interests.

The Department is set up in several Divisions. The **Wildlife Resources Division** is empowered to acquire land areas and to enter into agreements with landowners and the federal government for purposes of managing wildlife species and establishing specific sanctuaries, wildlife management areas, and public fishing areas. The Wildlife Resources Division administers a management plan for each area which establishes short- and long-term uses and guidelines for protection and use of each specific area. These areas owned and/or managed by the Wildlife Resources Division are important resources of the coastal area for conservation of wildlife and also for recreational hunting and fishing opportunities. Wildlife management areas within the jurisdiction of the Coastal Marshlands Protection Act and/or Shore Protection Act receive the additional protection provided by said legislation. The **Environmental Protection Division** is empowered to manage the State's air and water resources. The **Coastal Resources Division** is charged with management of coastal resources, which includes implementation of the Coastal Marshlands Protection Act and the Shore Protection Act. The Coastal Resources Division responsibilities also include management of marine fisheries resources. The **Pollution Prevention Assistance Division** provides technical assistance and education for reducing pollution throughout Georgia, including development of Best Management Practices for various industries. The **Historic Preservation Division** is charged with cataloging, protecting, and preserving the State's historic sites and areas. The **Parks, Recreation, and Historic Sites Division** has primary responsibility for development and maintenance of the State's parks and historic sites. The **Program Support Division** provides administrative support for the Department.

## -- Endangered Wildlife --

### Policy Statement

***Endangered Wildlife Act (O.C.G.A. 27-3-130, et seq.)***

***27-3-132. Powers and duties of department and board.***

(a) The department shall identify and inventory any species of animal life within this state which it determines from time to time to be rare, unusual, or in danger of extinction; and, upon such determination, such species shall be designated protected species and shall become subject to the protection of this article.

(b) The board shall issue such rules and regulations as it may deem necessary for the protection of protected species and for the enforcement of this article. Such rules and regulations shall not affect rights in private property or in public or private streams, nor shall such rules and regulations impede construction of any nature. Such rules and regulations shall be limited to the regulation of the capture, killing, or selling of protected species and the protection of the habitat of the species on public lands.

*General Description*

The Endangered Wildlife Act provides for identification, inventory, and protection of animal species that are rare, unusual, or in danger of extinction. Additional species may be added by the Board of Natural Resources at any time. The protection offered to these species is limited to those that are found on public lands of the State. It is a misdemeanor to violate the rules prohibiting capture, killing, or selling of protected species, and protection of protected species habitat on public lands. The rules and regulations are established and administered by the Department of Natural Resources for implementation of this Act.

Projects permitted under the authority of the Coastal Marshlands Protection Act, the Shore Protection Act, and the Revocable License require full compliance with the protection of endangered and protected species. Outside the jurisdiction of these laws, for those areas that are not public lands of Georgia, protection of endangered species is provided by the federal Endangered Species Act, which has jurisdiction over both private and public lands.

## -- Environmental Policy --

**Policy Statement**

***Georgia Environmental Policy Act (O.C.G.A. 12-16-1, et seq.)***

***12-16-2. Legislative findings.***

The General Assembly finds that:

(1) The protection and preservation of Georgia's diverse environment is necessary for the maintenance of the public health and welfare and the continued viability of the economy of the state and is a matter of the highest public priority;

(2) State agencies should conduct their affairs with an awareness that they are stewards of the air, land, water, plants, animals, and environmental, historical, and cultural resources;

(3) Environmental evaluations should be a part of the decision-making processes of the state; and

(4) Environmental effects reports can facilitate the fullest practicable provision of timely public information, understanding, and participation in the decision-making processes of the state. (Code 1981, § 12-16-2, enacted by Ga. L. 1991, p. 1728, § 1.)

*General Description*

The Georgia Environmental Policy Act (GEPA) requires that all State agencies and activities prepare an Environmental Impact Report as part of the decision-making process. This is required for all activities that may have an impact on the environment. Alternatives to the proposed project or activity must be considered as part of the report.

## -- Erosion and Sedimentation --

### Policy Statement

***Georgia Erosion and Sedimentation Act (O.C.G.A. 12-7-1, et seq.)***

***12-7-2. Legislative findings; policy of state and intent of chapter.***

It is found that soil erosion and sediment deposition onto lands and into waters within the watersheds of this state are occurring as a result of widespread failure to apply proper soil erosion and sedimentation control practices in land clearing, soil movement, and construction activities and that such erosion and sediment deposition result in pollution of state waters and damage to domestic, agricultural, recreational, fish and wildlife, and other resource uses. It is therefore declared to be the policy of this state and the intent of this chapter to strengthen and extend the present erosion and sediment control activities and programs of this state and to provide for the establishment and implementation of a state-wide comprehensive soil erosion and sediment control program to conserve and protect the land, water, air, and other resources of this state. (Ga. L. 1975, p. 994, § 2.)

***General Description***

The Georgia Erosion and Sedimentation Act requires that each county or municipality adopt a comprehensive ordinance establishing procedures governing land-disturbing activities based on the minimum requirements established by the Act. The Erosion and Sedimentation Act is administered by the Environmental Protection Division of the Georgia Department of Natural Resources, and by local governments. Permits are required for specified "land-disturbing activities," including the construction or modification of manufacturing facilities, construction activities, certain activities associated with transportation facilities, activities on marsh hammocks, etc. With certain constraints, permitting authority can be delegated to local governments.

One provision of the Erosion and Sedimentation Act requires that land-disturbing activities shall not be conducted within 25 feet of the banks of any State waters unless a variance is granted (O.C.G.A. 12-7-6-(15)). Construction of single family residences under contract with the owner are exempt from the permit requirement but are still required to meet the standards of the Act (O.C.G.A. 12-7-17-(4)). Large development projects, both residential and commercial, must obtain a permit and meet the requirements of the Act. According to the Georgia Coastal Management Act, any permits or variances issued under the Erosion and Sedimentation Act must be consistent with the Georgia Coastal Management Program. Permits within the jurisdiction of the Coastal Marshlands Protection Act and the Shore Protection Act can include requirements that certain minimum water quality standards be met as a condition of the permit.

There are specific exemptions to the requirements of the Erosion and Sedimentation Act (O.C.G.A. 12-7-17 - Exemptions). The exemptions include: surface mining, granite quarrying, minor land-disturbing activities such as home gardening,

construction of single-family homes built or contracted by the homeowner for his own occupancy, agricultural practices, forestry land management practices, dairy operations, livestock and poultry management practices, construction of farm buildings, and any projects carried out under the supervision of the Natural Resource Conservation Service of the U.S. Department of Agriculture. Exemptions from the requirements of the Act also apply to any project involving 1.1 acres or less, provided that the exemption does not apply to any land-disturbing activities within 200 feet of the bank of any State waters. Construction or maintenance projects undertaken or financed by the Georgia Department of Transportation, the Georgia Highway Authority, or the Georgia Tollway Authority, or any road or maintenance project undertaken by any county or municipality, are also exempt from the permit requirements of the Act, provided that such projects conform to the specifications used by the Georgia Department of Transportation for control of soil erosion. Exemptions are also provided to land-disturbing activities by any airport authority, and by any electric membership corporation or municipal electrical system, provided that such activities conform as far as practicable with the minimum standards set forth at Code Section 12-7-6 of the Erosion and Sedimentation Act. The Georgia Department of Transportation has developed a "Standard Specifications -- Construction of Roads and Bridges," which describes contractor requirements, including controls for sedimentation and erosion. The specifications describe the requirements for both temporary control measures for use during the construction phase, and permanent erosion and sedimentation control measures that need to be incorporated into the design of the project. Failure to comply with the provisions of the specification will result in cessation of all construction activities by the contractor, and may result in the withholding of monies due to the contractor according to a schedule of non-performance of erosion control, enforced by the Georgia Department of Transportation. Forestry and agricultural land-disturbing activities are subject to the Best Management Practices of the Georgia Forest Commission and the Georgia Soil and Water Conservation Commission, respectively.

## -- Game and Fish --

**Policy Statement**

***27-1-3. Ownership and custody of wildlife; privilege to hunt, trap, or fish; general offenses. (Game and Fish Code)***

(a) The ownership of, jurisdiction over, and control of all wildlife, as defined in this title, are declared to be in the State of Georgia, in its sovereign capacity, to be controlled, regulated, and disposed of in accordance with this title. All wildlife of the State of Georgia are declared to be within the custody of the department for purposes of management and regulation in accordance with this title. However, the State of Georgia, the department, and the board shall be immune from suit and shall not be liable for any damage to life, person, or property caused directly or indirectly by any wildlife.

(b) To hunt, trap, or fish, as defined in this title, or to possess or transport wildlife is declared to be a privilege to be exercised only in accordance with the laws granting such privilege. Every person exercising this privilege does so subject to the right of the state to regulate hunting, trapping, and fishing; and it shall be unlawful for any person participating in the privileges of hunting, trapping, fishing, possessing, or transporting wildlife to refuse to permit authorized employees of the department to inspect and count such wildlife to ascertain whether the requirements of the wildlife laws and regulations are being faithfully complied with. Any person who hunts, traps, fishes, possesses, or transports wildlife in violation of the wildlife laws and regulations violates the conditions under which this privilege is extended; and any wildlife then on his person or within his immediate possession are deemed to be wildlife possessed in violation of the law and are subject to seizure by the department pursuant to Code Section 27-1-21.
(c) It shall be unlawful to hunt, trap, or fish except during an open season for the taking of wildlife, as such open seasons may be established by law or by rules and regulations promulgated by the board or as otherwise provided by law.
(d) It shall be unlawful to hunt, trap, or fish except in compliance with the bag, creel, size, and possession limits and except in accordance with such legal methods and weapons and except at such times and places as may be established by law or by rules and regulations promulgated by the board.
(e) It shall be unlawful to hunt, trap, or fish for any game species after having obtained the daily or season bag or creel limit for that species.
(f) A person who takes any wildlife in violation of this title commits the offense of theft by taking. A person who hunts, traps, or fishes in violation of this title commits the offense of criminal attempt. Any person who violates any provision of this Code section shall be guilty of a misdemeanor.
(g) If any court finds that any criminal violation of the provisions of this title is so egregious as to display a willful and reckless disregard for the wildlife of this state, the court may, in its discretion, suspend the violator's privilege to hunt, fish, trap, possess, or transport wildlife in this state for a period not to exceed five years. Any person who hunts, fishes, traps, possesses, or transports wildlife in this state in violation of such suspension of privileges shall be guilty of a misdemeanor of a high and aggravated nature and upon conviction thereof shall be punished by a fine of not less than $1,500.00 nor more than $5,000.00 or imprisonment for a period not exceeding 12 months or both. (Ga. L. 1968, p. 497, § 1; Code 1933, § 45-201, enacted by Ga. L. 1977, p. 396, § 1; Ga. L. 1978, p. 816, §§ 13, 14; Ga. L. 1992, p. 2391, § 1.)

***27-1-4. Powers and duties of board generally.***

The board shall have the following powers and duties relative to this title:
(1) Establishment of the general policies to be followed by the department under this title;
(2) Promulgation of all rules and regulations necessary for the administration of this title including, but not limited to, rules and regulations to regulate the times, places, numbers, species, sizes, manner, methods, ways, means, and devices of killing, taking, capturing, transporting, storing, selling, using, and consuming wildlife and to carry out this title, and rules and regulations requiring daily, season, or annual use permits for the privilege of hunting and fishing in designated streams, lakes, or game management areas; and
(3) Promulgation of rules and regulations to protect wildlife, the public, and the natural resources of this state in the event of fire, flood, disease, pollution, or other emergency situation without complying with Chapter 13 of Title 50, the "Georgia Administrative

Procedure Act." Such rules and regulations shall have the force and effect of law upon promulgation by the board. (Ga. L. 1911, p. 137, § 1; Ga. L. 1924, p. 101, §§ 1, 3, 4; Ga. L. 1931, p. 7, § 25; Ga. L. 1937, p. 264, §§ 1, 4, 9; Ga. L. 1943, p. 128, §§ 1, 2, 14; Ga. L. 1955, p. 483, § 3; Ga. L. 1972, p. 1015, § 1527; Ga. L. 1973, p. 344, § 1; Code 1933, § 45-103, enacted by Ga. L. 1977, p. 396, § 1; Ga. L. 1978, p. 816, § 7; Ga. L. 1979, p. 420, § 3; Ga. L. 1987, p. 179, § 1.)

***General Description***

The Official Code of Georgia Annotated, Title 27, Chapter 1 (known as the Game and Fish Code) provides the ownership of, jurisdiction over, and control of all wildlife to be vested in the State of Georgia. The section declares that custody of all wildlife in the State is vested with the Georgia Department of Natural Resources for management and regulation. The Wildlife Resources Division is the principal State agency vested with statutory authority for the protection, management and conservation of terrestrial wildlife and fresh water wildlife resources, including fish, game, non-game, and endangered species. All licensing of recreational and commercial fish and wildlife activities, excluding shellfish, is performed by the Wildlife Resources Division. The Coastal Resources Division issues shellfish permits, regulates marine fisheries activities including the opening and closing of the commercial shrimp harvesting season, areas of shrimp harvest, regulates marine species size and creel limits, and enforces the National Shellfish Sanitation Program. The Commissioner of the Department of Natural Resources has directed that there will be cooperation and coordination between the Divisions of the Department in the administration of their respective responsibilities.

## -- Georgia Heritage --

**Policy Statement**

***Georgia Heritage Trust Act (O.C.G.A. 12-3-70, et seq.)***

***12-3-71. Legislative purpose.***

The General Assembly finds that certain real property in Georgia, because it exhibits unique natural characteristics, special historical significance, or particular recreational value, constitutes a valuable heritage which should be available to all Georgians, now and in the future. The General Assembly further finds that much of this real property, because of Georgia's rapid progress over the past decade, has been altered, that its value as part of our heritage has been lost, and that such property which remains is in danger of being irreparably altered. The General Assembly declares, therefore, that there is an urgent public need to preserve important and endangered elements of Georgia's heritage, so as to allow present and future citizens to gain an understanding of their origins in nature and their roots in the culture of the past and to ensure a future sufficiency of recreational resources. The General Assembly asserts the public interest in the state's heritage by creating the Heritage Trust Program which shall be the responsibility of the Governor and the Department of Natural Resources and which shall seek to protect this heritage through the acquisition of fee simple title or lesser interests in valuable properties and by utilization of other available methods. (Ga. L. 1975, p. 962, § 2.)

*General Description*

Georgia's Heritage Trust Act of 1975 seeks to preserve certain real property in Georgia that exhibits unique natural characteristics, special historical significance, or particular recreational value. This Act created the Heritage Trust Commission, composed of 15 members appointed by the Governor who represent a variety of interests and expertise. The Commission served as an advisory body to the Governor and to the Board of the Department of Natural Resources, making recommendations concerning the identification, designation, and acquisition of heritage areas. Although this Act is still in Georgia law, the Commission's term expired and the implementation and administration of many of the goals of the Act has been superseded by the Heritage 2000 Program.

## -- Groundwater Use --

**Policy Statement**

***Groundwater Use Act (O.C.G.A. 12-5-90, et seq.)***

***12-5-91. Declaration of policy.***

The general welfare and public interest require that the water resources of the state be put to beneficial use to the fullest extent to which they are capable, subject to reasonable regulation in order to conserve these resources and to provide and maintain conditions which are conducive to the development and use of water resources. (Ga. L. 1972, p. 976, § 2.)

*General Description*

The Groundwater Use Act charges the Board of Natural Resources with the responsibility to adopt rules and regulations relating to the conduct, content, and submission of water conservation plans, including water conservation practices, water drilling protocols, and specific rules for withdrawal and utilization of groundwater. The Environmental Protection Division administers these rules and regulations. Groundwater withdrawals of greater than 100,000 gallons per day require a permit from the Environmental Protection Division. Permit applications that request an increase in water usage must also submit a water conservation plan approved by the Director of Environmental Protection Division (O.C.G.A. 12-5-96). The Environmental Protection Division has prepared a comprehensive groundwater management plan for coastal Georgia that addresses water conservation measures, protection from saltwater encroachment, reasonable uses, preservation for future development and economic development issues. The Memorandum of Agreement with the Environmental Protection Division ensures that permits issued under the Groundwater Use Act must be consistent with the Coastal Management Program.

## -- Hazardous Waste --

**Policy Statement**

***Georgia Hazardous Waste Management Act (O.C.G.A. 12-8-60, et seq.)***

***12-8-61. Legislative policy.***

It is declared to be the public policy of the State of Georgia, in furtherance of its responsibility to protect the public health, safety, and well-being of its citizens and to protect and enhance the quality of its environment, to institute and maintain a comprehensive state-wide program for the management of hazardous wastes through the regulation of the generation, transportation, storage, treatment, and disposal of hazardous wastes. (Ga. L. 1979, p. 1127, § 2; Ga. L. 1992, p. 2234, § 5.)

***General Description***

The Georgia Hazardous Waste Management Act describes a comprehensive, State-wide program to manage hazardous wastes through regulating hazardous waste generation, transportation, storage, treatment, and disposal. Hazardous waste is defined by the Board of Natural Resources, and it includes any waste that the Board concludes is capable of posing a substantial present or future hazard to human health or the environment when improperly treated, transported, stored, disposed, or otherwise managed, based on regulations promulgated by the U.S. Environmental Protection Agency. The Hazardous Waste Management Act is administered and implemented by the Environmental Protection Division.

## -- Historic Areas --

**Policy Statement**

***Historic Areas (O.C.G.A. 12-3-50, et seq.)***

***12-3-50.1. Grants for the preservation of "historic properties"; additional powers and duties of department.***

(a) It is declared to be the public policy of the State of Georgia, in furtherance of its responsibility to promote and preserve the health, prosperity, and general welfare of the people, to encourage the preservation of historic properties which have historical, cultural, and archeological significance to the state . (Code 1981, § 12-3-50.1, enacted by Ga. L. 1986, p. 399, § 1; Ga. L. 1996, p. 6, § 12.)

***General Description***

The authority found at O.C.G.A. 12-3-50 provides the Department of Natural Resources with the powers and duties to "promote and increase knowledge and understanding of the history of this State from the earliest times to the present, including the archeological, Indian, Spanish, colonial, and American eras, by adopting and executing general plans, methods, and policies for permanently preserving and marking objects, sites, areas, structures, and ruins of historic or legendary significance, such as trails, post roads, highways, or railroads; inns or taverns; rivers, inlets, millponds,

bridges, plantations, harbors, or wharves; mountains, valleys, coves, swamps, forests, or Everglade; churches, missions, campgrounds, and places of worship; schools, colleges, and universities; courthouses and seats of government; places of treaties, councils, assemblies, and conventions; factories, foundries, industries, mills, stores, and banks; cemeteries and burial mounds; and battlefields, fortifications, and arsenals. Such preservation and marking may include the construction of signs, pointers, markers, monuments, temples, and museums, which structures may be accompanied by tablets, inscriptions, pictures, paintings, sculptures, maps, diagrams, leaflets, and publications explaining the significance of the historic or legendary objects, sites, areas, structures, or ruins." The Department is also required to "promote and assist in the publicizing of the historical resources of the State by preparing and furnishing the necessary historical material to agencies charged with such publicity; to promote and assist in making accessible and attractive to travelers, visitors, and tourists the historical features of the State by advising and cooperating with State, federal, and local agencies charged with the construction of roads, highways, and bridges leading to such historical points." The Historical Preservation Division is charged with carrying out these duties, and coordinates its activities in the coastal area with the Coastal Resources Division.

## -- Natural Areas --

**Policy Statement**

***Georgia Natural Areas Act (O.C.G.A. 12-3-90, et seq.)***

***12-3-91. Legislative findings and declaration of purpose.***

The General Assembly finds that there is an increasing nation-wide concern over the deterioration of man's natural environment in rural as well as urban areas; that there is a serious need to study the long-term effects of our civilization on our natural environment; that while the State of Georgia is still richly endowed with relatively undisturbed natural areas, these areas are rapidly being drastically modified and even destroyed by human activities; that it is of the utmost importance to preserve examples of such areas in their natural state, not only for scientific and educational purposes but for the general well-being of our society and its people. Therefore, it shall be the purpose and function of the Department of Natural Resources to:

(1) Identify natural areas in the State of Georgia which are of unusual ecological significance;

(2) Use its influence and take any steps within its power to secure the preservation of such areas in an undisturbed natural state in order that such areas may:

(A) Be studied scientifically;

(B) Be used for educational purposes;

© Serve as examples of nature to the general public; and

(D) Enrich the quality of our environment for present and future generations; and

(3) Recommend areas or parts of areas for recreational use. (Ga. L. 1969, p. 750, § 2; Ga. L. 1972, p. 1015, § 1511.)

***12-3-92. "Natural areas" defined.***

As used in this article, the term "natural areas" means a tract of land in its natural state which may be set aside and permanently protected or managed for the purpose of the preservation of native plant or animal communities, rare or valuable individual members of such communities, or any other natural features of significant scientific, educational, geological, ecological, or scenic value. (Ga. L. 1966, p. 330, § 2; Ga. L. 1969, p. 750, § 3.)

***General Description***

The Georgia Natural Areas Act authorizes the Department of Natural Resources to identify areas in the State of Georgia which are of unusual ecological significance, and to secure the preservation of such areas in an undisturbed natural state. The purpose for such acquisition is to allow scientific study of the property, to educate, to "serve as examples of nature to the general public," and to "enrich the quality of our environment for present and future generations." Natural areas, as defined by the Act, are tracts of land in their natural state that are to be set aside and permanently protected or managed for the purpose of preserving natural plant or animal communities, rare or valuable members of such communities, or any other natural features of significant scientific, educational, geologic, ecological, or scenic value.

## -- Oil and Gas and Deep Drilling --

**Policy Statement**

***Georgia Oil and Gas and Deep Drilling Act (O.C.G.A. 12-4-40, et seq.)***

***12-4-41. Legislative findings and declaration of policy.***

The General Assembly finds and declares that its duty to protect the health, safety, and welfare of the citizens of this state requires that adequate protection of underground fresh water supplies be assured in any drilling operation which may penetrate through any stratum which contains fresh water. This duty further requires that adequate protection be assured in any drilling or the use of such drilled wells in certain other environmentally sensitive areas or in other circumstances where the result of such drilling and use may endanger the health, safety, and welfare of the citizens of this state. It is not the policy of the General Assembly to regulate the drilling of shallow exploration or engineering holes except in such environmentally sensitive areas as defined in this part. The General Assembly further finds and declares that, with the current energy shortage which this state and nation face, it must encourage oil and gas exploration to identify new sources of energy, but not at the expense of our important natural resources such as residential, municipal, and industrial supplies of fresh water. The General Assembly further finds and declares that with an increase in oil exploration, it must provide assurances to persons engaging in such exploration that adequate safeguards regarding results of exploration will remain privileged information for a specified time. The General Assembly further finds and declares that it is in the public interest to obtain, protect, and disseminate all possible geologic information associated with drilling operations in order to further the purposes of future energy related research. (Ga. L. 1975, p. 966, § 1.)

*General Description*

Georgia's Oil and Gas and Deep Drilling Act regulates oil and gas drilling activities to provide protection of underground freshwater supplies and certain "environmentally sensitive" areas. The Board of Natural Resources has the authority to implement this Act. The Act establishes requirements for drilling, casing, and plugging of wells for oil, gas, or mineral exploration: (1) to alleviate escape of gas or oil from one stratum to another; (2) to prevent the pollution of freshwater by oil, gas, salt water or other contaminants; (3) to prevent drowning of any stratum that might reduce the total ultimate recovery of gas or oil; and, (4) to prevent fires, waste, and spillage of contaminants such as oil.

## -- Phosphate Mining --

**Policy Statement**

***Licenses to dig, mine, and remove phosphate deposits; restrictions on license holders. (O.C.G.A. 12-4-100, et seq.)***

***12-4-101. Restrictions on license holders.***

Whenever any person discovers phosphate rock or phosphatic deposits in the navigable streams or waters of this state or in any public land on their banks or margins and files with the Secretary of State notice of such discovery and a description of the location thereof, he shall be entitled to receive from the Secretary of State a license giving him or his assigns the exclusive right, for ten years from the date of the license, of digging, mining, and removing from such location and from an area for a distance of five miles in any or all directions therefrom the phosphate rock and phosphatic deposits that may be found therein, provided that persons receiving or holding such licenses shall in no way interfere with the free navigation of the streams and waters or the private rights of any citizen residing on or owning the lands upon the banks of such navigable rivers and waters; provided, further, that as long as the license remains in effect, no person, natural or artificial, shall have the privilege of locating a claim within 20 miles of any other claim for which he has received a license. (Ga. L. 1884-85, p. 125, § 1; Civil Code 1895, § 1726; Civil Code 1910, § 1977; Code 1933, § 43-401.)

*General Description*

The laws found at O.C.G.A. 12-4-100, *et seq.*, describe the State's management of phosphate deposits. There is great interest in phosphate mining in Georgia. In fact, the citizens of Georgia developed the Coastal Marshlands Protection Act in an effort to limit potential adverse environmental impacts from a proposed phosphate mining operation. The Secretary of State is charged with the administration of this statute, and is networked with the Georgia Coastal Management Program.

## -- Protection of Tidewaters --

**Policy Statement**

***Protection of Tidewaters Act (O.C.G.A. 52-1-1, et seq.)***

***52-1-2. Legislative findings and declaration of policy.***

The General Assembly finds and declares that the State of Georgia became the owner of the beds of all tidewaters within the jurisdiction of the State of Georgia as successor to the Crown of England and by the common law. The State of Georgia continues to hold title to the beds of all tidewaters within the state, except where title in a private party can be traced to a valid Crown or state grant which explicitly conveyed the beds of such tidewaters. The General Assembly further finds that the State of Georgia, as sovereign, is trustee of the rights of the people of the state to use and enjoy all tidewaters which are capable of use for fishing, passage, navigation, commerce, and transportation, pursuant to the common law public trust doctrine. Therefore, the General Assembly declares that the protection of tidewaters for use by the state and its citizens has more than local significance, is of equal importance to all citizens of the state, is of state-wide concern, and, consequently, is properly a matter for regulation under the police powers of the state. The General Assembly further finds and declares that structures located upon tidewaters which are used as places of habitation, dwelling, sojournment, or residence interfere with the state's proprietary interest or the public trust, or both, and must be removed to ensure the rights of the state and the people of the State of Georgia to the use and enjoyment of such tidewaters. It is declared to be a policy of this state and the intent of this article to protect the tidewaters of the state by authorizing the commissioner of natural resources to remove or require removal of certain structures from such tidewaters in accordance with the procedures and within the timetable set forth in this article. (Code 1981, § 52-1-2, enacted by Ga. L. 1992, p. 2317, § 1.)

***General Description***

The Protection of Tidewaters Act establishes the State of Georgia as the owner of the beds of all tidewaters within the State, except where title by a private party can be traced to a valid British Crown or State land grant. The Act provides the Department of Natural Resources the authority to remove those "structures" that are capable of habitation, or incapable of or not used for transportation. Permits for such structures may not extend past June 30, 1997. The Act provides procedures for removal, sale, or disposition of such structures. (This is similar to the Right of Passage Act, except that it is specific to tidewaters rather than all waters of Georgia.)

## -- Recreational Docks --

**Policy Statement**

***50-16-61. General supervision and office assignment. (Under the Administrative Procedures Act, Revocable License Program)***

The Governor shall have general supervision over all property of the state with power to make all necessary regulations for the protection thereof, when not otherwise provided for.

*General Description*

O.C.G.A. 50-16-61 describes the general supervision of State properties as the responsibility of the Governor. Under this authority, the Department of Natural Resources, Coastal Resources Division issues Revocable Licenses for recreational docks on State-owned tidal water bottoms. In 1995, the Georgia Supreme Court found that the State owns fee simple title to the foreshore on navigable tidal waters and, as a result, owns the river's water bottoms up to the high water mark and may regulate the use of these tidelands for the public good. (Dorroh v. McCarthy 265 Ga. 750, 462 S.E. 2d 708 (1995)). The opinion of the State Attorney General states: "In managing tidelands, the Department of Natural Resources acts under the authority of this section and the Department's employment of the extension of property lines method of allocating use of State-owned waterbottoms may be generally acceptable, but rigid adherence to such a policy when it denies deep water access to a riparian or littoral owner, may cause inequitable results (1993 Op. Att'y Gen. No. 93-25.) As described in the State Properties Code (O.C.G.A. 50-16-30, *et seq.*), the term "Revocable License" means "the granting, subject to certain terms and conditions contained in a written revocable license or agreement, to a named person or persons (licensee), and to that person or persons only, of a revocable privilege to use a certain described parcel or tract of the property to be known as the licensed premises for the named purpose." A Revocable License may be revoked, canceled, terminated, with or without cause, at any time by the licensor.

## -- Right of Passage --

**Policy Statement**

***Right of Passage Act (O.C.G.A. 52-1-30, et seq.)***

***52-1-31. Legislative findings and declaration of policy.***

The General Assembly finds and declares that by the common law the citizens of this state have an inherent right to use as highways all navigable streams and rivers which are capable of transporting boats loaded with freight in the regular course of trade either for the whole or part of the year and that this right of use extends to the entire surface of the stream or river from bank to bank. The General Assembly further finds that the common law regarding such right of use has not been modified by statute nor is it incompatible with the federal or state constitutions. Therefore, the General Assembly declares that ensuring the right of use by all the citizens of this state of navigable streams and rivers which are capable of transporting boats loaded with freight in the regular course of trade either for the whole or part of the year as highways has more than local significance, is of equal importance to all citizens of the state, is of state-wide concern, and, consequently, is properly a matter for regulation under the police powers of the state. The General Assembly further finds and declares that structures located upon navigable streams and rivers which are used as places of habitation, dwelling, sojournment, or residence interfere with the citizens' right to use the entire surface of such streams and rivers which are capable of transporting boats loaded with freight in the regular course of trade either for the whole or part of the year from bank to bank as

highways and must be removed to ensure the rights of the citizens of this state to such usage. It is declared to be a policy of this state and the intent of this article to ensure such rights of the citizens of this state by authorizing the commissioner of natural resources to remove or require removal of certain structures from such streams and rivers which are capable of transporting boats loaded with freight in the regular course of trade either for the whole or part of the year in accordance with the procedures and within the timetable set forth in this article. (Code 1981, § 52-1-31, enacted by Ga. L. 1992, p. 2317, § 1.)

***General Description***

The Right of Passage Act declares the right of use of all navigable waterways of the state by all citizens of Georgia. The Act establishes the mechanism to remove "structures" that are capable of being used as a place of habitation, are not used as or are not capable of use as a means of transportation, and do not have a permit under the Act. Permits shall not be issued for a term ending after June 30, 1997. The Right of Passage Act is implemented by the Department of Natural Resources Law Enforcement Division. (This is similar to the Protection of Tidewaters Act, except that it is specific to all navigable waters rather than tidewaters Georgia.)

## -- River Corridors --

**Policy Statement**

***Mountain and River Corridor Protection Act (O.C.G.A. 12-2-1, et seq.)***

***12-2-8. Promulgation of minimum standards and procedures for protection of natural resources, environment, and vital areas of the state.***

(a) The local governments of the State of Georgia are of vital importance to the state and its citizens. The state has an essential public interest in promoting, developing, sustaining, and assisting local governments. The natural resources, environment, and vital areas of the state are also of vital importance to the state and its citizens. The state has an essential public interest in establishing minimum standards for land use in order to protect and preserve its natural resources, environment, and vital areas. The purpose of this Code section shall be liberally construed to achieve its purpose. This Code section is enacted pursuant to the authority granted the General Assembly in the Constitution of the State of Georgia, including, but not limited to, the authority provided in Article III, Section VI, Paragraphs I and II(a)(1) and Article IX, Section II, Paragraphs III and IV.

(b) The department is therefore authorized to develop minimum standards and procedures, in accordance with paragraph (2) of subsection (b) of Code Section 50-8-7.1 and in accordance with the procedures provided in Code Section 50-8-7.2 for the promulgation of minimum standards and procedures, for the protection of natural resources, environment, and vital areas of the state, including, but not limited to, the protection of mountains, the protection of river corridors, the protection of watersheds of streams and reservoirs which are to be used for public water supply, for the protection of the purity of ground water, and for the protection of wetlands, which minimum standards and procedures shall be used by local governments in developing, preparing, and implementing their comprehensive plans as that term is defined in paragraph (3) of subsection (a) of Code Section 50-8-2. (Code 1981, § 12-2

8, enacted by Ga, L. 1989, p. 1317, § 5.1; Ga. L. 1991, p. 1719, § 1; Ga. L. 1992, p. 6. § 12; Ga L. 1993, p. 91, § 12.)

***General Description***

The statute that is informally known as the Mountain and River Corridor Protection Act (O.C.G.A. 12-2-8) authorizes the Department of Natural Resources to develop minimum standards for the protection of river corridors (and mountains, watersheds, and wetlands) that can be adopted by local governments. The Act is administered by the Environmental Protection Division. All rivers in Georgia with an average annual flow of 400 cubic feet per second are covered by the Act, except those within the jurisdiction of the Coastal Marshlands Protection Act. Some of the major provisions of the Act include: requirements for a 100-foot vegetative buffer on both sides of rivers; consistency with the Georgia Erosion and Sedimentation Act; and local governments must identify river corridors in land-use plans developed under their respective comprehensive planning acts.

Regional Development Centers are instrumental in helping local governments enact the provisions of this Act. The Coastal Georgia Regional Development Center prepared a Regional River Corridor Protection Plan for counties within their jurisdiction. The Plan describes the ten local governments and the associated rivers that are affected by the River Corridor Protection Act, and puts forward a regional plan for the protection of river corridors. Regional plans are preferable to having local governments prepare individual plans. The plan provides for construction of road crossings, acceptable uses of river corridors, maintenance of a vegetative buffer along the river for a minimum of 100 feet from the river's edge (residential structures are allowed within the buffer zone), timber production standards, wildlife and fisheries management, recreation, and other uses. The local governments within the Coastal Regional Development Center jurisdiction affected by the River Corridor Protection Act, and their respective rivers are listed below. Eight coastal counties and two coastal cities (Richmond Hill and Woodbine) are affected.

Adoption of language addressing the River Corridor Protection Act is required in local comprehensive plans. The following counties and cities have adopted a Regional River Corridor Protection Plan.

| | |
|---|---|
| Bryan County ..... | Canoochee River |
| | Ogeechee River |
| City of Richmond Hill ..... | Ogeechee River |
| Camden County ..... | Satilla River |
| | St. Mary's River |
| City of Woodbine ..... | Satilla River |
| Chatham County ..... | Savannah River |
| Effingham County ..... | Ogeechee River |
| | Savannah River |
| Glynn County ..... | Altamaha River |
| Liberty County ..... | Canoochee River |
| Long County ..... | Altamaha River |
| McIntosh County ..... | Altamaha River |

The following coastal counties have not yet adopted a River Corridor Protection Plan (as of August 1997).

| | |
|---|---|
| Charlton County ..... | St. Mary's River |
| Brantley County ..... | Satilla River |
| Wayne County[1] ..... | Altamaha River |

Jurisdiction of the River Corridor Protection Act extends along the above named rivers from the limit of Coastal Marshlands Protection Act jurisdiction upstream through the coastal counties.

## -- Safe Drinking Water --

**Policy Statement**

***Georgia Safe Drinking Water Act (O.C.G.A. 12-5-170, et seq.)***

***12-5-171. Declaration of policy; legislative intent; Environmental Protection Division to administer part.***

As a guide to the interpretation and application of this part, it is declared to be the policy of the State of Georgia that the drinking waters of the state shall be utilized prudently to the maximum benefit of the people and that the quality of such waters shall be considered a major factor in the health and welfare of all people in the State of Georgia. To achieve this end, the government of the state shall assume responsibility for the quality of such waters and the establishment and maintenance of a water-supply program adequate for present needs and designed to care for the future needs of the state.

[1] Wayne County has addressed the provisions of the River Corridor Protection Act in its County Growth Management Plan entitled "Evergreen Tomorrow."

This requires that an agency of the state be charged with this duty and that it have the authority to require the use of reasonable methods, that is, those methods which are economically and technologically feasible, to ensure adequate water of the highest quality for water-supply systems. Because of substantial and scientifically significant variations in the characteristics, usage, and effect upon public interest of the various surface and underground waters of the state, uniform requirements will not necessarily apply to all waters or segments thereof. It is the intent of this part to confer discretionary administrative authority upon such agency to take the above and related circumstances into consideration in its decisions and actions in determining, under the conditions prevailing in specific cases, those procedures to best protect the public interests.

The Environmental Protection Division of the Department of Natural Resources shall be the state agency to administer the provisions of this part consistent with the above-stated policy. (Code 1933, § 88-2601, enacted by Ga. L. 1964, p.499, § 1; Ga. L. 1977, p.351, § 1.)

***General Description***

The Georgia Safe Drinking Water Act of 1977 charges the Environmental Protection Division with the responsibility for maintaining the quality of drinking water and for maintaining a water-supply program adequate for present and future needs of the State. The Environmental Protection Division is designated as the agency to establish rules and policies for the proper administration of drinking water management programs.

## -- Scenic Rivers --

**Policy Statement**

***Georgia Scenic Rivers Act (O.C.G.A. 12-5-350, et seq.)***

***12-5-352. Rivers comprising the Georgia Scenic River System.***

(a) The Georgia Scenic River System shall be comprised of the following:

(1) That portion of the Jacks River contained within the Cohutta National Wilderness Area and located in Fannin and Murray counties, Georgia, which portion extends a length of approximately 16 miles;

(2) That portion of the Conasauga River located within the Cohutta National Wilderness Area and located in Fannin, Gilmer, and Murray counties, Georgia, which portion extends a length of approximately 17 miles;

(3) That portion of the Chattooga River and its West Fork which are now designated as part of the Chattooga National Wild and Scenic River and located in Rabun County, Georgia, which portion extends a length of approximately 34 miles; and

(4) That portion of Ebenezer Creek from Long Bridge on County Road S 393 to the Savannah River and located in Effingham County, Georgia, which portion extends a length of approximately seven miles.

(b) The Georgia Scenic River System shall also be comprised of any river or section of a river designated as a scenic river by Act or resolution of the General Assembly. (Ga. L. 1969, p. 933, § 3; Ga. L. 1978, p. 2207, § 1; Ga. L. 1981, p. 459, § 1.)

*General Description*

The Georgia Scenic Rivers Act of 1969 defines "scenic river" to mean certain rivers or section of rivers that have valuable scenic, recreational, or natural characteristics that should be preserved for the benefit and enjoyment of present and future generations. Certain sections of rivers are named in the Act, and the process for designating other sections of Georgia rivers is described. The Georgia Scenic Rivers Act is administered by the Environmental Protection Division.

## -- Scenic Trails --

**Policy Statement**

***Georgia Scenic Trails Act (O.C.G.A. 12-3-110, et seq.)***

***12-3-111. Legislative purpose.***

In order to provide for the increasing outdoor recreation needs of an expanding population with an increasing amount of leisure time, in order to promote the enjoyment and appreciation of the outdoor areas of Georgia, and in order to provide for a healthful alternative to motorized travel, trails should be established in urban, suburban, rural, and wilderness areas of Georgia. Therefore, the purpose of this article is to provide for a Georgia Scenic Trails System. (Ga. L. 1972, p. 142, § 2.)

*General Description*

The Georgia Scenic Trails Act authorizes the Department of Natural Resources to establish a Scenic Trails System in Georgia. The Department is authorized to construct, maintain, and manage trails on lands acquired through purchase, easement, lease or donation. The purpose is to create a balanced system of trails throughout the State, including urban, bicycle, horse, rural hiking, primitive hiking, historical, bikeways, and combination trails. The Georgia Department of Transportation is authorized to construct the bicycle trails and bikeways after the Department of Natural Resources has determined their routes.

## -- Septic Tanks --

**Policy Statement**

***Title 31 -- Health (O.C.G.A. Title 31 generally) (Septic Tank Law)***

***31-2-7. Standards for individual sewage management systems.***

(b) The Department of Human Resources shall have the authority as it deems necessary and proper to adopt state-wide minimum standards for on-site, individual sewage management systems, including but not limited to standards for the size and construction of septic tanks. The Department is authorized to require that any on-site, individual sewage management system be examined and approved prior to allowing the use of such system in the state. Any on-site, individual sewage management system which has been properly approved shall, by virtue of such approval and by operation of law, be approved for installation in every county of the state; provided, however, that such on-site, individual sewage management

system shall be required to meet local regulations authorized by law. Upon written request of three or more health districts, the department is authorized to require the reexamination of any such system or component thereof, provided that documentation is submitted indicating unsatisfactory service of such system or component thereof. Before any such examination or reexamination, the department may require the person, persons, or organization manufacturing or marketing the system to reimburse the department or its agent for the reasonable expenses of such examination. (Code 1981, § 31-2-7, enacted by Ga. L 1992, p. 3308, § 1; Ga. L. 1994, p. 1777, § 1.)

***31-3-5.1. Regulations for septic tanks or individual sewage management systems in unincorporated areas; conformity to building permit.***

(b) No building permit for the construction of any residence, building, or other facility which is to be served by a septic tank or individual sewage management system shall be issued by or pursuant to the authority of a county governing authority unless the septic tank or individual sewage management system installation permit is in conformity with any state-wide minimum standards for sewage management systems or the rules and regulations of the county board of health adopted pursuant to the authority of subsection (a) of this Code section. No person, firm, corporation, or other entity shall install a septic tank or individual sewage management system in violation of any state-wide minimum standards or the regulations of a county board of health adopted pursuant to the authority of subsection (a) of the Code section. Each county governing authority shall provide by ordinance or resolution for the enforcement of the provisions of this subsection. (Code 1981, § 31-3-5.1, enacted by Ga. L. 1986, p. 227, § 1; Ga. L. 1992, p. 3308. § 2; Ga. L. 1994, p. 1777, § 2.)

***General Description***

As stated above, the standards and regulations for individual sewage management systems are found at O.C.G.A. 31-2-7 and 31-3-5.1. The Department of Human Resources and the county boards of health are described and established by Title 31. There are other references for managing septic systems throughout the Code, including references within the River Corridor Protection Act (O.C.G.A. 12-2-8), the Georgia Water Quality Control Act (O.C.G.A. 12-5-20), and others, which make reference to safe siting of septic systems to ensure that leachate from those systems does not infiltrate the waters of the State. The county board(s) of health are provided the authority and the responsibility of ensuring safe installation and maintenance of septic systems.

## -- Shellfish --

**Policy Statement**

***Game and Fish Code (O.C.G.A. 27-1-1, et seq.)***

***27-4-190. Master collecting and picker's permits; hours for taking shellfish; recreational harvesting.***

(a) It shall be unlawful to take or possess shellfish in commercial quantities or for commercial purposes without first having obtained a master collecting permit or without proof of purchase that such shellfish were purchased from a certified shellfish dealer. Master collecting permits shall specify whether the permittee is authorized to take oysters, clams, or other shellfish and shall only be issued to persons certified by the Department of

Agriculture to handle shellfish unless permission to take and possess shellfish for mariculture purposes has been granted by the department as described in subsection (d) of Code Section 27-4-197. Such permits shall be provided annually at no cost by the department but shall only be issued to persons with the right to harvest shellfish pursuant to Code Sections 44-8-6 through 44-8-8 or to holders of leases from such persons. A permittee may request authorization from the department for employees or agents, who shall be referred to as pickers, of such permittee to take shellfish from permitted areas. Such request shall be in writing to the department and shall include the name, address, and personal commercial fishing license number of the picker. It shall be unlawful for pickers to take or possess shellfish as authorized under their employer's master collecting permit unless they carry on their person while taking or in possession of shellfish a picker's permit as provided by the department indicating the exact area and circumstances allowed for taking. Such pickers' permits and charts shall be provided annually by the department at no cost and shall be in a form as prescribed by the department. Pickers must possess a valid personal commercial fishing license as provided for in Code Section 27-4-110 and, when a boat is used, a valid commercial fishing boat license as provided in Code Section 27-2-8. Master collecting permits and pickers' permits shall not be issued to persons who have been convicted three times in the two years immediately preceding the filing of an application for a permit of violations of this Code section, subsection (b) of Code Section 27-4-193, subsections (a) and (b) of Code Section 27-4-195, or Code Section 27-4-199. Master collecting permits and pickers' permits issued to master collecting permittees' agents shall be surrendered to the department upon termination of Department of Agriculture certification for handling shellfish, upon termination of right to harvest shellfish, or upon violation of any provision of this title. If a picker is removed from authorization to take shellfish by the master collecting permittee, that picker shall immediately surrender to the department his picker's permit. It shall be unlawful to possess unauthorized pickers' permits or pickers' permits issued to another person.

(c) It shall be unlawful for any person to take or possess shellfish from unauthorized locations and during unauthorized periods of taking. It shall be unlawful to take shellfish except between the hours of one-half hour before sunrise and one-half hour after sunset. (Code 1981, § 27-4-190, enacted by Ga. L. 1991, p. 693, § 6.)

***27-4-193. Taking shellfish from unapproved growing areas; operating facility for controlled purification of shellfish.***

(a) As used in this Code section, the term "approved growing area" means that area or areas approved by the department for shellfish harvesting and "unapproved growing area" means all other areas.

(b) It shall be unlawful to take or possess shellfish from unapproved growing areas except at such times and places as the department may establish. The department is authorized to close approved growing areas to allow transplanting at any time between January 1 and December 31. It shall be unlawful to engage in transplanting of shellfish from unapproved growing areas without written authorization from the department. Such authorization may condition the transplanting upon compliance with current, sound principles of wildlife research and management. In approving growing areas, the department shall consider such current guidelines as have been established by the National Shellfish Sanitation Program at the time of approval of the growing areas and current, sound principles of wildlife research and management. (Code 1981, § 27-4-193, enacted by Ga. L. 1991, p. 693, § 6; Ga. L. 1992, p. 6, § 27.)

*General Description*

The provisions of O.C.G.A. Title 27 (Game and Fish Code), Part 4 describe the regulation of shellfish in Georgia. The provisions describe the requirements for a commercial shellfish harvester to have a license, issued by the Department of Natural Resources pursuant to the requirements of the U.S. Department of Agriculture. The Department also is authorized to approve shellfish growing areas for commercial harvest, and must consider the guidelines established by the National Shellfish Sanitation Program (See Section VII of this chapter). The Department conducts water sampling in areas that are approved for shellfish in conjunction with the National Shellfish Sanitation Program.

## -- Shore Protection --

**Policy Statement**

***Shore Protection Act (O.C.G.A. 2-5-230 , et seq.)***

***12-5-231. Legislative findings and declarations.***

The General Assembly finds and declares that coastal sand dunes, beaches, sandbars, and shoals comprise a vital natural resource system, known as the sand-sharing system, which acts as a buffer to protect real and personal property and natural resources from the damaging effects of floods, winds, tides, and erosion. It is recognized that the coastal sand dunes are the most inland portion of the sand-sharing system and that because the dunes are the fragile product of shoreline evolution, they are easily disturbed by actions harming their vegetation or inhibiting their natural development. The General Assembly further finds that offshore sandbars and shoals are the system's first line of defense against the potentially destructive energy generated by winds, tides, and storms, and help to protect the onshore segment of the system by acting as reservoirs of sand for the beaches. Removal of sand from these bars and shoals can interrupt natural sand flows and can have unintended, undesirable, and irreparable effects on the entire sand-sharing system, particularly when the historical patterns of sand and water flows are not considered and accommodated. Also, it is found that ocean beaches provide an unparalleled natural recreation resource which has become vitally linked to the economy of Georgia's coastal zone and to that of the entire state. The General Assembly further finds that this natural resource system is costly, if not impossible, to reconstruct or rehabilitate once adversely affected by man related activities and is important to conserve for the present and future use and enjoyment of all citizens and visitors to this state and that the sand-sharing system is an integral part of Georgia's barrier islands, providing great protection to the state's marshlands and estuaries. The General Assembly further finds that this sand-sharing system is a vital area of the state and is essential to maintain the health, safety, and welfare of all the citizens of the state. Therefore, the General Assembly declares that the management of the sand-sharing system has more than local significance, is of equal importance to all citizens of the state, is of state-wide concern, and consequently is properly a matter for regulation under the police power of the state. The General Assembly further finds and declares that activities and structures on offshore sandbars and shoals, for all purposes except federal navigational activities, must be regulated to ensure that the values and functions of the sand-sharing

system are not impaired. It is declared to be a policy of this state and the intent of this part to protect this vital natural resource system by allowing only activities and alterations of the sand dunes and beaches which are considered to be in the best interest of the state and which do not substantially impair the values and functions of the sand-sharing system and by authorizing the local units of government of the State of Georgia to regulate activities and alterations of the ocean sand dunes and beaches and recognizing that, if the local units of government fail to carry out the policies expressed in this part, it is essential that the department undertake such regulation. (Code 1981, §12-5-231, enacted by Ga. L.1992, p.1362, § 1.)

***General Description***

The Shore Protection Act is the primary legal authority for protection and management of Georgia's shoreline features including sand dunes, beaches, sandbars, and shoals, collectively known as the sand-sharing system. The value of the sand-sharing system is recognized as vitally important in protecting the coastal marshes and uplands from Atlantic storm activity, as well as providing valuable recreational opportunities.

The Shore Protection Act limits activities in shore areas and requires a permit for certain activities and structures on the beach. Construction activity in sand dunes is limited to temporary structures such as crosswalks, and then only by permit from the Georgia Coastal Resources Division. Structures such as boat basins, docks, marinas, and boat ramps are not allowed in the dunes. Shore Permits, which are administered by the Coastal Resources Division, are not granted for activities that are inconsistent with the Georgia Coastal Management Program. The Shore Protection Act prohibits operation of any motorized vehicle on or over the dynamic dune fields and beaches, except as authorized for emergency vehicles, and governmental vehicles for beach maintenance or research. The Shore Protection Act also prohibits storage or parking of sailboats, catamarans, or other marine craft in the dynamic dune field.

Direct permitting authority regarding any proposed facilities located within the jurisdictional area the Shore Protection Act lies with the Shore Protection Committee. These permits are administered by the Georgia Coastal Resources Division. This authority is a very important aspect of the Georgia Coastal Management Program, since recreation at the water's edge is a significant demand. Providing public access and recreational opportunities at or near the beach while protecting the sand sharing system is an important component of the Program.

## -- Solid Waste Management --

### Policy Statement

***Georgia Comprehensive Solid Waste Management Act (O.C.G.A. 12-8-21, et seq.)***

***12-8-21. Declaration of policy; legislative intent.***

(a) It is declared to be the policy of the State of Georgia, in furtherance of its responsibility to protect the public health, safety, and well-being of its citizens and to protect and enhance the quality of its environment, to institute and maintain a comprehensive state-wide program for solid waste management which will assure that solid waste facilities, whether publicly or privately operated, do not adversely affect the health, safety, and well-being of the public and do not degrade the quality of the environment by reason of their location, design, method of operation, or other means and which, to the extent feasible and practical, makes maximum utilization of the resources contained in solid waste.

(b) It is further declared to be the policy of the State of Georgia to educate and encourage generators and handlers of solid waste to reduce and minimize to the greatest extent possible the amount of solid waste which requires collection, treatment, or disposal through source reduction, reuse, composting, recycling, and other methods and to promote markets for and engage in the purchase of goods made from recovered materials and goods which are recyclable. (Code 1981, § 12-8-21, enacted by Ga. L. 1990, p. 412, § 1; Ga. L. 1992, p. 3259, § 1; Ga. L. 1993, p. 399, §§ 1, 2.)

***General Description***

The Georgia Comprehensive Solid Waste Management Act defines the rules regarding solid waste disposal in the State. Solid waste handling facilities must be permitted by the State unless an individual is disposing of waste from his own residence onto land or facilities owned by him and disposal of such waste does not adversely affect human health (O.C.G.A. 12-8-30.10). State law mandates that a county, municipality, or group of counties beginning a process to select a site for municipal waste disposal must first call at least one public meeting.

In addition to the above-named jurisdictions, a regional solid waste management authority must hold at least one meeting within the jurisdiction of each participating authority. Meetings held to make siting decisions for any publicly or privately owned municipal solid waste disposal facility must be publicized before the meeting is held (O.C.G.A. 12-8-26). Each city and county is required to develop a comprehensive solid waste management plan that, at a minimum, provides for the assurance of adequate solid waste handling capability and capacity for at least ten years. This plan must identify those sites that are not suitable for solid waste facilities based upon environmental and land use factors (O.C.G.A. 12-8-31.1); these factors may include historic and archeological sites. Solid waste facilities within 5,708 yards of a national historic site are not permitted (O.C.G.A. 12-8-25.1). Solid waste facilities on property owned exclusively by a private solid waste generator are generally exempt from these provisions. Local governments have the authority to zone areas of environmental, historic, or cultural

sensitivity and to protect those sites from becoming waste disposal areas regardless of whether they are public or privately owned.

## -- Surface Mining --

**Policy Statement**

***Georgia Surface Mining Act (O.C.G.A. 12-4-70, et seq.)***

***12-4-71. Legislative purpose; duty of Environmental Protection Division to administer part.***

(a) The purposes of this part are:

(1) To assist in achieving and maintaining an efficient and productive mining industry and to assist in increasing economic and other benefits attributable to mining;

(2) To advance the protection of fish and wildlife and the protection and restoration of land, water, and other resources affected by mining;

(3) To assist in the reduction, elimination, or counteracting of pollution or deterioration of land, water, and air attributable to mining;

(4) To encourage programs which will achieve comparable results in protecting, conserving, and improving the usefulness of natural resources to the end that the most desirable conduct of mining and related operations may be universally facilitated;

(5) To assist in efforts to facilitate the use of land and other resources affected by mining so that such use may be consistent with sound land use, public health, and public safety, and to this end to study and recommend, wherever desirable, techniques for the improvement, restoration, or protection of such land and other resources.

(b) The Environmental Protection Division of the department shall administer this part consistent with the above-stated purposes. (Ga. L. 1968, p. 9, § 2.)

***General Description***

Georgia's Surface Mining Act regulates all surface mining in Georgia, including the coastal zone. Dredging or ocean mining of materials are not directly regulated by State authority, except that sand and gravel operations are subject to the Shore Protection Act.

## -- Underground Storage Tanks --

**Policy Statement**

***Georgia Underground Storage Tank Act (O.C.G.A. 12-13-1, et seq.)***

***12-13-2. Public policy.***

(a) It is declared to be the public policy of the State of Georgia, in furtherance of its responsibility to protect the public health, safety, and well-being of its citizens and to protect and enhance the quality of its environments, to institute and maintain a comprehensive state-wide program for the management of regulated substances stored in underground tanks.

(b) It is the intent of the General Assembly that the Environmental Protection Division of the Department of Natural Resources shall be designated as the state agency to administer the provisions of this chapter. The director of the Environmental Protection Division of the Department of Natural Resources shall be the official charged with the primary responsibility for the enforcement of this chapter. In exercising any authority or power granted by this chapter and in fulfilling duties under this chapter, the director shall conform to and implement the policies outlined in this chapter.
(c) It is the intent of the General Assembly to create an environmental assurance fund which, in addition to those purposes set forth in subsections (f) and (g) of Code Section 12-13-9, may also be used by owners and operators as an alternate to insurance purchased from insurance companies for purposes of evidencing financial responsibility for taking corrective action and compensation of third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating underground storage tanks. (Code 1981, § 12-13-2, enacted by Ga. L. 1988, p. 2072, § 1; Ga. L. 1989, p. 14, § 12.)

***General Description***

The Underground Storage Tank Law provides the authority for the Environmental Protection Division to define the State criteria for operating, detecting releases, corrective actions, and enforcement of the utilization of underground storage tanks (USTs). The rules, found at Chapter 391-3-15 of the Rules and Regulations of the State of Georgia, establish minimum standards and procedures to protect human health and safety and to protect and maintain the quality of groundwater and surface water resources from environmental contamination that could result from any releases of harmful substances stored in such tanks. These requirements reflect the federal law regulating underground storage tanks as well as the applicable State rules. All facilities with underground storage tanks are subject to these requirements. The Memorandum of Agreement between the Coastal Resources Division and the Environmental Protection Division ensures cooperation and coordination in the implementation of UST standards within the coastal area.

## -- Water Quality --

**Policy Statement**

***Georgia Water Quality Control Act (O.C.G.A. 12-5-20)***

***12-5-21. Declaration of policy; legislative intent.***

(a) The people of the State of Georgia are dependent upon the rivers, streams, lakes, and subsurface waters of the state for public and private water supply and for agricultural, industrial, and recreational uses. It is therefore declared to be the policy of the State of Georgia that the water resources of the state shall be utilized prudently for the maximum benefit of the people, in order to restore and maintain a reasonable degree of purity in the waters of the state and an adequate supply of such waters, and to require where necessary reasonable usage of the waters of the state and reasonable treatment of sewage, industrial wastes, and other wastes prior to their discharge into such waters. To achieve this end, the government of the state shall assume responsibility for the quality and quantity of such

water resources and the establishment and maintenance of a water quality and water quantity control program adequate for present needs and designed to care for the future needs of the state, provided that nothing contained in this article shall be construed to waive the immunity of the state for any purpose.
(b) The achievement of the purposes described in subsection (a) of this Code section requires that the Environmental Protection Division of the Department of Natural Resources be charged with the duty described in that subsection, and that it have the authority to regulate the withdrawal, diversion, or impoundment of the surface waters of the state, and to require the use of reasonable methods after having considered the technical means available for the reduction of pollution and economic factors involved to prevent and control the pollution of the waters of the state.
(c) Further, it is the intent of this article to establish within the executive branch of the government administrative facilities and procedures for determining improper usage of the surface waters of the state and pollution of the waters of the state, and to confer discretionary administrative authority upon the Environmental Protection Division to take these and related circumstances into consideration in its decisions and actions in determining, under the conditions and specific cases, those procedures which will best protect the public interest. (Ga. L. 1957, p. 629, § 2; Ga. L. 1964, p. 416, § 2; Ga. L. 1977, p. 368, § 1.)

***General Description***

The Georgia Water Quality Control Act grants the Environmental Protection Division authority to ensure that water uses in the State of Georgia are used prudently, are maintained or restored to a reasonable degree of purity, and are maintained in adequate supply. In the administration of this law, the Environmental Protection Division can revise rules and regulations pertaining to water quality and quantity, set permit conditions and effluent limitations, and set permissible limits of surface water usage for both consumptive and non-consumptive uses through the Board of Natural Resources. Through a Memorandum of Agreement between the Environmental Protection Division and the Coastal Resources Division, the rules and permits of the Environmental Protection Division are administered in a manner consistent with the enforceable policies of the Coastal Management Program.

The authority to regulate the rivers, streams, lakes, and subsurface waters throughout the State for public and private water supply and agricultural, industrial, and recreational uses is provided to the Environmental Protection Division. The Act makes it unlawful for any person to dispose of sewage, industrial wastes, or other wastes, or to withdraw, divert, or impound any surface waters of the State without a permit. Tourism and recreational entities, manufacturing and transportation facilities, and other activities found in the coastal zone covered under the policies of the Georgia Coastal Management Program are responsible for compliance with the regulations implementing the Georgia Water Quality Control Act.

## -- Water Wells --

**Policy Statement**

***Water Wells Standards Act (O.C.G.A. 12-5-120, et seq.).***

***12-5-121. Legislative intent.***

It is the intent of the General Assembly to provide in this part for the application of standards for the siting, construction, operation, maintenance, and abandonment of wells and boreholes so as to protect the public health and the water resources of this state. (Ga. L. 1976, p. 974, § 2; Ga. L. 1985, p. 1192, § 1.)

***General Description***

The Water Wells Standards Act of 1985 provides standards for siting, constructing, operating, maintaining, and abandoning wells and boreholes. The Act requires that individual and non-public wells must be located as far removed from known or potential sources of pollutants as possible. Licensing requirements for drilling contractors are established by the Act, as well a State Water Well Standards Advisory Council. The Council is authorized to adopt and amend rules and regulations that are reasonable to govern the licensing of well contractors. Compliance with the Water Wells Standards Act is required for all activities that utilize well water. The provisions of the Act are enforceable under Georgia law. The Council may file a petition for an injunction in the appropriate superior court against any person that has violated any provisions of the Act.

## -- Wildflower Preservation --

**Policy Statement**

***The Wildflower Preservation Act (O.C.G.A. 12-6-170, et seq.)***

***12-6-172. Powers and duties of Department and Board of natural Resources as to wildflower preservation.***

(a) The Department of Natural Resources shall from time to time designate as a protected species and species of plant life within this state which it may determine to be rare, unusual, or in danger of extinction, and upon such designation such species will become subject to the protection of this article. (Ga. L. 1973, p. 333, § 3; Ga. L. 1982, p. 3, § 12.)

***General Description***

The Wildflower Preservation Act provides for designation of and protection of plant species that are rare, unusual, or in danger of extinction. Additional species may be added by the Board of Natural Resources at any time. The protection offered to these species is limited to those that are found on public lands of the State. It is a misdemeanor to transport, carry, convey, sell, cut, pull up, dig up, or remove protected species listed by this Act.

# SECTION II:
# OTHER MANAGEMENT AUTHORITIES

The following descriptions are of management authorities that provide the Coastal Resources Division with additional tools and mechanisms to accomplish the goals of the Georgia Coastal Management Program. Although these authorities are not listed as policies of the Program, they are laws of the State. Most of the statutes referenced here are primarily procedural. These laws and programs are not considered enforceable policies of the Georgia Coastal Management Program and thus may not be cited in reviewing federal consistency certifications and determinations from applicants and federal agencies.

***Coordinated and Comprehensive Planning by Counties and Municipalities (Informally known as the Georgia Planning Act)***

The Georgia Planning Act (O.C.G.A. 45-12-200, *et seq.*) requires each local government to develop a comprehensive plan to guide growth and development as a condition to receive State funding assistance. Under the Georgia Planning Act, minimum planning standards were developed for the preparation, adoption, and implementation of local comprehensive plans. The planning standards constitute a three-step planning process: inventory and assessment; needs and goals; and, implementation and strategy.

The Act establishes Regional Development Centers throughout Georgia. Three of these Centers have jurisdiction within the coastal zone: the Southeast Georgia Regional Development Center includes Brantley and Charlton counties; the Heart of Georgia Regional Development Center includes Wayne County; and the Coastal Georgia Regional Development Center includes the remaining eight counties (Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long, and McIntosh). The role of the Regional Development Centers is to work with local and county governments individually and on a regional basis to improve services and programs, consistent with local comprehensive plans, to benefit residents of the region. The Coastal Management Program works closely with the Regional Development Centers to implement the policies of the Program. Many of the goals, objectives and policies of the Georgia Coastal Management Program can be achieved by local comprehensive planning processes and implementation through local land-use controls and the public infrastructure.

***Georgia Administrative Procedures Act***

The Georgia Administrative Procedures Act (O.C.G.A. 50-13-4, *et seq.*) establishes the procedural requirements for adoption, amendment, or repeal of rules and regulations, among other things. New rules require <u>at least</u> 30 days notice of intended

action. Similar public comment requirements are required for federal regulatory actions. Public comment and input is important for any regulatory action, both to provide an opportunity for presentation of citizens' ideas and concerns and to provide time for implementation by those entities that may be potentially impacted.

***Georgia Litter Control Law***

The Georgia Litter Control Law (O.C.G.A. 16-7-40, *et seq.*) makes it unlawful for any person or persons, "...to dump, deposit, throw, or leave or to cause or permit the dumping, placing, throwing, or leaving of litter on any public or private property in this state or any waters in this state" unless the situation meets one of three conditions. Litter may be disposed at a site if: (1) The property is designated as a litter disposal site; and/or (2) If litter is placed in a proper receptacle; and/or (3) If it is disposed of by permission of the property owner in a manner consistent with the public welfare.

***Georgia Uniform Conservation Easement Act***

The Georgia Uniform Conservation Easement Act (O.C.G.A. 44-10-1, *et seq.*) defines "conservation easement" to mean a non-possessory interest in real property, with limitations or affirmative obligations, the purposes of which include retaining or protecting natural property; assuring its availability for agricultural, forest, recreational, or open space use; protecting natural resources; maintaining or enhancing air or water quality; or preserving the historical, archeological, or cultural aspects of real property. A landholder may be a government agency or a charitable organization.

# SECTION III:
# TABLE OF MANAGEMENT AUTHORITIES[2]

| Management Authority (Georgia Code Section) (Year of Enactment) | Major Provisions | Agency | GCMP Policy ? | Comments |
|---|---|---|---|---|
| **Georgia Coastal Management Act** (O.C.G.A. 12-5-320, *et seq.*) (1997) | • Enables DNR to develop and implement plan<br>• Provides authority to DNR to accept, spend, and grant funds<br>• Provides authority to DNR to hold public hearings<br>• Provides authority to Governor to review and approve coastal management plan and to submit it to federal government for approval | DNR/ Coastal Resources Division | Yes | • Enabling legislation only: does not require new regulations. |
| **Coastal Marshlands Protection Act** (O.C.G.A. 12-5-280, *et seq.*) (1970) | • Protects tidal wetlands<br>• Requires permit for structures, dredging, filling<br>• Establishes Coastal Marshlands Protection Committee | DNR/ Coastal Resources Division | Yes | • **Requires permit** for structures or activities in coastal marshes |
| **Coordinated Comprehensive Planning By Counties and Municipalities Act** (O.C.G.A. 45-12-200, *et seq.*) (1989) | • Requires each local government to develop a comprehensive plan to guide growth and development | Dept. of Community Affairs | No | • Describes role of Regional Development Centers to help with planning |

[2] For those authorities included as a policy of the Georgia Coastal Management Program (GCMP), the administering agency is included as a networked participant of the Program.

| Management Authority (Georgia Code Section) (Year of Enactment) | Major Provisions | Agency | GCMP Policy ? | Comments |
|---|---|---|---|---|
| **Department of Community Affairs Code** (O.C.G.A. 50-8-1, *et seq.*) (1988) | • Establishes the Department of Community Affairs and the structure of the Regional Development Centers | Dept. of Community Affairs | No | • Authorizes the DCA and RDCs to provide planning and technical assistance, to gather and distribute information and studies, and to help with maps, surveys, reports, etc. for municipal and county governments |
| **Department of Natural Resources Authority** (O.C.G.A. 12-2-1, *et seq.*) (1937) | • Establishes structure, powers and duties of DNR, including EPD<br>• Establishes DNR Board | DNR | Yes | |
| **Endangered Wildlife Act** (O.C.G.A. 27-3-130, *et seq.*) (1973) | • Purpose is to identify/protect rare, unusual, or other animals in danger of extinction<br>• Provides authority to DNR board to issue regulations for protection of protected species | DNR/ Wildlife Resources Division | Yes | • Protection of protected species habitat is limited to public lands<br>• Private property, private streams, and actions that would impede construction are exempt from wildlife protection regulations<br>• Wildlife Resources Division enforces the protection of endangered species |
| **Game and Fish Code** (O.C.G.A. 27-1-1, *et seq.*) (1977) | • Designates Wildlife Resources Division to operate Wildlife Management Areas, to register aquaculture activities, and to protect wildlife resources<br>• Establishes hunting, trapping, and fishing laws<br>• Establishes Conservation Rangers | DNR/ Wildlife Resources Division | Yes | • Hunting, trapping and fishing license requirements are established |

| Management Authority (Georgia Code Section) (Year of Enactment) | Major Provisions | Agency | GCMP Policy ? | Comments |
|---|---|---|---|---|
| **Georgia Administrative Procedures Act** (O.C.G.A. 50-13-4, *et seq.*) (1964) | • Establishes requirements for adoption, amendment or repeal of rules and regulations<br>• Requires minimum of 30 days notice of intended rules change | All State Agencies | No | |
| **Georgia Aquaculture Development Act** (O.C.G.A. 27-4-251, *et seq.*) (1992) | • Establishes Commission to study and promote aquaculture development in the State. | DNR/Dept.of Ag./Dept. of Industry, Trade, & Tourism | Yes | |
| **Georgia Air Quality Act** (O.C.G.A. 12-9-2, *et seq.*) (1964) | • Establishes ambient air quality standards, emissions limitations, emission control standards, etc. | DNR/ Environmental Protection Division | Yes | • **Requires permit** for air emissions |
| **Historic Area Act** (O.C.G.A. 12-3-50, *et seq.*) (1951) | • Establishes law for preservation of historic sites in Georgia | DNR/ Historic Preservation Division | Yes | |
| **Georgia Boat Safety Act** (O.C.G.A. 52-7-1, *et seq.*) (1994) | • Governs abandoned vessels<br>• Sets enforceable rules for safe boating practices<br>• Establishes 1000' boating safety zones on Jekyll, Tybee, St. Simons, and Sea Islands. | DNR/Law Enforcement Division & Georgia Bureau of Investigation | Yes | |

| Management Authority (Georgia Code Section) (Year of Enactment) | Major Provisions | Agency | GCMP Policy ? | Comments |
|---|---|---|---|---|
| **Georgia Code of Public Transportation** (O.C.G.A. Title 32 generally) (1973) | • Establishes the Georgia Dept. of Transportation to plan and maintain the State highway system (O.C.G.A. 32-2-1)<br>• Provides code of statutes for public roads and other transportation facilities of the State, counties and municipalities of Georgia | Georgia Dept. of Transportation | No | |
| **Georgia Administrative Procedures Act (Revocable License Program)** (O.C.G.A. 50-16-61, *et seq.*) (1863) | • Establishes Permit requirements for use of State-owned tidal water bottoms | DNR/ Coastal Resources Division | Yes | • **Requires Permit** from DNR/CRD for tidal water bottoms.<br>• Revocable licenses are issued by other agencies throughout State for resource management<br>• The Act also establishes requirements for public hearings, etc. |
| **Georgia Comprehensive Solid Waste Management Act** (O.C.G.A. 12-8-20, *et seq.*) (1972) | • Defines rules regarding solid waste disposal, including permit requirements for facilities | DNR/ Environmental Protection Division | Yes | • **Requires permit** for solid waste facility |
| **Georgia Environmental Policy Act** (O.C.G.A. 12-16-1, *et seq.*) (1991) | • Requires preparation of an Environmental Effects Report for any governmental action that may significantly adversely affect the quality of the environment | State Attorney General's Office | Yes | • Similar to the National Environmental Policy Act (NEPA) that establishes Environmental Impact Statements for federal projects |

| Management Authority (Georgia Code Section) (Year of Enactment) | Major Provisions | Agency | GCMP Policy ? | Comments |
|---|---|---|---|---|
| **Georgia Erosion and Sedimentation Act** (O.C.G.A. 12-7-1, *et seq.*) (1975) | • Establishes minimum standards for land-disturbing activities<br>• Requires each local government to establish procedures for land-disturbing activities | DNR/ Environmental Protection Division | Yes | • **Requires permit**<br>• Several exemptions to the requirements for an E&S permit exist, including: DOT projects, single family owner-built residences, forestry, etc. |
| **Georgia Forestry Commission** (O.C.G.A. 12-6-1, *et seq.*) (1921) | •Establishes the Georgia Forestry Commission and the regulation and monitoring of forestry activities | Georgia Forestry Commission | No | • Provides for monitoring, management, conservation, and protection of forest lands, education, production of seedlings, sale of forest products from land managed by Commission, etc. |
| **Georgia Fisheries Law Pertaining to Shellfish** (O.C.G.A. 27-1-4, *et seq.*) (1981) | • Protects public health & safety by setting minimum water quality standards for shellfish waters and seafood | DNR/ Coastal Resources Division | Yes | |
| **Georgia Hazardous Waste Management Act** (O.C.G.A. 12-8-60, *et seq.*) (1979) | • Establishes regulations for generation, storage, treatment, and disposal of hazardous wastes | DNR/ Environmental Protection Division | Yes | • **Requires Permit** |
| **Georgia Heritage Trust Act of 1975** (O.C.G.A. 12-3-70, *et seq.*) (1975) | • Establishes Heritage Trust Commission<br>• Seeks to preserve certain property in Georgia with unique natural characteristics, special historical value, or particular recreational value. | DNR | Yes | • The Heritage Trust Commission term has expired and implementation of many of the goals of the Act has been superseded by the Heritage 2000 Program |

| Management Authority (Georgia Code Section) (Year of Enactment) | Major Provisions | Agency | GCMP Policy ? | Comments |
|---|---|---|---|---|
| **Georgia Litter Control Law** (O.C.G.A. 16-7-48, *et seq.*) (1970) | • Makes it unlawful to litter on any public or private property or waters of Georgia | Georgia Law Enforcement Agencies | No | |
| **Georgia Natural Areas Act** (O.C.G.A. 12-3-90, *et seq.*) (1966) | • Provides authority to identify and preserve areas of unusual ecological significance in a natural state | DNR/ Wildlife Resources Division | Yes | |
| **Georgia Oil and Gas and Deep Drilling Act** (O.C.G.A. 12-4-40, *et seq.*) (1975) | • Provides protection to underground water supplies and environmentally sensitive areas from the effects of oil and gas drilling activities | DNR/ Environmental Protection Division | Yes | |
| **Georgia Ports Authority Act** (O.C.G.A. 52-2-1, *et seq.*) (1945) | • Establishes the Georgia Ports Authority<br>• Regulates port facilities | Georgia Ports Authority | No | |
| **Georgia Safe Dams Act** (O.C.G.A. 12-5-370, *et seq.*) (1978) | • Establishes inspection and permitting requirements for dams | DNR/ Environmental Protection Division | Yes | |
| **Georgia Safe Drinking Water Act** (O.C.G.A. 12-5-170, *et seq.*) (1977) | • Establishes regulatory requirements for drinking water management programs | DNR/ Environmental Protection Division | Yes | |

## *POLICIES AND MANAGEMENT AUTHORITIES*

| Management Authority (Georgia Code Section) (Year of Enactment) | Major Provisions | Agency | GCMP Policy ? | Comments |
|---|---|---|---|---|
| **Georgia Scenic Rivers Act of 1969** (O.C.G.A. 12-5-350, *et seq.*) (1969) | • Defines scenic rivers<br>• Names certain sections of rivers for preservation | DNR/ Environmental Protection Division | Yes | • River Care 2000 supplements this program |
| **Georgia Scenic Trails Act** (O.C.G.A. 12-3-110, *et seq.*) (1972) | • Provides authority to construct, manage and maintain a system of trails in Georgia | DNR/Parks and Historic Sites Division | Yes | |
| **Georgia Soil and Water Conservation Commission** (O.C.G.A. 2-6-23, *et seq.*) (1937) | • Establishes Georgia Soil and Water Conservation Commission<br>• Sets up five water conservation districts in Georgia | Georgia Soil and Water Conservation Commission | No | • Non-regulatory agency -- relies on voluntary cooperation for enforcement of Best Management Practices directed at reducing erosion and water pollution |
| **Georgia Surface Mining Act** (O.C.G.A. 12-4-70, *et seq.*) (1968) | • Regulates all surface mining in Georgia | DNR/ Environmental Protection Division | Yes | • **Requires Permit** |
| **Georgia Underground Storage Tank Act** (O.C.G.A. 12-13-1, *et seq.*) (1981) | • Establishes criteria for operating, detecting releases, and utilizing underground storage tanks | DNR/ Environmental Protection Division | Yes | • **Requires Permit**<br>• Rules found at 391-3-15 of Rules and Regulations describe requirements for protection of groundwater, etc. |
| **Georgia Uniform Conservation Easement Act** (O.C.G.A. 44-10-1, *et seq.*) (1992) | • Defines "conservation easement" to be non-possessory interest in real property, with limitations and obligations | State Attorney General's Office | No | • Establishes provisions for tax relief for conservation easements |

| Management Authority (Georgia Code Section) (Year of Enactment) | Major Provisions | Agency | GCMP Policy ? | Comments |
|---|---|---|---|---|
| **Georgia Water Quality Control Act** (O.C.G.A. 12-9-1, *et seq.*) (1964) | • Establishes regulatory requirements for water quality and quantity, permits for discharges into surface and subsurface waters, etc. | DNR/ Environmental Protection Division | Yes | • **Requires permit** for discharges into State waters |
| **Groundwater Use Act** (O.C.G.A. 12-5-90, *et seq.*) (1972) | • Provides authority to establish regulations and permit requirements for withdrawal, drilling protocols, and water conservation plans | DNR/ Environmental Protection Division | Yes | • **Requires permit** for withdrawal of groundwater |
| **Jekyll Island State Park Authority Act** (O.C.G.A. 12-3-20, *et seq.*) (1950) | • Establishes authority to manage and control uses of Jekyll Island<br>• Establishes the Recreational Authorities Overview Committee to oversee management of Jekyll Isl. State Park, and three other sites | Jekyll Island Authority | No | |
| **Licenses to Dig, Mine, and Remove Phosphate Deposits** (O.C.G.A. 12-4-100, *et seq.*) (1884) | • Authorizes the Office of the Secretary of State to regulate phosphate mining | Office of the Secretary of State | Yes | |
| **Mountain and River Corridor Protection Act** (O.C.G.A. 12-2-8, *et seq.*) (1981) | • Requires a 100' vegetative buffer<br>• Requires consistency with Erosion and Sedimentation Act<br>• Requires local governments to identify river corridors in land-use plans | DNR/ Environmental Protection Division, & local governments | Yes | |

| Management Authority (Georgia Code Section) (Year of Enactment) | Major Provisions | Agency | GCMP Policy ? | Comments |
|---|---|---|---|---|
| **Nongame Wildlife Conservation and Habitat Acquisition Fund** (O.C.G.A. 12-3-600, *et seq.*) (1981) | • Provides a mechanism to fund nongame wildlife conservation and habitat acquisition | DNR/Wildlife Resources Division | No | |
| **Public Service Commission** (O.C.G.A. 46-2-1, *et seq.*) (1882) | • Sets minimum standards for siting of energy facilities and railroads | Public Service Commission | No | |
| **Protection of Tidewaters Act** (O.C.G.A. 52-1-1, *et seq.*) (1992) | • Requires permit for vessels used for habitation and not transportation within the tidewaters of the State | DNR/Law Enforcement Section | Yes | • **Permits** are not issued for terms beyond June 30, 1997 |
| **Right of Passage Act** (O.C.G.A. 52-1-30, *et seq.*) (1981) | • Requires vessel operators to stay to the right (starboard) side of streams and channels for traffic safety | DNR/Law Enforcement Section | Yes | |
| **Section 401 Water Quality Certification** (Federal Clean Water Act, 33 U.S.C. 1251, *et seq.*) (1972) | • Federal Clean Water Act provision authorizes states to review of federal permits for activities that may result in a discharge to navigable waters | DNR/ Environmental Protection Division (Atlanta) | No | • Through a Memorandum of Agreement between CRD and EPD, CRD assists EPD with 401 administration within the eleven-county coastal area |
| **Title 31 - Health (Septic Tank Law)** (O.C.G.A. Title 31 generally) (1981) | • Establishes authority to set state-wide standard for septic tanks | Dept. of Human Resources & County Health Departments | Yes | • **Requires permit** from county |

| Management Authority (Georgia Code Section) (Year of Enactment) | Major Provisions | Agency | GCMP Policy ? | Comments |
|---|---|---|---|---|
| **Shore Protection Act** (O.C.G.A. 12-5-230, *et seq.*) (1979) | • Protects sand dunes, beaches, sandbars, and shoals<br>• Limits construction activity to temporary structures by permit only<br>• Prohibits motorized vehicles on dunes and beaches<br>• Prohibits docks, marinas, boat ramps, storage facilities in dunes<br>• Establishes Shore Protection Committee | DNR/ Coastal Resources Division | Yes | • **Requires Permit** from DNR/CRD |
| **State Programmatic General Permit for Recreational Docks** (Federal Clean Water Act Sect 404(e)(1)) (1972) | • General federal permit for construction of recreational docks in coastal waters | U.S. Army Corps of Engineers | No | • **Requires Permit.** Administered by DNR/Coastal Resources Division through an MOA with the Corps<br>• Recreational docks usually also require a Marsh Permit or a Shore Permit and a Revocable License. |
| **Water Wells Standards Act** (O.C.G.A. 12-5-120, *et seq.*) (1985) | • Provides standards for siting, construction, and operation of wells | Water Well Standards Advisory Council | Yes | • **Requires permit** |
| **Wildflower Preservation Act** (O.C.G.A. 12-6-170, *et seq.*) (1973) | • Provides for designation and preservation of rare, unusual, or endangered plant species | DNR/ Wildlife Resources Division | Yes | |

# SECTION IV:
# STATE PROGRAMS

The following State programs contribute towards effective management of Georgia's coastal resources. As non-regulatory programs, they do not constitute enforceable policies of the Program and may not be used in federal consistency reviews.

***Acres for Wildlife Program***

The Acres for Wildlife Program is administered by the Nongame and Endangered Wildlife Program of the Georgia Department of Natural Resources to provide technical assistance to private landowners for resource and habitat management. The Program helps to identify wildlife habitat and provides advice to the landowner to help him or her manage the property for the welfare of the wildlife.

***Certified Burner Program***

The Certified Burner Program is administered by the Georgia Forestry Commission to educate the citizens of Georgia about safe burning techniques. The Georgia General Assembly declared that prescribed burning is a resource protection and land management tool that benefits the safety of the public, Georgia's forest resources, the environment, and the economy of the State (O.C.G.A. 12-6-146).

***Community Wildlife Project***

The Community Wildlife Project is the only wildlife habitat certification program directed to the community as a whole. It is designed to encourage and improve management of wildlife habitats found in urban, suburban, and semi-rural areas. The program is administered by local garden clubs affiliated with the Garden Clubs of Georgia in concert with the Nongame and Endangered Wildlife Program of the Georgia Department of Natural Resources. The Community Wildlife Project establishes minimum criteria for community-based habitat management projects.

***Forest Stewardship Program***

The Forest Stewardship Program is administered by the Georgia Forestry Commission in cooperation with the Nongame and Endangered Wildlife Division of the Department of Natural Resources. The Program is designed to provide technical assistance to private landowners for management of forest lands. A concomitant Stewardship Incentive Program provides State funding on a cost-sharing basis to implement certain aspects of the program.

***Heritage 2000***

Heritage 2000 is a public-private partnership program designed by Governor Miller to acquire historic property and resources throughout Georgia. The initiative is modeled after Preservation 2000.

***Nongame Wildlife Conservation and Habitat Acquisition Fund***

Georgia's Nongame Wildlife Conservation and Habitat Fund (O.C.G.A. 12-3-600, *et seq.*) provides the Department of Natural Resources a mechanism to establish nongame wildlife conservation and habitat acquisition, as well as education programs to enhance the protection of nongame flora and fauna. The Department of Natural Resources may solicit voluntary contributions through an income tax return contribution mechanism, by offers to match contributions, or by fund raising or other promotional techniques. Any funds collected are placed into a "Nongame Wildlife Conservation and Wildlife Habitat Acquisition Fund."

***Preservation 2000***

Preservation 2000 is a three year program implemented by Governor Miller in 1994 to acquire approximately 100,000 acres for the State of Georgia to preserve natural areas, historic sites, parks, wildlife management areas and similar sites. It is funded by a $65 million bond fund, approximately $1.45 million in gifts, and small amounts of federal money. Since its inception, over 84,000 acres have been acquired and approximately 33,000 acres are under negotiation. There were over 450 nominations of various parcels throughout the State. Currently, there are four natural areas and two wildlife management areas designated within the coastal area as a result of Preservation 2000. Some of the 33,000 acres under negotiation lies within the coastal area. The areas acquired provide such uses as protection for bald eagles and other endangered species, hunting, fishing, boating, nature observation, primitive camping, scientific study, and protection of water quality for shellfish. A concomitant part of the Preservation 2000 program is the Georgia Greenways Council, a coalition of trail organizations and local, State, and federal agencies involved with trail development. The coalition promotes the protection of linear corridors and coordinates trail development throughout the State. A proposed Coastal Water Trail, the aquatic equivalent of the Appalachian trail, will run along Georgia's coast from the Savannah River to the St. Mary's River. This trail will provide routing for sea kayaks and other small craft, and include access trails, boat launching sites and camping areas.

***River Care 2000***

River Care 2000 is a public-private partnership program designed by Governor Miller to acquire natural areas and historic property along Georgia's riverbanks. The initiative is modeled after Preservation 2000. River Care 2000 is intended to provide recreation and park land, and to allow better flood management.

# SECTION V:
# STATE AGENCIES, AUTHORITIES, AND COMMISSIONS

***Department of Community Affairs***

The Georgia Code Section 50-8-1, *et seq.*, describes the purpose and duties of the Department of Community Affairs. The purpose of the Department, in general, is to promote, develop, sustain, and assist local governments. The Department assists local governments by developing, promoting, and establishing standards and procedures for coordinated and comprehensive planning, by assisting local governments to participate in an orderly process for coordinated and comprehensive planning, and by assisting local governments to prepare and implement comprehensive plans to promote the public interests of the State. The Department serves as the principal department in the executive branch of State government for local government affairs. It provides a liaison between local governments and other governments, including the State government and the federal government. The Department acts as the State's principal department for developing, promoting, maintaining, and encouraging coordinated and comprehensive planning. Under the auspices of the Department, Regional Development Centers (RDCs) are established to accomplish the goals of the Department. The Coastal Resource Division coordinates closely with RDCs in an effort to fulfill the goals of the Georgia Coastal Management Program.

***Georgia Forestry Commission***

The Georgia Forestry Commission was established by the Georgia Legislature (O.C.G.A. 12-6-1, *et seq.*). The laws of this section provide for establishment of the Georgia Forestry Commission, and establish management, conservation measures, and protection of forest lands. The Commission has implemented Best Management Practices (BMPs) for forestry. Since soil characteristics and slope vary greatly within the State, specific BMPs were developed for each of Georgia's four major regions: lower coastal plain, upper coastal plain, piedmont, and mountain. Forestry BMPs are designed to protect water quality from road construction, timber harvesting, site preparation, and other silvicultural practices that may cause non-point source pollution. The BMPs that have been developed for Georgia forestry address streamside management zones, access systems (roads), harvesting of wetland sites, reforestation and regeneration, forest protection (prescribed burns, etc.) and other procedures common to silviculture.

The use of BMPs for forest road construction and maintenance is mandated by federal legislation to qualify for the silvicultural exemption from the permit process provided for in the 1972 Water Pollution Control Act and the Clean Water Amendments of 1977 and 1987. The basic goal of this federal legislation is to protect and enhance the

quality of the nation's waters so they are fishable and swimmable. The use of BMPs enables these goals to be met on waters influenced by forest lands. Compliance with established BMPs provides silvicultural and agricultural operations exemption from the federal permit process, therefore a Section 404 Permit is not required for wetlands that are already used for silviculture operations. The Coastal Resources Division will cooperate with and support the Georgia Forestry Commission and local Georgia Soil and Water Conservation Districts in encouraging good forest and agricultural management practices on private and public lands in order to maintain a supply of good quality timber and agricultural products into the future, while protecting other natural values.

Outside of the jurisdictional areas of the Coastal Marshlands Protection Act and Shore Protection Act, the Georgia Forestry Commission conducts forestry activities on State-owned forest lands, and offers guidance and technical assistance to private timber operations including fire prevention and control practices. The Georgia Forestry Commission's authority will be administered consistent with the approved Coastal Management Program through the Memorandum of Agreement executed between the Georgia Forestry Commission and the Georgia Department of Natural Resources.

***Georgia Ports Authority***

The Georgia Ports Authority Act (O.C.G.A. 52-2-1) establishes the Georgia Ports Authority, and describes its powers and authority. The Georgia Ports Authority develops and improves harbors and seaports, fosters and stimulates shipment of freight and commerce through Georgia ports, operates tug boats, locomotives, and other machinery, and generally conducts the business of operating ports.

Both privately-owned and Georgia Ports Authority ports plan, construct, maintain, and operate the State's port system. Cooperative efforts between the Coastal Resources Division and ports management are the preferred means by which to implement sound coastal management policies, not only on project proposals but also on long-range planning and policy development. Many port and navigation projects also require federal permits. Review of those permits are subject to the federal consistency provisions of the Georgia Coastal Management Program.

***Georgia Soil and Water Conservation Commission***

The Georgia Soil and Water Conservation Commission was established by O.C.G.A. 2-6-23. Among the duties of the Commission and the 40 Soil and Water Conservation Districts in Georgia are the following: implement the federal Watershed Protection and Flood Prevention Act; preserve and improve soil fertility; promote the wise use and conservation of land and water; and, generally, protect lakes, rivers and harbors against the results of soil erosion. The Georgia Soil and Water Conservation

Commission is the lead agency in Georgia for protecting water quality from agricultural nonpoint source pollution. The Conservation Commission, in cooperation with various State, local, and federal agencies and institutions has developed a voluntary program using agricultural Best Management Practices (BMPs) for protecting water quality in Georgia. The Conservation Commission and the soil and water conservation districts are not regulatory or enforcement agencies, and, therefore, must secure voluntary cooperation of the agricultural community. The Conservation Commission accepts the responsibility to provide education and technical assistance to landowners, users, contractors, and the general public to ensure that the stewardship principles in agricultural BMPs are understood and employed.

***Jekyll Island State Park Authority***

Jekyll Island is established as a State Park, managed by the Jekyll Island State Park Authority (O.C.G.A. 12-3-20, *et seq.*), which reports to the Commissioner of the Department of Natural Resources. A joint committee of the General Assembly, the Recreational Authorities Overview Committee, is the overview committee of Jekyll Island State Park Authority, the Stone Mountain Memorial Association, the North Georgia Mountains Authority, and the Lake Lanier Islands Development Authority.

***Public Service Commission***

O.C.G.A. 46-2-20, *et seq.* provides the Georgia Public Service Commission with the following authority: to generally supervise all gas or electric light and power companies; to require all companies under its supervision to establish and maintain public services and facilities in a reasonable and just manner; and to prescribe rules and regulations for the safe installation and safe operation of all natural gas transmission and distribution facilities within Georgia, including but not limited to all natural gas transmission and distribution facilities that are owned and operated by municipalities. The Rules and Regulations of the Georgia Public Service Commission (Chapter 515-4-4 Integrated Resource Planning) require utilities to develop and file for review integrated resource plans for construction or sale of electric plants, long term power purchases, expenditures for demand-side capacity options. The rules and regulations provide for the periodic review of each utility's integrated resource plans and capacity resource construction projects and implementation plans.

# SECTION VI:
# FEDERAL AUTHORITIES

The following federal authorities are referenced in various parts of the Coastal Management Program Document. Although the Program does not rely on these federal authorities as policies of the Program, they provide significant backup authority for many of Georgia's laws, as well as the law in their own right. The federal laws also provide certain requirements for federal agencies within the coastal zone. A brief summary of pertinent federal authorities follows.

***Atlantic Coastal Fisheries Cooperative Management Act***

The Atlantic Fisheries Cooperative Management Act (16 U.S.C. 5101, *et seq.*), known as the Atlantic Coastal Fisheries Act, was enacted in 1993. It presents a new approach to coordinated management of coastal migratory fisheries along the U.S. Atlantic coast. The cooperative management process established by the law involves the Atlantic States Marine Fisheries Commission (Commission), the National Marine Fisheries Service and the U.S. Fish and Wildlife Service. The Atlantic Coastal Fisheries Act builds upon the success achieved by the Atlantic Striped Bass Conservation Act, which was instrumental in the recovery of the Atlantic striped bass stocks. The Atlantic Coastal Fisheries Act provides a mechanism to ensure Atlantic coastal state compliance with mandated conservation measures in Commission-approved fishery management plans. Prior to the passage of this Act, state implementation of a Commission fishery management plan was voluntary, with the exception of the "Fishery Management Plan for Atlantic Striped Bass." Today, all Atlantic coast states that are included in a Commission fishery management plan must comply with certain conservation provisions of the plan or the Secretary of Commerce may impose a moratorium in that state's waters for harvesting the species in question.

***Clean Air Act***

The federal Clean Air Act (42 U.S.C. § 7401, *et seq.*) is administered by the Environmental Protection Agency (EPA). It establishes a permit system and regular monitoring of the pollutants discharged from major sources of air pollution. The EPA is required to set emission standards for at least 189 toxic air pollutants.

The federal Clean Air Act provides for regulation of emissions to the atmosphere to protect the nation's air resources. Georgia has been delegated the authority to implement a State regulatory program under the Clean Air Act. The State program requirements are administered by the Georgia Environmental Protection Division. All facilities in the State must meet the requirements of the Clean Air Act and the rules of the

Environmental Protection Division. The Memorandum of Agreement between the Environmental Protection Division and the Georgia Coastal Resources Division ensures cooperation in the issuance and enforcement of air quality laws and standards.

***Clean Water Act and State General Programmatic Permits***

The federal Clean Water Act (33 U.S.C. § 1251, *et seq.*), formerly known as the Federal Water Pollution Control Act of 1972, provides a technology-based approach to regulating water pollution, i.e., it requires the use of best available technology for the treatment of pollution before it is discharged into water. Water quality standards and criteria are established by the Clean Water Act.

Section 319 of the Clean Water Act requires states to assess water quality impacts that result from nonpoint source pollution and to develop management programs for nonpoint source pollution control. The U.S. Environmental Protection Agency approves all state management programs and provides grants to support program implementation. The Georgia Section 319 Program, administered by the Environmental Protection Division, focuses on education and demonstration projects for agricultural, silvicultural, and metropolitan areas.

Section 402 of the Clean Water Act specifies that point source dischargers must obtain a National Pollution Discharge Elimination System (NPDES) permit before they can discharge pollutants into water. The permit sets limits on how much of each particular pollutant can be discharged. NPDES permits do not eliminate discharges; rather, they regulate how much pollution can be discharged. The permit holder must monitor discharges and report the results to the Environmental Protection Agency (EPA) and to the Environmental Protection Division of the Georgia Department of Natural Resources. Water quality standards are set by each state for each water body and for each type of pollutant.

The filling of wetlands is also regulated under the Clean Water Act. Under Section 404, the Army Corps of Engineers is authorized to grant permits to applicants that want to fill or dredge wetlands. Section 404(e)(1) provides authority to the U.S. Army Corps of Engineers to issue general permits for any category of activities that are similar in nature and result in no more than minimal adverse effects to waters of the United States, either individually or cumulatively. Some of these permits are known as State Programmatic General Permits, which operate in conjunction with a state or local regulatory program (e.g., the Georgia Water Quality Control Act) that protects the aquatic environment in a manner equivalent to the Clean Water Act. These State Programmatic General Permits reduce unnecessary duplication of effort and allow the Corps to focus its resources on other activities. The Georgia Coastal Resources Division has established a Memorandum of Agreement to administer the State General Programmatic Permit for

recreational docks in the coastal area. The review process for this permit is similar to the review process for the Revocable License, thus the delegation of this authority to the Coastal Resources Division has helped to simplify permit processes.

Georgia is provided with review authority under Section 401 of the Clean Water Act. The 401 Water Quality Certification Program authorizes states to review federal licenses and permits that may result in a discharge to the navigable waters of the United States. Wetland areas, in addition to lakes, streams, rivers, and oceans are considered navigable waters. This authority provides a review of any federally-permitted activity that results in a discharge to navigable waters of the U.S. (e.g. National Pollutant Discharge Elimination System permits and 404 Dredge and Fill permits). This certification program is administered by the Georgia Environmental Protection Division in cooperation and coordination with the Coastal Resources Division in the eleven-county coastal area to ensure consistency with the policies of the Georgia Coastal Management Program.

***Coastal Barrier Resources Act (1982)*** and the ***Coastal Barrier Improvement Act (1990)***

The Coastal Barrier Resources Act and the Coastal Barrier Improvement Act prohibit most federal expenditures and financial assistance within undeveloped coastal barriers that are designated units of the Coastal Barrier Resource System. Georgia has Coastal Barrier Resource Units on Little Tybee Island, Little St. Simons Island, Sea Island, Little Cumberland Island, and Cumberland Island.

***Coastal Zone Management Act***

The Coastal Zone Management Act (CZMA) (16 U.S.C. § 1451, *et seq.*) was passed in 1972 to manage and protect the habitats, resources, and scenic and recreational qualities of the areas along the country's coasts. Administered by the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), the CZMA encourages states to set up voluntary programs to manage their coastal zones in a comprehensive manner. NOAA provides federal grants, that are matched by state funds, to develop and implement coastal management programs. Management programs must include defined boundaries, defined land uses, an inventory of areas of particular concern, the legal authorities under state law to carry out the program, the structure of the state agency or agencies that will carry out the program, a planning process for protection of and access to public beaches and other coastal areas, a planning process for energy facilities, and a means of controlling beach erosion. It also requires that states coordinate their program with other states.

The 1990 amendments to the CZMA require that states with approved coastal zone management programs, as well as states that submit such programs for approval,

develop programs to manage nonpoint sources of water pollution. NOAA and EPA provide technical assistance to develop these programs. The CZMA also established the National Estuarine Research Reserve System, which consists of representative estuarine ecosystems that are managed for long-term research and public education.

***Endangered Species Act, and the Standard Manatee Conditions***

The Endangered Species Preservation Act of 1966 (Pub. L. 89-669, 80 Stat. 926 (1966)) authorizes the Secretary of the Interior to make a list of endangered species and to acquire land to protect those species. The Act was amended in 1969 to allow the Secretary to list species that are threatened with extinction and to include listings of animals throughout the world. It has been amended many times since, but it still provides a means of identifying species that need protection, methods to provide for consideration of listed species prior to any federal action that may affect them, and a way to punish those who harm listed species. The majority of the Endangered Species Act is implemented by the Department of the Interior through the U.S. Fish and Wildlife Service. Marine species are handled by the National Marine Fisheries Service.

One technique for managing species on the list is to develop species-specific management plans. These plans often involve interagency cooperation in their development and implementation. The "Recovery Plan for the Loggerhead Turtle" is an example of a management plan developed by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the Georgia Department of Natural Resources.

Under Section 7 of the Endangered Species Act, every federal agency, in consultation with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service as appropriate, must ensure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. Through the Georgia Coastal Management Program, the Coastal Resources Division and the U.S. Fish and Wildlife Service cooperate to conduct Section 7 evaluations on activities as required.

Under Section 10 of the Endangered Species Act, any state that issues permits has responsibility for specifying conditions within the permit that will ensure the protection of endangered species. Under these federal requirements and through the Coastal Marshlands Protection Committee and the Shore Protection Committee, permits for marinas, community docks, and other activities within the jurisdiction of the committees, can require provisions to prevent harm to species listed on the Federal Endangered

Species List. In addition, Section 401 Water Quality Certifications require that impacts to endangered species be avoided.

The "Standard Manatee Conditions" are promulgated under the authority of the Endangered Species Act. The Conditions describe procedures for construction activities such as: posting notices; educating construction site workers about criminal penalties associated with violation of the Act; installing siltation barriers; and, "no wake/idle speed" policies for boats operating in the known vicinity of manatees. The Conditions also provide telephone numbers to report collisions with manatees and size and posting requirements for manatee warning signs.

***Intermodal Surface Transportation Efficiency Act of 1991***

The Intermodal Surface Transportation Efficiency Act (ISTEA, pronounced "Ice Tea") was enacted in 1991 to provide more flexible funding guidelines to states. Part of the U.S. Department of Transportation laws, it allows state and local agencies to best achieve local, regional, and national transportation needs in a more coordinated, efficient fashion. ISTEA significantly enhanced the role of local governments in the transportation planning process. The Act allows local and state transportation agencies to direct funding into projects they deem important, including: constructing alternative transportation corridors such as bikeways, contributing funds to wetland conservation, mitigation efforts, and wetland mitigation banks.

***Magnuson-Stevens Fishery Conservation and Management Act***

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Act) (16 U.S.C. 1801, *et seq.*) empowers the federal government to regulate fishing from three miles offshore (nine miles off the Florida Gulf Coast and off Texas) out to 200 miles. This area is sometimes referred to as federal waters or the "Exclusive Economic Zone" (EEZ). In addition to conserving fishery resources, one of the main purposes of the Act was to eliminate foreign fishing while developing the U.S. fishing industry.

The Magnuson Act created eight regional fishery management councils that are overseen by the Secretary of Commerce. Each council develops fishery management plans for the stocks in their geographical regions. Georgia is a member of the South Atlantic Fishery Management Council, headquartered in Charleston, South Carolina.

***Marine Mammal Protection Act***

The Marine Mammal Protection Act (MMPA) (16 U.S.C. § 1361, *et seq.*) was enacted in response to the public's outcry over the deaths and decline of whales, dolphins, baby harp seals, sea otters, and other species of marine mammals. Enforcement authority is split between the Fish and Wildlife Service and the National Marine Fisheries Service.

The Marine Mammal Commission provides oversight over both agencies' actions. The MMPA establishes a moratorium on the taking and importing of marine mammals. Activities within Georgia that may be subject to the MMPA include fishing, construction, or other activities that may impact dolphins, manatees, right whales, or other marine mammals.

***Migratory Bird Treaty Act***

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. § 703-712) establishes treaties with Canada, Mexico, Great Britain, Japan, and the Soviet Union for the protection of migratory birds. The MBTA is implemented by the U.S. Fish and Wildlife Service. The treaties were designed to deal with migratory game birds, but have been amended several times to cover a variety of migratory bird species. The MBTA is used to set hunting seasons for migratory ducks, prohibit the use of lead shot for duck hunting, and establish bird deaths from application of pesticides as a crime. Hunting for migratory birds requires a federal Migratory Bird Stamp affixed to a Georgia hunting license.

***National Environmental Policy Act***

The purpose of the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321, *et seq.*) is to require all federal agencies and federally funded projects to consider the environmental consequences of major federal actions. The Act is directed at federal agencies, not at states or local governments or individuals. NEPA requires the completion of an Environmental Impact Statement (EIS) to describe the potential for environmental impact of the proposed project; it does not, however, require the government to take the most environmentally correct action. NEPA also requires that an Environmental Assessment (EA) be performed on every federal project to determine whether an EIS is necessary. If, as a result of the EA, the agency proposing the project determines that there is no significant environmental impact, the agency can issue a Finding of No Significant Environmental Impact (FONSI) and continue with the project without an EIS.

***National Fishing Enhancement Act***

The National Fishing Enhancement Act (33 U.S.C. 2103, *et seq.*) recognizes the importance of artificial reefs, and establishes the states as lead regulatory agencies in the development of artificial reefs. The Act also calls for a national artificial reef development plan to provide guidance to the states.

***National Flood Insurance Program***

The National Flood Insurance Program is administered through the Federal Insurance Administration, which is a division within the Federal Emergency Management Agency (FEMA). The National Flood Insurance Program sets standards for construction

in flood prone areas. In such areas, in order to obtain the flood insurance required by most banks and mortgage companies for a property loan, the owner must comply with the building standards of the National Flood Insurance Program. These building practices have been adopted through local building ordinances by most communities throughout the country.

***National Food Securities Act***

The National Food Securities Act regulates agricultural activities in highly erodible areas and requires approved conservation plans in certain circumstances. The Act also prohibits clearing and draining of wetlands for agricultural purposes. The provisions of the Food Securities Act are administered by the United States Department of Agriculture Natural Resource Conservation Service and Agricultural Stabilization and Conservation Service. The Georgia Coastal Resources Division coordinates with these agencies to ensure compliance with the policies of the Georgia Coastal Management Program.

Animal feedlot operations, animal waste disposal, application of agricultural chemicals, and other agricultural practices are regulated under the Federal Clean Water Act, as amended. Discharges of any agricultural pollutant requires a permit relative to provisions of the National Pollutant Discharge Elimination System (NPDES). The Georgia Environmental Protection Division is authorized by the United States Environmental Protection Agency to carry out the purposes and requirements of the Federal Clean Water Act including the issue of NPDES permits and Section 401 certifications. The Georgia Environmental Protection Division is also the State agency responsible for regulation relative to the Georgia Water Quality Control Act, Groundwater Use Act, and Hazardous Waste Management Act.

In addition to the direct permitting and compliance responsibilities of the Georgia Environmental Protection Division, the Division has entered into a Memorandum of Agreement with the Georgia Soil and Water Conservation Commission and the United States Department of Agriculture, Natural Resource Conservation Service to permit waste disposal systems for animal confinement operations. The Memorandum of Agreement between the Coastal Resources Division and the Environmental Protection Division ensures cooperation and coordination to achieve Coastal Management Program goals for such permits.

***National Historic Preservation Act***

The 1966 National Historic Preservation Act, as amended, (NHPA) provides the framework for historic preservation in this country. The NHPA provides for the National Register of Historic Places to identify and evaluate significant historic properties; requires the designation of a State Historic Preservation Officer to carry out the historic

preservation program in each state; authorizes Certified Local Governments to participate in federal and state programs; provides matching grants-in-aid to states; and, establishes the environmental review process that mandates the consideration of impacts of federally funded or licensed projects on historic properties.

The Historic Preservation Division of the Georgia Department of Natural Resources serves as the State Historical Preservation Office. The Division works with local communities to preserve the historical, architectural, and archeological resources of the State of Georgia.

***Resource Conservation and Recovery Act***

The Resource Conservation and Recovery Act (RCRA) (42 U.S.C. § 6972, *et seq.*) is part of the Solid Waste Disposal Act (42 U.S.C. § 6901, *et seq.*). RCRA is designed to regulate hazardous wastes by identifying and tracking them, in what has become known as the "cradle to grave" handling of these materials. Any industry or business that generates, stores, transports, or disposes of hazardous waste, as defined by the Act, is subject to the requirements of the Solid Waste Disposal Act and the implementing regulations. RCRA does not reduce hazardous waste, it merely acts to track it.

***Rivers and Harbors Act of 1899***

The Rivers and Harbors Act of 1899 (33 U.S.C. § 403, *et seq.*) provides laws governing safe navigation of the nation's rivers and harbors. Under Section 10 of the Rivers and Harbors Act, a developer or landowner may need to apply for an Obstruction and Alteration Permit from the U.S. Army Corps of Engineers. This section prohibits the "creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States..." Generally, the Rivers and Harbors Act requires that a landowner secure a Section permit from the Corps before building any wharf, pier, or other structure in any water of the United States outside established harbor lines.

Construction of docks, piers, wharves, marinas, etc., must comply with these federal requirements. Through the federal consistency provisions of the Georgia Coastal Management Program, permits for marinas, docks, piers, and other structures must comply with the rules and regulations implementing the Shore Protection Act, the Coastal Marshlands Protection Act, the Revocable License Program, and the Section 401 Water Quality Certification.

# SECTION VII:
# FEDERAL PROGRAMS

At the federal level, several programs assist with the protection of Georgia's coastal resources. As non-regulatory programs, they seek to develop state-federal partnerships to achieve their goals.

***Federal Aid in Sportfish Restoration Act***

Popularly referred to as the Dingell-Johnson Act, this Act (16 U.S.C. 777, *et seq.*) created the Federal Aid in Sportfish Restoration Program. Part of the U.S. Fish and Wildlife Service's Federal Aid program, the program was created to strengthen the ability of the state and territorial fish and wildlife agencies to manage and restore fish and wildlife resources to meet effectively the consumptive and non-consumptive needs of the public for these resources. In 1984, the program was supplemented by the Wallop-Breaux amendments. This program provides an important source of funds for management of coastal fisheries resources in Georgia.

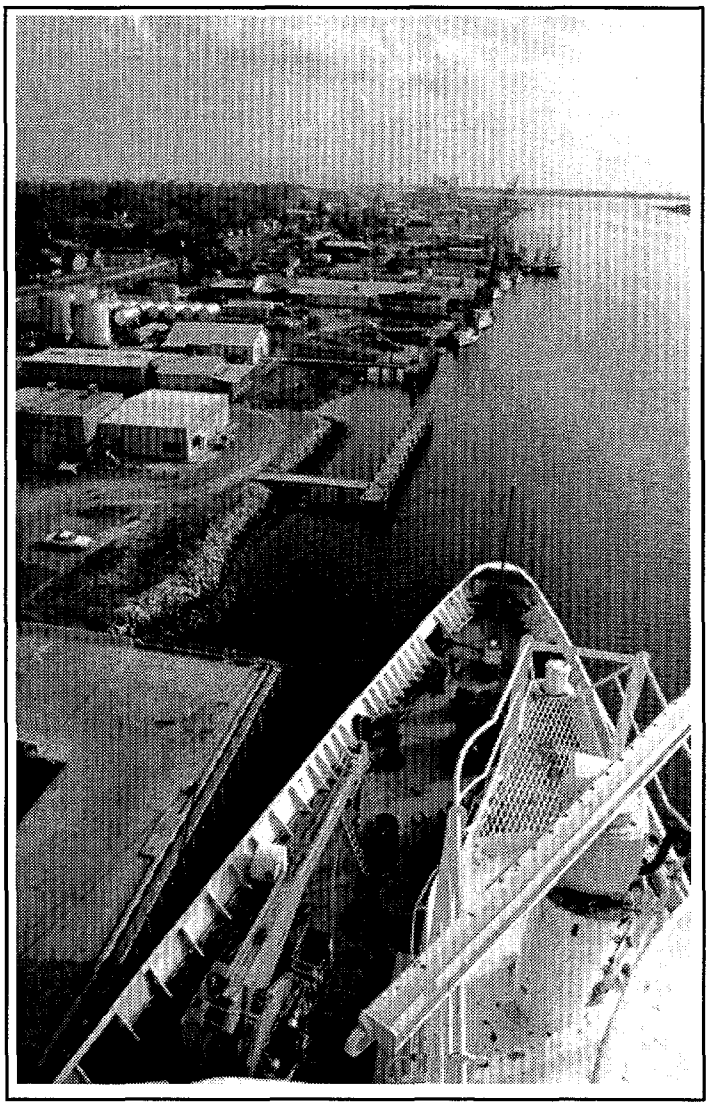
***National Shellfish Sanitation Program***

The National Shellfish Sanitation Program (NSSP), administered by the U.S. Public Health Service, was established as a result of concern about health risks associated with contaminated shellfish. The NSSP is dependent on the states adopting the recommended requirements and on the cooperative and voluntary efforts of state regulatory agencies and the shellfish industry. The NSSP is implemented in Georgia by the Coastal Resources Division. The regulations governing taking shellfish in Georgia waters are found at O.C.G.A. 27-4-190, *et seq.* Shellfish areas throughout the State are delineated and monitored by the Coastal Resources Division for contamination by sewage effluent and other pollutants. Siting of sewage outfalls must consider the potential impacts to shellfish areas. The NSSP manual sets rules for protecting water quality of shellfish harvesting areas. Through the implementation of these rules, limitations are placed on certain activities in or near shellfish harvest areas. Testing and classification of shellfish waters is conducted by the Coastal Resources Division. Enforcement of statutory provisions is the responsibility of the Law Enforcement Section of the Department of Natural Resources.

***Partners for Wildlife Program***

The Partners for Wildlife Program is designed to implement sound natural resource management on private lands. It is administered by the U.S. Fish and Wildlife Service in concert with the various state resource management agencies. The Program provides technical assistance to private landowners, assists the U.S. Department of Agriculture in implementing conservation programs, and cooperates with other state and local agencies to protect natural habitats.

# CHAPTER SIX:
# USES SUBJECT TO MANAGEMENT



...we can never know how wide a circle of disturbance we produce in the harmonies of nature when we throw the smallest pebble into the ocean of organic life.

George Perkins Marsh

# SECTION I:
# CONSIDERATION OF THE NATIONAL INTEREST

## A. Introduction

As lead agency for the Georgia Coastal Management Program, the Coastal Resources Division recognizes that there is considerable national interest in the effective management, beneficial use, protection, and development of the coastal area in Georgia, and in all coastal states. The coastal area is rich in a variety of natural, commercial, recreational, ecological, industrial, and aesthetic resources of immediate and potential value to the present and future well-being of the nation. Consideration of the national interest must therefore balance the provision of facilities that support national concerns and the protection of coastal resources, also a national concern. Where the national interest of facilities and resource conservation conflict, resolution is achieved through the resource policies, rules, and regulations applicable to the specific facility or associated activity. Identification of facilities and coastal resources that are in the national interest is guided by federal laws and regulations, executive policy statements, federal agency studies and reports, and consultations with federal agencies. Refer to Chapter Four, Section V for a description of federal agency cooperation during the program development process.

The following concerns are considered by the State of Georgia to be of such long-range, comprehensive importance as to be in the national interest: (1) National Defense; (2) Energy Production and Transmission; (3) Transportation, Ports, and Navigation; and (4) Coastal Resources (significant fish/shellfish/crustacean species and habitats; threatened wildlife habitats; public recreation areas; freshwater aquifers; historic, cultural, and archeological sites; barrier islands; and wetlands).

Consideration of national interest in program implementation is achieved by the review, certification, and permitting process conducted by the Coastal Resources Division. Applications for facilities or activities in areas under direct permitting jurisdiction of the Coastal Resources Division are placed on public notice and made available to federal agencies. Review of these applications considers the national interest as reflected in the regulations and policies, and also considers comments from the public and from federal agencies involved in making a decision on the permit application. Consideration of the national interest may also be requested of the Georgia Department of Natural Resources Board by federal agencies at any time. Such deliberation may result in changes or additions to regulations or policies. Other agencies reviewing permit applications for the coastal area also consider the national interest in their review process.

## B. Management for Facilities and Resources in the National Interest

1. National Defense

All of the policies of the Georgia Coastal Management Program apply to national defense facilities if such facilities are not on federal lands, which are excluded from the coastal area. The policies of particular interest for national defense are those regulating transportation (ports, roads and highways, airports, railways), public services and facilities (e.g., water supply), and areas of special concern (e.g., navigation channels).

2. Energy Production and Transmission

Energy facilities and activities considered to be in the national interest include electric generating plants, petroleum refineries and associated facilities, gasification plants, facilities associated with liquified natural gas, uranium enrichment or nuclear fuel processing facilities, and oil and gas facilities. Agencies within the Georgia Coastal Management Program network consider the national interest in energy production and transmission when they plan for energy facilities located in or affecting the coastal area. This planning process includes anticipating and managing the impacts from such facilities. See Section IV, "Energy Facility Planning," later in this chapter for a more complete explanation of the planning process.

3. Transportation, Ports, and Navigation

The vital importance of transportation, ports, and navigation channels has been stressed in the Program Document. These facilities serve national defense and economic needs, among others. Nothing in Georgia's Coastal Management Program arbitrarily restricts or unnecessarily interferes with these important activities. The policies for transportation and dredging provide consideration of the national interest in these activities.

4. Coastal Resources

*a. Significant Fish Species and Habitat*

The policies for Recreation and Tourism, Marine Related Facilities, Fisheries and Wildlife, and Areas of Special Concern sections of the Coastal Management Program document describe significant fish species and habitats in coastal Georgia. Policies, in conjunction with the priorities for use of Special Management Areas, govern the activities that affect threatened wildlife and their habitats.

*b. Threatened Wildlife Habitats*

Of particular interest are policies for: Residential and Commercial Development; Transportation Facilities; Recreation and Tourism; Fisheries and Wildlife; Public Services and Facilities; and Areas of Special Concern. As specific policies under these and other areas indicate, activities that disturb threatened or endangered wildlife and vegetation, including their habitats, are discouraged in the coastal area.

*c. Public Recreation Facilities*

In addition to their particular management plans, several policies governing activities associated with recreational resources are also applicable to Special Management Areas that contain public recreation facilities. Of particular interest are policies for: Recreation and Tourism; Marine Related Facilities; Transportation Facilities; and Public Services and Facilities.

*d. Freshwater Aquifers*

Drinking water supply is affected by several factors, including adequacy of recharge areas, amount of extraction from supply, and purity of supply. The policies in general seek to direct activities in the coastal area in such a way as to protect this invaluable resource. Of particular interest are policies for the following: Residential and Commercial Development, Public Services and Facilities, and Areas of Special Concern. The Areas of Special Concern section has a special segment dedicated to aquifer management and protection.

*e. Historic, Cultural, and Archeological Sites*

Historic, cultural, and archeological sites are included as Special Management Areas if designated in the National Register, and may be included if they are eligible for designation. Priorities of use for these areas govern proposed activities that might affect these resources. The policies generally discourage activities that would disturb such resources. Of particular interest are policies for: Transportation Facilities; Residential and Commercial Development; Recreation and Tourism; and Areas of Special Concern. These policies aid in preserving those resources in which there is a national interest. Chapter Seven includes findings and specific policies on areas of historic, archaeological, cultural, and paleoentological significance.

*f. Barrier Islands*

The national interest in barrier islands is reflected in several policies. In managing activities that affect these valuable natural resources, there must be a balance between ecological

needs and increasing development pressures. The following use categories contain policies that pertain to the protection of the national interest in these resources: Residential and Commercial Development; Transportation Facilities; Recreation and Tourism; Marine Related Facilities; Public Services and Facilities; and Areas of Special Concern. In addition, where Special Management Area designations exist on a barrier island, the island will be managed according to the specific priorities of use for that area. There is a separate findings and policy section on barrier islands in the "Areas of Special Concern" section.

*g. Wetlands*

The national interest in wetlands is reflected throughout all of the policies, which provide strong protection against unwarranted dredging, filling or other alteration of coastal and freshwater wetlands. Specific policies on wetlands are included in sections on Residential and Commercial Development; Agriculture and Silviculture; Recreation and Tourism; and Marine Related Facilities in this Chapter, and Wetlands in Chapter Seven.

# SECTION II:
# ACTIVITIES OF REGIONAL BENEFIT

To provide a fair and equitable management program, Georgia Coastal Management Program policies must ensure that local land and water regulations do not unreasonably restrict or exclude land or water uses of regional benefit. The first step in satisfying this requirement is identifying those uses considered to be of regional benefit. Activities are considered to be of regional benefit in the Georgia coastal area if (1) they have been identified as activities subject to management, that is, those determined to have reasonably foreseeable effects upon land use, water use, or natural resources of the coastal area; and (2) they result in a multi-county environmental, economic, social, or cultural benefit.

The focus is on those coastal land and water uses that, by their nature, would require extension through more than one county or which meet a clearly recognized need, not only for the coastal region but for the State as a whole. Most public services in the Georgia coastal area are provided on a county-wide basis. Local and county governments in the coastal area have not exhibited any trend toward excluding activities that offer benefits to an area of greater than local concern. The following is a list of uses that affect or produce some regional benefit in coastal Georgia.

(1) Major transportation facilities such as interstate highways, state roads, airports, railroads, public transit systems, ports, and important navigational projects;
(2) Public recreation facilities of a regional or statewide significance;
(3) Regional water and waste treatment facilities;
(4) Regional waste disposal facilities;
(5) Major energy transmission or generating facilities;
(6) Major public facilities such as multi-purpose reservoirs, state and federal prisons, hospitals, and universities;
(7) Housing development and community growth.

The next step in providing for uses of regional benefit is to identify methods to ensure that local land and water uses do not unreasonably restrict or exclude uses of regional benefit. Consistent with the networking structure of the Georgia's Coastal Management Program, the present authority of the Department of Natural Resources and other State agencies is utilized to comply with requirements for uses of regional benefit. Legal authority found at Official Code of Georgia Annotated (O.C.G.A.) 22-1-2 establishes the right of the State, through its various agencies, to assert dominion over any lands of the State on account of public exigency and for the public good. Therefore, the Georgia Coastal Management Program, through specific acquisition powers of the Department of Natural Resources and other State agencies, ensures that adequate sites are or can be set aside for various uses of regional benefit. The legal basis for this system is

in place through the present powers vested in State agencies to acquire sites as the need arises for particular uses of regional benefit.

Another method available to ensure that local land and water uses do not unreasonably restrict or exclude uses of regional benefit is described by the Georgia Planning Act. This Act encourages municipal and county governments to develop comprehensive plans that address economic development, natural and historic resources, community facilities, housing, and land use to attain designation as a "qualified local government" eligible to receive State grants. The Georgia Planning Act establishes Regional Development Centers throughout the State that are responsible for developing regional plans based on the local plans within their respective region. Under the Act, local governments submit for review to their respective Regional Development Centers any proposed action that would affect regionally important resources or would result in any development of regional impact.

Regionally Important Resources (RIRs) are defined by Georgia Planning Act rules and procedures as: "a natural or historic resource which has natural boundaries extending beyond a single government's jurisdiction or has value to a broader public constituency and which is vulnerable to the actions and activities of man." These projects are referred to as developments of regional impact and include post secondary schools, hospitals, airports, recreational facilities, waste disposal facilities, petroleum storage facilities, and any project that exceeds prescribed demand levels for electricity, natural gas, water, wastewater treatment, or transportation. The Georgia Department of Community Affairs has the authority to "establish rules and procedures which would, based upon guidelines which the Department may establish, affect regionally important resources or further any development of regional impact (O.C.G.A. 50-8-7.1)."

As directed by law, the Department of Community Affairs has developed "Procedures for the Designation and Review of Regionally Important Resources." These procedures are designed so that each resource identified as a potential RIR is assessed in terms of its value and vulnerability and assigned a strategy for its management and conservation or protection. A uniform review process for local government actions affecting RIRs across the State is also described. As part of the comprehensive planning process the Regional Development Centers and local and county governments are required to consider all pertinent RIRs in their regional and local plans in the same manner as they consider the basic planning elements. Through the Georgia Coastal Management Program, the Coastal Resources Division works closely with the appropriate Regional Development Centers of the coastal area to review proposals for RIRs, to help develop management strategies, and to work with local governments during planning for areas that may have an impact on any RIRs. A Memorandum of Agreement between the Coastal Resources Division, the Department of Community Affairs, and the Regional Development Centers within the coastal area establishes the cooperative processes to review local proposals affecting RIRs.

# SECTION III:
# ACTIVITIES SUBJECT TO MANAGEMENT

The Georgia Coastal Management Program includes policies for managing the full range of activities that have reasonably foreseeable effects upon land use, water use, or natural resources of the coastal area. Most of these activities occur within the jurisdictions of the Shore Protection Act, the Coastal Marshlands Protection Act, and/or the Revocable License, which are administered by the Coastal Resources Division.

Georgia Coastal Management Program policies address the impacts of an activity on coastal resources rather than the activity itself. Assessing the impacts of a proposed action represents a more flexible method of managing activities in the coastal area. With this approach, policies need not be developed for every aspect of a given activity, but only for those aspects that have a reasonably foreseeable effect upon land use, water use, or natural resources of the coastal area. This approach is consistent with Georgia's existing home-rule constitutional authority, which vests land development and use decisions with local governments.

Specific areas of the coastal environment are more vulnerable to the effects of human activities than others. Environmentally-sensitive areas of Georgia's coast include the beaches, dynamic dune fields, submerged shoreline lands, salt marshlands, all tidally-influenced waters, tidal water bottoms, and freshwater wetlands. Through the Shore Protection Committee and the Coastal Marshlands Protection Committee, the Coastal Resources Division has direct authority to issue permits for any alteration of these areas under the Shore Protection Act and the Coastal Marshlands Protection Act. The Coastal Resources Division has further authority through the Revocable License and the State Programmatic General Permit for Recreational Docks.

Outside the direct authority of the Coastal Resources Division, within the coastal area, there are other activities or aspects of human development that may significantly impact coastal resources. Through Memoranda of Agreement, the Coastal Resources Division cooperates with other State authorities to create the Georgia Coastal Management Program network. The federal consistency provisions of the federal Coastal Zone Management Act provide another mechanism for coastal management; these provisions are described in Chapter Eight.

Identification of the activities that have a reasonably foreseeable effect upon land use, water use, or natural resources of the coastal area is based upon information compiled by the Coastal Management Program staff; input from local, State, and federal agencies; citizen working groups; and public input received through the Coastal Zone Advisory Committee and

Task Forces, and the subsequent Coastal Advisory Committee. An activity is considered to have reasonably foreseeable effects on coastal resources and therefore is subject to management under State law if it entails one or more of the following criteria.

(1) It is located within the jurisdiction of the Shore Protection Act, Coastal Marshlands Protection Act, the Revocable License, or the Section 401 Water Quality Certification;
(2) It has detrimental environmental impact upon any area within the jurisdiction of the Shore Protection Act, Coastal Marshlands Protection Act, the Revocable License, or the Section 401 Water Quality Certification (for example, water pollution from an inland source that would reach the coast and result in degradation of the estuarine system);
(3) It creates adverse effects on the quality or quantity of coastal resources -- natural, economic, social or historical; and/or
(4) It disrupts access to a public coastal resource.

Coastal activities that have a reasonably foreseeable effect on coastal resources are addressed by Georgia Coastal Management Program policies in the following categories: (1) Development and Manufacturing; (2) Transportation Facilities; (3) Agriculture and Silviculture; (4) Recreation and Tourism; (5) Marine Related Facilities; (6) Fisheries and Wildlife; (7) Public Services and Facilities; (8) Dredging; and (9) Energy Facilities.

## A. Development and Manufacturing

Findings

*Residential Development*

Paralleling national growth trends, residential growth within Georgia's coastal area is expected to increase steadily due to expanding industry and commerce and related employment opportunities, as well as the public's affinity for living near the seashore. Adequate housing that meets building standards and is appropriately located is a basic need for coastal residents. There remain many suitable locations for residential development within coastal Georgia; if residential growth is not properly managed, however, there may be negative environmental impacts.

Housing projects can have adverse effects on coastal water resources and ecosystems. Of primary concern is adequate treatment and disposal of domestic sewage from residences, which can degrade water quality and impact marine and aquatic species if mishandled. This issue may be especially problematic in existing homes and communities that may have been built prior to modern building codes. Uncontrolled development patterns can also increase soil erosion, sedimentation and contamination of coastal waters, and cause flooding problems from rapid storm water runoff. Another potential impact of residential growth is the loss of vital wetland areas if dredging and/or filling of these areas is allowed in site preparation or construction. (Refer to Chapter Seven, Section III, Part G for a discussion of the importance of wetlands.) Although wetland loss can be mitigated, scientific opinion is inconclusive regarding whether or not the mitigated site replaces the natural site in function and value.

Many potential resource conflicts exist. For example, a residential development may provide needed housing but at the same time disrupt commercial fishing by degrading water quality with improperly-controlled sewage effluent and increased storm water runoff. This same housing development, if located on beach-front property, could conflict with recreation by restricting access to a public beach. In addition, residential development in hazard-prone areas may risk life and property and could constitute a potential resource conflict.

For effective coastal management, a sustainable balance must be found between residential development and coastal resource conservation.

*Commercial and Industrial Development*

The increasing number of commercial activities in the coastal area is an integral part of growth. As population density increases, the commercial activities associated with residential and industrial development and coastal recreational activity will expand to serve the needs of

people who live in and visit the coast. The Georgia coast attracts large numbers of visitors each year, and that portion of commercial activity that supports the tourist trade is a significant aspect of coastal economy.

When evaluating the impacts associated with commercial activity, both large-scale development and the cumulative effect of many small activities must be carefully considered. Commercial development requires not only buildings but also roads, parking lots, storm drain systems, water treatment facilities, etc., all of which have potential negative impacts. For example, increased development of sub-standard buildings in flood-prone areas or storm hazard areas increases the potential for loss of life and property. Disturbance of the natural drainage system by excessive clearing of vegetation and covering large areas with impermeable surfacing causes soil erosion, sedimentation, contamination of coastal waters and a lowering of the water level in freshwater aquifers.

The solution to these and many other potential negative impacts is not to stop development. Rather, promoting environmentally-conscience construction, site preparation, and development standards will allow coastal resources to function naturally and regenerate themselves. In this way, necessary commercial development can take place with minimum negative effects on coastal resources.

*Manufacturing*

The growth and development of manufacturing is increasing in coastal Georgia, with correlating potential for economic benefits. Manufacturing plants are a source of employee payrolls and property tax revenues. New and existing industries provide a diversified economic base that complements government employment and the long-standing coastal economic activities of agriculture, forestry, fishing, and tourism. Coastal areas are especially attractive to five major types of industrial manufacturing:

(1) Industries that benefit from location near low-cost water transportation systems;
(2) Industries that derive power from water or use water for manufacturing processes or cooling purposes;
(3) Industries that benefit from location near coastal population centers, but do not have direct dependence on water use or access;
(4) Marine transportation industries; and
(5) Industries that depend directly on the marine environment for raw materials.

While economic benefits exist, manufacturing activities may, if improperly managed, create negative impacts. Waste disposal, oil spills, and the escape of toxic material into aquatic ecosystems are unfortunate by-products of industry that negatively impact the coastal

environment. In addition to water and air pollution discharges, the possible environmental impacts of industrial development in the coastal area include the following.

(1) Possible destruction of wetlands and the associated flora and fauna by filling, dredging, and/or draining for site preparation;
(2) Soil erosion and flood control caused by site preparation, construction of access roads, and operation of heavy equipment;
(3) Attenuation of the quality and quantity of surface and groundwater resources caused by site preparation, facility operation, and introduction of pollutants;
(4) Proliferation of secondary development, such as transportation access facilities, sewage treatment plants or port development; and
(5) Potential air and surface water quality degradation.

Not only do possible conflicts exist between industrial growth and natural systems, but also between competing industrial activities. Commercial fishing, for example, depends on the same coastal water resource that is vital to certain manufacturing uses for transportation, cooling, or effluent discharge. The viability of fishing enterprises may be negatively impacted by a lowering of water quality caused by manufacturing uses.

The coastal area provides a unique opportunity for water-dependent industrial activities, as well as residential and recreational potential. Suitable sites for industrial uses are limited, however, and resources are finite. Competition for use of coastal resources intensifies with growth and development. Georgia's coastal area still retains many miles of unspoiled coastline and many acres of productive marshes and forests. Heavy manufacturing is relatively limited in the coastal area.

Policies

- Coastal Marshlands Protection Act
- Georgia Air Quality Act
- Georgia Comprehensive Solid Waste Management Act
- Georgia Erosion and Sedimentation Act
- Georgia Hazardous Waste Management Act
- Georgia Surface Mining Act
- Georgia Underground Storage Tank Act
- Georgia Water Quality Control Act
- Groundwater Use Act
- Licenses to Dig, Mine, and Remove Phosphate Deposits
- Revocable License Program (Georgia Administrative Procedures Act)
- Shore Protection Act
- Waste Control Law

- Water Wells Standards Act

Description

The Coastal Marshlands Protection Act protects tidal wetlands by limiting certain activities and structures in marsh areas, and by requiring permits for other activities and structures. Any development activity that affects coastal marshlands is subject to restrictions under this authority. Relevant activities, including erecting structures, dredging, or filling in marsh areas requires a permit from the Coastal Marshlands Protection Committee. Marsh Permits are administered by the Coastal Resources Division. Developers requiring a Marsh Permit are encouraged to take advantage of the technical assistance and preliminary permit review service provided by the Coastal Resources Division through the Georgia Coastal Management Program (See Chapter Four).

Development and manufacturing projects which impact air quality are subject to the Georgia Air Quality Act. This Act provides authority to the Environmental Protection Division to promulgate rules and regulations necessary to abate or control air pollution. Industries and manufacturers must follow established ambient air quality standards, emission limitations, emission control standards, and other measures necessary to provide standards that are no less stringent than the federal Clean Air Act. The Georgia Air Quality Act also requires: establishment of a program for the prevention and mitigation of accidental releases of hazardous air contaminants or air pollutants; training and educational programs to ensure proper operation of emission control equipment; and standards of construction no less stringent than the federal Act.

Proper waste management for development and manufacturing sites is detailed in the Georgia Comprehensive Solid Waste Management Act. Designed to protect human health as well as historic sites, the law defines rules regarding solid waste disposal and provides for a public comment process for facility siting. Solid waste facilities on private property are generally exempt from this law's provisions. Enforcement of this law is delegated to the Environmental Protection Division. Additional restrictions governing waste management may be in place through local zoning ordinances.

The Erosion and Sedimentation Act addresses erosion issues from development and other activities by setting minimum requirements for land-disturbing activities. Permits are required for specified land disturbing activities including the construction or modification of manufacturing facilities and construction activities. The Act also mandates that "an undisturbed natural vegetative buffer of 25 feet measured from the stream banks shall normally be maintained..." between waters of the State and land-disturbing activities, unless a variance is granted. The Act is administered and enforced by the Environmental Protection Division. Local governments may add restrictions to the provisions of the Act.

Also administered by the Environmental Protection Division, the Georgia Hazardous Waste Management Act describes a comprehensive, State-wide program for managing hazardous wastes by regulating the generation, transportation, storage, treatment, and disposal of hazardous wastes. Hazardous waste is designated by the Board of Natural Resources, and it includes any waste that the Board concludes is capable of posing a substantial present or future hazard to human health or the environment when improperly treated, transported, stored, disposed, or otherwise managed, based on regulations promulgated by the U.S. Environmental Protection Agency. Any industry or manufacturing operation which promulgates hazardous waste is subject to this law.

Georgia's Surface Mining Act regulates all surface mining in the State. Licenses to dig, mine, and remove phosphate deposits specifically regulate the impacts of phosphate mining.

Under the Georgia Underground Storage Tank Act, the Environmental Protection Division has the authority to define the State criteria for operating, detecting releases, corrective actions, and enforcing the use of underground storage tanks (USTs). EPD rules governing USTs (EPD Rules and Regulations, Chapter 391-3-15) define the minimum standards and procedures to protect human health and safety and to protect groundwater from contamination. Any development or manufacturing activity with USTs must comply with these rules and regulations.

The Georgia Water Quality Control Act was designed to ensure that waters of the State are used prudently, are maintained or restored to a reasonable degree of purity, and are maintained in adequate supply. The Environmental Protection Division administers this law and, through the Board of Natural Resources, sets rules regulating the rivers, streams, lakes, and subsurface waters throughout the State for public and private water supply, as well as agricultural, industrial, and recreational uses. The Division may set rules and regulations pertaining to water quality and quantity, set permit conditions and effluent limitations, and set permissible limits of surface water usage for both consumptive and non-consumptive uses. All development and manufacturing projects are required to comply with this law.

Through the Groundwater Use Act, the Board of Natural Resources has the responsibility to adopt rules and regulations relating to the conduct, content, and submission of water conservation plans, including water conservation practices, water drilling protocols, and specific rules for withdrawal and utilization of groundwater. Development and manufacturing projects utilizing groundwater must comply with this law. Groundwater withdrawals of greater than 100,000 gallons per day require a permit from the Environmental Protection Division. Permit applications that request an increase in water usage must also submit a water conservation plan approved by the Director of the Environmental Protection Division.

Through the Revocable License Program, the use of State-owned tidal water bottoms is protected. Any development or manufacturing project that proposes to use State-owned water bottoms, including constructing a portion of a facility on a water bottom or dredging tidal bottoms, must meet certain conditions and obtain a Revocable License. For projects within the eleven-county coastal area, licenses must be obtained from the Coastal Resources Division. These licenses may be issued in conjunction with Marsh Permits and/or Shore Permits.

The Shore Protection Act provides legal authority for the protection and management of Georgia's sand dunes, beaches, sandbars, and shoals by limiting activities in shore areas and requiring a permit for certain activities and structures. Only temporary structures can be permitted in dune areas. Permitting authority lies with the Shore Protection Committee and is administered by Coastal Resources Division.

The Waste Control Law makes it unlawful to dump waste, including but not limited to sand, gravel, bottles, boxes, tires, construction materials, sludge from wastewater treatment facilities, biomedical waste, hazardous waste, and other waste. Development and manufacturing projects must properly dispose of waste in order to comply with this law.

Any development or manufacturing project requiring a well must comply with the Water Wells Standards Act. This Act provides standards for siting, construction, operation, maintenance, and abandonment of wells and boreholes. Individual and non-public wells must be located as far removed from known or potential sources of pollutants as possible. Licensing requirements for drilling contractors are established by the Act, as well as a State Water Well Standards Advisory Council.

In addition to the above-mentioned authorities, the Georgia Department of Human Resources oversees county and district health agencies and sets minimum requirements for local regulation of sewage management systems. Residential development projects must meet minimum requirements for septic tanks and sewage systems set by local health agencies.

Another authority important to developers and manufacturers is the Section 401 Water Quality Certification, as part of the federal Clean Water Act. The Act provides authority to the states to review federal permits that may result in a discharge to the navigable waters of the United States. The Environmental Protection Division has authority to administer Section 401 Water Quality Certification. The Coastal Resources Division assists the Environmental Protection Division in the administration of this authority in the eleven-county coastal area. Any development or manufacturing project that may result in a discharge to the navigable waters of the United States must receive a Section 401 Water Quality Certification.

## B. Transportation Facilities

Findings

Georgia's coastline has always been a point of modal interface between one form of transportation and another. Ports and harbors provide a terminus for both passengers and goods, generating impetus for waterborne transportation and surface and air links. The construction and maintenance of all forms of transportation services are a vital part of the economic viability of the coastal area. Investment in these facilities meets a definite need in coastal Georgia, serving both coastal and State residents. Transportation facilities serve the national interest due to their role in national defense; provision of access to coastal recreation areas and other resources; and contribution to overall economic growth. Transportation systems are important elements in coastal management because they provide access to a variety of public resources -- economic as well as historic, social, and recreational. Potential environmental impacts from construction, maintenance, and operation of transportation systems do, however, exist.

*Ports and Commercial Waterways*

The ports and commercial waterways of Georgia represent major economic enterprises that meet the needs of waterborne commerce for both the coastal area and the entire State. Ports and commercial waterways also have a major national impact by providing a means of access to international and domestic markets. The Georgia Ports Authority operates two ports along the coast. One facility, located at Brunswick, consists of four terminals. The other, located at Savannah, consists of two terminals. In addition to the public terminals of the Georgia Ports Authority, there are approximately fifteen private terminals located in the Savannah area. These terminals also transfer a wide variety of goods and materials and are an important contributor to the coastal economy.

It is estimated that the Brunswick terminals generate $543 million in annual revenue, $124 million in income and $18 million in State and local taxes. It is estimated that both public and private terminals in Savannah generate $6.7 billion dollars in total annual revenue, $1.3 billion in income, and $171 million in State and local taxes.

*State Terminals:* The economic impact of public port development is substantial. According to information published by the Georgia Ports Authority, the four public facilities at the Port of Brunswick cleared more than 1.5 million short tons of cargo in fiscal year 1994 (July 1-June 30). Among the products most handled through the Brunswick facilities were gypsum, potash, wood pulp, petroleum products, and automobiles. The two Georgia Ports Authority facilities in Savannah cleared more than 7.4 million short tons of cargo during fiscal year 1994 (July 1-June 30). The ports' .

leading agricultural export commodities include wheat, soy beans, corn, and coca beans. The port also handles dry bulk, liquid bulk, and breakbulk products.

*Private Terminals:* The fifteen private terminals in the Savannah area clear a wide variety of products including sugar, petroleum products, fiber products, gypsum, asphalt, and bulk liquids.

Port development and associated activities can have major direct and secondary environmental impacts, particularly in relatively undisturbed areas. A primary impact on coastal water quality is dredging to create and maintain navigation channels. Dredging can modify the hydrology of a harbor, produce changes in salinity, and degrade water quality through siltation and resuspension of solids. Lowering water quality may also have a detrimental effect on dependent plant and animal resources. Dredging may release sediment-based contaminents that become available to early life forms of fishes and other aquatic life forms. Initial and maintenance dredging can also create dredge material disposal problems and impact underwater archeological resources. Further, ports handling petroleum products or toxic substance cargoes involve risks of spills resulting in water quality degradation. The secondary effects of port development primarily affect land resources and land use. Ports generate a large volume of rail and truck traffic and often are a spur to industrial and urban development.

*Roads and Highways*

Roads and highways are key components in shaping the growth patterns of the coastal area, as they do in others parts of the State. The motor vehicle is the primary mover of people and goods, and access to and from the roadway network is a key factor in the economic gain of a community. Intersections, curb cuts, and highway interchanges are often the site of extensive development.

In addition, construction, operation, and maintenance of a roadway involve engineering and construction activities that may have direct negative environmental impacts if not properly managed. Of primary concern is the location of the thoroughfare, which may be routed along or through wetland areas, water bodies, or other sensitive habitats. Especially significant is the potential for destruction or significant deterioration of ecological systems through dredge and fill operations. Bridges, rather than roadbeds, are preferred in situations in which filling would result in loss of marsh or wetland habitat, or disrupt water flow and circulation.

Possible impacts of altering drainage and sedimentation as a result of land clearing, grading, and slope stabilization are associated with road and highway construction. Measures must be taken to eliminate soil erosion or sedimentation of wetlands and other water bodies. Roadways must be designed to minimize stormwater runoff from road surfaces and

embankments in order to prevent toxic or nutrient loading of adjacent wetlands and other waters.

*Air Transport*

Air transport is an increasingly important mode for the transportation of passengers and cargo. Airport facilities are generally of coastal management concern when their construction or expansion may have significant impacts on coastal resources. In addition to potential direct loss of natural habitats, including valuable wetlands, the construction and operation of major airport facilities, if not properly managed, can result in water quality degradation caused by storm water runoff from paved parking and landing areas or by sedimentation and erosion.

*Railways*

Railroads are a principal means of transporting industrial, commercial, and agricultural goods to market in coastal areas of Georgia. Railroads serve as an important supplement to other transportation modes linking industrial and manufacturing sites to port facilities.

The possible negative environmental effects associated with development of new railroads are similar to the impacts of roads and highways. Those effects include loss of valuable wetland habitats if dredge or fill is required; disruption of water flow and circulation if properly designed bridges or other means to provide circulation are not utilized; and degradation of adjacent water quality if erosion and storm water runoff and sedimentation are not adequately controlled during construction and operation. Sound management practices and implementation of the following policies reduce the potential for these environmental problems when new railroad corridors are selected and developed.

Policies

- Coastal Marshlands Protection Act
- Endangered Wildlife Act
- Game and Fish Code
- Georgia Erosion and Sedimentation Act
- Georgia Comprehensive Solid Waste Management Act
- Georgia Hazardous Waste Management Act
- Georgia Water Quality Control Act
- Shore Protection Act
- Wildflower Preservation Act

Description

Transportation activities occurring within the jurisdictions of the Coastal Marshlands Protection Act or the Shore Protection Act require a permit from the Coastal Resources Division through the Coastal Marshlands Protection Committee or the Shore Protection Committee, and a Revocable License issued by the Coastal Resources Division. Department of Transportation activities are exempt from permit requirements of the Coastal Marshlands Protection Act. As a networked agency, the Georgia Department of Transportation is required by the Georgia Coastal Management Act to coordinate its activities within the jurisdiction of the Coastal Management Program to ensure compliance with the policies of the Program to the maximum extent possible. Transportation activities that impact the water quality of navigable waters or wetland areas require a Section 401 Water Quality Certification from the Environmental Protection Division.

Land-disturbing activities are subject to the jurisdiction of the Erosion and Sedimentation Act. Many transportation activities, however, are exempt from the provisions of this Act. Construction or maintenance projects undertaken or financed by the Georgia Department of Transportation, the Georgia Highway Authority, or the Georgia Tollway Authority, or any road or maintenance project undertaken by any county or municipality, are exempt from the permit requirements of the Act, provided that such projects conform to the specifications used by the Georgia Department of Transportation for control of soil erosion. Exemptions are also provided to land-disturbing activities by any airport authority, provided that activities conform as far as practicable with the minimum standards set forth in the Act at Code Section 12-7-6. The Department of Transportation has developed a "Standard Specifications -- Construction of Roads and Bridges," which described contractor requirements, including controls for sedimentation and erosion. The specifications describe the requirements for both temporary control measures for use during the construction phase, and permanent erosion and sedimentation control measures that need to be incorporated into the design of the project. Failure to comply with the provisions of the specification will result in cessation of all construction activities by the contractor according to a schedule of non-performance of erosion control, and enforced by the Department of Transportation.

Transportation facilities must comply with the regulations developed under the Georgia Water Quality Control Act. This Act grants the Department of Natural Resources, Environmental Protection Division the authority to ensure that water uses in the State of Georgia are used prudently, are maintained or restored to a reasonable degree of purity, and are maintained in adequate supply. The Division is authorized to create rules and regulations pertaining to water quality and quantity, set permit conditions and effluent limitations, and set permissible limits of surface water usage for both consumptive and non-consumptive uses. The authority to regulate the rivers, streams, lakes, wetlands, and subsurface waters throughout the State for public and private water supply and agricultural, industrial, and recreational uses is

provided to the Environmental Protection Division. The Act makes it unlawful for any person to dispose of sewage, industrial wastes, or other wastes, or to withdraw, divert, or impound any surface waters of the State without a permit.

Transportation facilities must also dispose of their wastes in accordance with State law, specifically the Georgia Comprehensive Solid Waste Management Act and the Georgia Hazardous Waste Management Act. The Comprehensive Solid Waste Management Act regulates solid waste disposal. The Hazardous Waste Management Act describes a comprehensive, State-wide program for managing hazardous wastes through the regulation of the generation, transportation, storage, treatment, and disposal of hazardous wastes.

The Wildflower Preservation Act protects plant species that are rare, unusual, or in danger of extinction. The Endangered Wildlife Act protects animal species that are rare, unusual, or in danger of extinction. The Game and Fish Code (O.C.G.A. Title 27, Ch. 1) vests ownership of all wildlife in the State, and declares that custody of the State's wildlife is vested with the Department of Natural Resources. All transportation facilities on public lands must comply with the provisions of these Acts. In addition, projects permitted under the authority of the Coastal Marshlands Protection Act, the Shore Protection Act, or the Revocable License Program require full compliance with the protection of endangered or protected species. Outside the jurisdiction of these laws, for areas that are not public lands of Georgia, protection of endangered species is provided by the federal Endangered Species Act.

Transportation projects that require federal permits are subject to the federal consistency provisions described in Chapter Eight. Additionally, there are federal requirements for the transfer of oil and hazardous materials. Federal Coast Guard Rules and Regulations authorize the Coast Guard to inspect and enforce ship safety and transportation rules. Also, the Coast Guard has an Inlet Protection Program for Tybee Roads, Tybee Inlet, Sapelo Sound, Wassaw Sound, Ossabaw Sound, and St. Catherines Sound. This protection program identifies a strategy for spill containment in the event of an accidental oil spill or discharge.

## C. Agriculture and Silviculture

Findings

*Agriculture*

Georgia has almost eight million acres of farmland classified as "prime," which may be defined as available land that is best suited for producing food or fiber, i.e., it has the soil quality, growing season, and moisture supply necessary to produce sustained yields of crops. As is the case throughout most of the world, this land is also suitable for urban development. Approximately 25,000 acres of prime farmland are converted annually to nonagricultural uses. By the year 2000, with continued population and economic growth, as many as 500,000 acres or 6.5% of the State's prime farmland may be lost to nonagricultural uses.

Approximately 7.3 percent of the land in coastal Georgia is in agricultural use. In 1992, the counties comprising Georgia's coastal area maintained 1114 individual farms. Wayne County contained the most farms (283), while McIntosh contained the fewest (33). The farms in Liberty County were the largest, with each averaging 318 acres of harvested cropland. The farms in Brantley County were the smallest, with 230 farms averaging 120 acres each. Between 1987 and 1992, the total number of farms in the coastal area decreased by approximately 2.7%, and the amount of land devoted to crop harvesting decreased by an average of 10.5%. Only Brantley, Chatham, and Glynn Counties had an increase in harvestable cropland.

Row crop agriculture is an important activity in Georgia's coastal area, especially in the second tier of coastal counties. Tobacco is the most important row crop grown in the coastal area, with nearly five million pounds produced in 1992. Corn, soybeans, peanuts, and cotton are also important farm commodities of coastal Georgia.

Every county in the coastal area supports commercial cattle ranching activities. In January, 1993, the coastal counties contained approximately 19,000 head of cattle. Effingham County led the region with 4,100 head, followed by Wayne County with 3,700 head. Hog farming is also an important agricultural activity in the coastal area. In December 1992, the coastal counties produced approximately 17,800 hogs and pigs. Effingham County led the region in production with 7,700 head, followed by Wayne County with 7,200 head.

Poultry production of both layers and broilers is another important agricultural industry in coastal Georgia. In 1992, large layer operations existed in Brantley, Bryan, Camden, and Charlton Counties. Brantley County led production, with approximately 735,000 layers. Broilers were produced in Charlton, Liberty, and Long Counties. Long County led production, with approximately 2.8 million broilers.

Agricultural activities may have significant environmental consequences if not conducted appropriately. Contamination from agricultural practices may be the cause for certain streams and waterways to be adversely affected in such a manner that they are unable to support the use for which they are designated (e.g., recreation, swimming, fishing, etc.). The Georgia Soil and Water Conservation Commission has developed a series of voluntary Best Management Practices (BMPs) for agriculture that are designed to protect the quality of Georgia's waters. The term BMP refers to a practice, or a combination of practices, determined to be the most effective practical means of preventing or reducing the amount of pollution generated by agricultural (or silvicultural) nonpoint sources. The BMPs for agriculture encompass such practices as conservation tillage systems, contour farming and terracing, stripcropping, filter strips, cover crops and crop rotation, nutrient management, pest management, pasture management, agricultural waste management, streamside forest buffers, and others.

*Silviculture (Forestry)*

Silviculture is the practice of applied forest ecology. With its related industries, silviculture is a major economic activity in coastal Georgia. The State's climate and soils favor southern pines, which grow to pulpwood size in only 15 years and to saw timber size in about thirty years. Georgia has approximately 24 million acres of commercial forest land, more than any other state. In recent years, farmer-owned timberland has decreased and the amount leased or owned by the forest industry has increased. In the eleven counties that make up Georgia's coastal area, commercial forests cover over 2.5 million acres or 76.4% of the land area. Forest industry companies hold ownership to 44.7% of the commercial forests in the coastal area. Concurrently, timber processing industries have benefitted from coastal Georgia's excellent transportation availability and large supplies of high quality groundwater. The 1993 average annual total income from timber, including sawtimber and pulpwood, was $110.5 million.

If not properly conducted, silvicultural activities may have significant environmental consequences, primarily from disruption of hydrologic systems. Logging in coastal watersheds has the potential to disrupt delicate coastal ecosystems. Increased erosion of soil and nutrients resulting from tree removal may accelerate sedimentation and reduce water quality. The processing of forest products also may cause environmental damage if proper controls are not observed for air and water effluent discharges.

As a result of the 1972 Federal Water Pollution Control Act, as amended, a forestry technical task force was appointed by the governor to develop Best Management Practices (BMPs). BMPs for forestry are common sense practices to reduce or minimize road construction, harvesting, site preparation, and regeneration impacts on water quality from erosion and sedimentation. After developing BMPs in 1981, the task force recommended that the BMPs

be implemented through a voluntary nonregulatory program exempt from permitting under the Georgia Erosion and Sedimentation Act. This recommendation was adopted. Water quality violations, however, are enforceable under the Georgia Water Quality Control Act.

The Georgia Forestry Commission was designated by the Georgia Environmental Protection Division as the lead agency in BMP education for the forestry community. On behalf of the Division, through annual contracts, the Commission also investigates and mediates complaints involving forestry practices.

Policies

- Coastal Marshlands Protection Act
- Georgia Erosion and Sedimentation Act
- Georgia Water Quality Control Act
- Georgia Forestry Code
- Mountain and River Corridor Protection Act

Description

The Coastal Marshlands Protection Act limits certain activities and structures in tidal wetlands, and requires permits for other activities and structures. Any agricultural or silvicultural activity that directly alters lands within the jurisdictional areas of the Coastal Marshlands Protection Act must be permitted by the Department of Natural Resources Coastal Resources Division, through the Coastal Marshlands Protection Committee.

The Erosion and Sedimentation Act regulates land-disturbing activities. Among other provisions, the Act requires that local governments establish regulations for land-disturbing activities, and that no land-disturbing activities be conducted within 25 feet of the banks of State waters unless a variance is granted by the Director of the Environmental Protection Division. Agricultural practices, forestry land management practices, dairy operations, livestock and poultry management practices, construction of farm buildings, and any projects carried out under the technical supervision of the U.S. Department of Agriculture Natural Resource Conservation Service are exempt from this Act. Forestry and agricultural land-disturbing activities are subject to the Best Management Practices of the Georgia Forestry Commission and the Georgia Soil and Water Conservation Commission, respectively.

Agricultural and silvicultural uses of State rivers, streams, lakes, wetlands, and subsurface waters are subject to the Georgia Water Quality Control Act. Developed to ensure that water in the State are used prudently, are maintained or restored to a reasonable degree of purity, and are maintained in adequate supply, the Act authorizes the Department of Natural

Resources, Environmental Protection Division to establish rules and regulations pertaining to water quality and quantity, to set permit conditions and effluent limitations, and to set permissible limits of surface water usage for consumptive and non-consumptive uses.

The Georgia Forestry Code (O.C.G.A. 12-6-1, *et seq.*) establishes the Georgia Forestry Commission and also establishes management, conservation, and protection measures for forest lands. The Commission has implemented a Best Management Practices program for forestry designed to protect water quality from road construction, timber harvesting, site preparation, and other silvicultural practices that may cause nonpoint source pollution. The Certified Burner Program is administered by the Georgia Forestry Commission to educate the citizens of Georgia about safe burning techniques.

Prescribed burning is described in the Forestry Code (O.C.G.A. 12-6-146) to be a "resource protection and land management tool which benefits the safety of the public, Georgia's forest resources, the environment, and the economy of the state." The authorization and promotion of prescribed burns for community protection, silviculture, environmental, and wildlife management purposes is State law (O.C.G.A. 12-6-146(b)). The nuisance and liability of smoke from such burns is recognized, and, therefore, a permit is required "to burn any woods, lands, marshes, or any other areas" (O.C.G.A. 12-6-90 (a)). The Best Management Practices for Forestry and Agriculture describe the appropriate conditions for the use of prescribed burning. Uncontrolled or inappropriate use of fire can destroy the litter, duff, and humus layers of the forest floor and expose mineral soil to erosion. The BMPs establish appropriate weather conditions, construction of fire breaks, slope and soil conditions, etc.

The Mountain and River Corridor Protection Act (O.C.G.A. 12-2-8, *et seq.*) allows the Department of Natural Resources to develop minimum standards and procedures for the protection of natural resources, environment, and vital areas of the State including mountains and river corridors. These standards and procedures must be used by local governments in developing, preparing, and implementing their comprehensive plans. The Act requires a 100-foot vegetative buffer on both sides of rivers. In their comprehensive plans, local governments may exempt specific agricultural and forestry activities from the buffer requirement, provided that BMPs are followed and water quality is not impaired. The Act also requires consistency with the Erosion and Sedimentation Act. All rivers in Georgia with an average annual flow of 400 cubic feet per second are covered by the Act, except those within the jurisdiction of the Coastal Marshlands Protection Act.

Vegetative buffers have been used worldwide in various disciplines: in forestry and agriculture to moderate nonpoint source degradation of water courses; in wildlife management to improve and to provide habitat; and in landscape architecture to improve visual appeal. These uses are not exclusive of one another, but provide compatible land use from several different

perspectives. Rapid regeneration and replanting are also concepts that are harmonious with the idea of environmental and economic sustainability of the coastal area, especially if done using indigenous or native plant species. Vegetative buffers can be used to assist in pollution and erosion control, habitat diversification, and visual beautification. They are best implemented as large-scale, ecosystem- or watershed-wide programs to offer protection to the streams, rivers, marshes and estuaries of the coastal area, but they can be used on a project-by-project basis. Vegetative buffers are not a panacea and should not be relied upon as an inexpensive management technique to mitigate poor land and other natural resource management practices. They should be considered as a valuable tool that can assist in the restoration of coastal and watershed ecosystems once sound land management practices have been developed and put into general use.

An additional management measure is to encourage conservation easements. The Georgia Uniform Conservation Easement Act defines "conservation easement" to mean a non-possessory interest in real property, with limitations or affirmative obligations, the purposes of which include: retaining or protecting natural property; assuring its availability for agricultural, forest, recreational, or open space use; protecting natural resources; maintaining or enhancing air or water quality; and/or preserving the historical, archeological, or cultural aspects of real property. A landholder may be a government agency or a charitable organization. Conservation easements are legally binding agreements between a property owner and a governmental body or a land trust that restricts the type and amount of development and use that may take place on the property. The landowner may retain several rights, including the right to sell, restrict public access, maintain the land for agricultural use subject to best management practices, add additional buildings to the site, etc.

At the federal level, the National Food Securities Act regulates agricultural activities in highly erodible areas, requires approved conservation plans in certain circumstances, and prohibits clearing and draining of wetlands for agricultural purposes. The Natural Resource Conservation Service and the Farm Service Agency of the U.S. Department of Agriculture administer this Act. Additionally, Section 404 of the Clean Water Act, administered by the Army Corps of Engineers, requires permits for dredging and filling wetlands. The Corps of Engineers also requires permits for conversion of forested wetlands to other uses such as agriculture or urban. Also, the federal Clean Water Act mandates that agriculture and forestry roads follow BMPs when crossing streams and wetlands. As of January 1, 1996, the Corps and the Environmental Protection Agency, in a joint Memorandum of Agreement, listed nine specific wetlands that if converting to a pine plantation via mechanical site preparation would require a permit.

## D. Recreation and Tourism

Findings

Recreation and tourism represent major industries in coastal Georgia. There are a wide variety of recreational opportunities ranging from swimming, sailing, and sport fishing to observing wildlife and scenic vistas, and visiting historic places. The total tourist expenditures in 1993 in the eleven counties of the coastal area was approximately $1.39 billion. Most tourism in coastal Georgia is generated by the beaches and historical resources. Georgia's mild climate allows most popular recreational activities such as golf, tennis, and boating to be conducted throughout the year.

The Parks, Recreation, and Historic Sites Division of the Georgia Department of Natural Resources is responsible for the operation of four State Parks and four historic sites located within the coastal area. The Wildlife Resources Division manages ten Wildlife Management Areas within the coastal area. In addition, there are ten natural areas, managed by various State, local, or federal authorities, within the coastal area, including Gray's Reef National Marine Sanctuary, the Sapelo Island National Estuarine Research Reserve, and Blackbeard Island National Wildlife Refuge and Wilderness Area. The Jekyll Island Authority was established in 1950 to operate the island's historic and recreational facilities, including beaches, golf courses, and historic district. In addition to these State-operated facilities, there are several parks and recreation facilities, dozens of historic districts and hundreds of historic places, and open spaces that are operated by local governments, counties, and the federal government throughout the coastal area. Refer to Chapter Seven, "Special Management Areas," for more information about these and other areas.

The State of Georgia recognizes the importance of recreation as a basic need of coastal area residents and visitors. The amount of leisure time that is available to Americans continues to increase, and recreation is a significant feature of our daily lives. With expanding growth and development, the availability of open space, natural areas, and locations with adequate recreational facilities are important. The two primary environmental concern with parks, historic sites, and open spaces are: (1) maintaining the ecological balance of adjacent fragile areas such as marshlands, other wetlands, and wildlife habitat; and, (2) protecting the significant natural, historical, and cultural characteristics of the resources and the surroundings while providing an economically-sound use. Sustainable use of the coastal area for recreation is a primary goal of the Georgia Coastal Management Program.

Commercial recreational areas for visitors to the coastal area are a significant economic enterprise and contribute to the economic success of many coastal areas. Construction and operation require regulation for public safety or aesthetic reasons under various local planning and building codes. Commercial recreation facilities are of a coastal management concern if they

disrupt existing public access or if they significantly degrade water quality, cultural entities, historic areas, scenic vistas, or environmental factors.

State and federal parks, historic sites, and wildlife management areas located in coastal Georgia provide opportunities for hunting, fishing, bird watching, beach access, marsh access, access to sites of historical significance, and other recreational opportunities. In addition to the State- and federally-owned properties in the coastal region, there are numerous non-government owned historic and natural resources that not only give coastal communities their unique character, but also provide overnight accommodations, dining, shopping, touring, biking, boating, fishing, hunting, camping, and other recreational opportunities.

A number of parks and historical and culturally significant sites have been designated within this document as "Areas of Preservation and Restoration" because of their unique natural and cultural value and importance as a recreational use area. The priority of uses for these specific parks and sites is addressed in Chapter Seven, "Special Management Areas."

Most public recreational facilities in the coastal area (as throughout the State) are financed in full or in part by the U.S. Department of the Interior, National Park Service. Funds provided by the Dingell-Johnson and Wallop-Breaux Acts (Aquatic Resources Trust Fund) support recreational fishing activities and development projects, such as boat ramps, floating docks, and fishing piers.

Policies

- Coastal Marshlands Protection Act
- Georgia Erosion and Sedimentation Act
- Georgia Heritage Act
- Georgia Water Quality Control Act
- Groundwater Use Act
- Shore Protection Act

*TABLE 6.1: Inventory of State and Federal Parks, Historic Sites, and Wildlife Management Areas in Coastal Georgia*

State-managed Wildlife Management Areas within the coastal area:
- Altamaha Wildlife Management Area - McIntosh County
- Dixon Memorial Wildlife Management Area - Brantley County
- Little Satilla Wildlife Management Area - Wayne County
- Ossabaw Island Wildlife Management Area - Chatham County
- Paulk's Pasture Wildlife Management Area - Glynn County
- Rayonier Wildlife Management Area - Wayne and Brantley Counties
- Richmond Hill Wildlife Management Area - Bryan and McIntosh Counties
- Sansavilla Wildlife Management Area - Glynn and Wayne Counties
- Sapelo Island Wildlife Management Area - McIntosh County

Natural Areas within the coastal area:
- Savannah National Wildlife Refuge
- Wassaw National Wildlife Refuge
- Ossabaw Island Heritage Preserve
- Gray's Reef National Marine Sanctuary
- Harris Neck National Wildlife Refuge
- Blackbeard Island National Wildlife Refuge and Wilderness Area
- Sapelo Island National Estuarine Research Reserve, Sanctuary, and Natural Area
- Lewis Island Natural Area
- Wolf Island National Wildlife Refuge
- Cumberland Island National Seashore
- Okefenokee National Wildlife Refuge and Wilderness Area

State Parks within the coastal area:
- Skidaway Island Park
- Ft. McAllister Historic Park
- Crooked River Park

State Historic Sites within the coastal area:
- Hofwyl-Broadfield Plantation
- Fort King George
- Fort Morris
- Wormsloe

National Parks and Monuments within the coastal area:
- Ft. Frederica National Monument
- Cumberland Island National Seashore
- Ft. Pulaski National Monument

Description

In addition to Georgia statutory requirements for access by physically handicapped persons, the federal Americans with Disabilities Act must be complied with for all public structures.

Permits for parks, tourist-oriented or commercial recreation facilities within the jurisdiction of the Coastal Marshlands Protection Act and the Shore Protection Act are administered by the Coastal Resources Division. In the rest of the eleven-county coastal area, the Environmental Protection Division has permit authority over certain aspects of facilities open to the public, including sewage systems and water systems, and other authorities under the Environmental Assessment process. In addition, land-disturbing activities associated with recreation and tourism are subject to the provisions of the Erosion and Sedimentation Act.

Administered by the Environmental Protection Division, the Georgia Water Quality Control Act establishes regulatory requirements for water quality and quantity, permits for discharges into surface and subsurface waters of the State, etc. Any recreational or tourist-related discharge of water is subject to the provisions of this law. Likewise, recreational or tourism activities using groundwater are subject to the Groundwater Use Act. This Act provides authority to establish regulations and permit requirements for withdrawal, drilling protocols, and water conservation plans.

Georgia's Heritage Trust Act seeks to preserve certain real property in Georgia that exhibits unique natural characteristics, special historical significance, or particular recreational value. The goals of this Act have been superseded by the Heritage 2000 Program. The Heritage 2000 Program provides funding to acquire properties for preservation of significant cultural or historical resources.

The Department of Natural Resources is authorized to grant permits or enter into contractual agreements with recognized scientific organizations or qualified individuals for the purpose of conducting field archeological research or salvage archeology on State property. The Department can also promulgate regulations to preserve and protect any cultural or archeological finding. The Historic Preservation Division administers State and federal funding for historic preservation activities. The Department of Natural Resources, Parks, Recreation, and Historic Sites Division has the authority to construct, operate, and maintain State parks.

The Historic Preservation Division is the lead state agency for administration of both federal and state tax incentive programs for preservation of historic properties. The Coastal Resources Division cooperates with that agency to help identify potential candidates for such programs. The Nongame Wildlife Conservation and Habitat Acquisition Fund provides a mechanism for voluntary donations and tax refund allocations to establish a fund to acquire

property. The Department of Natural Resources has the power and authority under Title 27-1-6 of the Georgia Code to "acquire by purchase, condemnation, lease, agreement, gift, or devise lands or waters suitable for... fish hatcheries, nursery ponds, game farms, sanctuaries, reservations, and refuges... and for wildlife restoration, propagation, protection, preservation, management research or management...." Access to some of the areas already acquired is by boat only. The River Care 2000 Program provides funds for acquisition of substantial properties along the State's rivers, including some in the coastal area. The Heritage 2000 Program provides funds for acquisition of historical or culturally significant properties. The Preservation 2000 program provides funds for preservation of natural areas, historic sites, parks, wildlife management areas, and similar sites.

There are many non-government sponsored mechanisms to acquire public access to properties for recreational and conservation purposes. Land trusts and conservation easements are two such mechanisms. Land trusts are non-profit organizations that protect land for its natural, scenic, historic, or productive value. Conservation easements are agreements between property owners and government agencies or a land trust that restrict the type and amount of development and use that may take place on the property. Both mechanisms can be effective complements to government acquisition programs and the regulation of uses to protect sensitive properties. In 1992 the Georgia legislature passed the Uniform Conservation Easement Act, which authorizes and promotes the use of conservation easements. Two non-profit organizations, the Georgia Environmental Policy Institute and the Coastal Georgia Land Trust, are very active in their efforts to assemble land trusts and conservation easements in the coastal region of Georgia for a wide variety of purposes, including habitat protection, greenways, scenic easements, and historic resource protection.

Acquisition of title to culturally valuable properties and utilization of other methods are authorized by the Heritage 2000 Program, among other State-administered programs. The Parks, Recreation and Historic Sites Division provides educational opportunities at certain historical and cultural venues. Hog Hammock, on Sapelo Island, is one example. A uniquely isolated cultural community descended from slaves, this community has special cultural value. The Historical Preservation Division works with local communities to promote the preservation and continuation of cultural communities and traditions, including the historic places in which they live.

## E. Marine Related Facilities

Findings

Commercial docks and marinas, boat ramps, and recreational docks and piers are increasingly popular uses of coastal areas. Commercial docks and marinas serve multiple users and commonly collect a fee for use of their facilities. Recreational docks are private docks not available for public use. Policies that apply to docks apply to both commercial and recreational docks. Both public and private boat ramps are available for general or selective use to launch watercraft, depending upon the ownership of the boat ramp. In 1994, 24,946 boats were registered in the six coastal counties. That figure attributes one boat to every fifteen residences. Given current rates of growth, an increase of 3,200 boats is expected in those coastal counties by the year 2000. There are now 28 public marinas and 36 public boat ramps in the coastal counties. In addition, there are 33 non-boating facilities such as piers and docks available for public use.

The growth of recreational boating and the increase of coastal development in general has led to an increasing awareness of the need to protect waterways. In the federal Coastal Zone Management Act, Congress declared it to be a national policy that state coastal management programs provide for public access to the coast for recreational purposes. Also recognizing the importance of healthy coastal resources to promote recreation, a 1995 Executive Order recognized the social, cultural, and economic importance of recreational fisheries and directed federal agencies to improve aquatic resources to provide increased recreational fishing opportunities. Boating and adjunct activities such as marina operations are important means of public access. If these facilities are poorly planned or managed, however, they may pose a threat to the health of aquatic systems and may pose other environmental and navigational hazards. Ensuring the best possible siting, the best available design and construction, and appropriate operation and maintenance practices for marinas greatly reduces the potential of such threats.

Policies

- Coastal Marshlands Protection Act
- Endangered Wildlife Act
- Game and Fish Code
- Georgia Boat Safety Act
- Georgia Comprehensive Solid Waste Management Act
- Georgia Erosion and Sedimentation Act
- Georgia Fisheries Law Pertaining to Shellfish (Game and Fish Code)
- Georgia Water Quality Control Act
- Protection of Tidewaters Act

- Revocable License Program (Georgia Administrative Procedures Act)
- Right of Passage Act
- Shore Protection Act
- Wildflower Preservation Act

Description

Any marine-related facility, including docks and boat ramps, is subject to the provisions of the Revocable License and the Coastal Marshlands Protection Act. A Revocable License is necessary for use of State-owned tidal water bottoms. A Marsh Permit is necessary for structures built in tidal wetlands, and for dredging and filling of these marshlands. Both Revocable Licenses and Marsh Permits are administered by the Department of Natural Resources, Coastal Resources Division. Recreational docks must also receive the federal "State Programmatic General Permit for Recreational Docks." Under an agreement with the U.S. Army Corps of Engineers, this permit is also administered by the Coastal Resources Division. Marine-related facilities are also subject to the provisions of the Shore Protection Act. This Act prohibits docks, marinas, boat ramps, and boat storage facilities in the dynamic dune field.

The Endangered Wildlife Act protects animal species that are rare, unusual, or in danger of extinction. The Wildflower Act offers similar protection to plant species. Both Acts are applicable only on public lands of the State, but the federal Endangered Species Act applies to both public and private lands. The Game and Fish code protects wildlife resources. All permits issued by the State government for marine-related facilities are required to ensure the safety of endangered species. The State of Georgia has a list of protected animals and plants that State-issued permits must address. In addition to the State's protected species there is a federal list of threatened and endangered species, many of which are included on the State's list. Because the State of Georgia must obey federal law, when the State issues permits, it holds the responsibility of ensuring that federal laws are not violated by the permitted activity. To this effect, State-issued permits must include provisions, if applicable, to protect endangered species. Federal laws such as the Endangered Species Act, the Migratory Bird Act, the Marine Mammal Protection Act, and Standard Manatee Conditions apply if protected species may be adversely impacted by the project. The federal "Standard Manatee Conditions" guidelines, for example, demonstrate the proper measures that must be taken near manatee areas for their protection. If a marina or community dock is constructed near a manatee area, those guidelines must be included in the permit guidelines issued by the State of Georgia.

Through its permits, the State of Georgia has the responsibility for protecting the public interest and state-owned lands. Protection of the public interest includes maintaining currents and water quality. Georgia law also establishes the authority to regulate waste disposal on land

or in water. Permits are issued only if the applicant can ensure that water quality can be maintained and that Georgia waste disposal rules are observed.

State fisheries law requires the Department of Natural Resources to operate a sanitation program in compliance with the National Shellfish Sanitation Program. This law specifies a formula by which the minimum distance of a marina from restricted or approved shellfish harvesting areas is determined. This formula is dependent upon the number of boats, the average number of people per boat, marina usage, and the volume of water in the marina area. This formula, which estimates the fecal coliform contamination from a marina, must meet the standard of 14 MPN/100 ml of water before the marina water will reach a shellfish area.

Under the Coastal Marshlands Protection Act, construction of boat ramps is prohibited in approved shellfish areas. There are no laws, however, which prohibit boat ramps in or near restricted shellfish harvest areas. However, all structures within the jurisdiction of the Coastal Marshlands Protection Act must meet minimum standards and undergo a review of water quality impacts in order to receive a permit. All structures, either in saltwater or freshwater areas, must meet the minimum water quality standards as passed under the Clean Water Act and reviewed by the State's 401 Water Quality Certification Program.

Recreational docks must comply with water quality laws such as the Clean Water Act. The National Shellfish Sanitation Program established standards for activities in or near shellfish areas, but does not set a specific distance limitation. Under the Coastal Marshlands Protection Act, recreational docks are prohibited from use for commercial purposes.

The U.S. Coast Guard is the lead agency that enforces the federal laws pertaining to fueling facilities and contingency plans for spills. Mandated by federal law, these authorities are applied in Georgia but are not part of the State's authorities. In addition to Georgia laws, Section 404 of the federal Clean Water Act regulates dredging and filling. The Corps of Engineers is the lead administrator of Section 404 permits; applicants must follow the sequencing requirements of the Corps of Engineers' 404(b)(1) guidelines. Section 404 of the federal Clean Water Act regulates dredging and filling in wetlands. A Section 401 Water Quality Certification from the Environmental Protection Division is necessary for any marine-related facility that may impact wetlands.

## F. Fisheries, Aquaculture, and Wildlife

Findings

Management of marine fishery resources, including both commercial and recreational activities, is the responsibility of the Georgia Department of Natural Resources, Coastal Resources Division. Commercial marine fisheries are important coastal resources and represent a major industry in Georgia. Approximately 2400 persons purchased commercial fishing licenses in 1995. The principal commercial fishery in Georgia is the shrimp trawl fishery. There were 537 commercial trawler licenses issued in 1995. The total shrimp harvest amounted to approximately 7 million pounds in 1995 and had an ex-vessel value of approximately $27 million. Sale of by-catch (incidental or non-targeted catch) from the shrimp trawl fishery grossed an additional $200,000, and off-season whelk trawling grossed another $200,000. The bait shrimp fishery employs approximately 40 fishermen and has an ex-vessel value of approximately $570,000 annually.

The second largest commercial fishery in Georgia is the blue crab fishery. Approximately 200 individuals rely on crab fishing as their principal occupation. The 1995 harvest of blue crabs in Georgia was approximately 9 million pounds, and had an ex-vessel value of approximately $5 million.

With the exception of a nominal shad season, no large scale gill net fisheries exist in Georgia waters. An offshore hook-and-line snapper/grouper fishery exists that employs approximately 60 fishermen and produces an ex-vessel value of approximately $400,000 to $700,000 annually.

Shellfish is an under-utilized resource of the Georgia coastal area at this time. Currently 496,052 acres of potentially productive shellfish habitat exist in the State. The small shellfish fishery is most affected by water quality. Shellfish (oysters and clams) feed by filtering ambient water, consequently retaining bio-concentrate pathogens and other contaminants. Consumption of shellfish from contaminated waters can result in hepatitis or typhoid. Almost half of the potentially productive acres of shellfish habitat are closed due to unacceptable water quality or lack of data needed to allow harvesting. Of the 171,110 acres of approved habitat, only 25,364 acres are being commercially harvested and 15,509 acres are open to public harvest. The oyster/clam fishery has an ex-vessel value of approximately $100,000 annually. The Georgia coastal area offers great potential for the development of shellfish mariculture.

The ex-vessel value of the harvested resource is but a small percentage of the overall economic value of coastal fisheries. In 1995, approximately eleven processors or seafood packing houses, employing 1,131 individuals, were located in coastal Georgia. There are also

approximately 50 wholesale seafood dealers employing over 100 individuals. No reliable estimates of the economic impact of Georgia commercial fisheries can be found; considering support services and industries, however, it is certainly a substantial multiple of the harvest value.

The marine recreational fishery is another important resource in coastal Georgia. A 1994 survey estimated 443,717 anglers participate in saltwater fishing in Georgia. Direct expenditures by marine fishermen in the State are estimated at $53.4 million annually. The total economic value of recreational fishing, including support services and commodities is estimated at more than $250 million annually. Currently, there are over 25,000 boats registered in the six Georgia coastal counties, representing a ratio of one boat for every 15 residents. Given current rates of growth, an increase of 3,200 boats is expected in coastal counties by the year 2000. There are now 28 public marinas and 36 public boat ramps in coastal Georgia. Planners must consider the continuing popularity of marine fishing and boating to ensure proper accesses and species management.

Aquaculture in the State of Georgia currently is not a large enterprise. An Aquaculture Development Commission was created by an act of the Georgia Legislature (O.C.G.A. 27-4-251, *et seq.*), and became effective July 1, 1992. The duties of the Commission are to make a thorough study of aquaculture and the potential for its development and enhancement in Georgia, including an evaluation of Georgia's natural resources as they relate to aquaculture, an evaluation of species that have a potential for aquaculture in the state, and an identification of constraints to development of aquaculture.

Management of fish and wildlife species, other than marine fisheries, in the coastal area is the responsibility of the Wildlife Resources Division of the Georgia Department of Natural Resources. In order to promote the protection and wise use of Georgia's fish and wildlife resources, the Wildlife Resources Division promulgated the following objectives at their February 1991 Decision Conference:

(1) To provide and to promote opportunities for wildlife recreation;
(2) To acquire, to protect, and to enhance wildlife habitat and natural areas;
(3) To educate the public regarding the importance of wildlife, wildlife habitat, and natural areas;
(4) To gather and dispense scientific information for the sound management of wildlife resources and populations;
(5) To promote non-game wildlife programs;
(6) To develop additional funding sources for all game and fish programs; and
(7) To emphasize the environmental review process.

Recent Wildlife Resources Division emphasis has been placed on a comprehensive land acquisition program to preserve natural areas and maintain habitat for both game and non-game animals.

Policies

- Georgia Aquaculture Development Act
- Georgia Fisheries Law Pertaining to Shellfish (Game and Fish Code)
- Georgia Natural Areas Act
- Georgia Water Quality Control Act

Description

Hunting is recognized as an important wildlife management tool. Through the Game and Fish Code, the Department of Natural Resources, Wildlife Resources Division is designated to operate Wildlife Management Areas, register aquaculture activities, and protect wildlife resources. The Nongame Wildlife Conservation and Habitat Fund provides a mechanism to fund nongame wildlife conservation and habitat acquisition.

The Georgia Natural Areas Act authorizes the Department of Natural Resources to identify areas in the State of Georgia which are of unusual ecological significance, and to secure the preservation of such areas in an undisturbed natural state. Natural areas, as defined by the Act, are tracts of land in their natural state that are to be set aside and permanently protected or managed for the purpose of preserving natural plant or animal communities, rare or valuable members of such communities, or any other natural features of significant scientific, educational, geologic, ecological, or scenic value. These areas are important habitat for fish and wildlife species.

Land trusts and conservation easements are important mechanisms to acquire land for conservation purposes. Land trusts are held by non-profit organizations set up to acquire property for conservation, environmental education, research, etc. Conservation easements are legally binding agreements between a property owner and a governmental body or a land trust that restricts the type and amount of development and use that may take place on the property. In 1992, the Georgia Legislature adopted the Georgia Conservation Easement Act, which authorizes and promotes the use of conservation easements in Georgia. The landowner may retain several rights, including the right to sell, restrict public access, maintain the land for agricultural use subject to best management practices, or to add additional buildings to the site, etc.

An important aspect of fisheries management is protecting habitat through water quality standards. The Georgia Water Quality Control Act establishes regulatory requirements for water

quality and quantity, permits for discharges into surface and subsurface waters, etc. The Georgia Fisheries Law Pertaining to Shellfish protects public health and safety by setting minimum water quality standards for shellfish waters.

The Coastal Resources Division of the Department of Natural Resources actively participates in the South Atlantic Fisheries Management Council and the Atlantic States Marine Fisheries Commission. The Council annually develops an operations plan to conduct federal fisheries management. These plans are developed in coordination with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service, the Skidaway Institute of Oceanography, the University of Georgia Marine Institute, other foundations and private property owners, as well as the other states within the council's jurisdiction. The intent of these operations plans is to supplement existing research data in an effort to implement more meaningful management plans.

There are currently several very active citizen advisory committees involved with fisheries management issues: the Coastal Fisheries Advisory Commission, with the Food Shrimp Issues Subcommittee and the Blue Crab Issues Subcommittee; and the Saltwater Advisory Committee (formerly the Saltwater License Advisory Committee). Input from these Committees is valuable in developing management plans. The Saltwater Fishing License Committee was instrumental in developing the Marine Recreational Fish Enhancement Plan, which is a five-year management strategy.

There are several programs currently in effect to promote wildlife management practices by private property owners. Some examples include: the Forest Stewardship Program, operated under the auspices of the Georgia Forestry Commission; Partners for Wildlife, under the auspices of the Fish and Wildlife Service; and the Acres for Wildlife Program, operated by the Department of Natural Resources. Each of these programs, and several others, provide a different emphasis. Some provide funding mechanisms to lease property for wildlife management, some provide educational materials, and others provide technical support, but each furnish help to the private landowners to foster wildlife management ideals.

The Coastal Resources Division of the Department of Natural Resources has developed several artificial reef sites. These projects, however, are dependent upon discontinuous funding sources. The Coastal Management Program can encourage and assist with locating funding sources for artificial reef projects. A five-year Marine Recreational Fisheries Enhancement Plan has been developed to provide the basis for a longer-term plan that can be subject to periodic updates, with input from a citizen advisory committee. The Coastal Resources Division of the Department of Natural Resources is currently participating in the development of Atlantic Coast

interstate fishery management plans, and cooperating in the development of federal plans for the management of coral, shrimp, reef fish, mackerel, and golden crab.

The Coastal Resources Division of the Department of Natural Resources is an active voting member of the South Atlantic Fishery Management Council and the Atlantic States Marine Fisheries Commission, both of which have active law enforcement committees. The Wildlife Resources Division is actively involved with the Atlantic Flyway Council, and the North American Waterfowl Plan, among others, and works cooperatively with adjacent states, National Marine Fisheries Service (NMFS), the U.S. Coast Guard, and the New England Aquarium to survey, manage and safeguard right whale migration and breeding areas. There are cooperative agreements between the respective law enforcement divisions of the Department of Natural Resources, the U.S. Coast Guard, the NMFS and the U.S. Fish and Wildlife Service (FWS). Local law enforcement agencies frequently cooperate in enforcement of fish and wildlife regulations, and apprehension of suspected violators.

The Department of Natural Resources and cooperative agencies have established manatee corridors and right whale critical habitats for the marine environment. The Department of Natural Resources always considers wildlife corridors during purchase, lease, cooperative agreement, or other acquisition of lands throughout the State. There is no explicit definition of a wildlife corridor that is applicable to all situations, but the concept of connecting several wildlife management areas with corridors is recognized by the Department of Natural Resources and the Coastal Management Program as a sound management principle. Rules pertaining to land-use and zoning are under the authority of local governments.

## G. Public Services and Facilities

Findings

*Public Buildings and Rights-Of-Way*

Although construction of new public or government buildings may serve a need in the public interest, these facilities should also protect the public's interest in resource management through careful consideration of site characteristics, construction methods, and building and site design. Public and quasi-public buildings have potential negative impacts similar to those associated with residential or commercial development. They are of coastal management concern if they involve dredging or filling in productive wetlands, or impact water quality from erosion, storm water run-off, or sewage discharges. There also may be conflicts with other potential uses for the same site locations and other water-dependent uses.

*Water Supply Facilities*

Water supply in coastal Georgia is inextricably linked to groundwater. Approximately 63 percent of water use in the coastal plain is derived from groundwater sources. There are three potential sources of groundwater: (1) shallow aquifers, 85 to 390 feet deep, which supply generally good quality water to rural households and other small quantity users; (2) the principle artesian aquifer, the Floridan Aquifer, 40 to 900 feet deep, that supplies excellent water quality to major industrial and municipal users; and (3) the deep aquifer beneath the Floridan Aquifer and the brackish water zone, which may have eventual industrial application.

Salt water intrusion caused by excessive withdrawals endangers the Floridan Aquifer. While groundwater from this aquifer is plentiful in coastal Georgia, heavy pumping by industrial and municipal users has decreased groundwater pressure and induced large cones of depression in the aquifer in the Savannah and Brunswick areas, and to a lesser degree in the St. Marys area. This resulting pressure imbalance facilitates infiltration of brackish water trapped in formations that underlie the principle aquifer. Therefore, continued groundwater withdrawals and groundwater use must be carefully managed to secure continued high quality water for coastal Georgia. Groundwater management plans and water conservation measures are necessary to allow continued economic and population growth.

Surface water in coastal Georgia provides the other 38 percent of the water used in the coastal plain (the coastal plain extends further inland than does the coastal area as described for management by this program). Of this, 53 percent is used for self-supplied industry, 34 percent is used for irrigation, and 18 percent is used for public supply. Decreasing dependence on groundwater and managing surface water uses more effectively are potential management strategies for sustaining Georgia's groundwater resources.

There is also the potential for adverse impacts associated with the transmission of freshwater. Installation of water pipelines, with the concomitant digging and trenching by construction equipment, can cause environmental damage where they cross wetlands or submerged bottoms. There are also potential secondary impacts from increased growth and development as a result of water supply to new areas. Comprehensive management plans can help to mitigate such impacts.

*Sewage Treatment Facilities*

Sewage treatment facilities include treatment plants and associated transmission systems, lagoons, impoundments, septic tanks, and outfalls. Provision of adequate sewage treatment systems in order to protect public health and welfare, as well as environmental quality in coastal communities, becomes increasingly important with growing populations and urban densities. The primary negative impact associated with sewage treatment systems is water quality degradation caused by effluent discharge from septic tanks or treatment plants. Septic tanks are only effective in treating sewage in areas where soils are suitable for proper drainage, where systems are adequately spaced, and where groundwater and surface water sources are sufficiently distant. Central treatment plants can also present environmental problems. Eventual disposal of the effluent or sludge may degrade the quality of coastal waters, and possibly disrupt wetland systems, recreational activities, and fish and shellfish resources. The same issues involved in the laying of other pipelines can be present in construction of sewer transmission systems.

Certain potential secondary impacts of growth inducement from sewage treatment facilities can result if sewer systems are extended into areas with little previous development. This type of growth catalyst can become a serious problem if sensitive or fragile areas are threatened, or if local zoning or other regulation is inadequate to provide proper management.

*Solid Waste Facilities*

Solid waste disposal is a crucial problem confronting all local governments in Georgia's coastal area. Proper landfilling of solid waste requires special site conditions and operating methods. In the coastal area, the widespread presence of porous soils, a high water table, and seasonal surface flooding severely limit the availability of acceptable landfill sites. Improperly located landfills can directly intercept and pollute the shallow aquifer that underlies much of the coastal area. High amounts of rainfall, characteristic of coastal Georgia, may seep through layers of solid waste and induce formation of leachate in improperly operated landfills. Subsequent pollution of the shallow groundwater may result, thereby affecting the source of water of some coastal residents and wildlife. Additionally, surface runoff polluted by landfills may pose a health hazard to humans, wildlife, and fisheries in coastal waters. Coastal waters may be

adversely affected by the downstream flow of polluted water from dump or landfill sites located far inland on coastal tributaries.

As existing disposal sites become filled to capacity, new sites that satisfy environmental criteria must be located. The following policies for solid waste disposal are important for guiding the location and operation of disposal sites to meet future needs while protecting coastal resources.

*Dams and Reservoirs*

Dams and reservoirs are not currently, and are not expected to be, a controversial issue in the Georgia coastal area. The coastal rivers are broad, relatively slow-moving, and pass through flat, low-lying areas. Georgia coastal rivers have limited suitability for hydroelectric projects. Dams and reservoirs do provide, however, other benefits such as drinking water storage and recreation opportunities; thus they may become important factors in the future. For that reason, dams and reservoirs are considered in the Coastal Management Program for consideration during planning processes.

Many of the possible impacts that might be created by dams, reservoirs and water diversion projects are associated with alteration of normal stream flow. Such impacts include water quality degradation, changes in salinity and water temperature, loss of aquatic species habitat or adequate spawning periods, alteration of the character of downstream coastal marshes, and interdiction of upland sediments destined for incorporation into the coastal sediment budgets. Reservoirs or impoundments also may inundate areas of geological significance, historical interest, or archeological importance. While many of the adverse environmental effects of dams and reservoirs cannot be avoided, specific management policies and techniques can reduce the impact.

Policies

*Public Buildings and Rights-Of-Way*

- Coastal Marshlands Protection Act
- Georgia Erosion and Sedimentation Act
- Georgia Scenic Rivers Act
- Georgia Water Quality Control Act
- Historic Areas
- Shore Protection Act
- Submerged Cultural Resources

*Water Supply Facilities*

- Coastal Marshlands Protection Act

- Georgia Erosion and Sedimentation Act
- Georgia Safe Drinking Water Act
- Georgia Water Quality Control Act
- Groundwater Use Act
- Revocable License Program (Georgia Administrative Procedures Act)
- Shore Protection Act

*Sewage Treatment Facilities*

- Coastal Marshlands Protection Act
- Georgia Erosion and Sedimentation Act
- Georgia Fisheries Law Pertaining to Shellfish (Game and Fish Code)
- Georgia Water Quality Control Act
- Revocable License Program (Georgia Administrative Procedures Act)
- Septic Tank Law (Title 31 - Health)

*Solid Waste Facilities*

- Georgia Comprehensive Solid Waste Management Act
- Georgia Hazardous Waste Management Act

*Dams and Reservoirs*

- Coastal Marshlands Protection Act
- Georgia Safe Dams Act
- Georgia Scenic Rivers Act
- Revocable License Program (Georgia Administrative Procedures Act)
- Shore Protection Act

Description

For additional descriptions of the policies listed above, refer to Chapter Five, "Policies and Management Authority." The following are additional comments with respect to each public service facility area.

*Public Buildings and Rights-Of-Way*

In addition to the State authorities listed above, there are various federal authorities with which there must be compliance for construction of rights-of-way, including the federal Clean Water Act and the National Historic Preservation Act.

No land-disturbing activities shall be conducted without a permit issued by the governing authority of the county in which the activity is proposed. In addition to an erosion control permit, a permit issued under the Shore Protection Act or the Coastal Marshlands Protection Act may be

required. Permit coordination for activities within the coastal zone is a focal point of the Georgia Coastal Management Program.

The Federal Flood Insurance Program is administered through the Federal Insurance Administration, which is a Division within the Federal Emergency Management Agency. The Program establishes standards for construction in designated flood areas, and requirements for flood insurance within the areas.

In addition to the State authorities listed, federal and local health codes establish sewage disposal standards.

The only structures that are permitted under the jurisdiction of the Shore Protection Act are structures of a temporary nature, which must not impose upon the normal functions of the sand-sharing mechanisms. Buildings are not permitted.

*Water Supply Facilities*

In addition to the State authorities listed, there are federal laws such as the Clean Water Act and local health codes concerning drinking water.

The Shore Protection Act establishes permit requirements for the construction of any structure, for any engineering activity, and for any land alteration activity that changes the natural topography or vegetation. Permanent pipeline construction across beaches is prohibited. Open pipeline canals are prohibited within the jurisdiction of the Coastal Marshlands Protection Act and the Shore Protection Act, and recommended for prohibition in other areas of the coastal area.

Federal and State requirements for protection of wetlands do not prohibit activities within wetlands areas, they merely establish certain criteria that are necessary for obtaining a permit to accomplish the activity. The U.S. Army Corps of Engineers has developed a wetlands mitigation strategy in cooperation with several state and other federal agencies.

*Sewage Treatment Facilities*

In addition to the State authorities listed above, the federal Clean Water Act Section 402 (National Pollutant Discharge Elimination System) establishes requirements for permits to discharge pollutants. The Coastal Resources Division staff reviews all federal permits that result in discharges to the navigable waters of the coastal area under the authority provided by section 401 of the Clean Water Act.

The Department of Human Resources and the various County Health Departments are responsible for permitting and monitoring septic tanks.

Within the jurisdiction of the Coastal Marshlands Protection Act and/or the Shore Protection Act, applications for the construction of lagoons or impoundments for waste treatment facilities and similar activities shall be denied.

The National Shellfish Sanitation Program is administered by the U.S. Public Health Service and implemented by the Coastal Resources Division. The National Shellfish Sanitation Program sets standards for water quality and siting requirements for outfalls, among other things.

The Coastal Resources Division coordinates with the Environmental Protection Division and other agencies with responsibility for implementing comprehensive plans affecting sewage treatment, to ensure that proposed projects are compatible with growth and development plans and that alternative locations for sewage treatment facilities are considered.

*Solid Waste Facilities*

The Coastal Resources Division works with the appropriate Regional Development Centers (RDCs) to provide local governments with technical assistance regarding solid waste facilities in the coastal area.

*Dams and Reservoirs*

Dams and Reservoirs are not a significant issue in the coastal area.

## K. Dredging

Findings

Dredging in coastal Georgia is primarily performed by the U.S. Army Corps of Engineers to maintain shipping channels at safe operating depths. Suitable sites for dredged material storage is determined by a "Local Assurer." In the Savannah Harbor, the Local Assurer is the Chatham County Board of Commissioners. At the Port of Brunswick, the Local Assurer is the Glynn County Board of Commissioners. For the Atlantic Intracoastal Waterway, the Local Assurer is the Georgia Department of Transportation.

In the Savannah Harbor, Chatham County and the Georgia Department of Transportation manage dredged material containment areas along more than 20 miles of the Savannah River shipping channel. An average of 7.83 million cubic yards of sediment are removed from the Savannah Harbor annually. Most of the material is concentrated in a large sediment basin on the Back River, which is aided by the operation of tide gates maintained by the Corps of Engineers.

The Port of Brunswick requires dredging and disposal of approximately 1.8 million cubic yards of material per year. More than one half of this material is pumped to an approved off-shore site for deep water disposal. The remainder of the material is pumped to a storage area on nearby Andrews Island.

For the Atlantic Intracoastal Waterway, 135 miles of navigational channel are maintained at a 12 foot depth. This requires the removal of about three million cubic yards of shoal material annually. The State of Georgia provides 83 dredged material disposal sites, not diked, along the Waterway.

Dredged materials are tested for contaminants based upon the U.S. Corps of Engineers/U.S. Environmental Protection Agency Inland Testing Manual. The guidance in this manual recommends an initial assessment, tiered testing approach similar to that employed in the Ocean Testing Manual. The Inland Testing Manual recommends an initial evaluation of existing contaminant information (Tier I) to help identify potential areas of contamination and chemicals of concern to evaluate. If the initial assessment or events indicate problems with sediment contamination, additional chemical testing (Tier II) and biological testing (Tier III) is advocated.

Policies

- Coastal Marshlands Protection Act
- Georgia Erosion and Sedimentation Act

- Georgia Water Quality Control Act
- Shore Protection Act
- Revocable License Program (Georgia Administrative Procedures Act)
- Mountain and River Corridor Protection Act

Description

The Corps of Engineers uses a "reason to believe" test together with a tiered testing approach to determine the necessity and type of testing required on dredged materials. These procedures were formulated jointly by the U.S. Environmental Protection Agency and the Army Corps of Engineers. This approach applies to both ocean and inland disposal sites. The Corps of Engineers holds permittees to the same standards to which they are held.

Through its permits, the State of Georgia has the responsibility for protecting the public interest and State-owned lands. The Coastal Marshlands Protection Act requires a consideration of the public interest before a permit can be issued for a material disposal site in the marsh. The Revocable License protects the State-owned tidal water bottoms; only activities that have minimal impact on State property are issued a revocable license.

Federal permits are also required for projects involving the dredging or filling of wetlands; permitted projects must meet the requirements of the federal Clean Water Act.

# SECTION IV:
# ENERGY FACILITY PLANNING

Energy facilities are important factors in economic growth, development, and national defense. Maintaining Georgia's energy facility infrastructure is important for economic, public health and safety, and environmental reasons. This section describes Georgia's energy facilities, the planning process, and the management authority regarding energy in Georgia.

"Energy facilities" refer to any equipment or facility which is or will be used primarily in the exploration for or the development, production, conversion, storage, transfer, processing, or transportation of, any energy resource; or for the manufacture, production, or assembly of equipment, machinery, products, or devices which are involved in any of these activities. The term includes, but is not limited to, the following.

(1) Electric generating plants;
(2) Petroleum refineries and associated facilities;
(3) Gasification plants;
(4) Facilities used for the transportation, conversion, treatment, transfer, or storage of liquified natural gas;
(5) Uranium enrichment or nuclear fuel processing facilities;
(6) Oil and gas facilities, including platforms, assembly plants, storage depots, tank farms, crew and supply bases, and refining complexes;
(7) Facilities, including deepwater ports, for the transfer of petroleum;
(8) Pipelines and transmission facilities; and,
(9) Terminals which are associated with any of the aforementioned.

## A. Energy Facilities in Georgia

Overall, most of the State's total energy comes from sources outside the State. Coal, which is not mined in Georgia, furnishes about 30 percent of Georgia's energy consumption, gasoline provides 20 percent, other petroleum products provide 20 percent, natural gas provides 20 percent, and hydro power and nuclear sources (combined) provide less than 10 percent of Georgia's total energy consumption.

### 1. Georgia's Electric Utilities

The generation, transmission, and retail distribution of electricity in Georgia is a complex network of competitive organizations. There are three types of retail distribution utilities for

electricity: cooperatives, investor-owned facilities, and municipal systems. Electric generating plants are owned either jointly by two or more of these utilities or individually by one utility. The U.S. Army Corps of Engineers owns hydroelectric generating facilities that provide some electricity to these organizations. In addition, manufacturers (such as paper mills) in the coastal area operate on-site steam and electricity co-generating plants to economically provide for their own needs and sell excess electric generation to the utilities.

Georgia's electric power is generated through a combination of coal, oil, natural gas, nuclear, and hydropower sources. Plants located in the coastal area include McIntosh, Kraft, Riverside, and McManus. The electricity transmission system is integrated with the utilities and interconnects all generating plants. Because the system is interconnected, there are not direct delivery lines from specific generating plants to specific retail service areas. Electricity is delivered to assigned retail service areas through the integrated transmission system. Each retail service area has been delineated and assigned to a specific utility (cooperative, investor-owned, or municipal) by the Georgia Territorial Act. The utility is obligated to serve all customers located in that area. To promote competition, the Act allows customers having a connected load greater than 900 kilowatts (e.g., a large grocery store, a small manufacturer) the opportunity to be served by any of the utilities, regardless of location.

*TABLE 6.2: Electric Utilities Located in the Coastal Area*

| Owner | Plant Name | Fuel Source | Kilowatt Capacity (KW) |
|---|---|---|---|
| **Primary Fuel Plants:** | | | |
| GA Power | McManus | Oil | 143,750 |
| SE&P | McIntosh | Coal | 172,000 |
| SE&P | Kraft | Coal/Gas | 335,000 |
| SE&P | Riverside | Gas | 111,000 |
| **Combustion Turbine Plants:** | | | |
| GA Power | McManus | Oil | 500,600 |
| GA Power | McIntosh | Gas | 607,920 |
| SE&P | Kraft | Gas/Oil | 18,500 |
| SE&P | McIntosh Ct. | Gas/Oil | 160,000 |
| **Hydro-electric Plants:** | | | |
| ACOE | Hartwell | Hydro | 344,000 |
| ACOE | Richard B. Russell | Hydro | 300,000 |
| ACOE | Thurmond (S.C.) | Hydro | 280,000 |
| | TOTAL CAPACITY: | | 2,972,770 |

*a. Investor-Owned Facilities and Servicers*

Savannah Electric and Power Company and Georgia Power Company are investor-owned utilities. They own power generation and transmission facilities in whole or in part, and provide

service in assigned retail service areas as well as to some customers with 900 kilowatts connected load outside their assigned territory. Savannah Electric and Georgia Power do not provide service to all the customers in the coastal area. Their assigned retail service areas generally include larger municipalities and nearby areas.

Savannah Electric's assigned retail service area includes most of Chatham and Effingham counties, plus parts of Bryan, Bulloch, and Screven counties. Georgia Power's assigned retail service area includes Pembroke, Hinesville, Darien, Sapelo Island, Sea Island, St. Simons Island, Brunswick, Kingsland, Folkston, Jesup, Ludowici, and nearby areas.

The plants and service network of investor-owned facilities such as Georgia Power and Savannah Electric and Power Company are regulated by the Georgia Public Service Commission and, therefore, are required to complete Integrated Resource Plans as defined by the Official Code of Georgia Annotated (O.C.G.A. 46-3A) and the rules of the Georgia Public Service Commission.

*b. Electric Cooperatives*

In addition to investor-owned facilities and service networks, there exist electric cooperatives known as Electric Membership Corporations (EMCs). Oglethorpe Power supplies electrical energy to the cooperatives in the coastal area for retail distribution. The EMCs' assigned retail service areas are generally rural but include several municipalities and the suburbs of other municipalities served by investor-owned utilities or municipal systems. There are six EMCs in the coastal area: Planters EMC in parts of Effingham County; Excelsior EMC in a portion of Effingham County; Canoochee EMC in parts of Bryan, Liberty, and Long Counties; Satilla Rural EMC in parts of Wayne and Brantley Counties; Okefenokee Rural EMC in Charlton, Camden, Glynn, and portions of Brantley Counties; and Coastal EMC in parts of Bryan, Long, Liberty, and McIntosh Counties.

Oglethorpe Power owns portions of electric generation plants including Vogle, Hatch, Wansley, Scherer, Rocky Mountain, and Talasee Shoals. Oglethorpe is also a co-owner in the State's network of transmission lines and substations called the Integrated Transmission System. This system provides the means for Oglethorpe to provide generated power to the EMCs and, consequently, to its customers.

As cooperative organizations, Oglethorpe Power and the EMCs are not directly regulated by the Georgia Public Service Commission. However, the generation plants that supply power to their systems are owned in part by organizations that are regulated. Consequently, Oglethorpe Power prepares regular Integrated Resource Plans to support the planning and maintenance of its plants and service network similar to those required by the Georgia Public Service Commission.

*c. Municipal Power Companies*

The Municipal Electric Authority of Georgia (MEAG) provides power to 48 small-to-medium sized cities around the State. MEAG was formed in 1975 to provide wholesale power to smaller municipalities. However, none of the MEAG customer cities are located within the coastal area.

*d. Southeast Power Administration and the Army Corps of Engineers*

The Army Corps of Engineers operates hydro-electric projects in two districts: the Savannah District and the Mobile (Alabama) District. The Savannah District operates three plants called Hartwell, Richard B. Russell, and Thurmond. The Thurmond Plant is actually located on the South Carolina side of the Savannah River, but the Plant supplies a portion of its power to Georgia users. The Hartwell Plant is due to be upgraded in 1996 with an addition of 82,000 Kilowatts of power and the Thurmond Plant is due for upgrading in the year 2003 with an increase in capacity by 74,000 Kilowatts.

The planning and upgrading of Corps of Engineers generation facilities is governed by the planning process of the Corps of Engineers. Their planning process is based upon maintenance and safety reviews, updated on an annual basis, and is not necessarily demand-driven. As federally-built and -operated systems, these generation plants are not regulated by the State of Georgia or the Georgia Public Service Commission. However, Corps of Engineers projects are subject to the federal consistency provisions of the Georgia Coastal Management Program.

2. Natural Gas

Natural gas is used as an energy source for residential, commercial, and industrial uses, as well as for electric generating facilities. A large infrastructure exists to deliver natural gas to all its users. Parts of Georgia are provided natural gas through Municipal Gas Distribution Systems, some of whom are members of the Municipal Gas Authority of Georgia. Other portions of the State are serviced by Atlanta Gas Light Company. Natural gas service is provided to all coastal counties, with the exception of Brantley County, by Atlanta Gas Light Company. Claxton Natural Gas Company provides natural gas service to the Pembroke area. Atlanta Gas Light and Claxton Natural Gas Company operate their gas supply portfolios in accordance with the Federal Energy Regulatory Commissions' regulations.

*a. Natural Gas Pipelines*

Two pipelines supply the coastal region and are owned by Southern Natural Gas Company. The first line runs from the Augusta area to Savannah; the second line runs from Macon to the Brunswick area.

*b. Natural Gas Supplies and Liquefied Natural Gas*

Atlanta Gas Light Company contracts, elects, or is assigned various types of natural gas supplies. Firm transportation capacity and production area underground storage quantities are acquired through wellhead supply contracts and the spot gas market. Firm transportation capacity is supplemented through Liquefied Natural Gas (LNG) supplies and supplemental underground storage allotments. There are three Liquefied Natural Gas plants, owned by Atlanta Gas Light Company, located in Georgia but they are not in the coastal area. The supply of liquefied natural gas is important to the natural gas supplies for the coast but the plants and their management are not expected to impact the coastal area. A former LNG plant on Elba Island in Chatham County may be re-opened by Southern Natural Gas Company as a peak shaving facility with the intention of vaporizing LNG during the summer and winter peak load times. This proposed re-opening should not require any new construction requiring dredging, land disturbing activities, or pipeline construction. If this plant is expanded or if additional LNG facilities are planned and constructed within the coastal area, these facilities will be subject to applicable permit requirements and the oversight of the Georgia Public Service Commission.

*c. Regulation of Natural Gas Utilities*

The Atlanta Gas Light Company is regulated by the Georgia Public Service Commission and is consequently required to have an approved Integrated Resource Plan. These plans are designed to promote energy efficiency, to ensure long-term planning, and to identify future demand and energy needs.

3. Oil and Gas Facilities, Facilities of the Transfer of Petroleum, and Petroleum Refineries

There are no oil and gas refining facilities in the coastal area of Georgia. For general use of oil and gas, the rules for underground storage tanks (O.C.G.A. 391-3-15) apply to the coastal area and to the entire State. The State ports handle and transfer petroleum products as part of their normal course of business. When petroleum products are transported or transferred, the rules of the U.S. Coast Guard apply. The coast of Georgia falls into two Coast Guard regions. These regions have the responsibility and the authority for inspecting and enforcing vessels to ensure that all of the requirements of the law are met pertaining to the transport and transfer of

petroleum materials. As a federal agency, the Coast Guard is subject to the federal consistency provisions of the Georgia Coastal Management Program.

4. Other Energy Facilities

There are no substantial facilities of the following types that are located in or substantially affect the coastal area: Petroleum Refineries and Associated Facilities; Gasification Plants; or Uranium Enrichment or Nuclear Fuel Processing Facilities.

## B. Projected Energy Supply and Demand

Both Savannah Electric and Power Company and Georgia Power perform long-term prediction of energy demands for the State based upon economic models. The principal economic variables used in the energy models include: real income, housing starts, non-manufacturing employment, manufacturing employment, industrial output, and fuel prices. With the exception of fuel prices, the figures used in the model are derived from the Georgia Economic Forecast. Fuel prices are based upon the recommendation of the Southern Electric System Fuel Panel, and are adjusted to reflect retail oil, gas, and electricity prices by customer classes needed for use in the energy models. End-use technology information used in the residential and commercial models comes from a variety of governmental and utility sources, including the Electric Power Research Institute. Legislative and regulatory actions such as the Clean Air Act, which affect the price or usage of electricity, are also considered.

The average annual growth rate of the Georgia territorial energy supply in Georgia Power's forecast period (years 1994-2019) is projected to be 2.0 percent compared to 3.6 percent for the period of 1980-1990. Some key economic variables, such as real personal income and population, are expected to decline in the forecast period as compared to the 1980-1990 period.

The State of Georgia does not have any substantial proven natural gas reserves to utilize. Therefore, Georgia does not produce raw Natural Gas or Liquefied Natural Gas. The most recent data from 1993 indicate that Georgia stored and consumed approximately 344 billion cubic feet of natural gas annually with all gas imported from other areas. This consumption of natural gas represents approximately 20 percent of Georgia's total energy consumption.

## C. Energy Planning, Applicable Laws, and Regulations

The energy planning and certification process in the State of Georgia is governed by statute found in the Official Code of Georgia Annotated (Title 46, Chapter 3A) entitled "Integrated Resource Planning," and also by the Rules of the Georgia Public Service Commission (Chapter 515-3-4) entitled "Integrated Resource Planning." The Public Service Commission requires plans for a variety of public services including power plants and natural gas suppliers. The provisions in the rules of the Georgia Public Service Commission outline the requirement for electric plants to have a plan, endorse the Public Service Commission with the ability to enforce the requirement for a plan, and define the required components of the plan. Under the requirements of Georgia law, integrated resource plans for utilities must contain the following components.

(1) The utility's electric demand and energy forecast for at least a 20 year period;
(2) The utility's program for meeting the requirements shown in its forecast in an economical and reliable manner;
(3) The utility's analysis of all capacity resource options, including both demand-side and supply-side options, and sets forth the utility's assumptions and conclusions with respect to the effect of each capacity resource option on the future cost and reliability of electric service;
(4) The size and type of facilities that are expected to be owned or operated in whole or in part by such utility and the construction of which is expected to commence during the ensuing ten years or such longer period as the commission deems necessary and shall identify all existing facilities intended to be removed from service during such period or upon completion of such construction;
(5) Practical alternatives to the fuel type and method of generation of the proposed electric generating facilities and set forth in detail the reasons for selecting the fuel type and method of generation;
(6) Detail the projected demand for electric energy for a 20 year period and the basis for determining the projected demand;
(7) Description of the utility's relationship to other utilities in regional associations, power pools, and networks;
(8) Identification and description of all major research projects and programs which will continue or commence in the succeeding three years and set forth the reasons for selecting specific areas of research;
(9) Any other information as may be required by the commission; and,
(10) Convention of a public hearing on the adequacy of the plan within 60 days of the filing of the plan.

Utilities are not allowed to increase or decrease the capacity of any of the following: (1) A generating unit of an electric power plant; (2) A long-term power purchase; or (3) A demand-side capacity option by more than 15% without first obtaining a certificate from the Public Service Commission that the public convenience or necessity requires such a change.

The rules of the Public Service Commission include specifications for site selection of future energy facilities. Each utility's application may be approved if it is found to be in the public interest and to comply substantially with the below site specifications. Additionally, each Integrated Resource Plan filed by existing utilities must include, but are not limited to, the site criteria discussed below. Plant site selection *alternatives* (for new utility sites) and site analysis *criteria* (for existing sites) that must be addressed are listed below:

(1) Geological survey data and pertinent site geophysical characteristics, such as seismic and groundwater conditions;
(2) Environmental factors which include, at a minimum:
    (a) Air emission and compliance with the Clean Air Act and other clean air regulations and constraints;
    (b) Water emission including cooling water and other plant effluents as well as compliance with all clean water regulations;
    © Compliance with noise limitations;
    (d) Local endangered species;
(3) Cultural and historic consideration such as properties of architectural, historical, or archaeological significance (districts, sites, buildings, structures, and objects);
(4) Disposal alternatives, to ensure that the most environmentally benign and cost-effective methods are implemented;
(5) Transmission network additions to connect the resource(s) to the bulk power supply system.

Natural gas utilities, also regulated by the Public Service Commission, are required to file an annual gas supply plan and to conduct a public hearing on such a filing (O.C.G.A. 46-2-26.5).

The Georgia Public Service Commission consists of five members elected by qualified voters of the State. The Commission has supervisory powers over all gas or electric light and power companies within the State and may require companies to establish and maintain public services and facilities as may be reasonable and just. In addition, the Commission may prescribe rules and regulations for the safe installation and operations of all natural gas transmission and distribution facilities within the State (O.C.G.A. 46-2-20).

The Georgia Public Service Commission also has the power and authority to allocate any utility service or to alter, amend, suspend, or terminate any existing rule in order to protect the public health, safety, or welfare (O.C.G.A. 46-2-71). The Commission must hold a hearing

respecting any such changes and precede the action with a notice to those affected by the action, except in cases of emergency. During emergency situations, the Commission may take action and notify affected individuals as soon as practicable under the circumstances.

Under Georgia law and rules the Georgia Public Service Commission has the authority to ensure that long term planning of energy and energy facilities occurs, is documented, and there is ample opportunity for public comment in the process. The planning process requires that a multitude of factors be taken into account including environmental concerns, assessments of existing and future demands, energy conservation, maximizing net societal benefit, financial planning, and regulatory constraints. Throughout this process, concerns in the national interest are considered and addressed. As new facilities' sites are selected and facilities' integrated resource plans are updated, these criteria are revisited and reviewed.

Through the Georgia Coastal Management Plan, the Coastal Resources Division encourages the consideration of issues of regional and national interest and the consideration of public health and welfare. Coastal Resources Division staff provides technical assistance with energy facility planning to assist facilities to meet their requirements.

## D. Public Involvement in the Energy Planning Process

The Official Code of Georgia Annotated (§46-3A-2(b)) requires that not more than 60 days after a utility has filed its plan, the Georgia Public Service Commission shall convene a public hearing on the adequacy of the plan. The Commission shall determine: (1) the forecast requirements are based upon substantially accurate data and an accurate method of forecasting; (2) the plan identifies and takes into account any present and projected reductions in the demand for energy that may result from measures to improve energy efficiency in the industrial, commercial, residential, and energy-producing sectors of the State; and (3) the plan adequately demonstrates the economic, environmental, and other benefits to the State and to customers of the utility, associated with the possible measures and sources of supply.

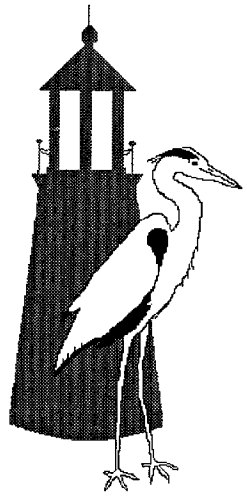
Under circumstances where the Public Service Commission uses its authority to alter, amend, suspend, or terminate existing rates, schedules, contracts, rules, or regulations, a hearing must be held. In cases of emergency, the Commission may take action but must declare the situation an emergency and must afford notice and hearing to the persons affected as soon as is reasonably practicable (O.C.G.A. 46-2-71). These provisions of the law allow public involvement in the energy planning process by providing an avenue for public input to proposed changes to energy facilities. The law requires that public notice must be placed, that hearings are held to discuss any issues, and, in cases of rule changes, the affected parties are properly notified.

## E. Policies

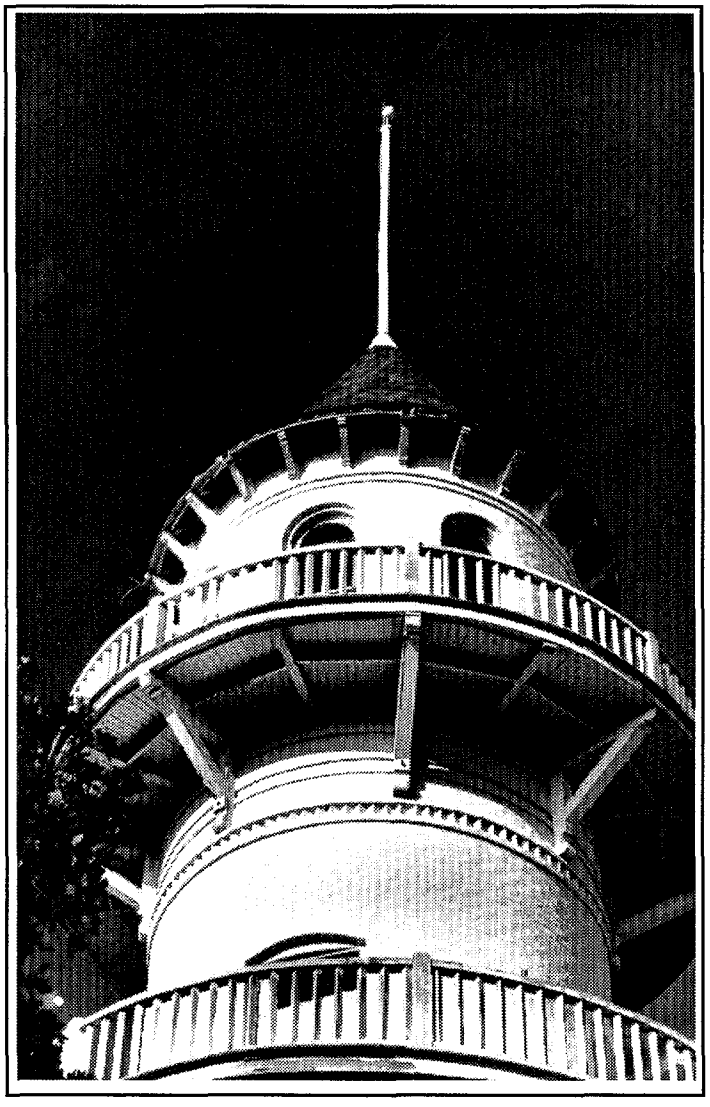
- Coastal Marshlands Protection Act
- Endangered Wildlife Act
- Georgia Air Quality Act
- Georgia Safe Drinking Water Act
- Georgia Underground Storage Tank Act
- Georgia Water Quality Control Act
- Groundwater Use Act
- Shore Protection Act
- Wildflower Preservation Act

## F. Description

The Georgia Water Quality Control Act, Georgia Air Quality Act, Coastal Marshlands Protection Act, Shore Protection Act, and Wildflower Preservation Act policies address water quality, air quality, and habitat (including wetlands) concerns. The Shore Protection Act includes policies to address potential impacts to the sand-sharing system. The Public Services Commission requires that the national interest be considered in planning and siting energy facilities. The Environmental Protection Division has initiated a Coastal Groundwater Comprehensive Management Plan under the authority of the Safe Drinking Water Act and the Groundwater Use Act. This plan includes consideration of energy facilities. The Georgia Underground Storage Tank Management Rules regulate underground storage tanks, including these on energy facilities.



# CHAPTER SEVEN:
# SPECIAL MANAGEMENT AREAS



Thus always does history, whether of marsh or market place, end in paradox. The ultimate value in these marshes is wildness, and the crane is wildness incarnate. But all conservation of wildness is self-defeating, for to cherish we must see and fondle, and when enough have seen and fondled, there is no wilderness left to cherish.

Aldo Leopold
*A Sand County Almanac*

The State of Georgia recognizes the need to address areas that are of particular importance because of their coastal-related values or characteristics, or because they may face pressures which require detailed attention beyond the general planning and regulatory system which is part of the regulatory program. As a result, these areas require special management attention within the terms of the State's overall coastal program. This special management may include regulatory or permit requirements applicable only to the area of particular concern. It also may include increased intergovernmental coordination, technical assistance, enhanced public expenditures, or additional public services and maintenance to a designated area. "Special Management Areas" are, therefore, areas of unique natural resource value, including those exhibiting scarce or vulnerable natural habitats and physical features; those offering substantial recreational value; those of particular economic value; and those of vital importance in protecting and maintaining coastal resources. An area or resource must meet one or more of the following criteria to be designated a Special Management Area.

(1) The area is a unique, scarce, fragile, or vulnerable natural habitat; a unique or fragile physical figuration; or an area of historical significance, cultural value, or scenic importance;

(2) The area demonstrates high natural productivity or essential habitat for living resources, including fish, wildlife, and endangered species and the various trophic levels in the food web critical to their well-being;

(3) The area is one of substantial recreational value and/or opportunity;

(4) The area is one where developments and facilities are dependent upon the utilization of, or access to, coastal waters;

(5) The area has unique hydrologic, geologic, or topographic significance for industrial or commercial development or for dredge material disposal;

(6) The area is one of urban concentration where shoreline utilization and water uses are highly competitive;

(7) The area is one where, if development were permitted, it might be subject to significant hazard due to storms, slides, floods, erosion, settlement, salt water intrusion, and sea level rise; and/or

(8) The area is needed to protect, maintain, or replenish coastal lands or resources including coastal flood plains, aquifers and their recharge areas, estuaries, sand dunes, coral and other reefs, beaches, offshore sand deposits, and mangrove stands.

# SECTION I:
# AREAS OF PARTICULAR CONCERN

This category of Special Management Areas includes areas or resources of such special importance and concern that the State has established regulatory and/or management controls over them. As development and implementation of the Georgia Coastal Management Program continues, areas that may deserve particular attention or designation as Areas of Particular Concern will be studied. Nominations of additional Areas of Particular Concern for inclusion in the Coastal Management Program may be suggested by State agencies, federal agencies, local governments, organizations, and interested private citizens. As long as the designation criteria are met, the Coastal Resources Division may designate new Areas of Particular Concern as a routine program change. Any addition that would require a change in the designation criteria would constitute an amendment to the Program, subject to public review and Commissioner approval as described in Chapter Four, Section II, Part E. Routine program changes and amendments must be approved by the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management (15 C.F.R. §§ 923.80-923.84). The criteria for designating an Area of Particular Concern are as follows.

(1) The area of concern must be inventoried and designated on a generic or site-specific basis, or both;

(2) The area must be identified by location (if site specific) or category of coastal resources (if generic) in sufficient detail that affected landowners, governmental entities, and the public can determine with reasonable clarity whether a given area is designated;

(3) In identifying areas, the nature of the concern must be described as well as the basis on which designations are made;

(4) The management program must describe how it addresses and resolves the concerns for which areas are designated; and

(5) The management program must provide guidelines regarding priorities of uses in these areas, including guidelines on uses of lowest priority.

The Coastal Zone Advisory Committee Task Force identified certain areas as areas of concern because they are unique and either environmentally fragile or economically significant to the coastal area and the State. This section describes the Areas of Particular Concern, along with the policies appropriate to each area. Refer to Chapter Five, "Policies and Management Authority," for more detailed descriptions of the applicable policies.

*TABLE 7.1: Inventory of Areas of Particular Concern*

| |
|---|
| Areas of Historic, Archaeological, Cultural, and Paleoentological Significance |
| Barrier Islands |
| Marsh Hammocks |
| Aquifer Management and Protection |
| Economic Development Areas |
| Public Access and Open Space |
| Freshwater Wetlands |
| Navigational Channels |
| Beaches, Dunes, and the Sand-Sharing System |
| Rivers and Adjacent Wetlands |
| Shorebird Nesting Areas |
| Ocean Management |

## A. Areas of Historic, Archaeological, Cultural, and Paleoentological Significance

Findings

Georgia's coastal area has a rich cultural history. Historic sites attract tourists and local residents alike to learn about the life and history of their predecessors. As of January 1997, 112 historic resources in the coastal area have been nominated to the National Register of Historic Places. The Regional Development Centers and the Department of Natural Resources, Historic Preservation Division provide technical assistance and funding to help identify these resources. Local communities and property owners are the critical link for nominating areas of historical significance. Local governments are required by the Georgia Planning Act to include an inventory of historic resources in their comprehensive plans. Without proper zoning protection, historically-significant areas could be used for activities that would diminish their historical value. It is important that local governments use their zoning powers to protect valuable historic and cultural sites from the impacts of development.

Policies

- Coastal Marshlands Protection Act
- Georgia Comprehensive Solid Waste Management Act
- Historic Areas
- Revocable License Program (Georgia Administrative Procedures Act)
- Shore Protection Act
- Submerged Cultural Resources

Description

The Historic Preservation Division is responsible for identifying historic and archeological sites; for establishing, maintaining, and expanding the site inventory and register of historic places; and for assisting local communities in designating and nominating sites for the National Register. Local communities may initiate recognition of a site, and Regional Development Centers may employ historic planners to assist local communities with the application process.

The Historic Areas and Submerged Cultural Resources Code Sections establish the laws for preservation of historic sites in Georgia. The Georgia Planning Act requires local governments to address historic resources in their local comprehensive plan. The Real Estate Unit of the Georgia Department of Natural Resources acquires property throughout the State under various authorities and for various purposes, including historic preservation.

Under the Georgia Comprehensive Solid Waste Management Act, publicly-owned solid waste facilities are required to identify and consider historic or cultural sites. Georgia law specifies a 5,708 yard minimum distance from historic sites. Private facilities are limited by local zoning requirements that are within the jurisdiction of local governments.

Within the jurisdiction of the Coastal Marshlands Protection Act, the Shore Protection Act, and the Revocable License Program, potential disposal sites for dredging materials must take into account significant historic, cultural, and archeological areas.

## B. Barrier Islands

Findings

Eight major barrier islands and several smaller barrier islands lie along the Georgia coast, separated from the mainland by several miles of salt marsh. These islands currently support a wide range of uses and activities, ranging from wildlife refuge and camping to residential and commercial development. All of Georgia's approximately 88 miles of ocean beach is located on the seaward side of these islands. This fact, combined with coastal Georgia's generally mild climate, makes the barrier islands highly attractive for recreational and commercial development.

Ten of the islands are in public ownership. With one exception (Jekyll Island), these islands lack causeway access and are designated wildlife management areas, heritage preserves, and undeveloped recreational areas. Tybee Island, Sea Island, St. Simons Island, and Jekyll island are the only barrier islands directly accessible by automobile and are thus the only islands

where significant urban development has occurred. Approximately 65% of the total upland acreage of the fifteen largest barrier islands is in public ownership (36% State and 29% Federal). The Georgia barrier island system is the most undisturbed system of large barrier islands in the United States. Section III of this chapter, "Shorefront Access and Protection Planning," provides a more complete description of Georgia's beaches and barrier islands.

Policies

- Coastal Marshlands Protection Act
- Revocable License Program (Georgia Administrative Procedures Act)
- Shore Protection Act

Description

The Coastal Marshlands Protection Act, the Shore Protection Act, and the Revocable License Program consider impacts on barrier islands when issuing permits. Development is allowed if in the public interest. Local governments are responsible for zoning decisions for their communities.

## C. Marsh Hammocks

Findings

In addition to the barrier islands, there are forested islands called marsh hammocks amidst salt marshes. Marsh hammocks exist for a number of reasons. Some are the remnants of old barrier islands formed during times of higher sea level; some are islands separated from larger islands by erosion; some are formations from ballast dumped by ships during the colonial era; some are dredge spoil disposal sites. Marsh hammocks act as protectors for other areas by slowing erosion from high spring or flood tides, acting as wind barriers, and impeding stormwater runoff. Marsh hammocks are botanically unique and can be valuable habitat for eagles and other animal species, as well as rare plants whose seeds have washed ashore. In many cases, Indian middens have been found on these islands. Marsh hammocks are unique scenic counterparts to coastal marshes.

Marsh hammocks are sometimes developed for residential sites, used as platforms for causeways, or used as wetland mitigation sites. As population and development pressures increase, more interest in developing these small upland areas is expected. Since development of these sites often requires considerable investment of infrastructure such as building causeways, laying utility lines to more remote areas, as well as disrupting valuable habitat, the extent of

marsh hammock development that is in the public interest must be carefully evaluated. Erosion and sedimentation buffers help protect surrounding marsh.

Policies

- Coastal Marshlands Protection Act
- Georgia Erosion and Sedimentation Act

Description

Development and associated projects involving marsh hammocks have the potential to impact marshlands. In particular, roads built to developed marsh hammocks may affect the function of the surrounding marsh. All projects impacting salt marshlands are subject to the jurisdiction of the Coastal Marshlands Protection Act. Residential, commercial, and industrial development on marsh hammocks are subject to the 25 foot setback required of the Georgia Erosion and Sedimentation Act. Local governments are responsible for zoning decisions in their communities.

## D. Aquifer Management and Protection

Findings

Coastal Georgia has a series of aquifer systems that vary in their confinement, depth, geologic characteristics, and water yield. The limestone strata underlying the coastal plain form one of the most productive aquifer systems in the country. The shallowest aquifers are near the surface in unconsolidated sediments, and are generally unconfined. The aquifers range in depth from 11 to 72 feet, and commonly yield two to 25 gallons of water per minute. They serve as a supplemental source of water in urban areas, and a primary source of water for domestic and livestock use in rural areas.

The Upper and Lower Brunswick aquifers are located in phosphatic and dolomitic quartz sand, and are generally confined. They range in depth from 85 to 390 feet, and commonly yield 10 to 30 gallons of water per minute. In coastal Georgia, these aquifers are considered to be a supplemental water supply to the Upper Floridan aquifer. Most wells tap both the Floridan aquifer and parts of the Upper and Lower Brunswick aquifer.

The Floridan aquifer is a limestone, dolomite, and calcareous sand aquifer system, and is generally confined. Its depth ranges from 40 to 900 feet, and it commonly yields 1,000 to 5,000 gallons of water per minute, though it can exceed 11,000 gallons per minute. The aquifer was deposited in the period from mid-Eocene to mid-Miocene. Since the aquifer is deeply buried in

the coastal area, the groundwater level is influenced primarily by pumping and not by recharge from local precipitation. Instead, it is recharged with water where it is exposed near the fall line that runs from an area south of Augusta towards Macon, through Albany to Bainbridge. The aquifer flows from the fall line toward the ocean and provides water to the coastal area. The Floridan aquifer supplies 50 percent of groundwater used in Georgia.

The major withdrawals from the Floridan aquifer occur in the Savannah and Brunswick areas. Since pumping began in Brunswick during the late 1800's, withdrawals have lowered the level of the Upper Floridan aquifer and formed a cone of depression centered at Brunswick. This water level decline has allowed saltwater to migrate upward into the Upper Floridan aquifer in Brunswick from the Fernandina permeable zone. A cone of depression has also developed in Savannah. The water level in the Upper Floridan aquifer in the Savannah area is mainly affected by pumping for municipal and industrial uses. The water level in the Upper Floridan aquifer in the Jesup-Doctortown area is mainly affected by industrial pumping at Doctortown, near Jesup. Beneath the Floridan aquifer lie the Claiborne, Clayton, and Cretaceous aquifers. These aquifers are less important as water sources for the coastal area.

As pressure on groundwater use increases and saltwater intrusion and lowering of the water table limit the usefulness of the aquifer, groundwater management issues become more pressing. The continued availability of high quality groundwater is a major limitation for residential, commercial, and industrial development in coastal Georgia. Long-term planning for alternative water uses such as surface water use, water conservation, and limiting excessive withdrawals are necessary to ensure continued access to water and to allow continued economic growth and achieve groundwater quality standards.

Policies

- Georgia Safe Drinking Water Act
- Groundwater Use Act
- Water Wells Standards Act

Description

The Georgia Safe Drinking Water Act charges the Department of Natural Resources, Environmental Protection Division with the responsibility of maintaining the quality of drinking water and maintaining a water-supply program adequate for present and future needs of the state. The Division is also authorized to develop rules and policies for the proper administration of drinking water programs.

The Groundwater Use Act charges the Board of Natural Resources with the responsibility to adopt rules and regulations relating to the conduct, content, and submission of water conservation plans, including water conservation practices, water drilling protocols, and specific rules for withdrawal and utilization of groundwater. The Environmental Protection Division administers these rules and regulations. Groundwater withdrawals over 100,000 gallons per day require a permit from the Division. Permit applications that request an increase in water usage must also submit a water conservation plan approved by the Division Director. The Environmental Protection Division has prepared a comprehensive groundwater management plan for coastal Georgia that addresses water conservation measures, protection from saltwater encroachment, and economic development issues.

The Water Wells Standards Act provides standards for siting, construction, operation, maintenance, and abandonment of wells and boreholes. In the case of individual and non-public wells, the Act requires that they be located as far from known or potential sources of pollutants as possible. The Act establishes licensing requirements for drilling contractors and a State Water Well Standards Advisory Council. The Council has the authority to adopt and amend rules and regulations that are reasonable to govern the licensing of well contractors. Compliance with the Act is required for all activities that use well water. The Council may file a petition for an injunction in the appropriate superior court against any person that has violated any provisions of the Act.

## E. Economic Development Areas

Findings

Continued economic growth is important to the economic health of the coastal area. Local governments are encouraged to use comprehensive planning and zoning authority to guide development at the local level. Through the Georgia Coastal Management Program, the Coastal Resources Division provides information and technical assistance to local governments and developers to assist the planning process and to ensure that appropriate coastal issues are addressed. The Division's role includes providing technical and scientific information that encourages sustainable development in order to make efficient use of resources without degrading the coastal environment and quality of life. Making quality economic growth a priority for the coastal region encourages long-term investment, economic stability, and employment opportunities in years to come.

The median income varies among the coastal counties reflecting the diversity of communities in the coastal area. Chatham County, which includes the City of Savannah, is the most urban county and ranks highest for median income. The comparatively rural counties rank lower for personal income levels. The coastal area has experienced strong population growth for

the period from 1980 to 1990. This population growth is expected to continue at an average of 20 percent per decade. Since increased population means increased use of resources and increased demand for municipal services, development planning and resource management is critical for the coastal area.

Although forestry and fishing are important employers in the coastal area, these industries are expected to lag behind State and national growth trends for the period 1990 to 2005. The service, communication, and transportation industries are expected to show the strongest growth in Georgia. To maintain a healthy economy while protecting natural resources for current and future residents, new development must be sustainable or carefully planned to minimize adverse environmental impacts. Through the Coastal Management Program, resources are available to provide planning and technical assistance, including referrals to experts and agencies.

Policies

Currently, there are no Program policies in this category.

Description

Local governments are responsible for zoning decisions for their communities. These governments may consider setting aside specific areas to promote and encourage economic development. Regional Development Centers assist in planning efforts. The Coordinated and Comprehensive Planning by Counties and Municipalities Act guides local planning.

## F. Public Access and Open Space

Findings

Public access to recreational, wilderness, and other areas of the Georgia coastal area is of paramount importance to a burgeoning population. Section IV of this chapter, "Shorefront Access and Protection Planning," provides a summary of beach and natural areas within the coastal area that can be easily accessed by the public. Section VI of Chapter Six, "Marine Related Facilities," provides additional aspects related to public docks. Also refer to the Coastal Resources Division publication, "Anglers Guide to Georgia's Saltwater Fishing Access Sites" for information.

Policies

- Coastal Marshlands Protection Act

- Georgia Fisheries Law Pertaining to Shellfish (Game and Fish Code)
- Georgia Natural Areas Act
- Georgia Scenic Rivers Act
- Georgia Scenic Trails Act
- Revocable License Program (Georgia Administrative Procedures Act)
- Shore Protection Act

Description

The Nongame Wildlife Conservation and Habitat Acquisition Fund provides a mechanism for voluntary donations and tax refund allocations to establish a fund to acquire property for wildlife habitat. The Georgia Department of Natural Resources has the authority under Title 27-1-6 of the Official Code of Georgia Annotated to "acquire by purchase, condemnation, lease, agreement, gift, or devise lands or waters suitable for ... fish hatcheries, nursery ponds, game ponds, sanctuaries, reservations, and refuges ... and for wildlife restoration, propagation, protection, preservation, management research or management...." Programs such as Preservation 2000 and RiverCare 2000 use State funding to acquire land for conservation and alternative uses. These programs also encourage access to publicly-owned areas for recreational and educational use. Any new tax incentive program will require legislative action.

The Georgia Natural Areas Act authorizes the Department of Natural Resources to identify areas in Georgia which are of unusual ecological significance, and to secure the preservation of such areas in an undisturbed state. The purpose of such acquisition is to allow for scientific study and education, to serve as an example natural area, and to enrich the quality of Georgia's environment. The Act defines natural areas as tracts of land in their natural state to be set aside and permanently protected, or managed for the purpose of preserving natural plant or animal communities, rare or valuable members of such communities, or any other natural feature of significant scientific, educational, geologic, ecological, or scenic value.

The Georgia Scenic Trails Act provides for a Georgia Scenic Trails System, in order to provide for the increasing recreation needs of an expanding population, promote outdoor areas, and provide an alternative to motorized travel. The Georgia Scenic Rivers Act defines scenic rivers to mean those which have valuable scenic, recreational, or natural characteristics that should be preserved for the benefit and enjoyment of present and future generations.

The Coastal Marshlands Protection Act, the Shore Protection Act, the Revocable License Program, and Georgia Fisheries Law Pertaining to Shellfish include policies to prevent docks from having an adverse impact on navigation, marsh habitat, waterfowl, shellfish habitats, or safety. Refer to section VI of Chapter Five, "Marine Related Facilities," for additional

information about docks. Local governments are responsible for planning public access and open space in their communities.

## G. Freshwater Wetlands

Findings

There is no single definition of wetlands among wetland ecologists, managers, or government regulators. Despite differences in wording, however, there is much agreement among scientists with regard to areas or habitats that are wetlands. Problems in defining wetlands stem from the nature of wetlands themselves, which vary greatly in their characteristics and functions. Some wetlands are temporary or transient and some are degraded by dredging and filling, thus making the functions of the wetlands difficult to determine. Most definitions of wetlands include the following three attributes: saturation or inundation by water at some time during the growing season; unique anaerobic soils called "hydric" soils; and "hydrophitic" vegetation which is adapted to or tolerant of saturated soils.

Wetlands are some of the most productive natural areas in the world. Important fish and wildlife habitat, wetlands are the nursery areas for most of the fish and shellfish used for human consumption. These fish and shellfish also depend on wetlands for breeding, spawning, feeding, and cover. Migratory birds and waterfowl use wetlands for food, shelter, breeding, and wintering grounds. Many other animal species, including many threatened and endangered species, rely on wetland habitats.

Wetlands are critical to humans as habitat for commercially-important fish and shellfish species, and as habitat for hunted waterfowl and fur-bearers. They also provide important recreation areas for boaters, hunters, fishers, hikers, photographers, etc. Functionally, wetlands are important in helping control flooding and erosion. They also are frequently located between water bodies and high ground, thus serving as buffers. Finally, wetlands help improve water quality and availability. They purify water by processing nutrients, suspended materials, and other pollutants. They help increase water availability by absorbing water in wet seasons and gradually releasing it during dry periods.

Policies

- Georgia Environmental Policy Act
- Georgia Erosion and Sedimentation Act
- Georgia Safe Drinking Water Act
- Georgia Water Quality Control Act
- Mountain and River Corridor Protection Act

Description

Federal, State, and local laws have been passed to protect wetlands. Many development, construction, agricultural, and silvicultural activities affect or are affected by wetlands. All activities that impact the navigable waters and wetlands of the State require a federal permit from the Corps of Engineers and a certification of consistency with State water quality laws under Section 401 of the federal Clean Water Act. The Savannah District Corps of Engineers is developing standard operating procedures for wetland mitigation which value wetland restoration and enhancement greater than preservation in mitigating situations.

The Georgia Water Quality Control Act gives the Environmental Protection Division the authority to restore and maintain a reasonable degree of purity in the waters of the State, to maintain an adequate supply of such waters, to regulate where needed reasonable usage of State waters, and to require reasonable treatment of sewage, industrial wastes, and other wastes prior to their discharge into such waters. Implementing Rules of the Act include "wetlands" as "waters of the State" to which the regulations are applicable.

The Georgia Erosion and Sedimentation Act requires a 25-foot setback for residential, commercial, and industrial development. The Georgia Environmental Policy Act calls for an environmental effects report when a proposed governmental action may significantly adversely affect the quality of the environment. The Safe Drinking Water Act delegated authority to the Environmental Protection Division to ensure that the drinking waters of the State are utilized prudently to the maximum benefit of the people.

The Mountain and River Corridor Protection Act authorizes the Department of Natural Resources to develop minimum standards and procedures for the protection of wetlands to be used by local governments in developing, preparing, and implementing their comprehensive plans. These include land use activities, land development densities, and activities which involve alteration of wetlands.

## H. Navigational Channels

Findings

Safe navigation of the rivers and estuaries of Georgia's coast are important considerations for management, in conjunction with protection of natural resources. Section VI, "Marine Related Facilities," and Section III, "Transportation Facilities," provide additional information on safe navigating and dredging in association with channel maintenance.

Policies

- Coastal Marshlands Protection Act
- Georgia Boat Safety Act
- Georgia Erosion and Sedimentation Act
- Shore Protection Act

Description

The Coastal Marshlands Protection Act, the Shore Protection Act, and the Georgia Erosion and Sedimentation Act require permits for dredging when excavating shipping channels from the Atlantic Ocean to inland waters and associated sounds. If wetlands are involved, a Section 401 Water Quality Certification is required under the federal Clean Water Act. The Historic Preservation Division reviews dredging and excavation actions under Section 106 of the National Historic Preservation Act to ensure protection of historic resources. Inland sites include, but are not limited to, the Altamaha, Ogeechee, Satilla, Turtle, Brunswick, Savannah, and St. Mary's Rivers and their sounds.

## I. Beaches, Dunes, and Sand-Sharing System

Findings

Georgia's coast is comprised of barrier islands and marshes. All of Georgia's beaches and dunes are found on the barrier islands. Major elements of the island-marsh-tidal system are interrelated: sand beaches and dunes protect the islands from erosion and flooding; islands protect the marshes from the force of storms; and marshes provide feeding and nursery grounds for aquatic life. The dunes, beaches, and sediment transport provided by the rivers of Georgia and neighboring states comprise the "sand-sharing system." This system is vitally important for retaining the beaches and barrier islands.

Through the Georgia Coastal Management Program, the Coastal Resources Division recognizes the need to protect the fragile sand-sharing system, while allowing recreational access to the beaches and waterfront areas. This sand-sharing system, however, is evolving over time. The impacts of unrestrained development can greatly exaggerate the migration of the barrier islands, lead to flooding problems, and reduce the recreational opportunities provided by Georgia's beaches. Careful planning and management of the sand-sharing system are essential to continued and sustainable use of this resource.

Policies

- Shore Protection Act

Description

The Shore Protection Act limits activities along the shoreline and requires a permit for certain activities and structures on the beach. Construction activity in sand dunes is limited to temporary structures such as crosswalks, and then by permit from the Coastal Resources Division. Structures such as boat basins, docks, marinas, and boat ramps are not allowed in the dunes. The Act prohibits operation of any motorized vehicle on or over the dynamic dune fields and beaches, except as authorized for emergency vehicles and government vehicles for beach maintenance or research. The Act also prohibits storage or parking of sailboats, catamarans, or other marine craft in the dynamic dune field.

## J. Rivers and Adjacent Wetlands

Findings

There are five major rivers (the St Mary's, Satilla, Altamaha, Ogeechee, and Savannah Rivers) and several smaller, tidal rivers in coastal Georgia. Georgia's coastal salt marshes, intertidal areas, and tidal water bottoms are the jurisdiction of the Coastal Marshlands Protection Act, and comprise approximately 701,000 acres -- about one-third of all of the salt marshes on the Atlantic Coast. The wetlands provide many useful functions, including storm surge and flood protection, nursery and spawning habitat for marine fish and shellfish, flushing and filtration of land-borne contaminants, and migratory wildfowl nesting and feeding areas. They also provide recreational fishing and boating activities and scenic vistas.

Wetlands and rivers are discussed elsewhere in this chapter, in part G, "Wetlands," of this section, and in section IV, "Shorefront Access and Protection Planning." Protecting and encouraging sustainable use of these valuable resources is of paramount importance to the Georgia Coastal Management Program.

Policies

- Coastal Marshlands Protection Act
- Georgia Natural Areas Act
- Georgia Scenic Rivers Act
- Georgia Scenic Trails Act
- Georgia Water Quality Control Act

- Historic Areas
- Mountain and River Corridor Protection Act
- Submerged Cultural Resources

Description

Stormwater runoff from agricultural field and impervious surfaces (e.g., roads, rooftops, parking lots), commonly empties into wetlands, streams, and embayments. This runoff often contains contaminants such as nutrients from fertilizer, oil from cars, and toxics from pesticide use. Contaminants are a significant cause of shellfish bed closures throughout the country and the world. Section 402 of the Clean Water Act specifies requirements for municipalities to develop and implement stormwater management plans, and to obtain appropriate National Pollutant Discharge Elimination System (NPDES) permits. Savannah, the largest city and urban area in the Georgia coastal area, has a stormwater management plan. The Environmental Protection Division developed amendments to the Georgia Water Quality Control Act to provide regulatory guidelines for stormwater runoff and discharges. Through the Georgia Coastal Management Program, the Coastal Resources Division encourages development of stormwater runoff systems that do not contaminate local waters; the Division can provide technical assistance to help in these efforts.

Discharges must meet federal and State water quality standards. The Georgia Water Quality Control Act is the State authority that addresses the issues and regulations necessary to implement Section 402 of the federal Clean Water Act, the Nation Pollutant Discharge Elimination System. State-funded programs such as Preservation 2000, River Care 2000, and Heritage 2000 provide funds to acquire and manage lands for conservation and alternative uses. The Georgia Scenic Trails Act authorizes the Department of Natural Resources to construct, manage, and maintain a system of trails throughout Georgia.

The Georgia Natural Areas Act authorizes the Department of Natural Resources to identify areas in Georgia which are of unusual ecological significance, and to secure the preservation of such areas in an undisturbed state. The purpose of such acquisition is to allow for scientific study and education, to serve as an example natural area, and to enrich the quality of Georgia's environment. The Act defines natural areas as tracts of land in their natural state to be set aside and permanently protected, or managed for the purpose of preserving natural plant or animal communities, rare or valuable members of such communities, or any other natural feature of significant scientific, educational, geologic, ecological, or scenic value.

The Georgia Scenic Rivers Act defines scenic rivers to mean those which have valuable scenic, recreational, or natural characteristics that should be preserved for the benefit and

enjoyment of present and future generations. The Historic Areas and Submerged Cultural Resources Code Sections also address historic resources.

## K. Shorebird Nesting Areas

Findings

Nesting areas for shorebirds and waterfowl are important considerations for the preservation of these species. There are hundreds of species of birds that either reside or migrate through coastal Georgia. Some of these birds are endangered or threatened with extinction. Others provide a valuable recreational opportunity for hunters and birdwatchers. All are part of the biodiversity of the coastal area that provides stability to the coastal ecosystem. Development considerations must comply with regulations implementing the federal Endangered Species Act and the Georgia Endangered Wildlife Act. For those species not covered under these laws, it is still important to recognize their significance in the coastal ecosystem during consideration of any development activities.

Policies

- Coastal Marshlands Protection Act
- Endangered Wildlife Act
- Revocable License Program
- Shore Protection Act

Description

The Coastal Marshlands Protection Act recognizes coastal marshlands as important habitat and protects these marshlands by limiting and requiring permits for activities and structures in marsh areas. In establishing protections for sand dunes, beaches, sandbars, and shoals, the Shore Protection Act contributes towards the protection of Shorebird Nesting Areas. In addition, projects permitted under authority of the Coastal Marshlands Protection Act, the Shore Protection Act, and the Revocable License require full compliance with the protection of endangered or protected species.

The Endangered Wildlife Act provides for identification, inventory, and protection of animal species that are rare, unusual, or in danger of extinction. The protection offered to these species is limited to those that are found on public lands of the State. It is a misdemeanor to violate the rules prohibiting capture, killing, or selling of protected species, and protection of protected species on public lands. Some important Shorebird Nesting Areas are protected as natural areas. Refer to Section II, "Areas of Preservation and Restoration."

## L. Ocean Management

Findings

The Atlantic Ocean is a substantial resource for Georgians. It provides food supplies, a means of transportation, historic sites and relics, valuable live bottom habitat, and potential sites for waste disposal and phosphate mining. As is the case on land, not all uses of ocean resources are mutually compatible. Further, some ocean uses can have impacts on nearshore and land-based resources. Mining and oil and gas activities, for example, can have severe and wide-reaching environmental impacts.

Minerals are abundant in the marshes and estuaries, and phosphates and strategic minerals (e.g. titanium) have been identified as resources with significant economic potential. Some dredging occurs for sand, gravel, and shell. The phosphate deposits of major economic potential lie in upper Miocene strata in Wilmington, Little Tybee, Cabbage, and Wassaw Islands. There are also indications of minable concentrations approximately 10 miles offshore. At least 800 tons of 100 percent bone phosphate of lime could be recovered at a profit using 1969 technology levels. Possible adverse impacts of phosphate mining include the destruction of large areas of marsh-estuarine habitat, increased biological oxygen demand from sediment disturbance, hydrologic changes and patterns of sediment disruptions, and accidental rupture of the impermeable layer capping the aquifer and the consequent saltwater intrusion. Indirect impact on industries such as fisheries, mariculture, recreation, and tourism could also occur.

Other ocean management issues such as transportation of hazardous materials and takings of marine mammals can adversely affect habitat and biological populations. Regional management of fisheries, through the South Atlantic Fisheries Council, is a well-recognized. Other resources, however, have less defined management programs and are, therefore, more vulnerable to exploitation. The State of Georgia's jurisdiction over the ocean extends three nautical miles beyond the State's shoreline. Georgia can create laws and rules to regulate activities within this boundary. Beyond three miles, however, Georgia's direct authorities are more limited. Certain activities that occur beyond the three-mile limit that impact ocean and land resources may be subject to State law through federal consistency (See Chapter Eight).

Policies

- Coastal Marshlands Protection Act
- Endangered Wildlife Act
- Erosion and Sedimentation Act
- Georgia Oil and Gas and Deep Drilling Act
- Shore Protection Act

Description

Georgia's Oil and Gas and Deep Drilling Act regulates oil and gas drilling activities to provide protection of underground freshwater supplies and certain "environmentally sensitive" areas. Implemented by the Board of Natural Resources, the Act establishes requirements for drilling, casing, and plugging of wells for oil, gas, or mineral exploration.

The Georgia Endangered Wildlife Act and Wildflower Protection Act provide exemptions for construction activities and are limited to enforcement on public lands only. However, all State-issued permits must also ensure that the requirements of federal laws such as the federal Endangered Species Act and the Marine Mammal Protection Act are met.

The Shore Protection Act and the Coastal Marshlands Protection Act regulate activities which may affect the sand-sharing system, or coastal marshlands. Any near-shore ocean activity may be subject to these Acts. In addition, activities outside State waters that may impact Georgia's valuable sand-sharing system and marshland resources must comply with these acts under the federal consistency provisions.

The Erosion and Sedimentation Act requires local governments to adopt a comprehensive ordinance establishing procedures governing land-disturbing activities. The Act also requires permits for specified land-disturbing activities such as the construction or modification of manufacturing facilities, construction activities, certain activities associated with transportation facilities, and activities on marsh hammocks. Exemptions include: surface mining, granite quarrying, and minor land-disturbing activities such as home gardening, construction of single-family homes built or contracted by the homeowner for his or her own occupancy, agricultural practices, forestry land management practices, dairy operations, livestock and poultry management practices, construction of farm buildings, Department of Transportation construction and maintenance projects, and others.

# SECTION II:
# AREAS OF PRESERVATION AND RESTORATION

This category of Special Management Areas includes those areas exhibiting scarce or vulnerable natural habitats and physical features; those offering substantial recreational value; and those of vital importance in protecting and maintaining coastal resources. The forests, marshes, streams, beaches, and coastal waters warrant special attention in the State's coastal management program because of their ecological and economic importance. The fact that these are finite and limited resources which need careful preservation and thoughtful management is increasingly evident. The following areas have been categorized as Areas of Preservation and Restoration by because they, by definition, include procedures to designate the areas for the purpose of preserving and/or restoring them for their conservation, recreation, ecological, historical, and/or aesthetic values.

***TABLE 7.2: Inventory of Areas of Preservation and Restoration***

Heritage Trust Program Lands:
- Ossabaw Island -- Chatham County
- Richmond Hill Wildlife Management Area -- Liberty, Bryan, and McIntosh Counties
- Wormsloe Historic Site -- Chatham County
- Little Tybee Island / Cabbage Island -- Chatham County
- Altamaha River Corridor -- McIntosh, Wayne, and Long Counties

Wildlife Management Areas:
- Altamaha Wildlife Management Area -- McIntosh County
- Dixon Memorial Wildlife Management Area -- Brantley County
- Little Satilla Wildlife Management Area -- Wayne County
- Ossabaw Island Wildlife Management Area -- Chatham County
- Paulk's Pasture Wildlife Management Area -- Glynn County
- Rayonier Wildlife Management Area -- Wayne and Brantley Counties
- Richmond Hill Wildlife Management Area -- Bryan and McIntosh Counties
- Sansavilla Wildlife Management Area -- Glynn and Wayne Counties
- Richard J. Reynolds Wildlife Management Area -- McIntosh County

State Parks and Historic Sites:
- Crooked River State Park -- Camden County
- Fort McAllister Historic Site -- Chatham County
- Skidaway Island State Park -- Chatham County
- Fort King George Historic Site -- McIntosh County
- Hofwyl-Broadfield Plantation Historic Site -- Glynn County
- Fort Morris Historic Site -- Glynn County
- Wormsloe Historic Site -- Chatham County

Jekyll Island -- Glynn County

Sapelo Island National Estuarine Research Reserve -- McIntosh County

## A. Heritage Trust Program Lands

Heritage Trust Preserves within Georgia's coastal area, because of their unique natural, historical, and cultural values, are designated Areas of Preservation and Restoration. The Georgia Heritage Trust Program was established by the Heritage Trust Act of 1975. The purpose of the Heritage Trust Program is to identify those areas in Georgia that exhibit unique natural characteristics, special historical significance, or particular recreational values, and therefore warrant protection through the acquisition of fee simple title or lesser interests, or by utilization of other available methods. A "heritage area" is an area that has been identified by the Board of Natural Resources as having significant historical, natural, or cultural value.

A heritage area that has been acquired by the Department of Natural Resources for the Heritage Trust Program, and any other real property owned by the State of Georgia and under the custody of the Department of Natural Resources, may be dedicated as a heritage preserve and shall contain a designation of the best and most important use or uses for the particular area. Heritage preserves, upon written recommendation of the Board of Natural Resources and approval by the Governor, shall be held by the State in trust for the benefit of the present and future generations of Georgia citizens. Heritage preserves may not be put to any use other than the dedicated use or uses. Any lands within the coastal area dedicated as heritage preserves in the future will also be designated as "Areas of Preservation and Restoration" by the Georgia Coastal Management Program.

Priority of Uses for Heritage Trust Program Lands

(1) The dedicated uses of the specific heritage preserve;
(2) Uses that allow public enjoyment of the areas as long as the primary natural character of the area is not disrupted;
(3) Uses that are compatible with the area's wildlife and wildlife management;
(4) Uses that jeopardize the integrity of the Heritage Trust Program are prohibited.

## B. State Wildlife Management Areas

Wildlife Management Areas located within the coastal area are designated as Areas of Preservation and Restoration. The Georgia Department of Natural Resources, Wildlife Resources Division is empowered to acquire land areas and to enter into agreements with landowners for purposes of managing wildlife species and establishing specific sanctuaries, wildlife management areas, and public fishing areas. The Wildlife Resources Division administers a management plan for each area that establishes short- and long-term uses and guidelines for the protection and use of each specific area. These areas owned and/or managed by the Wildlife Resources Division are important for conservation of wildlife and for recreational

hunting and fishing opportunities. New acquisitions of wildlife management areas and public fishing areas within Georgia's coastal area will be designated as Areas of Preservation and Restoration. The Wildlife Management Areas within the jurisdiction of the Coastal Marshlands Protection Act, the Shore Protection Act, and/or the Revocable License receive the additional protection provided by these authorities.

Priority of Uses for State Wildlife Management Areas

(1) Uses that are consistent with the wildlife management area or public fishing areas plan for each designated area; and
(2) Uses that are compatible with the area's wildlife, wildlife habitats, and wildlife management that simultaneously provide public recreational opportunities such as hunting and fishing.

## C. State Parks and Historic Sites

State parks and historic sites within the coastal area are designated Areas of Preservation and Restoration. The Parks, Recreation, and Historic Sites Division of the Georgia Department of Natural Resources is responsible for the maintenance and operation of State parks and historic sites within the coastal area. These State parks and historic sites provide a wide variety of recreational opportunities and educational programs to Georgia residents and visitors. The State parks and historic sites within the coastal area also highlight many aspects of coastal Georgia's natural and cultural heritage.

The Parks, Recreation, and Historic Sites Division prepares management plans and regulates uses of each State park and historic site. Future additional State parks and historic sites within the coastal area will be designated as Areas of Preservation and Restoration.

Priority of Uses for State Parks and Historic Sites

(1) Varied recreational activities open to the public;
(2) Non-intensive uses that require minimal feasible alteration and that maintain the natural functions of the area; and
(3) Provision of educational opportunities to park visitors.

## D. Jekyll Island

Jekyll Island is the sixth largest of coastal Georgia's barrier islands, with about 4,400 acres of upland. Jekyll was named for Sir Joseph Jekyll, the largest contributor to Georgia's

colonization. At one time, the English operated an outpost garrison on Jekyll to support the fortifications of General Oglethorpe on St. Simons Island to the north. In 1886, the island was purchased by a group of America's wealthiest families who developed it into the nation's most exclusive resort of the time, the Jekyll Island Club. By 1900, the members of the Jekyll Island Club represented one-sixth of the world's wealth. The club closed in 1942 at the outbreak of World War II, and never reopened. The State of Georgia acquired Jekyll Island in 1947 for use as a State park. In 1950, the State legislature established the Jekyll Island Authority (O.C.G.A. 12-3-230) to operate the island's facilities. The State purpose of the Authority is to maintain and to protect Jekyll Island's resources using funds generated from its amenities, and to restore and conserve the facilities. Jekyll Island is not, therefore, within Georgia's system of State parks. In 1978, the Jekyll Island Club Historic District was designated a National Historic Landmark.

The Jekyll Island Authority is responsible for planning and regulating uses of Jekyll Island within the guidelines established in the "Jekyll Island -- State Park Authority Act." Due to Jekyll Island's unique recreational, historical, and cultural value, it is designated an Area of Preservation and Restoration.

Priority of Uses for Jekyll Island

(1) Uses that preserve the historic and cultural values of Jekyll Island;
(2) Varied recreational activities open to the public;
(3) Non-intensive uses that require minimal feasible alteration and that maintain the natural functions of the island; and
(4) Provision of educational opportunities to visitors.

### E. Sapelo Island National Estuarine Research Reserve

Congress created the National Estuarine Research Reserve System (NERRS) in 1972, in order to develop a system of estuarine reserves that represents a wide range of coastal and estuarine habitats found in the United States and its territories. In 1975, Georgia proposed the Duplin River estuary as a national estuarine sanctuary. The U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) studied and approved the State's proposal, and the site received designation as the Sapelo Island National Estuarine Sanctuary in December 1976. Sapelo Island was the second estuarine sanctuary designated as part of the national system. These protected estuarine areas are now know as the National Estuarine Research Reserve System. As part of the national program, Sapelo Island represents the Carolinian biogeographic region.

The Sapelo Island National Estuarine Research Reserve (SINERR) occupies almost one-third of Sapelo Island. Sapelo Island is the fourth largest Georgia barrier island, and one of the most pristine. The reserve, about 6000 acres, is made up of the Duplin River estuary, maritime forest, and beach and dune areas. The Duplin River estuary includes unspoiled coastal marsh and tidal creeks. This area represents one of the earth's most biologically productive systems and was formed at its present location five to ten thousand years ago. Not only is the island rich in natural history, but also in human history dating back over 6000 years.

The Georgia Department of Natural Resources manages the SINERR in conformance with the applicable NOAA regulations for the National Estuarine Research Reserve System and with a memorandum of agreement between the two agencies. The two primary purposes of the SINERR are to protect natural and cultural resources, and to allow scientists to investigate and research the functions of the estuarine system. Public education and compatible recreation use are also part of the SINERR's program. The University of Georgia Marine Institute operates a major research center within the SINERR that provides scientists from around the world the opportunity to study estuarine and marine resources, geologic development of barrier islands and associated shoreline processes. Research at the Institute has generated more that 600 publications.

The Sapelo Island National Estuarine Research Reserve is an Area of Preservation and Restoration due to its important research, educational, and recreational attributes.

Priority of Uses for Sapelo Island NERR

The priority of uses for Sapelo Island National Estuarine Research Reserve are those research, educational, and recreational activities conducted within the guidelines and regulations established for National Estuarine Research Reserves, and the goals and objectives established by the Department of Natural Resources with assistance from the SINERR Advisory Committee.

# SECTION III:
# SHOREFRONT ACCESS AND PROTECTION PLANNING

A comprehensive coastal management plan must provide a definition of the term "beach" and a planning process for the protection of, and access to, public beaches and other public coastal areas of environmental, recreational, historical, aesthetic, ecological or cultural value. Georgia has defined "beach" in the Shore Protection Act (O.C.G.A. 12-5-230, *et seq.*) as "a zone of unconsolidated material that extends landward from the ordinary low-water mark to the line of permanent vegetation." Management consideration of public beaches and other public areas within the purview of the Georgia Coastal Management Program provides a planning framework for shorefront access and protection.

The coast of Georgia extends about 100 linear miles from the mouth of the St. Mary's River in the South to the mouth of the Savannah River in the North. The Savannah, Ogeechee, Altamaha, Satilla, and St. Mary's Rivers, as well as several smaller tidal rivers, empty into the Atlantic Ocean along Georgia's coast. The coast is characterized by an extensive system of salt marshes, tidal estuaries, and sounds that separate a series of eight major and several smaller barrier islands from the mainland. The "shoreline" of Georgia, therefore, is estimated to be more than 2,344 miles long when including all tidally-influenced shores. Unlike many other areas of the East Coast, approximately two-thirds of Georgia's islands are parks, refuges, or preserves. Georgia's coastal marshes comprise approximately one-third of the remaining salt marshes on the Atlantic Coast. All major elements of the island-marsh-tidal system are interrelated: sand beaches and dunes protect the islands from erosion and flooding; the islands protect the marshes from the force of storms; and the marshes provide feeding and nursery grounds for aquatic life.

## A. Georgia's Barrier Islands

All of Georgia's beaches are located on the barrier islands, and most are ocean-facing. Georgia's 13 barrier islands comprise about 76,300 acres and include approximately 88 miles of beach. The largest island, Cumberland Island, has approximately 16.9 miles of beach on its 15,100 acres. Ossabaw, Sapelo, and St. Simons islands are also larger than 10,000 acres.

Of the 88 miles of beaches, approximately 19 miles have easy public access. All of the beaches in Georgia belong to the citizens of Georgia and are open to the public to the ordinary high water mark. Access to most of Georgia's beaches is difficult because they are located on islands not connected to the mainland by roads. While all of Georgia's beaches are accessible by boat, access is limited, for safety reasons, to non-motorized boats on Tybee, Sea, St. Simons, and

Jekyll Islands. Motor vehicle traffic is prohibited on all of Georgia's beaches, except by permit from the Department of Natural Resources.

*TABLE 7.3: Inventory of Georgia's Barrier Islands*

| Island | Approximate Acreage | Approximate Miles of Beach |
|---|---|---|
| Tybee | 1,500 | 3.4 |
| Little Tybee | 1,600 | 3.0 |
| Wassaw | 2,500 | 6.0 |
| Ossabaw | 11,800 | 9.5 |
| St. Catherines | 7,200 | 11.0 |
| Blackbeard | 3,900 | 7.5 |
| Sapelo | 10,900 | 5.6 |
| Little St. Simons | 2,300 | 6.5 |
| Sea | 1,200 | 3.8 |
| St. Simons | 12,300 | 3.8 |
| Jekyll | 4,400 | 8.0 |
| Little Cumberland | 1,600 | 2.4 |
| Cumberland | 15,100 | 16.9 |
| Totals | 76,300 | 88.3 |

Tybee Island

The northernmost of Georgia's barrier islands, Tybee Island is located within a short drive from Savannah, the largest city in Georgia's coastal area. Tybee Island's approximately 3.4 miles of beach are easily accessible by dune crosswalk structures and paths. There are three parking areas for beach access that can accommodate approximately 1500 cars. A fee of $5.00/day is charged between St. Patrick's Day (March 17) and Labor Day (or longer if warm weather prevails). There are also approximately 1500 metered parking spaces on streets in close proximity to the beaches. The combined revenue from the parking fees amounted to approximately $44,000 in 1994. The revenue is collected and used by the city of Tybee Island for law enforcement, lifeguards, beach maintenance, etc. There is one fishing pier with parking. Additionally, there are several private parking lots. There are three public dune crosswalk structures on the north end of the Island, eight public crossovers at the ends of streets that terminate at the dunes, as well as many privately-owned dune crossovers. The beach renourishment in 1995 included artificial dune construction, with re-vegetation of the artificial dunes and construction of three additional public dune crossover structures.

Little Tybee Island

State-owned and managed as a Heritage Preserve, Little Tybee is accessible only by boat and open to the public for day-use only.

Wassaw Island

Federally-owned and managed as a Wildlife Management Area, Wassaw is accessible only by boat. Use of the island is limited to tours conducted by the U.S. Fish and Wildlife Service.

St. Catherine's Island

Privately-owned and managed by the New York Zoological Society as a wildlife preserve, St. Catherine's is accessible only by boat and is not open to the public. Several exotic species, such as Grevy's Zebras, Palm Cockatoos, and Ring-Tailed Lemur are raised on the island for subsequent release back into the wild.

Ossabaw Island

State-owned and managed as a Heritage Preserve and Wildlife Management Area, Ossabaw is accessible only by boat and is restricted to hunting only.

Blackbeard Island

Federally-owned and managed as a Wildlife Management Area, Blackbeard is accessible only by boat. Public access is controlled by the U.S. Fish and Wildlife Service.

Sapelo Island

State-owned and managed in part as a Wildlife Management Area, Sapelo is accessible only by boat. Use of the Wildlife Management Area is restricted to hunting and primitive camping. A "pioneer campsite" with limited restroom and shower facilities is available. The Georgia Department of Natural Resources operates a scheduled ferry service to the island. There are a limited number of private residences and tourist-related facilities on the island. The Sapelo Island National Estuarine Research Reserve (SINERR), operated by the Georgia Department of Natural Resources in conjunction with the National Oceanic and Atmospheric Administration, provides educational and research opportunities on the island. SINERR also includes the upland, marsh, and ocean areas in close proximity to Sapelo Island.

Wolf Island

Managed by the U.S. Fish and Wildlife Service as a Nature Preserve, Wolf Island is accessible only by boat. There is no beach on the island.

Little St. Simons Island

Privately-owned, Little St. Simon is accessible only by boat. Tours and lodging are available by reservation. Lodging is limited to small bed-and-breakfast facilities.

Sea Island

A privately-owned residential island, Sea Island is accessible by automobile via a causeway from St. Simons Island, and by boat. There is no land-side access to public beaches, except the areas associated with the Cloister Hotel complex, available to guests of the hotel only. There are no public parking areas on the island, and no access to beaches from the public thoroughfares. Although the beaches are public, they can be accessed by non-motorized boat only. Sea Island (as well as Tybee, Jekyll, and St. Simons Islands) has a boating safety zone that prohibits motorized boating within 1,000 feet of the shore, limiting beach access to sailboats, kayaks, surfboards and other non-motorized water craft. The southern end of the island is most easily accessible by boat from East Beach on St. Simons Island.

St. Simons Island

With approximately 14,000 permanent residents, St. Simons Island has the largest human population of Georgia's barrier islands. The island is accessible by causeway from the mainland, by boat, and by air. The public beaches on St. Simons Island are easily accessible. There are 24 specific beach access points and nine overlooks. Nineteen of the access points are improved with a county-provided crosswalk. Seventeen access points have a total of 677 public parking spaces, five of which are reserved as handicapped parking. The largest parking lots, providing direct access to the beaches, are located at East Beach and Massengale Park. There is free public parking near the fishing pier that is within easy walking distance of beaches. There are four areas equipped with public restrooms: Neptune Park (near the Pier), the Lighthouse, Massengale Park, and First Street (near the old Coast Guard Station). The facilities at Massengale Park include picnic tables and barbecue grills. The facilities at East Beach include a fenced and lockable storage site for non-motorized water craft, and a unique crosswalk structure that allows boats to be hauled across the dunes with minimum impact. Bike trails throughout the island connect to the beaches.

Jekyll Island

Jekyll Island is State-owned and operated by the Jekyll Island Authority. There is a $2.00 per day parking fee that is collected upon arrival to the island. Access to the island is via a causeway from the mainland. In addition to golf courses, hotels, and convention facilities, Jekyll Island offers excellent public access to the approximately eight miles of beaches. There are 15 beach access locations associated with hotels on the island, all of which provide dune crosswalk structures and parking facilities. There are beach access provisions on 13 streets in residential areas of the island, all of which have paths to the beach and three of which have crosswalk structures. There are nine public beach areas that provide over 2,500 parking spaces and crosswalk structures. Four of these areas provide access facilities to accommodate handicapped individuals. There are also three picnic areas, with 185 parking spaces and crosswalk structures to provide access to the beach. One of the picnic areas provides facilities to accommodate the handicapped. There is a full-featured campground for tents and recreational vehicles that is within walking distance to the beach and a fishing pier.

Little Cumberland Island

Little Cumberland is privately-owned and accessible only by boat. There is limited access to the beaches, and public access to the rest of the island is prohibited.

Cumberland Island

Federally-owned and managed by the National Park Service as a National Seashore, Cumberland is accessible only by boat. A scheduled ferry service operates daily, with a limit of 300 persons allowed on the island each day. There are a few private residences, and a limited number of primitive camp sites on the island which must be reserved in advance. Cumberland Island hosts a community of feral ponies.

## B. Access to Non-Beach Shorefront and Marsh Areas

In addition to the 88 miles of beaches, there are approximately 2,200 miles of shorefront on coastal Georgia's rivers and marshes. Access to these areas is provided in each of the eleven coastal counties by private and public roads, boat ramps, and hiking trails. The waterways are public property and easily accessible by boat for recreational fishing, birdwatching, photography, and other activities. Several private entrepreneurs offer guide service for nature observation, fishing, and hunting. Private hunting and fishing clubs are found throughout the region.

The Parks, Recreation, and Historic Sites Division of the Department of Natural Resources offers canoe trips on the Altamaha and Satilla Rivers, and several private companies offer kayak and canoe trips on the rivers and marsh areas throughout coastal Georgia. Several State and federal parks are located adjacent to marshes or rivers, and offer short hiking trails. A few even provide nature guidebooks or trail markers to help identify plant and animal species that might be encountered, as well as historical and cultural information about the area. Scenic overlooks and historical markers alongside roadways are found throughout coastal Georgia.

### C. Planning for Beach and Shorefront Access

There is a variety of public and private beachfront property in coastal Georgia. Access to the beaches is often limited to water craft only. Tybee Island, Sea Island, St. Simons Island, and Jekyll Island have a boating safety zone that prohibits the use of motorized craft within 1000 feet of the beach, thereby further limiting beach access to non-motorized water craft. This is not a serious limitation on Tybee Island, St. Simons Island, or Jekyll Island, but is a serious restriction to the use of Sea Island's beaches.

The Georgia Planning Act (O.C.G.A. 45-12-200, *et seq.*) requires each local government to develop a comprehensive plan to guide growth and development as a condition to receive State funding assistance. On the federal level, the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 mandates a "continuing, comprehensive, and cooperative" transportation planning process for the state and urbanized areas. This planning effort must include alternative modes of transportation such as bicycling and walking. The Act provides a link between community transportation planning and planning for local recreation trails.

Under the Georgia Planning Act, minimum planning standards were developed for the preparation, adoption, and implementation of local comprehensive plans. The planning standards constitute a three-step planning process: inventory and assessment; needs and goals; and implementation and strategy. Assistance for preparing the recreational component of local comprehensive plans is provided by the "Georgia Recreation Planning Manual -- A Manual for Georgia Communities" prepared by the Parks, Recreation and Historic Sites Division. Technical assistance is also available from the Recreational Technical Assistance Office at the University of Georgia's Institute of Community and Area Development, the Regional Development Centers, and various other civic, student, and citizen groups.

As part of the development of local comprehensive plans, the assessment, need, and development of coastal access is addressed by local governments in the coastal area. There are six counties located directly on the coast. Only two of the coastal counties, Chatham and Glynn,

have beaches that are easily accessible by automobile or trail; the beach on Tybee Island is located in Chatham County, and the beaches of St. Simons Island and Jekyll Island are located in Glynn County. As a State-owned island, ordinances governing Jekyll Island are developed and implemented by the Jekyll Island Authority. Sea Island is also located in Glynn County, but its beaches are not easily accessible. All of the other beaches in Georgia are located on islands that are not easily accessible and are not addressed in local comprehensive management plans.

## D. The Role of Georgia's Coastal Management Program

Through the Georgia Coastal Management Program, the Coastal Resources Division seeks to ensure public access to beaches and other areas of the ocean front, and to protect and maintain those areas as a sustainable resource. Not a land use doctrine, the Coastal Management Program provides a management framework through which local land use decisions can be coordinated with all interested parties. Georgia's Coastal Management Program facilitates beach and shorefront access through the following activities.

### Publicize Public Access

The staff at the Coastal Resources Division publicizes and promotes public access to Georgia's beaches through newsletters, public speaking engagements, participation in community festivals, and other outreach venues and media.

### Provide Technical Assistance

The Coastal Resources Division, Habitat Management Program provides technical assistance for permitted activities within Georgia's coastal marshlands and shore sand-sharing system. Experts in the regulatory requirements of the Coastal Marshlands Protection Act and the Shore Protection Act, staff provide site analyses and technical advice for construction of piers, crosswalks, fences, etc., within the jurisdiction of these laws.

### Acquire Property for Coastal Access

Most public recreational facilities in the coastal area (as throughout the State) are financed in full or in part by the U.S. Department of the Interior, National Park Service. Permits for parks, tourist-oriented or commercial recreation facilities within the jurisdiction of the Coastal Marshlands Protection Act and the Shore Protection Act are administered by the Department of Natural Resources Coastal Resources Division.

Several legal authorities allow the State of Georgia to acquire property for various reasons, including recreation. The Georgia Scenic Trails Act (O.C.G.A. 12-3-110, *et seq.*) provides authority to construct, manage, and maintain trails throughout Georgia, including beach access trails. The Nongame Wildlife Conservation and Wildlife Habitat Acquisitions Fund is a program funded by voluntary tax deductions to acquire wildlife habitat and to support educational activities about wildlife. The Uniform Conservation Easements Act provides a mechanism for landowners to enter into agreements with charitable organizations or government agencies to develop easements for portions of their property for public access, conservation, recreational, or other purposes, in exchange for tax benefits. The Department of Natural Resources also has broad authority to acquire property for the citizens of Georgia for recreational and conservation purposes. Another mechanism to acquire properties are Land Trusts, which are charitable organizations established to acquire and manage properties for conservation or similar purposes. These represent just a few of the legal mechanisms for acquiring property for public access to coastal areas.

The Georgia Greenways Council is a coalition of trail organizations and local, State, and federal agencies involved with trail development. The Council promotes the protection of linear corridors and coordinates the development of trails throughout the State. A proposed Coastal Water Trail, the aquatic equivalent of the Appalachian trail, will run along Georgia's coast from the Savannah River to the St. Mary's River. This trail will provide routing for sea-kayaks and other small craft, and will include access trails, boat launching sites, and camping opportunities. Since most of Georgia's beaches are accessible only by water and some are restricted to non-powered watercraft, a sea-kayak trail will provide increased accessibility.

The Georgia Department of Natural Resources, Wildlife Resources Division is empowered to acquire land areas and to enter into agreements with landowners for purposes of managing wildlife species and establishing specific sanctuaries, wildlife management areas, and public fishing areas. The Wildlife Resources Division administers a management plan for each area. The management plan establishes short- and long-term uses for each area, and provides guidelines for protection and use of the area. The areas owned and/or managed by the Wildlife Resources Division are important for conservation of wildlife and also for recreational hunting and fishing opportunities. Wildlife management areas within the salt marsh and shore areas receive the additional protection provided by the Coastal Marshlands Protection Act and the Shore Protection Act.

Encourage Beach Access on County and Municipal Properties

Through the Georgia Coastal Management Program, the Coastal Resources Division works with municipal and county planning agencies and commissions to promote and enhance coastal access. In addition to coordinated permit activities, the Coastal Resources Division

provides technical expertise for design considerations that maximize dune protection while enhancing beach access.

Develop a Model Coastal Access Ordinance

In 1994, the Georgia Department of Community Affairs, in coordination with the U.S. Environmental Protection Agency and the Georgia Department of Natural Resources, developed a "Model Wetland Protection Ordinance" for use and adoption by local governments. The model provides a cookbook approach for adoption of a wetlands protection ordinance that can be amended by local governments. Through the Coastal Management Program, the Coastal Resources Division provides technical assistance to develop similar model ordinances for coastal access that can be used by local governments when developing local zoning ordinances.

# SECTION IV:
# SHORELINE EROSION AND HAZARD MITIGATION PLANNING

Shorelines naturally move and shift due to the constant energy forces from water and wind, as well as the deposit of materials along the land/water interface. These accretion and erosion cycles can be affected by both natural events and human activities. In turn, the cycles affect structures, property values, flood hazards, nesting areas, and other social and ecological factors.

The total length of coastal Georgia's shoreline has been estimated at 2,344 miles, which ranks eleventh of the 36 coastal states and territories. Georgia's ocean-front beaches constitute approximately 88 linear miles of the total shoreline. Georgia's beaches are located on the seaward side of barrier islands, of which only four are readily accessible by automobile (Tybee Island, St. Simons Island, Sea Island, and Jekyll Island). These four barrier islands contain about 19 miles of ocean beaches. Due to their automobile accessibility, these four barrier islands are also Georgia's only islands where development has substantially impacted the beach's natural sand-sharing system and dynamic sand dune fields. Coastal Georgia's less accessible barrier islands have retained their dynamic sand dune fields and natural cycle of beach erosion and accretion.

The majority of coastal Georgia's 2,344 miles of shoreline is contained within the hundreds of salt water rivers and creeks that intertwine the 378,000 acres of salt marsh lying between the barrier islands and the mainland. Some fairly severe erosion in tidal rivers has been observed, along the Ogeechee River at seven-mile bend and along the Crooked River at Elliott's Bluff, for example. Erosion and sedimentation control is a primary consideration in the evaluation of all permit applications for activities within the jurisdiction of the Coastal Marshlands Protection Act.

Shoreline erosion of beaches in coastal Georgia is of paramount concern on only about 19 miles out of the total 88 miles of beach. Jekyll Island is owned by the State of Georgia and operated by the Jekyll Island Authority as a resort/recreational park. Jekyll Island has approximately eight miles of beach that has never undergone artificial renourishment. St. Simons Island is predominately used for private residences and tourist-related businesses. Public access to St. Simons' approximately 3.8 miles of beach is maintained by the Glynn County government. Shore stabilization structures are prevalent on St. Simons Island's beach, which has never been artificially renourished.

Sea Island is privately-owned and is operated by the Sea Island Company as a residential resort community. Public land access to Sea Island beaches is restricted. Sea Island has about 4.7 miles of beach which underwent privately-funded renourishment projects in 1986 and 1990.

Tybee Island is privately-owned and is the most densely-developed barrier island in Georgia. Residential and commercial development dominate Tybee Island. Public access to Tybee Island's beach is managed by the City of Tybee Island. Tybee Island's 3.4 miles of beach was artificially renourished in 1976, 1987, 1993, and 1995.

The primary State management authority for shoreline stabilization and beach erosion control is embodied in the Shore Protection Act. The Coastal Resources Division, through the Shore Protection Committee, issues permits for any shoreline engineering activity or land alteration on beaches, sand dunes, bars, or submerged shoreline lands. The Shore Protection Act contains provisions for two distinct alternatives in addressing shoreline erosion. The first alternative, erosion control activities, includes beach restoration and renourishment, artificial dune construction, and construction and maintenance of groins and jetties. The second alternative, shoreline stabilization, includes construction of revetments.

In addition to shoreline erosion, natural processes such as storms and hurricanes can result in hazards to people and property through resulting wind, waves, and rising and falling water. There are two approaches to reducing damage from storms and hurricanes: engineering solutions and land-use planning. Engineering solutions may be directed at the environment (e.g., jetties, sea walls) or at structures (e.g., stilts, break-away walls). Many engineering modifications of the environment, however, can result in problems elsewhere on the coastline. Thus, the Shore Protection Act limits structures on Georgia's beaches. Land-use planning recognizes that certain areas (e.g., inlets, beaches) are more hazardous than others (e.g., areas protected by dunes and vegetation). Through policies such as the Shore Protection Act, which recognizes that coastal sand dunes, beaches, sandbars, and shoals help protect "real and personal property and natural resources," and the Marsh Protection Act, which recognizes that marshes "provide a great buffer against flooding and erosion," Georgia addresses coastal hazards. While land-use planning is the responsibility of local governments, through the Georgia Coastal Management Program the Coastal Resources Division can assist with hazard mitigation planning by providing technical assistance and pass-through funding.

Policies

- Coastal Marshlands Protection Act
- Endangered Wildlife Act
- Georgia Erosion and Sedimentation Act
- Georgia Water Quality Control Act
- Revocable License Program (Georgia Administrative Procedures Act)
- Shore Protection Act

Description

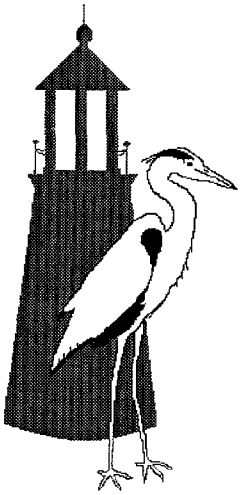
The Coastal Resources Division does not initiate erosion control activities. Permit applications for erosion control activities are made to the Division by the governing entity or private owner of the barrier island on which the activity is proposed. Beach restoration and renourishment techniques are preferable to shoreline stabilization activities since stabilization structures separate land from sea by maintaining the shoreline at its present position. Permits are granted for shoreline stabilization structures when the applicant has demonstrated that loss of property due to erosion is inevitable and that no reasonable or viable alternative exists.

Erosion control activities include beach restoration and renourishment, sand dune construction, and the construction and maintenance of groins and jetties. Local government units and private owners of barrier islands are encouraged to develop comprehensive beach erosion control programs that include continuous monitoring of erosion and accretion rates. Permittees of erosion control activities are required to conduct monitoring of the project's effectiveness and possible adverse impacts to adjacent properties. Permit applications must include beach monitoring (profile) data. Permittees of erosion control activities must also post a cash forfeiture bond payable to the State to cover the expenses of removal or modification of structures deemed responsible for adverse impacts to adjacent properties.

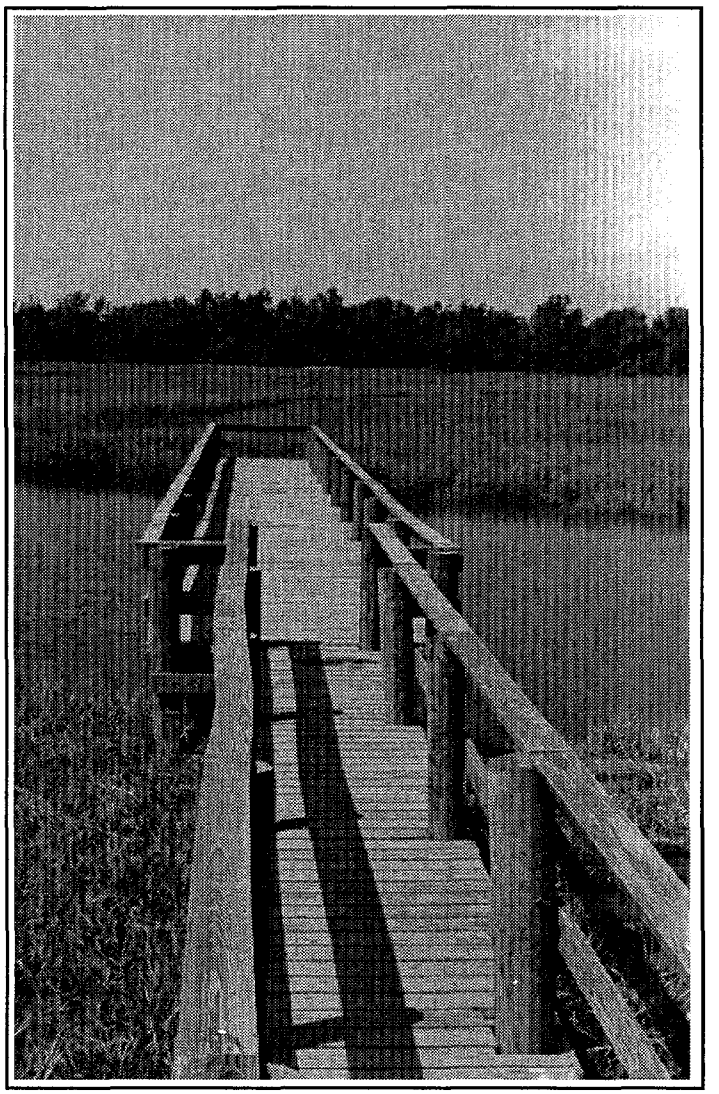
The State of Georgia has its own list of protected animals and plants that State-issued permits must address. In addition to the State's protected species there is a federal list of threatened and endangered species, many of which are included on the State's lists. Just like individual citizens, the State of Georgia must obey federal law. Therefore, when the State of Georgia issues permits, it holds the responsibility of ensuring that federal laws are not violated by the permitted activity. To this effect, State-issued permits must include provisions, if applicable, to protect endangered species. Additional federal laws such as the Migratory Bird Act, the Marine Mammal Protection Act, and Standard Manatee Conditions also apply if applicable protected species may be adversely impacted by the project.

The Coastal Marshlands Protection Act, the Shore Protection Act, and the Revocable License Program consider impacts on shoreline areas when issuing permits. Development is allowed if in the public interest. Local governments are responsible for zoning decisions for their communities. Residential, commercial, and industrial development in shoreline areas are subject to the 25-foot setback required of the Georgia Erosion and Sedimentation Act.

The Georgia Water Quality Control Act gives the Environmental Protection Division the authority to restore and maintain a reasonable degree of purity in the waters of the State, to maintain an adequate supply of such waters, to regulate where needed reasonable usage of the State waters, and to require reasonable treatment of sewage, industrial wastes, and other wastes prior to their discharge into such waters.



# CHAPTER EIGHT:
# FEDERAL CONSISTENCY



When we try to pick out anything by itself, we find it hitched to everything else in the universe.

John Muir

The federal Coastal Zone Management Act requires that federal actions within or outside the coastal zone that affect any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent with the enforceable policies of approved state coastal management programs. This concept is known as "federal consistency," and is a benefit available only to those states that have a federally-approved coastal management program.

The benefits to Georgia of the consistency requirement include improved coordination and cooperation with federal agencies, effective application of State laws for federal activities, and better resource protection. Federal consistency is a powerful tool that Georgia can use to review most federal actions affecting the coastal area. Based on effects rather than geographic boundaries, there are no categorical exclusions from the consistency requirement. Maximum benefit to Georgia requires that the State pay regular attention to proposed federal actions, develop and implement adequate consistency procedures, and notify federal agencies of the State's assertion of consistency.

To maximize the consistency benefits, the regulations implementing the Coastal Zone Management Act require that a single state agency, usually the lead coastal management agency, perform the consistency functions. As lead agency for the Georgia Coastal Management Program, the Coastal Resources Division performs the consistency functions for the State of Georgia. This provides uniform application of Georgia's coastal management policies, efficient coordination of all coastal management requirements, comprehensive coastal management review, and a single point of contact for federal agencies to discuss consistency issues.

Since the Georgia Coastal Management Program is a networked program that relies on other State agencies to implement the statutory authorities with which each is charged, there are special considerations for the federal consistency process. Consistency concurrence by the State for a federal activity can be achieved in either of two ways -- by issuance of all applicable State permits, licenses, or certifications, or by issuance of a consistency decision from the Coastal Resources Division for those activities that do not require a State permit, license, or certification. The Coastal Resources Division is the coordinating agency in both cases, i.e., the Division serves as the single point of contact to notify the federal agencies that all necessary State permits have (or have not) been issued and that the proposed activity is (or is not) consistent with the State laws that comprise the policies of the Georgia Coastal Management Program. In those instances where an activity requires a State permit, but additional policies also apply (even though the activity does not require other State permit), the Coastal Resources Division will ensure that the activity complies with all policies before issuing an affirmative consistency decision.

Generally, when a federal permit program has been delegated to the State of Georgia, State implementation of the federal permit is not subject to the federal consistency process. For example, the U.S. Environmental Protection Agency delegated the National Pollution Discharge Elimination System (NPDES) permit program in Georgia to the State. When Georgia issues its NPDES permit, federal consistency does not apply as the permit is no longer a federal permit, but is a state permit. With respect to the Section 401 Water Quality Certification Program, while Section 401 of the federal Clean Water Act gives Georgia the ability to certify that a federally-permitted activity will comply with State water quality standards and other appropriate requirements of State law set forth in the certification, the underlying federal permits (e.g., Clean Water Act Section 404 permits) are still subject to federal consistency. Also, for direct federal activities, the issuance of a State 401 Water Quality Certification would not necessarily mean that the activity was consistent with other relevant State Coastal Management Program policies.

Procedures for federal consistency review are defined in the following Section. Section II describes the appeals process and conflict resolution procedures. Section III lists the federal actions reasonably likely to affect Georgia's coastal area and therefore subject to federal consistency.

# SECTION I:
# FEDERAL CONSISTENCY PROCEDURES

The following types of federal actions must be consistent with the policies of the Georgia Coastal Management Program, as defined in Chapter Five of this document. Program policies are comprised of Georgia State law.

(1) Direct federal activities -- activities and development projects performed by a federal agency, or a contractor for the benefit of a federal agency;
(2) Federal license or permit activities -- activities not performed by a federal agency, but requiring federal permits or licenses or other forms of federal approval;
(3) Plans for the exploration or development of, or production from, any area which has been leased under the Outer Continental Shelf Lands Act; and
(4) Federal financial assistance to state agencies and local governments.

The Georgia Coastal Management Program is a comprehensive networked program with direct authority over certain activities and permits. The Program also relies on other State agencies to administer certain management authorities to help implement the full range of policies necessary for comprehensive coastal management. As designated lead agency for the Georgia Coastal Management Program, it is the role of the Coastal Resources Division to coordinate the various agencies on coastal matters, including federal consistency procedures. Each of the State agencies networked in the Georgia Coastal Management Program manages its own responsibilities, issues its own permits, administers its own federal grant monies, etc. One role of the Coastal Resources Division, as required in the federal Coastal Zone Management Act and designated in the Georgia Coastal Management Act, is to conduct federal consistency reviews. This is accomplished by coordination between the State agencies. State agencies involved with the Coastal Management Program are linked by Memoranda of Agreement (MOAs). These MOAs require notification of activities within the coastal area or that affect the coastal area.

In its simplest form, the consistency process involves two stages: (1) a consistency determination or certification is made by a federal agency or federal permit applicant regarding a proposed activity that affects the coastal area, and; (2) the Coastal Resources Division makes a consistency decision, i.e., concurs with or objects to the consistency determination or certification of the federal agency or permit applicant. The Division's role is to ensure that each relevant State permit is issued before the corresponding federal permit is issued. The Coastal Resources Division does not usurp the authority of any other State agency -- rather, the Division provides the necessary coordination to review federal activities in the coastal area. Agencies requiring guidance on consistency review procedures for the Georgia Coastal Management Program should contact the Coastal Resources Division.

## A. Direct Federal Activities and Development Projects

Summary

(1) The federal agency proposing an activity or development project within or outside Georgia's defined eleven-county coastal area determines if the proposed activity will have reasonably foreseeable effects upon any land use, water use, or natural resource of the coastal area.

(2) If effects are reasonably foreseeable, the federal agency submits a consistency determination to the Coastal Resources Division at least 90 days before final approval of the federal activity or project.

(3) The Coastal Resources Division shall provide public notice of the federal agency's consistency determination and consider public comments when making its consistency decision.

(4) The Coastal Resources Division has 45 days (plus appropriate extensions, if granted) to agree or disagree with the federal agency's consistency determination.

(5) Georgia waives its right to consistency if the Coastal Resources Division does not meet its time frames.

(6) Direct federal activities must comply with all applicable enforceable policies of the Georgia Coastal Management Program (i.e., Georgia laws), even when the federal agency is not normally required to apply for a State permit in all cases.

(7) If there is a dispute between the federal agency and the Coastal Resources Division over the consistency decision, either party may seek mediation from the Secretary of Commerce or informal negotiation from the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resources Management.

Description

Each federal agency activity within or outside the coastal zone that has reasonably foreseeable effects on any land or water use or natural resource of the coastal zone (including development projects) shall be carried out in a manner that is consistent to the maximum extent practicable with the enforceable policies of approved state management programs. 16 U.S.C. § 1456(c). The requirements for direct federal activities are found at 16 U.S.C. § 1456(c). Direct federal agency activities are any functions performed by or on behalf of a federal agency in the exercise of its statutory responsibilities. Such activities do not include the granting of a federal license or permit. A federal development project is a federal activity involving the planning, construction, modification, or removal of public works, facilities, or other structures, and the acquisition, utilization, or disposal of land or water resources.

Federal agencies proposing activities, whether within or outside the coastal area, must first determine if the activity will have reasonably foreseeable effects upon any coastal use or resource. Effects include cumulative and secondary effects. If such effects are reasonably foreseeable, then the federal agency must submit a consistency determination to the Coastal Resources Division no later than 90 days before final federal action on the proposed activity. If the federal agency determines that an activity is not reasonably likely to affect coastal uses or resources, then the federal agency may have to provide the Coastal Resources Division with a "negative determination" at least 90 days prior to the public action.

The federal agency should contact the Coastal Resources Division at the earliest possible moment in the planning of the activity to ensure early State and federal coordination and consultation. Early consultation with the Division reduces potential conflicts as the activity progresses.

There is no categorical exemption for any federal activity. If a federal activity is likely to affect coastal uses or resources, then consistency applies. However, the President may exempt a specific federal activity (but not a class of federal activities) under certain circumstances. See 16 U.S.C. § 1456 (c)(1)(B). A federal activity affecting Georgia's coastal area must be conducted in a manner that is consistent to the maximum extent practicable with Georgia's approved Coastal Management Program. This requires federal activities to be fully consistent with the policies of the Georgia Coastal Management Program unless compliance is prohibited based upon the requirements of existing law applicable to the federal agency's operations. Thus, a federal activity may deviate from full consistency if legally required (as opposed to a general notion or claim of national security). Finally, federal agencies may deviate from full consistency with an approved program when such deviation is justified because some unforeseen circumstances (e.g., an emergency situation) arising after the approval of the management program present the federal agency with a substantial obstacle that prevents complete adherence to the approved program.

While the form of the consistency determination may vary, it must include a detailed description of the proposed activity, its expected coastal effects, and an evaluation of the proposed activity in light of the applicable policies of the Georgia Coastal Management Program. More specifically, the consistency determination should state, generally, the enforceable statutory provisions and regulations of the Georgia Coastal Management Program; detail the analysis by which the federal agency has determined that its project is consistent to the maximum extent practicable with the relevant policies of the Coastal Management Program; provide an analysis of coastal effects (or reference pages of the NEPA document if appropriate); provide information, data, and analysis supporting the determination of consistency with the policies of the Coastal Management Program; and notify the Coastal Resources Division that it has 45 days (plus any

appropriate extension) from receipt of the determination and supporting information in which to agree or disagree with the determination.

The listing in Section III details those direct federal activities that Georgia deems will have reasonably foreseeable effects on coastal uses or resources. While the Coastal Resources Division, on behalf of the State of Georgia, will monitor unlisted federal activities and will notify federal agencies when an unlisted activity requires consistency review, it is the responsibility of federal agencies to comply with the consistency requirement and notify the Division for all federal activities (listed or unlisted) affecting Georgia's coastal area. The failure of the Division to either list federal activities in the Georgia Coastal Management Program Document or to monitor unlisted federal activities does not remove the requirement for federal agencies to provide the Coastal Resources Division with consistency determinations when the federal agency independently concludes that the proposed activity will affect coastal uses or resources.

Upon notification of a federal agency's consistency determination, the Coastal Resources Division shall issue public notice of the consistency determination in accordance with the Georgia Administrative Procedures Act. The Division shall consider public comments when making its consistency decision.

If the Coastal Resources Division agrees with a federal agency's consistency determination, the agency may immediately proceed with the activity. If the Coastal Resources Division disagrees with the consistency determination, the Division's disagreement must describe how the proposed activity is inconsistent with enforceable policies of the Georgia Coastal Management Program. The Division must also detail alternative measures (if they exist) that would allow the activity to be conducted in a manner consistent to the maximum extent practicable. In the event of a disagreement, the Division and the federal agency will attempt to resolve differences during the remainder of the 90-day period. The federal agency may, notwithstanding Coastal Resources Division disagreement, proceed with the activity as long as they clearly describe to the Division the specific legal authority (i.e., the statutory provisions, legislative history, or other legal authority) that limits the agency's discretion to comply with Georgia Coastal Management Program policies. Either party may seek non-binding formal Secretarial mediation or informal negotiation, as described in Section II.

## B. Federal License or Permit Activities

Summary

(1) The Coastal Resources Division, or the NOAA Office of Ocean and Coastal Resources Management determines the effects of a proposed license or permit.

(2) An applicant for any required federal approval submits a certification of consistency with the permit application if the activity is listed in Section III or, if unlisted, the Office of Ocean and Coastal Resource Management finds that the activity will have reasonably foreseeable effects on any coastal use or resource.

(3) Public notice shall be provided by a Joint Public Notice (JPN) with the relevant federal agencies, and, if applicable, according to the Georgia Administrative Procedures Act and the rules of the authorizing State agency that evaluates the relevant permits.

(4) The Coastal Resources Division has up to six months to respond, but must notify the applicant if review will exceed three months. The Coastal Resources Division coordinates with other State agencies on the status of State permits, and the time frame for the consistency decision is driven by the State permitting agency (or agencies). Response will always occur immediately following issuance of relevant State permits.

(5) The Coastal Resources Division must either concur with or object to the applicant's certification of consistency. Issuance of all relevant State permits for the same activity constitutes concurrence.

(6) The federal agency cannot issue approval until the Coastal Resources Division concurs. If all relevant State permits are issued, concurrence may be presumed.

(7) The applicant may appeal the Coastal Resources Division's federal consistency objection to the Secretary of Commerce. Appeals over State permits are subject to State appeals processes. If a State permit is appealed in favor of the applicant through the State appeals process, the Divisions consistency objection is automatically overturned.

Description

A private individual or business, or a State or local government agency, or any type of non-federal entity, applying to the federal government for a required permit or license or any other type of an approval or authorization, must follow the requirements of the Coastal Zone Management Act section 307(c)(3)(A) (16 U.S.C. § 1456(c)(3)(A)).

Applicants for federal licenses, permits, or other approvals, must certify to the Coastal Resources Division that the proposed activity, whether in or outside the coastal area, affecting

any land or water use or natural resource of the coastal area, will be conducted in a manner that is consistent with the policies of the Georgia Coastal Management Program. Section III of this chapter lists those federal license or permit activities deemed reasonably likely to affect any coastal use or resource. Unlisted activities may also require a consistency certification.

The applicant shall furnish to the federal permitting agency a consistency statement certifying that the proposed activity complies with and will be conducted in a manner consistent with the policies of the Georgia Coastal Management Program, i.e., State laws. The submitted statement shall include a declaration similar to the following: "The proposed activity complies with the policies of Georgia's approved Coastal Management Program and will be conducted in a manner consistent with such program." By making this statement certifying consistency, the applicant understands that Georgia State law and associated regulations define the enforceable policies of the Georgia Coastal Management Program, and that the project must fully comply with all relevant State laws and rules and regulations. If any State permits are necessary for the proposed project, the relevant State application will include the statement of consistency. The appropriate State agency shall notify the Coastal Resources Division of the permit application consistency certification.

Public notice shall be provided in conjunction with the federal permit by Joint Public Notice (JPN), but in no instance shall it provide less than the public notice requirements of the Georgia Administrative Procedures Act and the rules of the authorizing State agency. If there is no JPN procedure, the Coastal Resources Division shall issue public notice in accordance with the Georgia Administrative Procedures Act.

Georgia's federal consistency procedures do not add additional time to the State's review of State permit applications. The consistency procedures do ensure compliance with Georgia's Coastal Management Program, and ensure that federal actions are conducted in a manner that is consistent with the policies of the Coastal Management Program.

If the applicant obtains all relevant State permits within six months of submitting the State and federal permit application(s) to the relevant State agency, then the issuance of these State permits constitutes the State's federal consistency concurrence and the federal agency may issue its approvals. The Coastal Resources Division assists in coordinating State and federal agencies, tracking permit issuances, and notifying federal agencies once all relevant State permits have been received.

If a State permitting agency denies the permit application within the six month period, then that denial constitutes the State's federal consistency objection and the federal agency may not issue its approval. If, at any time, the applicant successfully appeals the permit denial to a State administrative body, or otherwise modifies the permit application and obtains the State permit, then the activity will be consistent with the policies of the Georgia Coastal Management

Program and the federal agency may issue its approval. The Coastal Resources Division serves to coordinate State and federal agencies, track permit denials and issuances, and notify federal agencies of permit denials and issuances.

If a State permitting agency has not acted upon a permit within the six month period, then that activity will be deemed inconsistent with the Georgia Coastal Management Program, provided the Coastal Resources Division, within the six month period, notifies the applicant and the federal agency in writing that the State objects to the activity and that the federal agency may not issue its approval. Once, and if, the applicant obtains relevant State permits then the activity will be consistent with the Coastal Management Program, and the federal agency may then issue its approval.

If, following receipt of the consistency certification, the Coastal Resources Division determines that no State permits are needed or that other State authorities as outlined in Chapter Five apply, the Division will issue a consistency decision within six months. The Coastal Resources Division will coordinate its consistency review with the relevant networked Georgia Coastal Management Program agencies.

### C. Outer Continental Shelf Permits or Licenses

Summary

(1) Similar to the process for federal permits or licenses.

Description

A private person applying to the federal government for outer continental shelf (OCS) exploration, development, and production activities must follow the requirements of the Coastal Zone Management Act, Section 307(c)(3)(B) (16 U.S.C. §1456(c)(3)(B)).

Any person who submits to the U.S. Department of the Interior an OCS plan for the exploration of, or development of, or production from, any area leased under the Outer Continental Shelf Lands Act, must certify to the Coastal Resources Division that any activities proposed in such OCS plans will be conducted in a manner consistent with the policies of the Georgia Coastal Management Program. The process and requirements for this section generally mirror those of federal license or permit activities discussed above.

An applicant for an OCS permit or license that does not have a corresponding State permit must submit a consistency certification and supporting data and information to the Coastal Resources Division and the permitting federal agency. The Coastal Resources Division will

coordinate its consistency review with the relevant networked Georgia Coastal Management Program agencies, and issue its consistency decision within six months of receipt of the certification and supporting information.

### D. Federal Financial Assistance Activities

Summary

(1) Either a State agency or a local government applies for federal financial assistance. The activity may be a listed or an unlisted activity, which must be determined by the Coastal Resources Division.
(2) The Georgia State Clearinghouse Procedures must be followed for submission of an application and Coastal Management Program review.

Description

A State agency or local government applying for any form of federal assistance for an activity reasonably likely to affect any land or water use or natural resource of Georgia's coastal area must follow the requirements of the Coastal Zone Management Act, Section 307(d) (16 U.S.C. §1456(d)). The federal agency may not grant any federal assistance until the Division finds an application consistent.

The Georgia State Clearinghouse notifies the Coastal Resources Division of applications for federal financial assistance. Public notice of the application shall be provided by the Coastal Resources Division according to the Georgia Administrative Procedures Act. Federal financial assistance applications for projects requiring State approvals are automatically deemed consistent with the Georgia Coastal Management Program policies once all relevant State approvals have been issued.

If the Coastal Resources Division determines the proposed project to be inconsistent with Georgia Coastal Management Program policies, a formal objection will be provided to the Georgia State Clearinghouse, the applicant, the federal agency, and the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management. Objections will be provided to the Georgia State Clearinghouse within the standard sixty-day review period, except for any programs established by the Clearinghouse requiring a thirty-day review period, in which case the Division will respond within those time limits. The objection shall describe how the proposed project is inconsistent with specific policies of the Georgia Coastal Management Program and alternative measures (if they exist) which, if adopted by the applicant agency, would permit the proposed project to be conducted in a manner consistent with the policies of the Coastal Management Program. The Division may object based on the failure of the applicant to

provide adequate information; in this case, the objection must describe the nature of the information requested and the necessity of having such information to determine consistency. The objection shall include a statement informing the applicant agency of a right of appeal to the Secretary of Commerce.

The federal agency may not grant the financial assistance if the State determines it to be inconsistent with the policies of the Georgia Coastal Management Program unless the applicant agency appeals the objection and the Secretary of Commerce overrides the State's objection.

If the Coastal Resources Division determines that an application for federal assistance outside of Georgia's defined eleven-county coastal area is subject to consistency review, the Division shall immediately so notify the applicant agency, the federal agency, the Georgia State Clearinghouse, and the Office of Ocean and Coastal Resource Management. Any objection by the Division to the proposed activity shall be made according to the Georgia State Clearinghouse schedule described above. If the Division determines it to be inconsistent with the policies of the Georgia Coastal Management Program, the federal agency may not grant the financial assistance except if the activity is consistent with the objectives or purposes of the federal Coastal Zone Management Act or if the activity is necessary in the interest of national security.

# SECTION II:
# APPEALS AND CONFLICT RESOLUTION PROCEDURES

## A. Appeals for State Permits

As described in Part B of Section I above, federal license or permit activities that also require a State permit under Georgia law are presumed to be consistent with the Georgia Coastal Management Program upon receipt of all relevant State permits. The appeals procedures for State permits are described in Georgia State laws and remain unchanged by this process. In most cases, Georgia law provides any person or agency that is aggrieved or adversely affected by any order or action the right to a hearing before an Administrative Law Judge. In cases in which there is no direct provision for State Administrative Law Judge review under State law, the aggrieved party has the right to the State Court process.

## B. Secretarial Mediation of Disputes

In the event of a serious disagreement between the State of Georgia and a federal agency over any aspect of the federal consistency requirement, either party may request that the U.S. Secretary of Commerce mediate the dispute. All parties must agree to participate in the mediation, but agreement to participate is non-binding and either party may withdraw from the mediation at any time. Secretarial mediation is a formal process that includes a public hearing, submission of written information, and meetings between the parties, upon which a hearing officer, appointed by the Secretary, will propose a solution.

Secretarial mediation may be used for disputes under any of the four consistency review types: direct federal activities, federal license or permit activities, OCS license and permit activities, and federal assistance activities. However, the request can only be made by the head of a federal agency, the Governor of Georgia, or the Coastal Resources Division. Exhaustion of the mediation process is not a prerequisite to judicial review.

## C. Informal Negotiation of Disputes

The availability of formal Secretarial mediation or litigation does not preclude the parties from informally negotiating the dispute through the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management (OCRM) or another facilitator. OCRM has successfully filled this role of informal negotiator, and most disputes are addressed through this informal method. Either party may request OCRM involvement, and participation is non-binding.

## D. Appeals to the Secretary of Commerce

The federal Coastal Zone Management Act (CZMA) provides an administrative appeal to the Secretary of Commerce from a consistency objection by a coastal state. In the case of a federal license or permit, an outer continental shelf exploration or development plan, or an application for federal financial assistance, the applicant may request that the Secretary override the State of Georgia's consistency objection on the grounds that the activity is consistent with the objectives of the CZMA, or is otherwise necessary in the interest of national security. 16 U.S.C. § 1456(c)(3)(A),(B), and (d).

The inquiry by the Secretary into whether the grounds for an override have been met is based upon an administrative record developed for the appeal. While the Secretary will review the State objection for compliance with the CZMA and the implementing regulations (e.g., whether the objection is based on enforceable policies), the Secretary does not review the objection for compliance with State laws and policies.

There are four elements that an appellant must meet in order to satisfy the first ground for a Secretarial override, "consistent with the objectives of the CZMA."

(1) The activity furthers one or more of the competing national objectives or purposes contained in sections 302 or 303 of the CZMA;
(2) When performed separately or when its cumulative effects are considered, the activity will not cause adverse effects on the natural resources of the coastal area substantial enough to outweigh its contribution to the national interest;
(3) The activity will not violate any requirement of the Clean Air Act, as amended, or the Federal Water Pollution Control Act, as amended; and,
(4) There is no reasonable alternative available (e.g., location, design, etc.) which would permit the activity to be conducted in a manner consistent with the management program.

The second ground for a Secretarial override, "necessary in the national security," describes a federal license or permit activity or a federal assistance activity which, although inconsistent with the Georgia Coastal Management Program, is found by the Secretary to be permissible because a national defense or other national security interest would be significantly impaired if the activity were not permitted to go forward as proposed.

If the Secretary overrides the State's objection, the authorizing federal agency may permit or fund the activity. A secretarial override does not obviate the need for an applicant to obtain any State-required permits or authorizations.

# SECTION III:
# LIST OF FEDERAL ACTIONS SUBJECT TO FEDERAL CONSISTENCY

## A. Direct Federal Activities and Development Projects

Department of Commerce, National Marine Fisheries Service:

- Fisheries Management Plans
- Endangered Species Act listings and Designation of Critical Habitat

Department of Defense, Army Corps of Engineers:

- Dredging, channel improvement, breakwaters, other navigational works, erosion control structures, beach replenishment, dams or flood control works, and activities and other projects with the potential to impact coastal lands and waters
- Land acquisition for spoil disposal or other purposes
- Selection of disposal sites for dredged material from federal harbors and navigation channels

Department of Defense: Air Force, Army, and Navy:

- Location, design, and acquisition of new or expanded defense installations (active or reserve status including associated housing, transportation, or other facilities)
- Plans, procedures, and facilities for handling storage use zones
- Establishment of impact, compatibility, or restricted use zones
- Disposal and reuse plans for military base closures

General Services Administration:

- Acquisition, location, and design of proposed federal government property or buildings, whether leased or owned by the federal government
- Disposal and disposition of federal surplus lands and structures

Department of Interior, Bureau of Land Management:

- Oil and gas leasing on federal lands

Department of Interior, Minerals Management Service:

- Oil and gas leasing on the Outer Continental Shelf
- Offshore sand mining leases
- Offshore mineral leases

Department of Interior, U.S. Fish and Wildlife Service:

- Management of National Wildlife Refuges; land acquisition

Department of Interior, National Park Service:

- National Park Service unit management; land acquisitions

Department of Transportation, Coast Guard:

- Location, design, construction, or enlargement of Coast Guard stations, bases, and lighthouses.
- Location, placement, or removal of navigation devices which are not part of the routine operations under the Aids to Navigation Program (ATON)

- Expansion, abandonment, designation of anchorages, lighting areas, or shipping lanes
- Cleanup of oil and hazardous substances and materials, and discharges in violation of the Federal Water Pollution Control Act, as amended by the Oil Pollution Control Act
- Area Contingency Plans developed under the Oil Pollution Control Act
- Designation and management of Regulated Navigation Areas and Limited Access Areas identified in 33 C.F.R. § 165
- Designation of Security and Safety Zones under the Port and Waterways Safety Act
- Enforcement of the MMPA, the ESA, the MFCMA, the ACFCMA, and the Lacey Act

Department of Transportation, Federal Aviation Administration:

- Location and design, construction, maintenance, and demolition of federal aids to air navigation

Department of Transportation, Amtrak, Conrail:

- Expansions, curtailments, new construction, upgradings or abandonments of railroad facilities or services, in or affecting the State's coastal area

Department of Transportation, Federal Highway Administration:

- Highway construction

Department of the Treasury, Federal Law Enforcement Training Center:

- Location and design, construction, upgradings, demolition, or abandonment of facilities or projects associated with the Federal Law Enforcement Training Center

Environmental Protection Agency

- Ocean dump site designations
- Superfund site cleanup
- Risk Assessment/Remediation plans

Federal Energy Regulatory Commission

- Licensing federal hydroelectric projects.

## B. Federal Licenses or Permits Subject to Consistency with The Georgia Coastal Management Program

Department of Defense, Army Corps of Engineers:

- Approval of plans for improvements made at private expense under U.S.A.C.E. supervision pursuant to the Rivers and Harbors Act (33 U.S.C. 565)[1]
- Disposal of dredged spoils into the waters of the U.S. pursuant to the Clean Water Act, Section 404 (33 U.S.C. 1344)[1]
- Other provisions of Section 404 of the Clean Water Act, including permits[1]
- All actions for which permits are required pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act (33 U.S.C. 1413)[1]

Federal Energy Regulatory Commission:

- Licenses for non-federal hydroelectric projects and primary transmission lines under Sections 3 (11), 4 (e), and 15 of the Federal Power Act (16 U.S.C. 796 (11), 797 (11), and 808)[1]

- Orders for interconnection of electric transmission facilities under Section 202 (b) of the Federal Power Act (15 U.S.C. 824 a (b))[1]
- Certificates for the construction and operation of interstate natural gas pipeline facilities, including both pipelines and terminal facilities under Section 7 © of the Natural Gas Act (15 U.S.C. 717 f (c))[1]
- Permission and approval for the abandonment of natural gas pipeline facilities under Section 7 (b) of the Natural Gas Act (15 U.S.C. 717 f (b))[1]
- Regulation of gas pipelines, and licensing of import and export of natural gas pursuant to the Natural Gas Act (15 U.S.C. 717) and the Energy Reorganization Act[1]

Environmental Protection Agency

- National Pollutant Discharge Elimination System (NPDES) permits and other permits for federal installations discharges in contiguous zones and ocean waters, sludge runoff and aquaculture permits pursuant to Sections 401, 402, 403, 405, and 318 of the Federal Water Pollution Control Act (33 U.S.C. 1341, 1342, 1343, and 1328)[1]
- Permits pursuant to the Resources Conservation and Recovery Act[1]
- Permits pursuant to the underground injection control program under Section 1424 of the Safe Drinking Water Act (42 U.S.C. 300 h-c)[1]
- Permits pursuant to the Clean Air Act of 1976 (42 U.S.C. 1857)[1]
- Permits pursuant to the Marine Protection, Research, and Sanctuaries Act (16 U.S.C. 1431)[1]

Department of Interior, U.S. Fish and Wildlife Service:

- Endangered species permits pursuant to the Endangered Species Act (16 U.S.C. 153 (a))[1]
- Permits pursuant to the Migratory Bird Treaty Act (U.S.C. 703)[1]

Nuclear Regulatory Commission:

- Licensing and certification of the siting, construction, and operation of nuclear generating stations, fuel storage, and processing centers pursuant to the Atomic Energy Act, Title II of the Energy Reorganization and the National Environmental Policy Act[1]

Department of Transportation, Coast Guard:

- Construction or modification of bridges, causeways, or pipelines over navigable waters pursuant to 49 U.S.C. 1455[1]
- Transport and transfer of hazardous substances and materials (33 U.S.C. §419)[1]
- Marine Event Permits[1]

Department of Transportation, Federal Aviation Administration:

- Permits, licenses, and other approvals for construction, operation, or alteration of airports[1]

U.S. Department of Interior:

- Outer Continental Shelf (OCS) activities (including pipeline activities) described in detail in OCS plans that affect coastal resource areas[2]
- OCS lease sales in the Atlantic Ocean under 43 U.S.C.A. § 1337[2]

1 = A corresponding Georgia State permit exists.
2 = This activity is subject to the provisions for OCS permits or licenses.

This list of federal licenses and permits may be revised by the State following consultation with the federal agency and approval by the Office of Ocean and Coastal Resource Management. The Coastal Resources Division may also review federal license and permit activities outside Georgia's eleven-county coastal area that affect the coastal area. This review requires prior consultation with federal agencies and approval by the Office of Ocean and Coastal Resource Management.

## D. Federal Assistance Programs Applicable to the Consistency Process

*(Note: Code Numbers refer to the Catalog of Federal Domestic Assistance Programs.)*

Department of Agriculture

10.414 Resource Conservation and Development Loans
10.416 Soil and Water Loans
10.418 Water and Waste Disposal Systems for Rural Communities
10.419 Watershed Protection and Flood Prevention Loans
10.901 Resource Conservation and Development
10.904 Watershed Protection and Flood Prevention
10.906 River Basin Surveys and Investigations
10.999 U.S. Department of Agriculture -- Miscellaneous
1. Irrigation and Drainage Loans
36.455 U.S. Department of Agriculture -- Environmental Impact Assessment/Statement

Department of Commerce

11.405 Anadromous & Great Lakes Fisheries Conservation
11.407 Interjurisdictional Fisheries Act of 1986
11.419 Coastal Zone Management Program Administration
11.420 Coastal Zone Management Estuarine Research Reserves
11.427 Fisheries Development and Utilization Research/Development Grants/Coop Agreements
11.433 Marine Fisheries Research Initiative (MARFIN) Projects
11.434 Cooperative Fisheries Statistics Program
11.441 South Atlantic Fishery Management Council Projects
11.474 Atlantic Coastal Fisheries Cooperative Management Act Projects
36.450 U.S. Department of Commerce -- Environmental Impact Assessment/Statement

Department of Defense

12.101 Beach Erosion Control Projects
12.104 Flood Plain Management Services
12.106 Flood Control Projects
12.107 Navigation Projects
12.109 Protection, Clearing and Straightening Channels
12.610 Joint Military/Community Comprehensive Land Use Plans
36.421 U.S. Department of Defense -- Environmental Impact Assessment/Statement
36.422 U.S. Department of the Army -- Environmental Impact Assessment/Statement
36.423 U.S. Department of the Navy -- Environmental Impact Assessment/Statement
36.424 U.S. Department of the Air Force -- Environmental Impact Assessment/Statement

Department of Health and Human Services (HHS)
35.460 HHS -- Direct Federal Development Project
36.460 HHS -- Environmental Impact Assessment/Statement

Department of Housing and Urban Development (HUD)
36.465 HUD -- Environmental Impact Assessment/Statement

Department of the Interior (DOI)
15.600 Anadromous Fish Conservation
15.605 Sport Fish Restoration
15.611 Wildlife Restoration
15.612 Endangered Species Conservation
15.614 North American Wetlands Conservation
15.616 Clean Vessel Act
15.904 Historic Preservation Fund Grants -- In-Aid
15.910 National Natural Landmarks Program
15.916 Outdoor Recreation -- Acquisition, Development, and Planning
35.440 DOI -- Direct Federal Development Project
36.440 DOI -- Environmental Impact Assessment/Statement -- Clean Vessel Act Grants

Department of Justice
35.430 U.S. Department of Justice -- Direct Federal Development Project
36.430 U.S. Department of Justice -- Environmental Impact Assessment/Statement

Department of Transportation
20.205 Highway Planning and Construction
20.219 National Recreational Trails Program
20.801 Development and Promotion of Ports and Intermodal Transportation
36.470 U.S. Department of Transportation -- Environmental Impact Assessment/Statement

General Services Administration
39.002 Disposal of Federal Surplus Real Property
35.600 General Services Administration -- Direct Federal Development Project
36.600 General Services Administration -- Environmental Impact Assessment/Statement

National Aeronautics and Space Administration (NASA)
35.631 NASA -- Direct Federal Development Project
36.631 NASA -- Environmental Impact Assessment/Statement

Environmental Protection Agency (EPA)
66.001 Air Pollution Control Program Support
66.418 Construction Grants for Wastewater Treatment Works
66.419 Water Pollution Control -- State and Interstate Program Support
66.433 State Underground Water Source Protection
66.435 Water Pollution Control -- Lake Restoration Cooperative Agreements
66.454 Water Quality Management Planning
66.456 National Estuary Program

66.459 Nonpoint Source (NPS) Reservation
66.461 State Wetland Protection Development Grants
66.500 Environmental Protection -- Consolidated Research
66.501 Air Pollution Control Research
66.502 Pesticides Control Research
66.504 Solid Waste Disposal Research
66.505 Water Pollution Control -- Research, Development, and Demonstration
66.506 Safe Drinking Water Research and Demonstration
66.507 Toxic Substances Research
66.600 Environmental Protection Consolidated Grants -- Program Support
66.700 Pesticides Enforcement Program
66.701 Toxic Substances Compliance Monitoring Cooperative Agreements
66.704 Pesticides Certification Program
66.801 Hazardous Waste Management State Program Support
66.802 Hazardous Substance Response Trust Fund
66.804 State Underground Storage Tanks Program
66.805 Underground Storage Tank Trust Fund
66.807 Superfund Innovative Technology Evaluation Program (SITE)
66.808 Hazardous Waste; Integrated Training and Technical Assistance -- Interstate
66.999 EPA -- Miscellaneous
1. State Inventories of Uncontrolled Hazardous Waste Sites
2. Water Pollution Control State and Local Manpower Program Development
3. State and Local Innovative Waste Management Activities
4. Special Studies, Investigations, and Surveys
5. Source Reduction and Recycling Technical Assistance

35.552 EPA -- Direct Federal Development Projects
1. Real Property Acquisition or Disposition, including obtaining major Leases or Easements
2. Construction of New EPA Facilities
3. EPA Issued Plans and Permits which do not impact Interstate Areas

36.552 EPA -- Environmental Impact Assessment/Statement

Department of Energy

81.049 Basic Energy Sciences, High Energy or Nuclear Physics, Magnetic Fusion Energy, Health and Environmental Research, Program Analysis and Field Operations Management
81.999 U.S. Department of Energy -- Miscellaneous
1. Loans for Wind Energy Systems and Small Hydroelectric Power Projects
2. Loan Guarantees for Alternative Fuel Demonstration Facilities

36.471 U.S. Department of Energy -- Environmental Impact Assessment/Statement

Federal Emergency Management Agency (FEMA)

83.503 Civil Defense -- State and Local Emergency Management Assistance
83.513 State and Local Warning and Communication Systems
83.516 Disaster Assistance
35.237 FEMA -- Direct Federal Development Project
36.237 FEMA -- Environmental Impact Assessment/Statement

# Part III

# REQUIREMENTS OF THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

# PART III:
# REQUIREMENTS OF THE
# NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

## A. Purpose and Need for Action

The National Oceanic and Atmospheric Administration (NOAA) has prepared this Draft Environmental Impact Statement (DEIS) pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 *et seq.* to assess the environmental impacts associated with the approval and implementation of the coastal management program submitted to NOAA by the State of Georgia. The State of Georgia has submitted its Coastal Management Program to the Office of Ocean and Coastal Resource Management (OCRM) for approval pursuant to Section 306 of the Federal Coastal Zone Management Act of 1972, as amended (CZMA), 16 U.S.C. §§ 1451, *et seq.*

The proposed action on the DEIS is approval of the Georgia Coastal Management Program (GCMP). The OCRM has made an initial determination that the program meets the requirements of the CZMA. Federal approval of the Georgia program will enable the State of Georgia to receive federal grant assistance for program implementation and will require that federal actions in or affecting the Georgia coastal zone be consistent with the Georgia program. The GCMP is described in Part II of this document. A table cross-referencing CZMA requirements with sections from this document may be found in Part I, Section D.

Approval and implementation of the GCMP will enhance governance of Georgia's coastal land and water uses according to the coastal policies and standards contained in the existing statutes, authorities and rules. Federal alternatives to program approval include delaying or denying approval, if certain requirements of the CZMA have not been met. The state could modify parts of the program or withdraw its application for federal approval if either of the above federal alternatives results from circulation of this document.

The Coastal Zone Management Act (CZMA)

In response to the intense pressures upon coastal areas of the United States, Congress passed the Coastal Zone Management Act. This Act was signed into law on October 27, 1972. The Act authorized a federal grant program to be administered by the Secretary of Commerce, who in turn delegated this responsibility to the National Oceanic and Atmospheric Administration's (NOAA) Office of Ocean and Coastal Resource Management (OCRM). The Coastal Zone Management Act of 1972 was substantially amended on July 26, 1976 (P.L. 94-370) and again on November 5, 1990 (P.L. 101-58). It was reauthorized in June 1996 (P.L. 104-150) for a three-year period with minor changes. The Act and its amendments affirm a national interest in the effective protection and development of the coastal zone by providing

assistance and encouragement to coastal states to develop and implement rational programs for managing their coastal zones.

Broad guidelines and the basic requirements of the CZMA provide the necessary direction for developing these state programs. These guidelines and requirements for program development and approval are contained in 15 C.F.R. Part 923, as revised and published June 28, 1996 in the Federal Register. In summary, the requirements for program approval are that a state develop a management program that accomplishes the following.

- Identifies and evaluates those coastal resources recognized in the Act that require management or protection by the state;

- Reexamines existing policies or develops new policies to manage these resources. These policies must be specific, comprehensive, and enforceable, and must provide an adequate degree of predictability as to how coastal resources will be managed;

- Determines specific uses and special geographic areas that are to be subject to the management program, based on the nature of identified coastal concerns. The basis for managing uses, or their impacts, and areas, should be based on resource capability and suitability analyses, socioeconomic considerations and public preferences;

- Identifies the inland and seaward areas subject to the management program;

- Provides for the consideration of the national interest in planning for the siting of facilities that meet more than local requirements; and

- Includes sufficient legal authorities and organizational structure to implement the program and to ensure conformance to it.

## B. Alternatives to the Proposed Action

1. Federal Alternatives

Alternatives available to OCRM include approving, delaying approval of, and denying approval of the Georgia Coastal Management Program. In approving a coastal management program (the preferred alternative), the Assistant Administrator for Ocean Services and Coastal Zone Management must find that a state has met the federal approval requirements of the CZMA and its implementing regulations codified at 15 C.F.R. Part 923. Delay or denial of program approval could be based on the failure of the Georgia Coastal Management Program to meet any of the requirements of the CZMA, as amended.

*Alternative 1: The Assistant Administrator could approve the GCMP. This is the preferred alternative.*

Approval of the Georgia Coastal Management Program, which would be based on an affirmative finding that the program meets all requirements of the CZMA and its regulations, would result in implementation by the state of the approved program. The benefits of GCMP implementation would include improved regulation and enforcement of existing authorities; balanced coastal community development; simplification of government processes; better natural resource and hazardous areas management; improved intergovernmental coordination; and greater public awareness. Additional benefits are review by Georgia of federal and federally permitted and funded projects for consistency with its coastal management program and consideration of the national interest in state decision-making.

*Alternative 2: The Assistant Administrator could deny approval of the GCMP.*

OCRM could deny approval if the program is found not to meet all requirements. This would have the same practical effects as the "no action" alternative in NEPA parlance; it would mean that Georgia does not implement a federally approved coastal management program. The impacts of denial of approval, or "no action," are described below:

a. No federal funds to administer the program: Under Section 306 of the CZMA, Georgia would receive about $950,000 annually to administer its coastal management program, and could receive up to approximately $200,000 in enhancement funds under Section 309.

b. No consistency review of federal actions: This would mean that federal actions would not be reviewed by Georgia for consistency with the GCMP as required by Section 307 of the Coastal Zone Management Act.

c. Possibly, a lack of adequate consideration of the national interest in the siting of facilities which are other than local in nature, as required by Section 306(d)(8)

of the CZMA. The State of Georgia and local governments would be under no obligation to give adequate consideration to coastal facilities that are of national interest. This could result in loss of public benefit that the use of such facilities provide.

*Alternative 3: The Assistant Administrator could delay approval of the GCMP.*

As an alternative to denying approval, OCRM could delay its approval if any element of the GCMP necessary for program approval does not meet requirements. Such a delay would be designed to give the state time to make necessary modifications. In the opinion of OCRM, the following two issues might be the most prominent in terms of reviewing the adequacy of the GCMP in meeting specific CZMA requirements.

Alternative 3a: Delay program approval if the State of Georgia does not have the organizational structure to implement the coastal management program.

The GCMP is a "networked" program consisting of several Georgia natural resource protection programs. Georgia's coastal management law requires that all state agencies coordinate and cooperate in administering the program and that all agencies with planning, management, or regulatory authority conduct actions in a manner consistent with the GCMP. Responsibility for implementing several core authorities and coordinating the overall program falls to the Coastal Resources Division, in the Department of Natural Resources (DNR). Other state agencies such as the DNR's Environmental Protection Division and the Georgia Department of Transportation need to act consistently with the GCMP. The Assistant Administrator could delay program approval if the coordination and consistency provisions of the GCMP, including the draft interagency Memoranda of Agreement included in the Appendices, are insufficient to effectively network state agencies and divisions into an overall coastal management program.

Alternative 3b: Delay program approval if the State of Georgia's coastal management authorities do not adequately manage activities with a direct and significant impact on coastal waters, due to exemptions contained in the authorities.

A number of Georgia's statutes that comprise the GCMP, notably the Erosion and Sedimentation Act and the Coastal Marshlands Protection Act, exempt certain activities and/or agencies from permit requirements. The Assistant Administrator could delay approval of Georgia's program if these exemptions hamper the state's ability to adequately administer the GCMP. In making this determination, NOAA will examine the individual statutes, the state Coastal Management Act which binds relevant state agencies to consistency with the GCMP policies, current agency practices, and working agreements and the Memoranda of Agreement between the Coastal Resources Division and networked agencies.

2. State Alternatives Considered During Program Development

Throughout the effort to develop a program in Georgia, preference was given to using a networked approach based on existing authorities rather than creation of a new CZM superagency. Georgia's General Assembly, in passing the Coastal Management Act in 1997, made clear and specific choices about the manner in which Georgia's coastal management program would be developed and implemented. The law establishes a networked program, with DNR as the lead agency responsible for a majority of the permitting and for ensuring coordination and cooperation with other state agencies.

An alternate approach to the program was considered during Georgia's first effort at a coastal management program in the late 1970s. Then, the inland boundary was based on rail lines and highways, rather than county lines. The program, as envisioned at that time, was based on a series of policies enforced by state and local statutes, regulations, and ordinances. This alternative was eliminated when Georgia ceased participation in the federal coastal management program before the program was approved by the Secretary. The original state Coastal Management Act sunsetted in 1984.

Another alternative, developed in 1992-1993, was based on an extensive set of resource policies drafted by the staff of the Coastal Resources Division. This program would have relied on passage of state legislation allowing for implementation and enforcement of the policies. This alternative was rejected due to overwhelming negative public reaction and a decision on the part of the Commissioner of Natural Resources to give the public greater involvement in the development of the program. Due to this decision, the original resource policies were discarded and public task forces formed to draft new recommendations.

A third alternative, considered in 1994-1995, involved developing the program without additional state legislation, using the public task force recommendations as the program's policies. This alternative was rejected due to the opinion of the state Attorney General's office, which mirrored NOAA's concerns, that Georgia would need to pass enabling legislation to meet all federal CZM requirements and ensure enforcement of the policies as well as consistency of state agency activities.

The final result of this process is a program based on the enforceable policies contained in 34 state statutes and programs, including the Coastal Management Act, passed in 1997, which establishes procedures for program implementation and requires state agencies to cooperate and coordinate their program activities and act consistently with the policies. Public involvement has vastly increased since 1992, and the program document contains hundreds of policy recommendations written by the public that guide program operations and funding decisions (the recommendations are not, however, the underlying enforceable policies of the program; these are found in statutes, rules, etc.). Summaries of the Coastal Management Act and other legislation are found in Part II, Chapter Five and the policy recommendations are contained in Appendix VIII.

4. Consultation and Coordination

Extensive consultation with the general public and all levels of government accompanied development of the GCMP. The governor appointed a Coastal Zone Advisory Committee in 1992, and several hundred residents of coastal Georgia participated in public task forces that provided the advisory committee with policy recommendations. All local, state and federal agencies referenced in Part II of this document were consulted during development of 1995, 1996, and 1997 draft program documents. DNR has consulted each agency continually in order to incorporate necessary revisions prior to publication.

## C. Description of the Affected Environment

### 1. Overview

With approximately 100 straight-line miles and over 2,344 linear miles of coastline, Georgia's coastal area is enriched with abundant marshes, barrier islands, beaches, estuaries, river corridors, maritime forests, and uplands. To date, the Georgia coast has been relatively undeveloped, mostly because many of Georgia's barrier islands are not easily accessible and much of the available developable land is currently being managed for timber production. Pressures from increasing population and development, however, are threatening the quality of life on the coast. The population of coastal Georgia is growing at approximately 20% per decade. Along with this increased population growth comes the pressure to develop environmentally sensitive areas such as wetlands, floodplains, and barrier islands. A long-range resource management plan will ensure an acceptable level of protection while providing for compatible economic development so that future generations may also enjoy the Georgia coast.

### 2. Coastal Area

The Georgia Coastal Management Act defines the "coastal area" or "coastal zone" to mean "all tidally influenced waters and submerged land seaward to the state's jurisdictional limits and all lands, submerged lands, waters, and other resources within the counties of Brantley, Bryan, Camden, Charlton, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Wayne." Of these counties, Bryan, Camden, Chatham, Glynn, Liberty, and McIntosh border the Atlantic Ocean, while Brantley, Charlton, Effingham, Long, and Wayne are in the second tier inland from the ocean.

### 3. Physical and Natural Environment

The Georgia coast is an interrelated system of productive coastal marine waters, barrier islands, estuaries, coastal marshlands, rivers, and associated upland areas.

#### *a. Coastal Marine Waters*

The westernmost portion of the United States on the Atlantic seaboard, Georgia's coast is located approximately in the center of the South Atlantic Bight. The broad, gentle slope of the continental shelf stretches 95 miles off the coast of Georgia. Because of this wide, shallow shelf, wave energy along the Georgia coast is generally low. On the shelf, many hard and soft bottom habitats can be found. "Live bottom" areas occur naturally where limestone outcroppings are exposed on the seafloor, allowing marine animals and plants to settle and colonize. The Gray's Reef National Marine Sanctuary, located approximately 15 miles east of Sapelo Island, is a natural reef community with an abundance of live bottom habitat in 60 to 70 feet of water on the continental shelf. Artificial reef communities have been created in some areas by sinking barges, World War II era liberty ships, and other materials that encourage reef organisms to settle and

grow. The coastal marine waters off of Georgia provide habitat for many birds, sea turtles, marine mammals, crustaceans, and fishes. Marine wildlife includes the following species protected by state and/or federal law: northern right whale, humpback whale, west Indian manatee, loggerhead sea turtle, green sea turtle, leatherback sea turtle, hawksbill sea turtle, Kemp's ridley sea turtle, piping plover, Wilson's plover, American oystercatcher, bald eagle, wood stork, least tern, gull-billed tern, and shortnose sturgeon. Many commercially-important species, such as shrimp, crab, snapper, and grouper live and breed in Georgia's marine and estuarine waters.

*b. Barrier Islands*

A chain of barrier island clusters stretches along the Georgia coast, separated from the mainland by acres of salt marsh. The seaward side of these islands is home to all of Georgia's approximately 88 miles of ocean beaches. From north to south, the major islands and their approximate acreages are listed in the following table.

| *Island* | *Approximate Acreage* | *Approximate Miles of Beach* |
|---|---|---|
| Tybee | 1,500 | 3.4 |
| Little Tybee | 1,600 | 3.0 |
| Wassaw | 2,500 | 6.0 |
| Ossabaw | 11,800 | 9.5 |
| St. Catherines | 7,200 | 11.0 |
| Blackbeard | 3,900 | 7.5 |
| Sapelo | 10,900 | 5.6 |
| Little St. Simons | 2,300 | 6.5 |
| Sea | 1,200 | 3.8 |
| St. Simons | 12,300 | 3.8 |
| Jekyll | 4,400 | 8.0 |
| Little Cumberland | 1,600 | 2.4 |
| Cumberland | 15,100 | 16.9 |
| *Totals* | 76,300 | *88.3* |

Georgia's barrier islands have built up over the past forty thousand years due to sea level rise, wave action, and shifting sand. Melting glacial water after the last great Ice Age created islands out of lands at the edge of the continental shelf. Once formed, wind, wave action, and rising sea level eroded sand from the seaward side of the islands and shifted sand to the landward side of the islands, causing the islands to roll over upon themselves and migrate landward. Longshore currents cause the development of sand bars and shoals, which may eventually acrete to or erode from the islands. Barrier islands serve important functions buffering the mainland from storms and protecting the mainland from erosion and property damage. The islands and their associated dune, live oak, pine forest, and marsh communities support an abundance of wildlife. Loggerhead, green, and leatherback sea turtles use Georgia beaches for nesting habitat.

Ospreys, brown pelicans, herons, egrets, shorebirds, and many species of sea gulls are common in this important wading and shorebird nesting and staging area.

*c. Estuaries*

Six major watersheds terminate at the Georgia coastline, forming an extensive estuarine ecosystem. When freshwater from rivers mixes with and dilutes saltwater from the ocean, both water bodies contribute their own chemical and physical characteristics. This combination of properties creates a richly diverse and highly productive natural habitat. About 75% of commercially important fish and shellfish in the nation are estuarine-dependent. These species rely on estuaries and upper reaches of tidal rivers and streams for early life-stage food, migration, and spawning. Georgia's coastal estuaries and associated aquatic ecosystems form a critical component in the life cycles of sport fishes such as spotted seatrout and red drum; commercial species such as shrimp, blue crabs, and oysters; and endangered species such as manatees and shortnose sturgeon. Fragile estuarine ecosystems establish the foundation for the interrelationship of many marine plants and animals with their environment. Without the estuaries, that life could not exist.

*d. Coastal Marshlands*

Moving inland, a broad band of coastal salt marshlands covering 378,000 acres separates the barrier islands from the mainland. Measuring three to five miles wide in some places, Georgia's marshlands constitute one-third of the remaining salt marsh along the U.S. Atlantic coast. The marshes are dominated by smooth cordgrass (Spartina alterniflora), which supports a highly productive food chain. High nutrient levels are transported in and out of the system by daily tidal cycles, thus supporting a rich habitat for fish, birds, crustaceans, and other wildlife. Herons, egrets, wood storks, redwing blackbirds, oysters, red drum, sea trout, blue crabs, and white shrimp are common here. The area experiences an average tidal range of 6 to 8 feet, with spring tides of 9 to 11 feet. These tidal ranges are several feet larger than neighboring Florida, South Carolina, and North Carolina due to Georgia's location in the center of the South Atlantic Bight. The large tidal range is responsible for Georgia's abundance of salt marsh.

*e. Rivers and Freshwater Wetlands*

Further to the west, brackish and freshwater wetlands extend inland up rivers and streams. This area is generally flat and occupied by live oak, tupelo gum, and cypress swamps. These wetlands serve to recharge the shallow groundwater aquifer and reduce the duration and magnitude of flood events. Wetlands function like sponges to retain floodwaters, filter out sediment and other contaminants, and slowly release the water over time to the rivers. These wetlands also provide important habitat for wildlife, including endangered and threatened species such as the bald eagle and wood stork. Large numbers of migratory waterfowl (scaup, mergansers, mallards, coots) and wading birds (white ibis, snipe, woodcock, yellowlegs) use these places as staging (resting and feeding) areas on the way to their wintering grounds in

Central and South America. Several major rivers feed these wetlands, including the Savannah, Ogeechee, Canoochee, Altamaha, Satilla, and St. Marys. Most of these rivers provide critical habitat for anadromous fish stocks as well as the endangered shortnose sturgeon. All of Georgia's coastal rivers carry large amounts of sediments to the sea, helping to build new land and to keep up with sea level rise over time.

*f. Upland Forests*

Much of the coastal mainland is heavily forested with slash, spruce, loblolly, and longleaf pines. Forests that are less managed are populated with a mixture of pines, hardwoods, and other species such as oak, hickory, magnolia, bay, palmetto, and dogwood. The pine and hardwood forests are home to many bird species, such as the endangered red-cockaded woodpecker and many birds of prey (red-tailed hawk, turkey vulture, great horned owl). Many game species, such as feral hogs, whitetail deer, black bear, wild turkey, and bobwhite quail, can also be found in these forested communities.

*g. Climate*

The marine subtropical climate of the Georgia coast is heavily influenced by the Atlantic Ocean and other meteorological and climatic features common to the southerly latitudes. The climate is moderate, with short, mild winters and long, humid springs and falls. Temperatures in the region average 52 degrees Fahrenheit in the winter, 65 degrees Fahrenheit in the spring, 80 degrees Fahrenheit in the summer, and 67 degrees Fahrenheit in the fall. Ocean and sea breezes tend to moderate temperatures along the coast. Rainfall averages 30 to 50 inches per year, half of which comes from summer thunderstorms. During the summer, the area is dominated by a large high-pressure system called the Bermuda High that diverts most of the continental frontal storms away from the southeast.

The Bermuda High disintegrates in late summer, allowing frontal passages to return. May through November is considered hurricane season. Historically, tropical storms and hurricanes impact the Georgia coast on the average of once every ten years. Coastal flooding resulting from hurricane-induced storm surges and long-term beach erosion pose a substantial danger to life and property on the low-lying barrier islands and mainland. The storms cost many lives and result in millions of dollars in property damage in the coastal zone due to high winds, flooding, and rainfall. Strong northeasters impact the coast more frequently than hurricanes and supply much of the rain in late fall, winter, and spring.

4. Socioeconomic Characteristics

*a. History*

The Native Americans were the first known settlers of coastal Georgia, over 10,000 years ago. A band of the Creek Indian tribe inhabited most of the Georgia coast at the time of Spanish

arrival in 1540. Following the formal conquest of Florida by DeSoto in 1539, the Spanish occupied the Georgia coast from 1540 to 1680, building missions and attempting to convert the Indians to Christianity. In the late 1600s, as the British and Native American tribes invaded the area from colonies at Charleston, South Carolina, the Spanish retreated to Florida. The area remained largely uninhabited from 1690 until the 1720s, with the notable exception of the famous pirate Edward Teach, or "Blackbeard," who used the Georgia coast as his refuge while roaming the southeast coast. According to local legend, buried treasure remains undiscovered on Blackbeard Island to this day.

The British began to establish permanent colonies in coastal Georgia in the early 1700s. Formed from lands ceded from South Carolina, the new colony was named Georgia in honor of King George II. English citizens were offered free passage, a land grant, and three years of support to settle in the new colony. The Spanish were not pleased with the English colonization efforts, and demanded that all of Georgia be returned to Spain. Britain declared war on Spain in December of 1739, and the Spanish attacked St. Simons Island in 1742 with over 50 ships and over 5,000 men. General James Oglethorpe, with only 650 men, repelled the Spanish in the Battle of Bloody Marsh. This battle ensured English control of the Georgia territory and all points north.

Slavery was introduced into coastal Georgia in the 1740s. Much of the property on St. Simons was given to British soldiers for their service in the military, but most returned to England at the beginning of the Revolutionary War. Those who remained purchased slaves and began to clear and dike off large tracts of riverine wetlands and uplands to grow rice and cotton. During the Revolutionary War, much of coastal Georgia was ravaged by the British army. The coast would soon recover economically due to abundant timber and the introduction of sea-island cotton from the West Indies.

The period from the late 1700s up to the Civil War was marked by the production of naval stores (tar, pitch, turpentine) and the cultivation and harvest of live oak timber, rice, indigo, and cotton. The naval stores and timber were needed for the growing shipbuilding industry. Live oak was the ideal lumber for building ships because of its strength and resistance to rotting. With the Industrial Revolution underway in England, cotton was in great demand to supply the cotton gins and textile mills. Due to the fertile soils and suitable climate, the Georgia coast provided the ideal conditions to grow high quality cotton. Vast areas of forest and swamp were cleared and drained for the timber and for land to cultivate. Timber, indigo, and cotton cultivation and harvest began to decline in the late 1800s, signaling the end of the plantation period. Most of the live oak forests had been harvested by this time. At the same time, the demand and price for indigo and cotton in England declined and the boll weevil decimated existing crops. Rice production reached its peak just prior to the Civil War in 1860. Coupled with the onset of the Civil War and the loss of slave labor, the plantation period in Georgia came to an end. After the Civil War, freed slaves populated many areas of the Georgia coast, particularly Sapelo Island. The coast quickly went from one of the most prosperous regions of the country to one of the poorest.

From the 1870s to the 1900s, during Reconstruction, the region tried to recover from the economic decline. Lumber mills began to appear on the Georgia coast. With most of the live oak already harvested, the mills sawed cypress, pine, and other oaks into lumber for export to Europe. The timber from up-state was floated down the Satilla and Altamaha rivers to the mills at Darien and St. Simons. Many of the small marsh islands in the vicinity of the old sawmills were formed from the discarded ballast stones of the old schooners used to transport lumber to Europe.

During the early 1900s, people began to discover coastal Georgia as an ideal resort destination. Savannah, St. Simons Island, Jekyll Island, and Cumberland Island were home to the cottages and summer villas of the nation's wealthiest families such as the Pulitzers, Carnegies, Reynolds, and Staffords. The cities of Savannah and Brunswick played an important role in national defense during World War II by building liberty ships. The Eighth Army Air Force, an important contingent in the European air battle during Word War II, was formed in the City of Savannah. The coast continues to support national defense today, with Fort Stewart Army Base in Hinesville, Hunter Army Air Field in Savannah, and Kings Bay Naval Submarine Base in St. Marys.

Continuing the trends of the past few decades, the Georgia coast is growing at a rapid pace. Timber, agriculture, and related manufacturing plants dominate the coastal economy. Tourism and related service industries are growing strong, and the Georgia coast remains a popular area for permanent residence. Many of the coastal counties have seen exponential growth in population due to the influx of tourism and the placement of military bases in the area. There are areas of the coast where culturally and historically significant communities still exist, such as the traditionally African-American community of Hog Hammock on Sapelo Island. Many historical places remain throughout the Georgia coast, including Fort Frederica, the Battle Site at Bloody Marsh, Fort Pulaski, Fort King George, and numerous historic districts, neighborhoods, commercial areas, homes, schools, and churches.

*b. Demographics*

According to the 1990 Census, the eleven-county coastal area of Georgia has a combined population of 460,233 people. Approximately 66.9% are white, 31.2% are black, 1.7% are Hispanic, and 1.9% are of other descent. The population is mainly centered around the Savannah area (Chatham, Effingham, and Bryan Counties), with smaller centers around Brunswick (Glynn County) and Kingsland/St. Marys (Camden County). The overall population of the region, however, is largely rural (66.8%). Only Chatham County's population density of 430 people per square mile exceeds the State average of 112 people per square mile. The emigration of people out of Chatham County, coupled with the immigration of people to surrounding Effingham and Bryan Counties, indicates that people are moving out of metropolitan Savannah to the suburbs.

The coastal population continues to grow from tourism when visitors to Tybee Island, Sea Island, St. Simons Island, and Jekyll Island decide to move to these communities. The

population is also growing from military bases in Camden, Liberty, and Long counties (Kings Bay Naval Submarine Base and Fort Stewart Army Base). According to the 1990 Census, a substantial 23% increase from 1990 is predicted for coastal Georgia in the next decade. This increase continues a trend in population growth on the coast which has exceeded 200% in some counties since 1930. Liberty County and Camden County have experienced a remarkable 547% and 376% increase in population respectively since 1930, due largely to the placement of military bases in those counties.

*c. Coastal Land Use*

The eleven-county coastal area of Georgia encompasses approximately 6,409 square miles, with an average population density of 82 people per square mile. Of the total area, 88% is land, and 12% is water. Seventy-five percent of the land area is forested and 25% is non-forested. Although there are clusters of intense development, much of the Georgia coast remains relatively undeveloped. As of the mid-1980s, only 4% of the coast was classified as developed, with 3.3% residential, 0.3% commercial, and 0.4% industrial. There is no shortage of developable land (estimated at 32% of the total land area); however, there is a need for better management of growth and better planning for development to insure that the region retains its growth potential and habitability.

Georgia has more land in forest management than any other state, accounting for 71% of the land area of coastal Georgia. Approximately 49% of the timberland is owned by industry, 39% is privately-owned, and 12% is owned by the government. The soils and climate of the area also make it conducive to growing crops due to the long growing season and ample rainfall. The second-tier coastal counties account for most of the conventional agricultural activities in coastal Georgia, such as row crop cultivation and livestock husbandry.

Commercial and industrial development along the Georgia coast is also an important land use with many positive economic benefits. Ports and waterborne commerce-related facilities, gypsum and sheet rock plants, pulp and paper mills, and public utility companies are a few examples of industries along the coast. The coastal area of Georgia has been attractive to industry for many reasons, including the proximity to water transportation, high quality groundwater resources, and nearby natural resources and raw materials. Manufacturing and other industry are beneficial to the coastal economy, however, there can be waste disposal, toxic and hazardous waste, and water and air pollution problems if not properly managed. The electricity provided by utility companies in the area is generated by hydroelectric, nuclear, coal, oil, and natural gas powered plants throughout the state. There are no nuclear or hydroelectric plants within the eleven-county coastal area.

In fiscal year 1992-1993, the eleven-county coastal area received $64.5 million in federal, state, and local funds to construct and maintain over 6,500 miles of public roads, highways, and bridges for its citizens. In addition, there are several airports capable of servicing a wide variety of aircraft sizes, including major airports (Savannah International Airport and the Glynco Jetport in Brunswick) and many smaller airfields throughout the coastal zone. The area is also served by

railways such as AMTRAK, CSX, and Norfolk-Southern. In addition, the entire Georgia coastal area is within one or two hours of the Jacksonville, Florida or the Charleston, South Carolina metropolitan area.

There is a large military and national defense presence in coastal Georgia. The Kings Bay Naval Submarine Base, Hunter Army Air Field, and Fort Stewart Army Base are the three major installations in the area, encompassing 7.4% of available land.

State and federal government entities own a wide variety of lands in coastal Georgia. Many of these areas are maintained as natural areas, and are very important to the ecological health of the area. These areas provide habitat for wildlife, control floodwaters, recharge groundwater supplies, and improve surface water quality. The federal government owns and maintains Cumberland Island National Seashore, Wassaw Island National Wildlife Refuge, Harris Neck National Wildlife Refuge, Gray's Reef National Marine Sanctuary, Fort Frederica National Monument, Fort Pulaski National Monument, Bloody Marsh National Monument, Wolf Island National Wildlife Refuge, Savannah National Wildlife Refuge, and Blackbeard Island National Wildlife Refuge. The Georgia Department of Natural Resources maintains parks and recreational areas at Skidaway Island and Crooked River; Wildlife Management Areas (WMAs) at the Altamaha River, Richmond Hill, Ossabaw Island, Paulks Pasture (lease), Sapelo Island (Richard J. Reynolds WMA), and Sansavilla (lease); State Heritage Preserves and Historic Sites at Fort King George, Fort McAllister, Wormsloe, Sunbury, Richmond Hill, Little Tybee Island, Cabbage Island and Hofwyl-Broadfield Plantation.

Many educational, medical, and other public facilities are located within the coastal area. Georgia Southern University, Savannah State College, Armstrong State College, Coastal Georgia Community College, and several other regional schools and technical colleges are all located on or near the coast. The Southeast Georgia Regional Medical Center in Brunswick; Candler, St. Josephs, and Memorial Hospitals in Savannah; and Camden Medical in St. Marys are a few of the major facilities that provide medical care to the citizens of the coast. In addition to schools and hospitals, a multitude of civic centers, theaters, museums, and other public facilities are also located throughout the eleven-county coastal area.

*d. Economy and Natural Resources*

The coast of Georgia enjoys a dynamic and diverse economy based largely on the region's abundant resources, including natural waterways, groundwater, pine forests, fisheries, and natural and historic features. Regional unemployment figures for 1991 ranged from a high of 7.6% in Brantley County to a low of 3.6% in Camden County. The eleven-county average of 5.4% unemployment is similar to the Georgia statewide unemployment figure of 5.0%. Median income figures for the area ranged from a high of $29,443 in Effingham County to a low of $18,802 in Long County. Per capita incomes ranged from $17,776 in Chatham County down to $8,080 in Long County.

The average median income and per capita income for the region during 1989-1990 was $24,381 and $12,630 respectively. Both averages are approximately 20% lower than the Georgia statewide average median income of $29,021 and average per capita income of $17,045. In 1989, 17.3% of the region's citizens were below the poverty level ($12,674 for a family of four) versus the state average of 14.7%. Camden County had the lowest poverty level of 11.5%, while Long County had the highest poverty level at 23.7%.

The eleven-county coastal area accounts for $6.2 billion in total buying power, 6.4% of the Georgia state total of approximately $97 billion. Seventy percent of that buying power ($4.3 billion) comes from Chatham and Glynn Counties. There is a tendency for wealth in the Georgia coastal area to be clustered near the population centers of Savannah and Brunswick and the military facilities of Camden and Liberty Counties, and absent from the rural counties of Brantley, Charlton, Long, McIntosh, and Wayne.

Extensive plantings of pine forests signify the importance of the timber industry in coastal Georgia. Timber activities include forestry management, timber harvesting, paper pulp processing, and pine product distillation. The long summer growing periods, plentiful rainfall, fertile soils, and access to large quantities of groundwater make the coastal area very conducive to timber growth and processing. Commercial forests cover much of the land area in the Georgia coastal area and produced a total income (from sawtimber and pulpwood) of $110.5 million in 1993. Georgia Pacific pulp mill employs 850 people, and the Hercules plant, which distills pine oils, employs 544 people. Union Camp Corporation in Savannah employs 2,800 people. Riceboro Interstate Paper Corporation, ITT Rayonier (Jesup), Stone Container Corporation (Savannah), Fort Howard Paper Corporation (Rincon), and Gilman Paper (St. Mary's) collectively employ another 4,350 people.

Other major manufacturers in the Savannah area include Gulfstream Aerospace (jet aircraft), Great Dane Trailers (truck trailers), Savannah Sugar Refinery (refined sugar), and Kemira, Incorporated (titanium dioxide, a paint pigment). Major manufacturing operations in the Savannah area provided a total of 15,800 jobs in 1993.

Row crop agriculture as well as livestock and poultry operations are also an important economic activity, especially in the second tier of coastal counties (Brantley, Charlton, Effingham, Long, and Wayne). In 1987, the eleven coastal counties contained 1,195 individual farms, comprising 7.3% of the total coastal land area. Tobacco is the most important row crop, along with corn, soybeans, peanuts, and cotton. Approximately 19,000 head of cattle are raised in the coastal zone, along with about 17,800 hogs and pigs and several million chickens.

Waterborne commerce and associated port development provides significant employment and revenue in coastal Georgia due to protected waterways, suitable physical port locations, and attractive local and regional markets. Savannah and Brunswick are the two major ports in Georgia that possess modern docking, storage, and land transportation facilities. Kings Bay Naval Submarine Base also has significant dockage facilities, but it is used exclusively by the

U. S. Navy. In 1989, Savannah and Brunswick handled almost 15 million tons of cargo. Products landed and shipped from Georgia ports range from automobiles and wood products to grains and gypsum. The 138 mile long Georgia segment of the Atlantic Intracoastal Waterway supports substantial barge and other commercial traffic.

The commercial fishing and seafood processing industry is yet another important economic factor on the Georgia coast. In 1995, there were approximately 2,500 commercial fishers in Georgia, principally trawling for shrimp. Blue crabs, whelks, clams, and oysters are also important species in the industry. In 1995, approximately 7 million pounds of shrimp valued at $27 million, 9 million pounds of blue crabs valued at $5 million, and 1.3 million pounds of all other species (snapper, grouper, oysters, clams, and other finfish and shellfish) valued at over $1.3 million were landed in Georgia. In that same year, over 1,400 people were employed in 11 seafood packing and processing houses, along with 50 wholesale seafood dealers employing over 100 people. Rich-Sea Pak and King and Prince, two large seafood processing houses, employ approximately 800 and 600 people, respectively.

Recreation and tourism is also an integral component of the coastal economy. The natural, relatively undisturbed shorelines and beaches of Georgia coupled with the temperate climate make coastal Georgia an attractive vacation destination. Abundant natural and historic resources, such as the National Historic Landmark districts in Savannah and Jekyll Island, Cumberland Island National Seashore, Fort Frederica National Historical Monument, the top-class golf courses, and abundant recreational fisheries, add to the allure of the area. Four State Parks and four State Historical Sites are operated by the State of Georgia and are open to the public. Many visitors enjoy recreational fishing, as evidenced by a 1994 survey that estimated 443,717 anglers state-wide participate in saltwater fishing in Georgia. These fishers catch over three million fish, creating an expenditure of $53.4 million annually, as well as a total economic value of over $250 million annually. Other popular activities include tennis, golfing, sailing, and scuba diving. Boating is another popular recreational activity, with almost 25,000 boats registered in coastal Georgia and over 40 marinas and 36 public boat ramps to serve them.

Savannah area visitors totaled 5.4 million in 1993, generating almost $616 million in spending and supporting 18,000 full-time jobs. In 1995, 1.53 million Glynn County tourists spent approximately $700 million dollars and supported 15,322 full-time jobs annually. The total impact from tourism in the Georgia coastal area was estimated at around $1.39 billion in 1993. Tourism continues to grow each year, and more people are choosing coastal Georgia as a place to retire.

National defense-related complexes are another major component of the coastal Georgia economy. These facilities employ a large number of personnel, which results in economic growth of the surrounding communities. Camden County and Liberty County have both experienced tremendous growth from Kings Bay Naval Submarine Base and Fort Stewart Army Base, respectively. The Kings Bay facility is home for 5 to 10 Trident nuclear submarines and employs 9,000 people. Fort Stewart, which is the largest Army base east of the Mississippi, had

19,000 employees in 1993. Also in 1993, Hunter Army Air Field in Savannah employed 4,800 personnel. United States Coast Guard personnel in Savannah and Brunswick are economically important to their communities. The Federal Law Enforcement Training Center (FLETC) in Brunswick trains law enforcement personnel for over 70 federal agencies across the U.S., employing approximately 1,300 people and graduating 25,000 people annually.

5. Environmental Quality

While coastal Georgia is rich in natural resources, maintaining the quality of those resources is of growing concern to coastal residents. Major issues include: wetlands reduction, toxic substances, nonpoint source pollution, groundwater management, and surface water withdrawal.

*a. Wetlands Reduction*

Wetlands are some of the most productive natural areas in the world. Important fish and wildlife habitat, wetlands are the nursery areas for most of the fish and shellfish used for human consumptions. These fish and shellfish also depend on wetlands for breeding, spawning, feeding, and shelter. Migratory birds and waterfowl use wetlands for food, shelter, breeding, and wintering grounds. Many other animal species, including many threatened and endangered species, rely on wetland habitats.

Wetlands also provide important recreation areas for boaters, hunters, fishers, birdwatchers, hikers, photographers, etc. Functionally, wetlands are important in helping control flooding and erosion. Located between water bodies and high ground, they serve as buffers to protect upland property. Wetlands also help improve water quality and availability. They purify water by processing nutrients and trapping suspended materials. They help improve water availability by absorbing water in wet seasons and gradually releasing it during dry periods.

According to the U.S. Fish and Wildlife Service, Georgia has lost approximately 25% of its total wetlands acreage since 1780. During the twenty-year period between 1950 and 1970, the estimated loss to Georgia's wetlands was 146,000 acres or an average of 7,300 acres per year statewide. While this is a substantial loss, Georgia retains the highest percentage of precolonial wetland acreage of all the southeastern states. One and one half million acres of wetlands are found within the eleven coastal counties. Of these, approximately 378,000 acres are estuarine wetlands, and the remainder are freshwater wetlands. Coastal fresh- and saltwater wetlands comprise over forty percent of the total wetlands acreage of Georgia.

As with most coastal areas, the population of coastal Georgia is growing tremendously. As the population increases and persons move into the coastal counties, those individuals must have access to places to live, work, and play. The creation of these amenities of life puts excessive pressure on fragile coastal ecosystems and contributes to the continuing loss of coastal

wetlands. The impacts of industrial, commercial, and residential development; soil erosion and sedimentation; point and nonpoint source pollution; waste management; and many other matters of natural resource degradation are priority environmental issues affecting wetlands in Georgia.

*b. Toxic Substances*

Posing direct threats to human health as well as natural resources, toxic substances are a major concern in coastal Georgia. According to the Georgia Environmental Protection Division, the sources of toxins are widespread. Some municipal and industrial treated wastewater contains concentrations of heavy metals coming from plumbing or industrial processes. Fish are especially sensitive to metals, and their populations may be affected by small concentrations that pose little threat to humans. Stormwater runoff may also contain toxins in the form of metals or organic chemicals such as pesticides or PCB's. Organic chemicals persist in the environment for many years, so toxic levels may remain long after production of the chemicals is outlawed. Although concentrations of carcinogenic organic compounds may accumulate in fish flesh without damage to the animal, regular consumption of fish contaminated with these compounds greatly increases the risk of cancer for humans.

Two sites on the U.S. Environmental Protection Agency's National Priorities List (Superfund) of the 1,210 worst hazardous waste sites in the country, Hercules 009 Landfill and LCP Chemicals, are located in Glynn County. At the Hercules site, soils and sediments are contaminated with toxaphene, which is a chlorinate pesticide. The entire LCP site is contaminated with mercury, and high levels of lead and PCBs are also present. Parts of the Turtle River, near the LCP site, are closed to commercial and recreational fishing due to the contaminated sediments. In addition to these nationally listed sites, the State of Georgia maintains a Hazardous Site Inventory. Fifty-three of the 336 sites on this inventory are located in the coastal area, mostly in Chatham and Glynn counties. The Georgia Environmental Protection Division is cooperating with the U.S. Environmental Protection Agency on the cleanup of the Superfund sites, and is cooperating with persons responsible for the contamination to investigate and clean up the sites on the Georgia Hazardous Site Inventory. Despite agency efforts, cleanup is costly and difficult. Coastal citizens near the sites raise concerns about contaminated seafood, health risks, and environmental justice.

*c. Nonpoint Source Pollution*

In Georgia, as elsewhere across the nation, the focus of pollution impact on aquatic systems has shifted from point source to nonpoint source pollution. While point source pollution has an easily identifiable discharge site, nonpoint source pollution is defined as contamination that cannot be directly linked to a specific point of discharge. Nonpoint sources may include agricultural and forestry runoff, urban and suburban runoff, erosion and sedimentation, construction activities, and mining activities. Contaminants may include sediments, litter, bacteria, herbicides, pesticides, fertilizers, metals, oils, cleansers, etc.

Due to the nonspecific nature of nonpoint source pollution, a combination of regulatory and nonregulatory approaches is necessary to control impacts. Often, voluntary techniques such as pollution prevention and best management practices are effective. Recognizing nonpoint source pollution as a key issue and challenge to be addressed, the Georgia Environmental Protection Division established the Nonpoint Source Program in 1996. This program seeks to expand existing nonstructural techniques through an approach that stresses watershed protection through planning, zoning, buffer zones, and building densities, as well as increased use of stormwater retention ponds, street cleaning, and perhaps eventual limitations on pesticide and fertilizer usage.

*d. Groundwater Management*

Coastal Georgia has a series of aquifer systems that vary in their confinement, depth, geologic characteristics, and water yield. The limestone strata underlying the coastal plain form one of the most productive aquifer systems in the country. The shallowest aquifers are near the surface in unconsolidated sediments, and are generally unconfined. The aquifers range in depth from 11 to 72 feet, and commonly yield two to 25 gallons of water per minute. They serve as a supplemental source of water in urban areas, and a primary source of water for domestic and livestock use in rural areas. Shallow wells are routinely tested for nitrates and pesticides by the Georgia Environmental Protection Division. Although a few wells have been found to be contaminated with nitrates, attributable to adjacent sources of pollution, no wells in the coastal area have been found to be contaminated with pesticides.

The Upper and Lower Brunswick aquifers are located in phosphatic and dolomitic quartz sand, and are generally confined. They range in depth from 85 to 390 feet, and commonly yield 10 to 30 gallons of water per minute. In coastal Georgia, these aquifers are considered to be a supplemental water supply to the Upper Floridan aquifer. Most wells tap both the Floridan aquifer and parts of the Upper and Lower Brunswick aquifer. Beneath the Floridan aquifer lie the Claiborne, Clayton, and Cretaceous aquifers. These aquifers are less important as water sources for the coastal area, although the Clayton Aquifer is stressed due to heavy use in southwest Georgia.

The Floridan aquifer is a limestone, dolomite, and calcareous sand aquifer system, and is generally confined. Its depth ranges from 40 to 900 feet, and it commonly yields 1,000 to 5,000 gallons of water per minute, though it can exceed 11,000 gallons per minute. Since the aquifer is deeply buried in the coastal area, the groundwater level is influenced greatly by pumping and is not recharged from local precipitation. Instead, it is recharged with water where it is exposed near the fall line that runs from an area south of Augusta towards Macon, through Albany to Bainbridge. The aquifer flows from the fall line toward the ocean and provides water to the coastal area. The Floridan aquifer supplies 50 percent of groundwater used in Georgia. This aquifer is impacted by saltwater intrusion in certain areas, due to excessive pumping pressure.

The major withdrawals from the Floridan aquifer occur in the Savannah, Brunswick, and Jesup areas. Since pumping began in the late 1800's, withdrawals have lowered the level of the Upper Floridan aquifer and formed cones of depression centered at Brunswick and Savannah. This water level decline has allowed saltwater to migrate upward into the Upper Floridan aquifer in Brunswick from the Fernandina permeable zone, contaminating the freshwater supply. The reduced pressure from groundwater pumping in the Savannah/Hilton Head area is allowing horizontal movement of saltwater into the Upper Floridan in a process called saltwater encroachment. The Upper Floridan water level in the Savannah area is mainly affected by pumping for municipal and industrial uses. The Upper Floridan water level in the Jesup-Doctortown area near Brunswick is mainly affected by industrial pumping.

The Georgia Environmental Protection Division is working with sister agencies in South Carolina and Florida to develop a comprehensive solution to problems associated with regional use of the Upper Floridan Aquifer. The Environmental Protection Division is also working on an interim strategy for groundwater use in southeast Georgia, to include water supply planning, conservation and alternative water supplies, adjusted water withdrawal permitting, and technical investigations of potential solutions to saltwater intrusion. Nevertheless, aquifer management remains a public concern. As pressure on groundwater use increases and saltwater intrusion and lowering of the water table limit the usefulness of the aquifer, groundwater management issues become more pressing. The continued availability of high quality groundwater is a major limitation for residential, commercial, and industrial development in coastal Georgia. Long-term planning for alternative water uses such as surface water use and water conservation, and limiting excessive withdrawals are necessary to ensure continued access to water and to allow continued economic growth while still achieving groundwater quality standards.

*e. Surface Water Withdrawal*

With the increasing concern of saltwater intrusion in the groundwater, alternative water supplies are under consideration. Although north Georgia relies almost exclusively on surface water, coastal Georgia has until now enjoyed use of the Upper Floridan aquifer. Recent applications for surface water withdrawals have sparked public concern over the effect of the withdrawals on anadromous fishes, endangered species, and local hydrology. Of primary concern is that the actual environmental consequences of such withdrawal are unknown. One of the first rivers being considered as a surface water source, the Altamaha River is also a uniquely important heritage in coastal Georgia. Potential withdrawals from this river have cultural and economic, as well as biological and geological implications. As the coastal region receives increasing development pressure, area residents will have to make some difficult decisions about water use and management.

## D. Environmental Consequences

By enacting the CZMA, Congress declared that "it is national policy... to preserve, protect, develop, and where possible, to restore or enhance the resources of the Nation's coastal zone for this and succeeding generations." (CZMA Section 303, 16 U.S.C. § 1452.) States are to achieve these potentially conflicting goals by improving governmental coordination, incorporating consideration of long term implications of development decisions, and instituting a more rational decision-making process which conforms to CZMA policies. Such actions have the potential to substantially affect future coastal area activity and have a significant positive environmental impact. The CZMA mandates giving full consideration to ecological, cultural, historic and aesthetic values as well as to needs for economic development when considering various development proposals.

Thus, many factors and diverse, often conflicting values between resource protection and development must be weighed. The CZMA requires that a balance must be achieved which allows or encourages development, while still protecting unique and critical resources.

It is the intent of the GCMP to carry out these legislative mandates of the CZMA. Therefore, the environmental, institutional and socioeconomic effects are expected to be primarily beneficial. The GCMP will provide more coordinated decision-making with a greater focus on critical coastal issues such as wetland protection, beach and dune management, and nonpoint source pollution.

Impacts associated with approval of the GCMP are of two types: (1) impacts resulting from federal approval and (2) impacts resulting from implementation of Georgia's coastal protection statutes embodied within the program. In general, such impacts are discussed in the following sections with respect to direction of change (positive or beneficial, negative, or neutral) and with respect to duration (long-term or short-term). Because the proposed action is approval of a broad ranging program, quantification of net effects is not possible. Impacts of denying or delaying federal approval are discussed below as well.

### 1. Positive Impacts Directly Resulting from Federal Approval

#### *a. Section 306 Funding*

Federal approval will enhance the State of Georgia's financial ability to carry out its various coastal management efforts in accordance with Georgia Coastal Management Program policies. The state will rely to a considerable degree on the program funding made available in annual grants under Section 306 of the federal Coastal Zone Management Act, both to administer the Georgia Coastal Management Program (forty percent) and to pass through as Coastal Incentive Grants (sixty percent). Program administration funding will support additional staff, contracts, services, and other resources to enhance implementation of core Georgia Coastal Management Program laws. Local communities will benefit both from additional resources invested in technical assistance and outreach activities provided by the Georgia Coastal

Management Program, and from the Coastal Incentive Grants. Section 306 funds will be used for the following efforts.

- Salaries for Program Staff -- eight, as described below.

  (i) Program Manager -- to manage the daily operation of the Georgia Coastal Management Program, to handle federal consistency and interagency coordination, to assist with the Coastal Incentive Grants, to provide outreach and technical assistance, and other duties;

  (ii) Public Education and Outreach Coordinator -- to create a public outreach strategy, to develop public education materials, and to coordinate Georgia Coastal Management Program public outreach, education, and information activities;

  (iii) Permit Coordinator, Savannah -- to staff a newly opened Habitat Management Program site office in Savannah, to provide technical and permitting assistance to citizens in the Chatham County area, to improve enforcement and compliance;

  (iv) Grants Coordinator -- to administer the Coastal Incentive Grants, to evaluate grant applications based on criteria developed by the Coastal Advisory Committee, to negotiate grant contracts, and to monitor awards;

  (v) Technical Assistant for 401 -- to review and make recommendations on Section 401 Water Quality Certification for projects in the coastal area. This position is currently funded by other sources, and will eventually be funded by Section 306;

  (vi) Technical Assistant for 6217 -- to develop a coastal nonpoint pollution control program for approval pursuant to Section 6217. If funding is appropriated to implement 6217, that funding will be used instead of Section 306.

  (vii) Administrative Technician for Permitting -- to provide support for the Habitat Management Program in administering Coastal Marshlands Permits, Shore Permits, Revocable Licenses, and the Water Bottom Leases; and,

  (viii) Administrative Technician for Coastal Management -- to provide support for the Coastal Management Program and the Operations Program in administering federal consistency, interagency coordination, public outreach, and Coastal Incentive Grants.

- Operating Expenses -- to include publications and printing, supplies and materials, travel, per diem fees and contracts, computer services charges, telecommunications, equipment purchases, and other operating expenses.

- Coastal Incentive Grants -- to enhance the coastal area and further the goals of the Georgia Coastal Management Program creatively and proactively, the Coastal Resources Division

will administer Coastal Incentive Grants. These grants will be provided on a competitive basis to local governments, educational and research institutions, and state agencies for projects of local and regional significance. Funded projects may include, but are not limited to: educational materials, planning studies, public access improvements, improvements in regulatory processes, economic development enhancements, and resource monitoring projects.

Funding for such efforts is expected to have direct beneficial impacts on the natural and socioeconomic environment of the coastal region, through protection of natural areas and other sensitive resources, provision of public access, waterfront revitalization, comprehensive planning, streamlining of permits and the monitoring of their effects, and conflict resolution. The integrated management approach of a coordinated cooperative GCMP is expected to result in direct benefits to the environment through a heightened proactive focus on coastal resource management. The GCMP provides the framework for a partnership among state and local agencies and other entities, public and private, to cooperate to preserve, protect, develop and restore the region's unique values.

*b. Federal Consistency Review*

Federal approval and implementation of the GCMP will have effects upon federal agency actions. Approval will activate the federal consistency review provisions of Section 307 of the CZMA. The GCMP federal consistency process and relevant provisions of 15 C.F.R. Part 930 are described in Part II, Chapter Eight. Because federal consistency entails early coordination and closer cooperation in planning as well as review of project proposals, it is presumed that federal consistency will provide another means to minimize the potential for adverse environmental impacts. This is considered to be a desirable impact and one of the main purposes of the CZMA.

The GCMP has been developed with the assistance and input of numerous federal agencies having responsibility for activities in or affecting the coastal area. Therefore, conflicts between the GCMP's enforceable policies and federally permitted or conducted activities should be minimal. The GCMP has executed a Memorandum of Agreement with the Savannah District of the U.S. Army Corps of Engineers which will further promote coordination between the Corps and the program. Federal activities will not be excluded but rather will be required to be consistent with the GCMP's policies.

*c. National Interest*

Part II, Chapter Six of this DEIS describes how the siting of land and water uses of regional benefit and consideration of national interest are integrated in the program. Coordination with federal agencies is described in Part II, Chapter Four. Georgia's coastal management statutes include formal public notice and federal agency coordination procedures to consider the national interest. Regional interests are considered in a variety of state programs, including the Georgia Planning Act and state eminent domain authority. Thus, the potential for

conflicts between state, regional and national goals is reduced. In implementing the GCMP, Georgia will provide such avenues for considering the national interest in program decisions.

2. Positive Impacts Directly Attributable to GCMP Approval

Development of the Georgia Coastal Management Program has brought about several improvements to the management of Georgia's coast. The most prominent was the passage of the Coastal Management Act (O.C.G.A. 12-5-320, *et seq.*) in 1997. This additional authority was necessary for Georgia to meet minimum requirements for program approval by NOAA. The Act statutorily designates the Department of Natural Resources (DNR) as the lead agency for the GCMP (O.C.G.A. 12-5-323(a)), provides authority for DNR to make reasonable inspections to ensure activities are consistent with the program (O.C.G.A. 12-5-325), requires all state agencies to coordinate and cooperate with the DNR in administering the program (O.C.G.A. 12-5-326), and requires that state agencies exercising regulatory, management, or planning authority in the coastal area to do so in a manner consistent with the policies of the program (O.C.G.A. 12-5-326).

The Coastal Resources Division (CRD) of DNR has primary responsibility for administering the GCMP, and several core authorities of the program fall within CRD's purview. These are described in detail in Part II, Chapters Four and Five. Several of the additional enforceable policies of the GCMP are administered by other divisions of the DNR. Memoranda of Agreement between the Coastal Resources Division and other DNR Divisions and state agencies will further foster coordination and unified implementation of the GCMP.

Georgia's Coastal Advisory Committee, an offshoot of the committee appointed by Governor Miller in 1992 to assist with program development, will continue to advise the GCMP. The Committee will develop criteria for the GCMP's Coastal Incentive Grants and establish annual funding priorities. The Committee will be expanded to include representatives from every municipality and county in Georgia's coastal zone.

Other impacts attributable to the GCMP are government simplification; improved assistance to applicants, local governments, and the public; enhanced environmental science and understanding; and increased public education, outreach, and coastal access. A number of these topics are detailed also in Part I-B, "Changes the Program Will Make."

*a. Simplify Government*

One of the primary goals of the Georgia Coastal Management Program is to simplify bureaucratic processes and serve the public more efficiently. During Program development, the Coastal Resources Division identified many possibilities for improving government service. Some of the following simplifications have already been implemented, some will be enhanced, and some will be initiated once the Program receives federal approval. As the Program is implemented, the Division will continue to seek improvements.

*Revocable License:* Required for private use of state owned tidal water bottoms, all Revocable Licenses are issued for projects in the coastal area. This license is often issued in conjunction with a Marsh Permit or Shore Permit. The Revocable License was formerly administered in Atlanta, far from the coast, while the Coastal Resources Division in Brunswick reviewed similar information for Marsh and Shore permits. Through the coastal management evaluation process, staff discerned the Revocable License could be more effectively and efficiently administered at the Coastal Resources Division, thereby eliminating duplication of effort. Issuance of the License was subsequently transferred to the Division.

*State Programmatic General Permit for Recreational Docks:* The U.S. Army Corps of Engineers, working with local building officials, is authorized to issue general permits for constructing recreational docks in the coastal area. This permit requires paperwork and review very similar to the process for Marsh Permits and the Revocable License. To eliminate duplication of effort and paperwork, a permit issued by the Army Corps of Engineers to the Coastal Resources Division allows the Division to issue this State Programmatic General Permit for Recreational Docks. This delegation of authority removes the Corps from the process and reduces the regulatory burden on the public.

*401 Water Quality Certification Review:* The Coastal Resources Division will assist the DNR's Environmental Protection Division with its administration of the Section 401 Water Quality Certification program within the eleven-county coastal area. Staff of the Coastal Resources Division will perform site analyses and technical review, and forward recommendations to the Environmental Protection Division, which retains authority to issue the certification. The procedures are formalized in a Memorandum of Agreement between the Divisions (Appendix V). The purpose of this cooperation is to reduce administrative overlap and to make administrative procedures more efficient, since the Coastal Resources Division conducts similar review of water quality impacts for Marsh Permits.

*b. Assist Applicants, Local Governments, and the Public*

*Project Review Service:* Though not required, the Coastal Resources Division encourages applicants in the eleven-county coastal area to submit preliminary development plans for consultation. Upon implementation of the Georgia Coastal Management Program, Division staff will review plans for potential conflicts with the Program's policies and provide technical assistance to help modify proposals and resolve conflicts. The staff will identify any required permits, licenses, and/or certifications relative to specific projects submitted for consultation and will also make every effort to expedite application processes.

*Project Coordination Meetings:* Upon implementation of the Georgia Coastal Management Program, the Coastal Resources Division will offer project coordination meetings. These occasional meetings of permitting agencies will be convened at the request of applicants to discuss project proposals. The purpose of the meetings is to foster agency coordination and cooperation with respect to specific projects, and is not intended as an additional public review of the merits of the proposed project. Project coordination meetings allow applicants to meet

relevant state and federal permitting agencies during the project planning process, and also allow permitting agencies to provide input during this planning and design phase. This helps the applicant avoid delays during construction, helps agencies avoid conflict between respective recommendations, and helps applicants and agencies avoid last-minute change requests.

*Interagency Coordination Meetings:* Upon implementation of the Georgia Coastal Management Program, the Coastal Resources Division will organize quarterly meetings of all state, local, and federal permitting agencies exercising regulatory authority and/or management or planning authority in the coastal area. Representatives from all agencies in the coastal management network shall be invited and urged to attend these meetings. The purpose of the meetings is to foster agency coordination with respect to agency policies and procedures, air issues, and improve cooperation. The meetings are not intended to review individual projects.

*Savannah Site Office:* The Coastal Resources Division has opened a site office in Savannah to provide better service to citizens in the northern part of the Georgia coast. Chatham County, containing the City of Savannah, is the most populous county in the Georgia coastal zone, and its rapid growth is expected to continue. The permit coordinator hired to staff the site office provides technical assistance to permit applicants, conducts site inspections, and enforces permits and licenses issued by the Division.

*Technical Assistance Initiative:* The Coastal Resources Division provides guidance to local governments, property owners, developers, and the public to clarify regulations, identify agency contacts, advise on minimizing environmental impacts of proposed projects, and provide expertise on coastal issues. Upon implementation of the Georgia Coastal Management Program, the Division will expand this effort. The goal of the technical assistance initiative is to create a central source of information on coastal management issues and regulations.

*Coastal Incentive Grants:* While the Coastal Resources Division and other agencies in the coastal management network implement the regulatory authorities of the Georgia Coastal Management Program, these agencies have few resources for non-regulatory projects. In order to enhance the coastal area and further the goals of the Coastal Management Program proactively and creatively, the Division will award Coastal Incentive Grants. These grants will be provided grants on a competitive basis to local governments, state agencies, and educational and research institutions for projects of local and regional significance. Through this funding program, coastal issues and concerns will be defined at the grass-roots level and local communities and organizations will be provided with the financial resources to research, develop, and implement solutions. Through the Coastal Incentive Grants, the Coastal Resources Division will fund coastal environmental research and monitoring projects that further the goals of the Georgia Coastal Management Program, as well as local public access projects (See Public Access section below).

*c. Enhance Environmental Science and Understanding*

*Public Health Program:* The Coastal Resources Division monitors coastal water quality and implements the National Shellfish Sanitation Program for the State of Georgia. These responsibilities include labeling areas open and/or closed to shellfishing, analyzing water quality, educating the public on shellfishing safety issues, and implementing other programs that monitor and improve coastal water quality. While the Division has always administered the Georgia Shellfish Program, implementation of the Georgia Coastal Management Program increases funding for monitoring projects.

*Cooperative Projects:* Coastal Resources Division staff members cooperate formally and informally with agencies, universities, and other organizations regarding environmental science and monitoring projects. Upon implementation of the Georgia Coastal Management Program, the Division will seek additional partnerships to improve scientific understanding of Georgia's coastal environment.

*d. Increase Public Education and Outreach*

*Public Education:* Improvements made in public outreach and education will increase the public's understanding of coastal environmental science. Throughout the development of the Georgia Coastal Management Program, the public placed a high priority on improving public education. Upon Program implementation, the Coastal Resources Division will hire a public education and outreach coordinator to inform the public about coastal resource issues.

*Coastal Ark:* The Coastal Resources Division will initiate a public and local government outreach and technical assistance program entitled the Coastal Ark. The Ark is a mobile resource platform that will be driven to local communities to provide information directly to resource users and local decision-makers. Although funded through alternative sources, the Ark is an important component of the Georgia Coastal Management Program.

*e. Public Access*

Implementation of the GCMP will enable Georgia to provide funding through the Coastal Incentive Grants to localities for construction of public access facilities and acquisition of lands to increase access sites. The CRD may also expend funds to comprehensively inventory access needs and potential sites. This will lead to better coordination of agency programs and policies and improve public access to the coast, consistent with the provisions of the GCMP. Technical assistance to and coordination with local communities will further promote the recreational potential of underutilized urban or small town waterfronts through river and waterfront development programs. Enhanced acquisition, planning, and development efforts for state natural areas and state park facilities would also benefit public access to and enjoyment of Georgia's coast. These would all benefit from increased resources and funding through GCMP implementation.

*f. Environmental Justice*

Approval of the Georgia Coastal Management Program will lessen the likelihood of environmental inequities and may promote greater environmental justice. The GCMP policies provide for the protection of resources, such as fish and shellfish and their critical habitats, that are the mainstays of traditional coastal economies. The GCMP's Coastal Incentive Grants will provide funds to local communities to increase access to Georgia's waterways and coastal lands for all residents and provides the means to rehabilitate degraded urban and small-town waterfront areas. Approval of the GCMP will also provide additional resources to the Coastal Resources Division's coastal water quality monitoring and Shellfish Sanitation programs, which will improve public health generally. In addition, the GCMP has designated areas of cultural significance, such as the Hog Hammock community within the Sapelo Island National Estuarine Research Reserve, and economic development areas, as Areas of Particular Concern. This provides management protection to these areas and makes them eligible for construction and acquisition projects under Section 306A of the federal Coastal Zone Management Act.

3. Impacts Resulting from Denying Federal Approval

Several environmental, economic and social impacts could result if OCRM decided to deny approval of the GCMP. An obvious economic impact is the fact that federal funds under Section 306 of the CZMA would not be available to administer the program, nor would Section 309 enhancement funds be available. Under Section 306 of the CZMA, Georgia would receive about $950,000 annually to implement its coastal management program. In addition, state review for consistency of federal actions, as required by Section 307 of the CZMA would not be available to Georgia. Further, the environmental status quo would prevail regarding resource protection and use in Georgia's coastal zone, and the technical assistance available to Georgia from OCRM would not be as easily available without federal approval of the program.

4. Impacts Resulting from Delaying Federal Approval

The environmental, economic, and social impacts listed above that would result from denial of federal approval of the GCMP would also apply to some extent to delaying approval of the Program. Further, continued delay at this juncture could make it impossible, due to limits in program development funding, for Georgia to enter the federal program in the future.

## E. Unavoidable Adverse Environmental Effects

The probable effects of Georgia Coastal Management Program implementation will, on the whole, be environmentally beneficial. Certain localized adverse environmental impacts may result, however, as the state seeks to balance the conservation of coastal resources with the recognized need for rational economic growth.

With or without the program, adverse impacts associated with the siting of major facilities for purposes of defense, transportation, and energy requirements in which both the state and federal governments have interest, will continue. It is important to note, however, that under the Georgia Coastal Management Program and related federal laws (e.g., the National Environmental Policy Act), such projects will be evaluated as to the impacts on the natural coastal environment. That is, investigations will be made, alternatives considered, etc. The Program also makes provisions for consideration of the national interest in the siting of these facilities.

## F. Relationship between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity

Approval of the Georgia Coastal Management Program will not restrict short-term uses of the environment since it is based on existing state authorities. Through more effective administration of existing resource protection laws, the program will also provide long-term assurance that the natural resources and benefits provided by the Georgia coast will be available for future use and enjoyment.

The Georgia Coastal Management Program recognizes that in the short-term some coastal-dependent developments have adverse environmental consequences, but that they may still have to be located in the coastal zone to protect the inland environment as well as help provide for orderly economic development, and meet national interest.

Regarding the long-term use of the environment, the Georgia Coastal Management Program recognizes the coastal zone as a delicately balanced ecosystem; implements a process of balanced management of coastal resources; allows growth to continue while protecting key resources; and provides a framework which can protect regional, state, and national interests by assuring the maintenance of the long-term productivity and economic vitality of coastal resources necessary for the well-being of the public. Beneficial changes will likely promote avoidance of long-term costs to the public and a diminished quality of life resulting from the misuse of coastal resources.

## G. Irreversible and Irretrievable Commitments of Resources

The only irretrievable or irreversible commitment of resources that will result directly from the approval of the Georgia program is the commitment of state and federal funds and personnel for the purpose of achieving the goals and objectives of the program. It is presumed that irretrievable and irreversible commitments of economic and environmental resources will occur during the implementation of the Georgia program. This program is designed to balance the need for development with the need for the protection and enhancement of coastal environmental resources by avoiding, minimizing, and mitigating the consequences of coastal development on resources such as wetlands, submerged lands, and the beach/dune sand sharing system.

The program ensures that any such proposed activities which commit coastal resources are subjected to comprehensive review as individual actions and as an action contributing to the cumulative impacts taking place on coastal resources. Such review will ensure that those irretrievable and irreversible commitments of resources which are undertaken under the Georgia Coastal Management Program are made with full awareness of the consequences of those commitments.

# Part IV

# LIST OF PREPARERS

# PART IV:
# LIST OF PREPARERS

**Michelle Aldenderfer** (GADNR) -- Ms. Aldenderfer has served as Senior Public Information Specialist for the Coastal Resources Division of the Georgia Department of Natural Resources for the past two and one-half years. She created and executed an outreach program for the developing Georgia Coastal Management Program. She also serves as the public outreach coordinator for the Marine Fisheries Section and the Ecological Services Section of the Division. Ms. Aldenderfer earned a double bachelors degree in Public Relations and Environmental Education at the University of Georgia.

**Lonice Barrett** (GADNR) -- Commissioner of the Georgia Department of Natural Resources, Mr. Barrett is a native of Perry, Georgia and graduated from both Georgia Southern and Georgia State with degrees in Parks and Recreation. He was appointed Commissioner by Governor Zell Miller in May 1995. He has served with the Department of Natural Resources since 1970 in a variety of positions including Commissioner, Deputy Commissioner, and Director of State Parks. He formerly served as Director of Recreation for the City of Statesboro.

**Kelie Cochran** (GADNR) -- As Ecological Resource Specialist, Ms. Cochran provides technical assistance to the Georgia Coastal Management Program by writing issue papers, researching legal aspects of coastal management, giving computer assistance on publications and presentations, and providing public outreach and information. Formerly with the Rhode Island Department of Environmental Management's Environmental Coordination Division as well as the Rhode Island Coastal Resources Management Program's Non-Point Source Pollution Section, Ms. Cochran is now developing a wetlands water quality certification program for the Coastal Resources Division. While working on her Master's Degree in Marine Affairs at the University of Rhode Island, Ms. Cochran was a recipient of NOAA's Walter B. Jones Excellence in Graduate Studies award. Her Bachelor's Degree in Marine Affairs was earned at the University of Miami.

**Janet Evans** (GADNR) -- Marine Biologist with the Georgia Department of Natural Resources, Coastal Resources Division, Ms. Evans is developing the Coastal Ark. Previously, she studied land use and landcover mapping of the Altamaha River. She also provides editing and technical assistance to the Georgia Coastal Management Program. Before coming to the Division, she served as research technician at the University of Georgia Marine Institute on Sapelo Island, studying red drum and sea trout. Ms. Evans received a Bachelor's Degree in Environmental Studies from Eckerd College in St. Petersburg, Florida, and a Master's Degree (ABT) in Marine Affairs from the University of Rhode Island.

**Christina Faughnan** (former GADNR) -- Former Administrative Technician for the Georgia Coastal Management Program, Ms. Faughnan provided administrative, clerical, and secretarial support during program development. Prior to working with the Department of Natural

Resources, Ms. Faughnan served for almost nine years with the U.S. Navy, in various administrative and clerical capacities.

**Phillip Flournoy** (GADNR) -- Mr. Flournoy began working for the Georgia Department of Natural Resources in 1991, as a research technician with the shortnosed sturgeon project. From 1992 to 1994, he was the first Program Manager for the Georgia Coastal Management Program. Currently, he serves as Program Manager for the Operations Program and supervises administrative processes and the shellfish sanitation project. Mr. Flournoy holds a Bachelor's Degree in chemistry and a Master's Degree in Public Administration from Georgia Southern University.

**Duane Harris** (GADNR) -- Director of the Coastal Resources Division since 1983, Mr. Harris has served with the Georgia Department of Natural Resources for 27 years. His previous positions include project leader for the oyster survey, project leader for artificial reef development, and chief of fisheries. He represents the State in regional and national organizations, and was past chair of the Atlantic States Marine Fisheries Commission and past chair of the South Atlantic Fishery Management Council. He also was part of the U.S. delegation to the International Commission of the Conservation of Atlantic Tuna in Madrid, Spain. Mr. Harris is a scuba instructor, a member of Leadership Georgia, a 1996 Toll Fellow, and a certified fisheries scientist.

**David W. Kaiser** (NOAA) -- Federal Consistency Coordinator, Coastal Programs Division, Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce. Mr. Kaiser received his Juris Doctor degree from the George Washington University National Law Center, his Masters degree in Marine Affairs from the University of Rhode Island, and his B.A. degree in Political Science from the University of New Hampshire. Mr. Kaiser has been OCRM's Federal Consistency Coordinator since 1992 and worked in the Southeast Region of the Coastal Programs Division from 1987-1992.

**Rhonda Knight** (GADNR) -- Mrs. Knight holds a Bachelor's Degree in criminal justice, with a minor in sociology, and a teaching certificate. She has previously worked as a teacher in the Glynn County School System (four years), was a Court Service Worker with the Division of Youth Services (four years), and a Senior Caseworker with the Department of Family and Children Services (two years). Presently she is a Secretary with the Georgia Coastal Management Program, assisting the Program Manager in fulfilling the objectives of the Program.

**Joshua Lott** (NOAA) -- Coastal Management Specialist, Coastal Programs Division, Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce. Mr. Lott received his B.A. in Political Science from the University of Pennsylvania and his Master of Urban and Regional Planning from the George Washington University. Mr. Lott has worked in the Southeast Region of the Coastal Programs Division since 1992.

**Tiffany Lutterman** (former GADNR) -- Currently Director of the Charlotte Harbor National Estuary Program, Ms. Lutterman served as Program Manager for the Georgia Coastal Management Program from 1994 to 1996. She received her Master's Degree in environmental management from Duke University.

**C. Victor Pyle, III** (former GADNR) -- Mr. Pyle is currently the Project Manager for the Long Island Sound Habitat Preservation and Restoration Project at Save the Sound, Inc. From 1994 to 1996, Mr. Pyle served as Technical Assistant for the Georgia Department of Natural Resources, Coastal Resources Division, working on several U.S. Environmental Protection Agency Wetland Protection Development Grants and assisting the Georgia Coastal Management Program with writing, editing, and reviewing the Program Document. Mr. Pyle has a Bachelor of Science in Marine Science from the University of South Carolina and is completing a Master of Science in Oceanography and Coastal Science from Louisiana State University. He spent a year in Washington, DC as a Knauss National Sea Grant Fellow with the U.S. EPA Wetlands Division.

**Stuart Stevens, Ph.D.** (GADNR) -- As Chief of the Ecological Services Section, Dr. Stevens represents the Department on many State, regional, and national tasks forces, committees, and boards to develop and implement improved techniques for coastal resources management. His duties include supervision of the direct regulatory authorities described in the Georgia Coastal Management Program Document, the Public Health Water Quality Testing Project, numerous federal grant projects, and Georgia's emerging Coastal Management Program. Dr. Stevens also participates as adjunct faculty at regional and State Universities. Dr. Stevens earned a Bachelor's Degree in marine sciences from the University of South Carolina, a Master's Degree in statistics from the University of Georgia, and a Doctorate in estuarine ecology also from the University of Georgia.

**LCDR Steve Thompson** (NOAA) -- A commissioned officer of the NOAA Corps, Lieutenant Commander Steve Thompson was stationed for two and a half years with the Georgia Department of Natural Resources, Coastal Resources Division and provided technical expertise to help the State develop the Georgia Coastal Management Program. LCDR Thompson earned a Bachelor's Degree in Geography with a minor in Geology and a Master's Degree in Environmental Studies/Policy from California State University. He has been a NOAA Corps officer for 15 years, during which time he has spent nearly five years at sea in various capacities on a number of projects including El Ni o studies, hydrothermal vent studies, and fisheries research. He worked with the U.S. and foreign tuna industries to minimize the mortality of dolphins by purse seiners, and he developed an algorithm and protocol for determining the sound velocity in sea water. He is currently the Executive Officer aboard the NOAA Ship OREGON II.

**Terry West** (GADNR) -- Mr. West is the Program Manager for the Habitat Management Program at the Coastal Resources Division, Georgia Department of Natural Resources. In this capacity, he is responsible for regulatory permitting under the Coastal Marshlands Protection Act and the Shore Protection Act, and allocation of State-owned tidal water bottoms. Mr. West

began working for the Department in 1985 as a conservation officer with the Wildlife Resources Division. In 1992, he transferred to the Coastal Resources Division to assist with developing the Georgia Coastal Management Program. Mr. West received a Bachelor's Degree in business administration from Oglethorpe University in Atlanta, Georgia.

**Kathryn Zagzebski** (GADNR) -- Program Manager for the Georgia Coastal Management Program since 1996, Ms. Zagzebski manages the daily operation of the Program, develops program documents, and provides technical assistance and public outreach. She received her Bachelor's Degree from Augustana College in Illinois, majoring in Political Science and French, and minoring in Computer Science. Following her undergraduate studies, she worked for Johns Hopkins University and took courses in environmental studies. She earned her Master's Degree in Coastal Environmental Management from Duke University. While attending graduate school, Ms. Zagzebski worked on fisheries management and marine mammal issues. Before coming to Georgia, Ms. Zagzebski volunteered as a research assistant with the Kewalo Basin Marine Mammal Laboratory.

# Part V

# LIST OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS RECEIVING COPIES OF THE DEIS

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# LIST OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS RECEIVING COPIES OF THE DEIS

Federal Agencies

Council on Environmental Quality
Department of Agriculture
- Natural Resources Conservation Service
- U.S. Forest Service

Department of Commerce
- Economic Development Administration
- NOAA, National Marine Fisheries Service
- NOAA, National Ocean Service

Department of Defense
- Air Force
- Army
- Army Corps of Engineers
  - Headquarters
  - Savannah District Office
- Marine Corps
- Navy

Department of Energy
Department of Health and Human Services
Department of Housing and Urban Development
Department of the Interior
- Fish and Wildlife Service
- Minerals Management Service
- National Park Service
- Office of Environmental Policy and Compliance

Department of Justice
Department of Transportation
- Federal Aviation Administration
- Federal Highway Administration
- Maritime Administration
- U.S. Coast Guard

Environmental Protection Agency
- Office of Federal Activities
- Office of Wetlands, Oceans, and Watersheds
- Region IV

Federal Emergency Management Agency
- Headquarters

Region IV
Federal Energy Regulatory Commission
Federal Law Enforcement Training Center
Federal Maritime Commission
General Services Administration
Interstate Commerce Commission
National Aeronautics and Space Administration
Nuclear Regulatory Commission
U.S. Senate Committee on Commerce, Science, and Transportation
U.S. House Committee on Resources

State and Regional Agencies and Local Governments

Association of County Commissioners of Georgia
City Halls in the Coastal Area
City of Savannah Water and Sewer Bureau
Coastal Advisory Committee members
Elected Officials in the Coastal Area
Georgia Department of Community Affairs
Georgia Department of Human Resources
Georgia Department of Natural Resources
- Commissioner
- Coastal Resources Division
  - Ecological Services Section
  - Marine Fisheries Section
- Environmental Protection Division
- Historic Preservation Division
- Parks, Recreation, and Historic Sites Division
  - Sapelo Island National Estuarine Research Reserve
- Pollution Prevention and Assistance Division
- Program Support Division
- Wildlife Resources Division
  - Nongame/Endangered Wildlife Program

Georgia Department of Transportation
Georgia Emergency Management Agency
Georgia Farm Bureau
Georgia Forestry Commission
Georgia Ports Authority
Jekyll Island Authority
Office of the Attorney General
Office of the Governor
Office of the Lieutenant Governor
Office of the Secretary of State
Public Libraries in the Coastal Area

Public Service Commission
Regional Development Centers
    Coastal Georgia RDC
    Heart of Georgia RDC
    Southeast Georgia RDC
Savannah-Chatham Metropolitan Planning Commission

National Interest Groups

American Association of Port Authorities
American Bureau of Shipping
American Farm Bureau Federation
American Oceans Campaign
American Petroleum Institute
American Planning Association
American Sport Fishing Association
Association of State Floodplain Managers
Boat U.S.
Center for Marine Conservation
Clean Water Network
Coast Alliance
Coastal States Organization
Conservation Fund
Environmental Defense Fund, Inc.
Environmental Law Institute
Environmental Policy Center
Friends of the Earth
The Georgia Conservancy
International City/County Management Association
League of Women Voters of the United States
National Association of Conservation Districts
National Association of Counties
National Association of Home Builders of the United States
National Audubon Society
National Fisheries Institute
National Parks and Conservation Association
National Recreation and Parks Association
Natural Resources Defense Council
National Wildlife Federation
The Nature Conservancy
Sierra Club Legal Defense Fund
U.S. Sailing Association
World Wildlife Fund

Individuals and Other Interested Parties

Upon request, copies were sent to all individuals and other interested parties not listed as receiving copies of the DEIS.

# Part VI

# REFERENCES

## PART VI:
## REFERENCES


Akioka, Lorena M. 1994. *Georgia Statistical Abstract, 1994-95.* Selig Center for Economic Growth. Athens, GA: University of Georgia Press. 521 pp.

Alabama Power Company, Georgia Power Company, Gulf Power Company, Mississippi Power Company, and Southern Electric Generating Company, 1988. *Southern Electric System Power Plant Directory.*

Atlanta Gas Light Company. 1994. *Atlanta Gas Light Company 1994 Annual Report.*

Averitt, Jack N. 1964. *Georgia's Coastal Plain, A History; Volumes I and II.* New York: Lewis Historical Publishing Company. 849 pp.

Bachtel, Douglas C. and Susan R. Boatright (eds.). 1993. *The Georgia County Guide, Twelfth Edition.* Athens, GA: University of Georgia Press. ISSN 1044-0976. 197 pp.

Brunswick and Glynn County Development Authority. 1992. *Brunswick and the Golden Isles of Georgia Statistics.* 4 pp.

Bush, David M. and Orrin H. Pilkey, Jr. 1992. *Principles of Property Damage Mitigation from Coastal Storms and Hurricanes: Examples from the North Carolina and South Carolina Coasts.* Duke University Department of Geology, Program for the Study of Developed Shorelines. 156 pp.

Coastal Georgia Regional Development Center. 1993. *Draft Overall Economic Development Program: Coastal Georgia, 1993.* Brunswick, GA.

Coastal Georgia Regional Development Center. 1993. *Regional River Corridor Protection Plan.* Brunswick, GA.

Coastal Georgia Regional Development Center. 1996. *Technical Staff Report (draft).* Brunswick, GA. 142 pp.

Coastal States Organization. 1994. *The Coastal Zone Management Act: The Congressional Plan for Managing America's Coasts.* Washington, DC: Coastal States Organization, Inc.

Department of Energy/Energy Information Administration. 1994. *Federal Offshore Statistics: 1993.* OCS Report, MMS 94-0060.

Department of Energy/Energy Information Administration. 1993. *U.S. Crude Oil, Natural Gas, and Natural Gas Liquid Reserves 1993 Annual Report.*

Georgia Department of Natural Resources. 1978. *A Scenic and Recreational River Proposal for the Great Altamaha Swamp.* Atlanta, GA. 162 pp.

Georgia Department of Natural Resources, Coastal Resources Division. 1996. *Angler's Guide to Georgia Saltwater Fishing Access Sites.* Brunswick, GA. 62 pp.

Georgia Department of Natural Resources, Environmental Protection Division. 1997. *Georgia's Environment 97.* Atlanta, GA. 18 pp.

Georgia Department of Natural Resources, Environmental Protection Division. 1996. *Water Quality in Georgia 1994-1995.* Atlanta, GA. 209 pp.

Georgia Department of Natural Resources, Wildlife Resources Division. 1992. *Protected Wildlife List.* Brunswick, GA. 10 pp.

Georgia Public Service Commission. 1992 and 1995. *Georgia Public Service Commission Reports, 1992 and 1995.*

Hodler, T.W. and H.A. Schretter (eds.). 1986. *The Atlas of Georgia.* Athens, GA: University of Georgia Institute for Community and Area Development. 273 pp.

Johnson, A.S., H.O. Hillestad, S.F. Shanholtzer, and G.F. Shanholtzer. 1974. *An Ecological Survey of the Coastal Region of Georgia.* National Park Service Scientific Monograph Series #3. Washington, DC: Government Printing Office.

Kaufman, Wallace J. and Orrin H. Pilkey, Jr. 1993. *The Beaches Are Moving: The Drowning of America's Shoreline.* Durham, NC: Duke University Press. 336 pp.

Krause, R.E., and R.B. Randolph. 1989. "Hydrogeology of the Floridan aquifer system in southeast Georgia and adjacent parts of Florida and South Carolina." *U.S. Geological Survey Professional Paper 1403-D.*

Lovell, Caroline Couper. 1981. *The Golden Isles of Georgia.* Atlanta, GA: Cherokee Publishing Co. 300 pp.

McKee, Gwen (ed.). 1984. *The Georgia Conservancy Guide to the Georgia Coast.* Jacksonville, FL: Miller Press. ISBN 0-9614284-0-6.

Municipal Electric Authority of Georgia. 1995. Unpublished Report.

National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1991. *Recovery Plans for U.S. Population of Loggerhead Turtle*. Washington, DC: National Marine Fisheries Service.

National Safety Council, Environmental Health Center. not dated. *Covering the Coasts: A Reporter's Guide to Coastal and Marine Resources.* Washington, DC: National Safety Council. 165 pp.

Official Code of Georgia Annotated. Also O.C.G.A. or OCGA.

Peck, M.F. 1991. "Potentiometric surface of the Upper Floridan aquifer in Georgia and adjacent parts of Alabama, Florida, and South Carolina, May-June 1990." *U.S. Geological Survey Open-File Report 91-206.*

Public Service Commission. 1995. Unpublished Materials.

Savannah Area Chamber of Commerce. 1994. *Savannah Area Economic Trends, 1988-1993.* Savannah, GA: Savannah Area Chamber of Commerce. 38 pp.

Schoettle, H. E. Taylor. 1993. *A Naturalist's Guide to St. Simons Island.* St. Simons, GA: Watermarks Printing Co. LCN: 93-61513. 120 pp.

Terrine Institute. 1993. *American Wetlands Month Brochure.*

U.S. Department of Commerce. 1976. *Business Prospects Under Coastal Zone Management.* National Oceanic and Atmospheric Administration, Office of Coastal Zone Management, Washington D.C.

U.S. Department of the Interior/Minerals Management Service, Information and Training Branch. 1994. *Facts About Offshore Natural Gas.* OSC Report, MMS 94-0069.

U.S. Geological Survey. 1994. "Ground-Water Conditions in Georgia, 1993." *Open File Report 94-118.* Atlanta, Georgia.

Wallace, R.K., W. Hosking, and S.T. Szedlmayer. undated. *Fisheries Management for Fisherman: A Manual for Helping Fishermen Understand the Federal Management Process.* Mobile, AL: Auburn University Marine Extension and Research Center, Sea Grant Extension. 56pp.

Wharton, C.H. 1978. *The Natural Environments of Georgia.* Geologic and Water Resources Division and Resource Planning Section, Office of Planning and Research, Georgia Department of Natural Resources, Atlanta, Georgia.

# Appendix I

# THE GEORGIA COASTAL MANAGEMENT ACT

# APPENDIX I:
# THE GEORGIA COASTAL MANAGEMENT ACT

**OFFICIAL CODE OF GEORGIA ANNOTATED**
**VOLUME 10, TITLE 12: CONSERVATION AND NATURAL RESOURCES**
**CHAPTER 5: WATER RESOURCES,**
**ARTICLE 4: COASTAL WATERS, BEACHES, SAND DUNES, ETC.**
**PART 6: GEORGIA COASTAL MANAGEMENT ACT**

**12-5-320. Short title.**

This part shall be known and may be cited as the "Georgia Coastal Management Act."

**12-5-321. Legislative purpose.**

The General Assembly finds and declares that the coastal area of Georgia comprises a vital natural resource system. The General Assembly recognizes that the coastal area of Georgia is the habitat of many species of marine life and wildlife which must have clean waters and suitable habitat to survive. The General Assembly further finds that intensive research has revealed that activities affecting the coastal area may degrade water quality or damage coastal resources if not properly planned and managed. The General Assembly further finds that the coastal area provides a natural recreation resource which has become vitally linked to the economy of Georgia's coast and to that of the entire state. The General Assembly further finds that resources within this coastal area are costly, if not impossible, to reconstruct or rehabilitate once adversely affected by human related activities and it is important to conserve these resources for the present and future use and enjoyment of all citizens and visitors to this state. The General Assembly further finds that the coastal area is a vital area of the state and that it is essential to maintain the health, safety, and welfare of all the citizens of the state. Therefore, the General Assembly declares that the management of the coastal area has more than local significance, is of equal importance to all citizens of the state, is of state-wide concern, and consequently is properly a matter for coordinated regulation under the police power of the state. The General Assembly further finds and declares that activities and structures in the coastal area must be regulated to ensure that the values and functions of coastal waters and natural habitats are not impaired and to fulfill the responsibilities of each generation as public trustees of the coastal waters and habitats for succeeding generations.

**12-5-322. Definitions.**

As used in this part, the term:

(1) "Activity" or "activities" means an action or actions which will have reasonably foreseeable effects upon land use, water use, or natural resources of the coastal area.

(2) "Board" means the Board of Natural Resources.

(3) "Certification of consistency" means a certification made by a person in connection with an application for a federally administered permit to conduct an activity or activities as defined in this Code section. Such certification of consistency shall be based on

determination of the activity's compliance with the policies of the Georgia coastal management program. Only those activities requiring a federally administered permit will require such certification of consistency.

(4) "Coastal area" or "coastal zone"' means all tidally influenced waters and submerged land seaward to the state's jurisdictional limits and all lands, submerged lands, waters, and other resources within the counties of Brantley, Bryan, Camden, Charlton, Chatham, Effingham, Glynn, Long, Liberty, McIntosh, and Wayne.

(5) "Department" means the Department of Natural Resources.

(6) "Determination of consistency" means a determination made by a federal agency proposing an activity or activities as defined in this Code section. Such determination of consistency shall be based on a determination of the activity's effects upon the coastal area. Only those activities proposed to be undertaken by a federal agency will be subject to a determination of consistency.

(7) "Federal agency" means the United States government and all its departments, boards, bureaus, commissions, and wholly owned corporations owned by the federal government.

(8) "Federally administered permit" means only those permits, licenses, or approvals required by federal law or regulation and issued by an agency of the federal government.

(9) "Georgia coastal management program" means a compilation of policies to guide the public and private uses of land and waters within the coastal area administered by the department in consultation with the state agencies and local governments of the coastal area and approved by the Secretary of Commerce in accordance with the requirements of the federal Coastal Zone Management Act of 1972, as amended, 16 U.S.C. Sections 1451 and following.

(10) "Local government" means a county, as defined by Code Section 36-1-1, or an incorporated municipality, as defined by Code Section 36-40-21, or any combination thereof, which has been authorized by an Act of the General Assembly, any of which has within its jurisdiction any coastal area.

(11) "Person" means any individual, partnership, corporation, municipal corporation, local government, association, state agency, or public or private authority.

(12) "Policy" or "policies" of the Georgia coastal management program means the enforceable provisions of present or future applicable statutes of this state or regulations duly promulgated thereunder.

(13) "State agency" means this state and all its departments, boards, authorities, bureaus, and commissions.

(14) "State permit" means all those permits, licenses, or approvals, whether required by a federal or state law, which are administered by a state agency.

(15) "Submerged land" means all lands lying or being under tidally influenced waters of the state.

(16) "Tidally influenced waters" means any water where the tide ebbs and floods on a daily basis.

**12-5-323. Powers and duties of the Department as to coastal area, generally.**

(a) The department shall have the following authority, which shall not be delegated to any other state agency:

(1) To prepare and administer a Georgia coastal management program and to monitor and inform appropriate local, state, and federal agencies concerning enforcement of this part and all rules, regulations, and orders upon which the Georgia coastal management program is based;

(2) To accept, expend, grant, and administer moneys that are available from persons or federal agencies to carry out the provisions of this part;

(3) To conduct public hearings on the Georgia coastal management program or any actions taken under this part;

(4) To concur or object to a certification of consistency filed by a person only in connection with an application for a federally administered permit and to concur or object to a determination of consistency filed by a federal agency in connection with a federal activity based on the policies of the Georgia coastal management program established pursuant to this part; provided, however, that if, prior to completion of review of a federally administered permit or federal activity under this part, the department receives notice of the denial of a state permit necessary for the activity, the department shall object to all certifications of consistency or determinations of consistency relating to the proposed activity filed by such person or federal agency; provided, further, that nothing in this part shall be construed to prevent the department from withdrawing such objection; and

(5) To exercise all incidental powers necessary to carry out the purposes of this part.

**12-5-324. Powers of Board as to coastal area generally.**

The board shall have the authority to promulgate rules and regulations for the implementation of the Georgia coastal management program in accordance with Chapter 13 of Title 50, the "Georgia Administrative Procedure Act."

**12-5-325. Inspection of project areas by officers of Department and conservation rangers.**

The department shall, in addition to its other duties prescribed by law, coordinate and cooperate with other state agencies, as necessary, as provided in paragraph (1) of subsection (a) of Code Section 12-5-323, and to make reasonable inspections within the coastal area where activities have been proposed to determine whether the proposed activities are consistent with this part and the policies of the Georgia coastal management program as provided in paragraph (4) of subsection (a) of Code Section 12-5-323.

**12-5-326. Other agencies to cooperate; agreements; local governments.**

All state agencies shall coordinate and cooperate with the department in the administration of this part. All state agencies exercising regulatory authority or management or planning authority in the coastal area shall administer such authority in conformity with the provisions of this part and shall apply such regulatory authority in a manner consistent with the policies of the Georgia coastal management program. All state agencies and local governments exercising statutory authority in the coastal area are authorized to enter into agreements regarding implementation of the Georgia coastal management program within their legal authority.

**12-5-327. Powers of the Governor.**

(a) The department shall prepare a document reflecting the Georgia coastal management program for submission to the Governor. The Governor shall have the authority to review and approve such document. Once approved, the Governor shall have the authority to submit the document reflecting the Georgia coastal management program to the Secretary of Commerce for approval as outlined in the federal Coastal Zone Management Act of 1972, as amended. At any time, the Governor, with the concurrence of the General Assembly, may withdraw the state from participation in the federal Coastal Zone Management Act of 1972 if it is determined that continued participation is not in the best interest of the state.

(b) The department shall make a report every three years of its activities under this part to the Governor and General Assembly. The report shall include a summary of the effectiveness of the program, a survey of user groups, and the department's opinion of the value of Georgia's continued participation in the program. Copies of the report shall be provided to the Governor, the Lieutenant Governor, the Speaker of the House of Representatives, the Chairperson of the House Natural Resources and Environment Committee, the Chairperson of the Senate Natural Resources Committee, and the Board of Natural Resources.

**12-5-328. Eleventh Amendment immunity.**

Nothing contained in this part shall be construed as a consent to waiver of immunity under the Eleventh Amendment of the United States Constitution or consent for any other state to exercise regulatory jurisdiction within the boundaries of this state.

**12-5-329. Repeal of part.**

Unless reestablished or continued by the General Assembly, this part shall stand repealed in its entirety on July 1, 2004."

*Ref: State of Georgia Peachnet Internet Site, http://www.ganet.org/services/*
*Downloaded June 15, 1997*

# Appendix II

# DRAFT DEPARTMENT OF NATURAL RESOURCES RULES TO IMPLEMENT THE GEORGIA COASTAL MANAGEMENT ACT

# APPENDIX II:
# DRAFT DEPARTMENT OF NATURAL RESOURCES RULES TO IMPLEMENT THE GEORGIA COASTAL MANAGEMENT ACT

Coastal Management Program Chapter XXX-X-X

**-- DISCUSSION DRAFT --**

**RULES OF**
**GEORGIA DEPARTMENT OF NATURAL RESOURCES**
**COASTAL RESOURCES DIVISION**

By authority of the Georgia Coastal Management Act, O.C.G.A., Title 12, Chapter 5, Article 4, Rules XXX-XX-X, relating to the Coastal Management Program, is amended by adding Rules to read as follows:

**CHAPTER XXX-XX-X**
**COASTAL MANAGEMENT PROGRAM**

**XXX-X-X.01 Public Notice.**

State agencies exercising regulatory authority in the coastal area shall cooperate in administering their regulatory authorities relative to proposed activities that will have reasonably foreseeable effects upon land use, water use, or natural resources of the coastal area. Joint public notices shall be used whenever possible for projects requiring authorization from two or more agencies. The agency issuing the public notice shall include the following statement:

> "Notification of Consistency with the Georgia Coastal Management Program: This notice serves as notification of consistency with the policies of the Georgia Coastal Management Program. The activity(s) proposed by this notice complies with all state laws, and rules and regulations cited as policies, as described in the Georgia Coastal Management Program Document. Comments concerning this action should be submitted to the Coastal Resources Division, Georgia Department of Natural Resources, One Conservation Way, Suite 300, Brunswick, GA 31520-8687."

**XXX-X-X.02 Revision of Application Form to Include Consistency Statement.**

State agencies exercising regulatory authority in the coastal area shall add to their application forms an applicant certification of consistency to read as follows:

> "This project is consistent with the policies of the Georgia Coastal Management Program. The activity(s) proposed by this project complies with all state laws, and rules and regulations cited as policies, as described in the Georgia Coastal Management Program Document."

**XXX-XX-X.03 Notification of Permit Application and Issuance.**

State agencies exercising regulatory authority in the coastal area shall notify the Department of Natural Resources, Coastal Resources Division of the receipt of a request for a license or permit that will have reasonably foreseeable effects upon land use, water use, or natural resources of the coastal area. Upon receipt of such notification, the Coastal Resources Division shall notify any federal agency(s) having regulatory authority for the proposed activity(s).

State agencies exercising regulatory authority in the coastal area shall subsequently notify the Coastal Resources Division upon issuance or denial of the state authority. The Coastal Resources Division shall, upon notification from the state agency(s), notify the relevant federal agency(s) of the state's consistency decision based on the issuance or denial of state authorities. The Coastal Resources Division will not evaluate another state agency's action nor conduct a separate review of a project.

**XXX-XX-X.04 No Delays in Permit Evaluation.**

There shall be no delay in evaluation of a project by one state agency based on its legislated responsibilities and evaluation criteria while awaiting the evaluation of another state agency. All required state agencies shall conduct their evaluations concurrent with other agencies to minimize delays to the applicant.

**XXX-XX-X.05 Interagency Meetings.**

State agencies exercising regulatory authority or management or planning authority in the coastal area shall be invited by the Department of Natural Resources, Coastal Resources Division to attend regular interagency meetings to coordinate agency policies and procedures. The Coastal Resources Division shall organize such meetings on a quarterly basis.

In addition to quarterly coordination meetings, the Coastal Resources Division shall organize meetings, at the request of applicants, of all state and federal agencies exercising regulatory authority or management or planning authority in the coastal area. A representative from each agency shall be invited and urged to attend these meetings. The purpose of the meetings is to foster coordination among agencies with respect to specific projects, and is not intended as another public review of the merits of the project.

Authority Ga. L. 1997, p. XXX, as amended; O.C.G.A. 12-5-320 *et seq.*

# Appendix III

# THE GEORGIA COASTAL MARSHLANDS PROTECTION ACT

# APPENDIX III:
# THE GEORGIA COASTAL MARSHLANDS PROTECTION ACT

**OFFICIAL CODE OF GEORGIA ANNOTATED**
**VOLUME 10, TITLE 12: CONSERVATION AND NATURAL RESOURCES**
**CHAPTER 5: WATER RESOURCES**
**ARTICLE 4: COASTAL WATERS, BEACHES, SAND DUNES, ETC.**
**PART 4: COASTAL MARSHLANDS**

**12-5-280. Short title.**

This part shall be known and may be cited as the "Coastal Marshlands Protection Act of 1970."

**12-5-281. Legislative purpose.**

The General Assembly finds and declares that the coastal marshlands of Georgia comprise a vital natural resource system. It is recognized that the estuarine area of Georgia is the habitat of many species of marine life and wildlife and, without the food supplied by the marshlands, such marine life and wildlife cannot survive. The General Assembly further finds that intensive marine research has revealed that the estuarine marshlands of coastal Georgia are among the richest providers of nutrients in the world. Such marshlands provide a nursery for commercially and recreationally important species of shellfish and other wildlife, provide a great buffer against flooding and erosion, and help control and disseminate pollutants. Also, it is found that the coastal marshlands provide a natural recreation resource which has become vitally linked to the economy of Georgia's coastal zone and to that of the entire state. The General Assembly further finds that this coastal marshlands resource system is costly, if not impossible, to reconstruct or rehabilitate once adversely affected by man related activities and is important to conserve for the present and future use and enjoyment of all citizens and visitors to this state. The General Assembly further finds that the coastal marshlands are a vital area of the state and are essential to maintain the health, safety, and welfare of all the citizens of the state. Therefore, the General Assembly declares that the management of the coastal marshlands has more than local significance, is of equal importance to all citizens of the state, is of state-wide concern, and consequently is properly a matter for regulation under the police power of the state. The General Assembly further finds and declares that activities and structures in the coastal marshlands must be regulated to ensure that the values and functions of the coastal marshlands are not impaired and to fulfill the responsibilities of each generation as public trustees of the coastal marshlands for succeeding generations.

**12-5-282. Definitions.**

As used in this part, the term:

(1) "Applicant" means any person who files an application under this part.

(2) "Board" means the Board of Natural Resources.

(3) "Coastal marshlands" or "marshlands" means any marshland intertidal area, mud flat, tidal water bottom, or salt marsh in the State of Georgia within the estuarine area of the state, whether or

not the tidewaters reach the littoral areas through natural or artificial watercourses. "Vegetated marshlands" shall include those areas upon which grow one, but not necessarily all, of the following: salt marsh grass (Spartina alterniflora), black needlerush (Juncus roemerianus), saltmeadow cordgrass (Spartina patens), big cordgrass (Spartina cynosuroides), saltgrass (Distichlis spicata), coast dropseed (Sporobolus virginicus), bigelow glasswort (Salicornia bigelovii), woody glasswort (Salicornia virginica), saltwort (Batis maritima), sea lavender (Limonium nashii), sea oxeye (Borrichia frutescens), silverling (Baccharis halimifolia), false willow (Baccharis angustifolia), and high-tide bush (Iva frutescens). The occurrence and extent of salt marsh peat at the undisturbed surface shall be deemed to be conclusive evidence of the extent of a salt marsh or a part thereof.

(4) "Commissioner" means the commissioner of natural resources.

(5) "Committee" means the Coastal Marshlands Protection Committee created by this part.

(6) "Eligible person" means any person who is the owner of high land adjoining the state owned marshland or water bottoms, or combination thereof, sought to be leased by said person such that at least 100 percent of the landward boundary of the state owned marshland or water bottom, or combination thereof, sought to be leased is bordered by said adjoining high land.

(7) "Estuarine area" means all tidally influenced waters, marshes, and marshlands lying within a tide-elevation range from 5.6 feet above mean tide level and below.

(8) "Live-aboard" means a floating vessel or other water craft which is moored to a dock, tree, or piling or anchored in the estuarine waters of the state and is utilized as a human or animal abode. Live-aboards include but are not limited to monohulls, multihulls, houseboats, floating homes, and other floating structures which are used for human or animal habitation.

(9) "Minor alteration" means any change in the marshlands which, taken singularly or in combination with other changes, involve less than 0.10 acres. Minor alteration also includes renewal of permits previously issued by the committee.

(10) "Person" means any individual, partnership, corporation, municipal corporation, county, association, or public or private authority, and shall include the State of Georgia, its political subdivisions, and all its departments, boards, bureaus, commissions, or other agencies, unless specifically exempted by this part.

(11) "Political subdivision" means the governing authority of a county or a municipality in which the marshlands to be affected or any part thereof are located.

(12) "Private dock" means a structure built onto or over the marsh and submerged lands which is used for recreational fishing and other recreational activities, is not available to the public, does not have enclosures, and does not create a navigation hazard; provided, however, that a private dock may be covered and screened with wainscotting not higher than three feet and may be equipped with a hoist.

**12-5-283. Coastal Marshlands Protection Committee created, members, powers, administrative hearings and review.**

(a) There is created the Coastal Marshlands Protection Committee to be composed of three members. The commissioner of natural resources and two persons selected by the board shall be the members of this committee. Both persons selected by the board shall be residents of Camden, Glynn,

McIntosh, Liberty, Bryan, or Chatham County. The committee shall issue all orders and shall grant, deny, revoke, and amend all permits and leases provided for by this part. The members of the committee shall be entitled to reimbursement of actual expenses and mileage together with a per diem as set by the board to be paid out of funds appropriated for use by the department.

(b) Any person who is aggrieved or adversely affected by any order or action of the committee shall, upon petition within 30 days after the issuance of such order or the taking of such action, have a right to a hearing before an administrative law judge appointed by the board. The hearing before the administrative law judge shall be conducted in accordance with Chapter 13 of Title 50, the "Georgia Administrative Procedure Act," and the rules and regulations adopted by the board pursuant thereto. The decision of the administrative law judge shall constitute the final decision of the board and any party to the hearing, including the committee, shall have the right of judicial review thereof in accordance with Chapter 13 of Title 50.

(c) Persons are "aggrieved or adversely affected" where the challenged action has caused or will cause them injury in fact and where the injury is to an interest within the zone of interests to be protected or regulated by this part. In the event the committee asserts in response to the petition before the administrative law judge that the petitioner is not aggrieved or adversely affected, the administrative law judge shall take evidence and hear arguments on this issue and thereafter make a ruling on this issue before continuing with the hearing. The burden of going forward with evidence on this issue shall rest with the petitioner.

(d) Any permit for minor alteration of the marshlands may be issued by the commissioner based on the recommendations of staff, past committee actions, and the results of public comments. The commissioner may refer the application to the committee to decide on permits for minor alterations that, in his judgment, should receive broader consideration. A committee member may choose to have the full committee decide on permit applications for minor alterations that the member feels should receive broader consideration.

**12-5-284. Powers and duties of Department as to coastal marshlands generally.**

(a) The department shall have the following authority:

(1) To administer and enforce this part and all rules, regulations, and orders promulgated under this part and to determine jurisdiction under this part;

(2) To accept moneys that are available from persons, government units, and private organizations;

(3) To conduct public hearings and institute and prosecute court actions as may be necessary to enforce compliance with this part and any rules and regulations promulgated hereunder, provided that all such actions shall be in the name of the department; and

(4) To exercise all incidental powers necessary to carry out the purposes of this part.

(b) The foregoing powers and duties may be exercised and performed by the department through such duly authorized agents and employees as it deems necessary and proper.

**12-5-285. Powers of Board of Natural Resources as to coastal marshlands generally.**

The board shall have power to promulgate rules and regulations for the implementation and enforcement of this part.

**12-5-286. Permits to fill, drain, etc. marshlands.**

(a) No person shall remove, fill, dredge, drain, or otherwise alter any marshlands or construct or locate any structure on or over marshlands in this state within the estuarine area thereof without first obtaining a permit from the committee or, in the case of minor alteration of marshlands, the commissioner. A permit may authorize the construction or maintenance of the project proposed in an application. After construction pursuant to a permit, a project may be maintained without a permit so long as it does not further alter the natural topography or vegetation at the project site.

(b) Each application for such permit shall be properly executed and filed with the department on forms prescribed by the department and shall include:

(1) The name and address of the applicant;

(2) A plan or drawing showing the applicant's proposal and the manner or method by which such proposal shall be accomplished. Such plan shall identify the coastal marshlands affected;

(3) A plat of the area in which the proposed work will take place;

(4) A copy of the deed or other instrument under which the applicant claims title to the property or, if the applicant is not the owner, then a copy of the deed or other instrument under which the owner claims title together with written permission from the owner to carry out the project on his land. In lieu of a deed or other instrument referred to in this paragraph, the committee may accept some other reasonable evidence of ownership of the property in question or other lawful authority to make use of the property. The committee will not adjudicate title disputes concerning the property which is the subject of the application; provided, however, that the committee may decline to process an application when submitted documents show conflicting deeds;

(5) A list of all adjoining landowners together with such owners' addresses, provided that if the names or addresses of adjoining landowners cannot be determined, the applicant shall file in lieu thereof a sworn affidavit that a diligent search, including, without limitation, a search of the records of the county tax assessor's office, has been made but that the applicant was not able to ascertain the names or addresses, as the case may be, of adjoining landowners;

(6) A letter from the local governing authority of the political subdivision in which the property is located, stating that the applicant's proposal is not violative of any zoning law;

(7) A nonrefundable application fee to be set by the board in an amount necessary to defray the administrative cost of issuing such permit. Renewal fees shall be equal to application fees, which shall not exceed $1,000.00 for any one proposal and shall be paid to the department;

(8) A description from the applicant of alternative sites and why they are not feasible and a discussion of why the permit should be granted;

(9) A statement from the applicant that he has made inquiry to the appropriate authorities that the proposed project is not over a landfill or hazardous waste site and that the site is otherwise suitable for the proposed project;

(10) A copy of the water quality certification issued by the department if required for the proposed project;

(11) Certification by the applicant of adherence to soil and erosion control responsibilities if required for the proposed project; and

(12) Such additional information as is required by the committee to properly evaluate the application.

(c) A copy of each application for a permit shall be delivered to each member of the committee at least seven days prior to any meeting of the committee.

(d) The department, after receipt of an application, shall notify in writing all adjoining landowners that the application has been received. Such notice shall indicate the use the applicant proposes to make of the property. Should the applicant indicate that any adjoining landowner is unknown or that the address of such landowner is unknown, then the department shall, after receipt of a completed application, cause a notice of the proposed activity and a brief description of the affected land to be published in the legal organ of or a newspaper of general circulation in the county or counties in which such land lies. Cost of such publication shall be paid by the applicant. Should the property to be affected by the applicant be bordered on any side or on more than one side by other property of the applicant, the applicant shall supply the names and addresses of the nearest landowners whose land borders on his land. If the names or addresses, or both, of the nearest landowners cannot be ascertained, the applicant shall supply a sworn statement of diligent search as provided in this Code section. The landowners named by the applicant shall be notified either directly or by advertisement as provided in this Code section. The department may also make inquiry to adjoining landowners to ascertain whether or not there is objection to issuance of a permit.

(e) The committee shall provide notice of applications by either public notice distributed jointly with the United States Army Corps of Engineers or public notice distributed by the committee. In no instance shall a public notice be issued for less than seven days prior to the meeting at which the committee reviews the subject of the public notice. Public notices shall be distributed to all persons who have requested to be placed on the mailing list. Such request shall be made in writing and shall be renewed in December of each year. Failure to renew the request shall result in the removal of such name from the mailing list.

(f) Whenever there appears to be sufficient public interest, the committee may call a public hearing.

(g) In passing upon the application for permit, the committee shall consider the public interest, which, for purposes of this part, shall be deemed to be the following considerations:

(1) Whether or not unreasonably harmful obstruction to or alteration of the natural flow of navigational water within the affected area will arise as a result of the proposal;

(2) Whether or not unreasonably harmful or increased erosion, shoaling of channels, or stagnant areas of water will be created; and

(3) Whether or not the granting of a permit and the completion of the applicant's proposal will unreasonably interfere with the conservation of fish, shrimp, oysters, crabs, clams, or other marine life, wildlife, or other resources, including but not limited to water and oxygen supply.

(h) It is the responsibility of the applicant to demonstrate to the committee that the proposed alteration is not contrary to the public interest and that no feasible alternative sites exist. If the committee finds that the application is not contrary to the public interest and no feasible alternative sites exist, as specified in this subsection, it shall issue to the applicant a permit. Such permit may be conditioned upon the applicant's amending the proposal to take whatever measures are necessary to protect the public interest.

(i) The committee shall act upon an application for a permit within 90 days after the application is complete; provided, however, that this provision may be waived upon the written request of the applicant. An application must be complete sufficiently in advance of the committee meeting at which the project will be considered to allow for public notice and evaluation by the department. An application is complete when it contains substantially all of the written information, documents, forms, fees, and materials required by this part.

(j) In the event a majority of the members of the committee determine that a permit should be denied, the application for permit shall be denied. Any applicant who is aggrieved or adversely affected thereby shall have the right to appeal as provided in Code Section 12-5-283.

(k) Should a majority of the members of the committee agree that a permit should be conditional, the permit shall be issued on such conditions as a majority of the committee directs. Any applicant who is aggrieved or adversely affected thereby shall have the right to appeal as provided in Code Section 12-5-283.

(l) Every permit shall require that the proposed project be completed within five years after the date of the issuance of the permit and such permit shall expire five years after the date of issuance. Such time may be extended an additional five years upon showing that all due efforts and diligence toward the completion of the work have been made. Any permit may be revoked by the committee for noncompliance with or for violation of its terms after written notice of intention to do so has been furnished to the holder thereof.

(m) A permit to alter marshlands that has been granted by the committee becomes final immediately upon issuance, but no construction or alteration may commence until the expiration of 30 days following the date of the committee meeting at which the application is approved; provided, however, that if a timely appeal is filed, no construction or alteration may commence until all administrative and judicial proceedings are terminated.

(n) Issuance of a permit under this part and construction of the permitted project shall not remove the designated property from the jurisdiction of this part. All changes in permitted uses which increase impacts to any land subject to the provisions of this part must be assessed by the committee to determine if the proposed change is consistent with this part and the permit. Each permitted alteration of marshlands shall be reviewed by the department on a five-year basis, or when noncompliance with the purpose for which the permit was issued is evident, to determine if the use of the marshland is consistent with the intent of this part. If the permit holder is found not to be in compliance with this part, the committee shall take action as authorized under Code Section 12-5-291.

(o) All plans, documents, and materials contained in any application for any permit required by this part shall be made a part of the permit, if granted, and conformance to such plans, documents, and materials shall be a condition of the permit. No change or deviation from any such plans, documents, or materials shall be permitted without the prior notification and approval of the committee.

(p) The permittee shall notify the department of completion of a project within 30 days of completion.

(q) If, prior to completion of review of an application under this part, the committee receives notice of the denial of a permit or authorization necessary for the project, review of the project shall be suspended and, if the denial becomes final, the application shall stand denied.

(r) If an area has both marshlands as defined in Code Section 12-5-282 and dynamic dune fields as defined in Code Section 12-5-232, it shall be subject to the jurisdiction of both such parts. In the event of a conflict between this part and Part 2 of this article, the commissioner shall determine which part shall apply so as to best protect the public interest.

**12-5-287. Leasing of state owned marshland or water bottoms.**

(a) The committee, acting for and on behalf of and in the name of the state, is further authorized and empowered to grant and convey to any eligible person a lease of state owned marshland or water bottoms, or a combination thereof, upon such terms and conditions as the committee deems advisable for the purpose of constructing, operating, and maintaining thereupon a marina or marinas or dock providing more than 500 linear feet of dock space, including the installing, maintaining, repairing, removing, and replacing of buildings, structures, piers, docks, floating docks, marine railways, dolphins, pilings, appurtenances thereto, and all facilities and improvements that shall be reasonably used for or in connection therewith, subject always to the initial and continuing compliance by the lessee with all applicable laws pertaining to the use of the leased property and subject always to the use and enjoyment of the public of any navigable waters upon or over the leased property. The applicant for any such lease shall inform the committee of the total linear footage of dock space proposed, but the final decision as to the total dock space available to moor boats shall be in the sound discretion of the committee.

(b) Upon application by any interested person for a lease pursuant to this Code section, the committee shall determine whether or not the applicant is an eligible person. The committee must also determine whether or not the applicant has sufficient lands properly to service the area to be leased. If the committee determines that the applicant is an eligible person and that sufficient lands exist to service the marina or dock, then the committee is authorized to grant and convey to the applicant a lease of the state owned marshland or water bottoms, or a combination thereof, described in the application without the necessity of public bid.

(c) The application for the lease shall be in writing and shall contain a request for a lease of the state owned property described therein. Such application shall include all of the information required for a permit under this part. The entire application must be in a form acceptable to the committee.

(d) Each lease granted under this Code section shall be upon such provisions, requirements, and conditions as the committee shall make and shall, except as provided in subsections (g) and (h) of this Code section, provide for a primary term of not more than ten years. Each lease, except as provided

in subsections (g) and (h) of this Code section, shall require the payment of an annual rental fee set by the committee which shall be not less than the fair market rental value of the state owned marshland or water bottoms leased thereby and may provide for two renewal terms, each of which shall not be for a term of more than equal duration to the primary term. Rental fees shall be paid in one installment to the department not later than July 15 of each year. A penalty of 10 percent of the annual rental shall be assessed for late payment. Failure to pay rental by August 1 of the year due shall result in the cancellation of the lease.

(e) Each lease granted under this Code section shall protect the interest of owners of marshland and high land adjoining the high land of the lessee upon which the lessee's eligibility for lease was based to a right of access to the state owned marshland or water bottoms adjoining the state owned marshland or water bottoms leased to the applicant; provided, however, said owners of adjoining high land may assign their rights in writing in favor of the applicant and such written assignment may be used to determine the percentage of landward boundary required for eligibility to lease the state owned marshland and water bottoms described in the application.

(f) If the eligible person desires the ability to transfer or convey ownership interests in the leasehold to individuals purchasing or leasing on a long-term basis the slips of the marina or marinas, each lease granted under this Code section shall require the formation of a condominium pursuant to Code Section 44-3-72.

(g) Upon application of any eligible person who either is the owner of a marina in existence on March 1, 1989, or holds a permit subsequently granted by the committee under this part on an application for a permit filed with the committee prior to March 1, 1989, the committee shall grant to that eligible person a lease of the state owned marshland or water bottoms upon which such marina is actually located for a term of 20 years beginning March 1, 1989, with a nominal rental of $1.00 per year; provided, however, that any extensions of the dock space or expansion of the area of state owned marshland or water bottoms actually used in conjunction with the marina shall be subject to the provisions of subsection (d) of this Code section; and provided, further, that any such application made on or after January 1, 1999, shall be subject to the provisions of subsection (d) of this Code section.

(h) Upon application of any eligible person who is either a nonprofit corporation, a nonprofit organization, or a public entity, the committee may grant a lease of state owned marshland or water bottoms for the construction and operation of a marina as a community or public dock. Each lease granted under this subsection shall be for a term of ten years from the date of its execution with a nominal rental of $1.00 for the entire term.

(i) The department shall make an annual report of its activities each calendar year to the General Assembly. The report shall include a summary of all applications received and leases granted, including length of terms, rentals, and locations. Copies of the annual report shall be provided to the director of the State Properties Commission, the chairperson of the House Natural Resources and Environment Committee, the chairperson of the House Committee on State Institutions and Property, the chairperson of the Senate Natural Resources Committee, and the chairperson of the Senate Committee on State and Local Governmental Operations.

(j) The committee may place such terms, limitations, restrictions, and conditions in such leases as are deemed necessary to ensure that the utilization of the property is in the public interest. Leased areas shall be deemed to be areas where resources are managed by the state and lessee for the protection of wildlife and other natural resources.

(k) The committee may designate staff of the department to act on its behalf to evaluate, enforce, and execute leases issued under this part.

(l) A lease granted under this part shall be issued only to applicants who agree not to discriminate against any person on the basis of race, gender, color, national origin, religion, or disability. Discrimination by lessee may be punished by termination of the lease, by injunction, or by any other legal remedy available to the committee.

**12-5-288. Guidelines for alteration of marshlands.**

(a) If the project is not water related or dependent on waterfront access or can be satisfied by the use of an alternative nonmarshland site or by use of existing public facilities, a permit usually should not be granted pursuant to Code Section 12-5-286.

(b) The amount of marshlands to be altered must be minimum in size. The following activities and structures are normally considered to be contrary to the public interest when located in coastal marshlands but the final decision as to whether any activity or structure is considered to be in the public interest shall be in the sound discretion of the committee:

(1) Filling of marshlands for residential, commercial, and industrial uses;

(2) Filling of marshlands for private parking lots and private roadways;

(3) Construction of dump sites and depositing of any waste materials or dredge spoil;

(4) Dredging of canals or ditches for the purpose of draining coastal marshlands;

(5) Mining;

(6) Construction of lagoons or impoundments for waste treatment, cooling, agriculture, or aquaculture which would occupy or damage coastal marshlands or life forms therein;

(7) Construction of structures which constitute an obstruction of view to adjoining riparian landowners, including signs and enclosures; and

(8) Occupying a live-aboard for more than 30 days during any calendar year; provided, however, that the commissioner may grant extensions of time beyond 30 days to persons making a request in writing stating the reasons for such extension. Owners of docks where live-aboards are moored as well as owners and occupants of live-aboards are responsible under this part.

**12-5-289. Inspection of marshlands by officers of department and conservation rangers.**

The department, through its officers, staff, and conservation rangers, shall, in addition to its other duties prescribed by law, make reasonable inspections of the marshlands to ascertain whether the requirements of this part and the rules, regulations, and permits promulgated or issued under this part are being faithfully complied with.

**12-5-290. Jurisdiction of superior court to grant injunctive relief.**

The superior court of the county in which land or any part thereof lies or in which jurisdiction is appropriate shall have jurisdiction to restrain a violation of this part at the action of any person.

**12-5-291. Enforcement of part.**

(a) In order to enforce this part or any orders issued under this part or any rules and regulations promulgated under this part, any one or any combination of any or all of the following methods may be employed:

(1) Whenever any person not exempted from this part by Code Section 12-5-295 is altering the marshlands without a permit, altering the marshlands in violation of the terms and conditions of a permit, or violating this part in any other manner, the committee may, prior to any hearing, issue a cease and desist order or other appropriate order to such person; provided, however, that the issuance of such order shall not affect the availability of relief under paragraph (4) of this subsection. Any such order becomes final unless the person named therein requests in writing a hearing before a hearing officer appointed by the board no later than ten days after the issuance of such order. Review of such order shall be available as provided in subsection (b) of Code Section 12-5-283;

(2) Whenever, after a hearing is held in accordance with Code Section 12-5-283 and Chapter 13 of Title 50, the "Georgia Administrative Procedure Act," at the request of the committee, for the imposition of civil penalties, the administrative law judge determines that any person has failed, neglected, or refused to comply with any provision of this part or any order of the committee or administrative law judge, the administrative law judge may issue an order imposing a civil penalty not to exceed $10,000.00 for such violation and an additional civil penalty not to exceed $10,000.00 for each day during which such violation continues. All penalties and interest recovered as provided in this Code section, together with the cost thereof, shall be paid into the state treasury to the credit of the general fund

(3) The committee may file in the superior court in the county in which the person under order resides or in the county in which the violation occurred or, if the person is a corporation, in the county in which the corporation maintains its principal place of business a certified copy of the final order of the committee or administrative law judge, unappealed from, or of a final order of the administrative law judge affirmed upon appeal; whereupon the court shall render judgment in accordance therewith and notify the parties. Such judgment shall have the same effect, and all proceedings in relation thereof shall thereafter be the same, as though such judgment has been rendered in an action duly heard and determined by the court;

(4) Whenever the committee, either before or after a hearing, determines that any person is or has been violating any of the provisions of this part or any orders issued under this part or any rules and regulations promulgated under this part, the committee may file a petition for injunction in the proper superior court of this state against such person for the purpose of enjoining such actions or, if appropriate, may make application for a writ of mandamus in the proper superior court of this state against such person for the purpose of compelling the proper performance of his official duty. It shall not be necessary for the committee to allege or prove that it has no adequate remedy at law; and

(5) The superior court, upon finding that any person is or has been violating any of the provisions of this part or any orders issued under this part or any rules and regulations promulgated under this part, may order the person to restore, as nearly as possible, all marshland to the condition existing prior to the alteration of the marshland.

(b) Owners of property with knowledge of unauthorized activities occurring thereon are responsible under this part.

**12-5-292. Posting of permit, etc.**

A copy of every permit issued to an applicant shall be prominently displayed within the area of proposed activity. If the committee deems it advisable, the applicant may be required to cause a sign to be erected bearing the permit number, date of issuance, name of applicant, and such other information as the committee may reasonably require. The committee may specify the type of sign to be erected and may designate, within reasonable dimensions, the size of the sign.

**12-5-293. Effect on permit of conveyance, etc., of land.**

If a permit holder sells, leases, rents, or otherwise conveys the land or any portion thereof for which the permit was issued, and if the permittee has notified the department within 30 days of such transfer or conveyance, such permit shall be continued in force in favor of the new owner, lessee, tenant, or other assignee so long as there is no change in the use of the land as set forth in the original application.

**12-5-294. Effect of emergency on operation of part.**

In the event of an emergency, whether created by act of God or by actions of domestic or foreign enemies, or in circumstances where grave peril to human life or welfare exists, the committee shall issue an order reciting the existence of such an emergency and requiring or allowing that such action be taken as it deems necessary to meet the emergency. Notwithstanding any other provisions of this part to the contrary, such order shall be effective immediately. If an order requiring a person to take action is issued pursuant to this Code section, such person shall be entitled to a hearing within ten days of the date of issuance of the order.

**12-5-295. Applicability of part.**

This part shall not apply to the following:

(1) Activities of the Department of Transportation incident to constructing, repairing, and maintaining a public road system in Georgia;

(2) Activities of the Department of Transportation and political subdivisions in maintaining existing drainage systems and ditches as long as such activities do not impact additional marshlands;

(3) Agencies of the United States charged by law with the responsibility of keeping the rivers and harbors of this state open for navigation, and agencies of this state charged by existing law with the responsibility of keeping the rivers and harbors of this state open for navigation including areas for utilization for spoilage designated by such agencies;

(4) Activities of public utility companies regulated by the Public Service Commission incident to constructing, erecting, repairing, and maintaining utility lines for the transmission of gas, electricity, or telephone messages;

(5) Activities of companies regulated by the Public Service Commission incident to constructing, erecting, repairing, and maintaining railroad lines and bridges;

(6) Activities of political subdivisions incident to constructing, repairing, and maintaining pipelines that have been approved by the department or appropriate authority for the transport of drinking water and sewage;

(7) The building of private docks on pilings, the walkways of which are above the marsh grass not obstructing tidal flow, by the owners of detached single-family residences located on high land adjoining such docks; or

(8) The reclamation of manmade boat slips as a part of any publicly funded construction project and ancillary development projects including, without limitation, hotels, restaurants, retail facilities, and recreational facilities, whether public or private, within any industrial areas continued in existence pursuant to Article XI, Section I, Paragraph IV, subparagraph (d) of the Constitution which are wholly contained on an island.

**12-5-296. Penalty.**

Any person violating any of the provisions of this part shall be guilty of a misdemeanor.

**12-5-297. Civil liability.**

Any person who causes or permits any removal, filling, dredging, or draining or other alteration of marshlands in this state within the estuarine area thereof without first obtaining a permit from the committee shall be liable in damages to the state and any political subdivision thereof for any and all actual or projected costs, expenses, and injuries occasioned by such alteration of the marshlands. The amount of damages assessed pursuant to this Code section shall include, but shall not be limited to, any actual or projected costs and expenses incurred by the state or any political subdivision thereof in restoring as nearly as possible the natural movement of the waters in the marshlands and replacing the vegetation and aquatic life destroyed by any alteration of marshlands. Damages to the state shall be recoverable in a civil action instituted by the department and shall be paid to the department to cover the cost of restoration. Damages to a political subdivision shall be recoverable in a civil action instituted by said subdivision.

*Ref: State of Georgia Peachnet Internet Site, http://www.ganet.org/services/*
*Downloaded June 15, 1997*

# Appendix IV

# THE GEORGIA SHORE PROTECTION ACT

# APPENDIX IV:
# THE GEORGIA SHORE PROTECTION ACT

## OFFICIAL CODE OF GEORGIA ANNOTATED
## VOLUME 10, TITLE 12: CONSERVATION AND NATURAL RESOURCES
## CHAPTER 5: WATER RESOURCES,
## ARTICLE 4: COASTAL WATERS, BEACHES, SAND DUNES, ETC.
## PART 2: ENGINEERING, CONSTRUCTION, ETC. ALONG SHORELINE

**12-5-230. Short title.**

This part shall be known and may be cited as the "Shore Protection Act."

**12-5-231. Legislative purpose.**

The General Assembly finds and declares that coastal sand dunes, beaches, sandbars, and shoals comprise a vital natural resource system, known as the sand-sharing system, which acts as a buffer to protect real and personal property and natural resources from the damaging effects of floods, winds, tides, and erosion. It is recognized that the coastal sand dunes are the most inland portion of the sand-sharing system and that because the dunes are the fragile product of shoreline evolution, they are easily disturbed by actions harming their vegetation or inhibiting their natural development. The General Assembly further finds that offshore sandbars and shoals are the system's first line of defense against the potentially destructive energy generated by winds, tides, and storms, and help to protect the onshore segment of the system by acting as reservoirs of sand for the beaches. Removal of sand from these bars and shoals can interrupt natural sand flows and can have unintended, undesirable, and irreparable effects on the entire sand-sharing system, particularly when the historical patterns of sand and water flows are not considered and accommodated. Also, it is found that ocean beaches provide an unparalleled natural recreation resource which has become vitally linked to the economy of Georgia's coastal zone and to that of the entire state. The General Assembly further finds that this natural resource system is costly, if not impossible, to reconstruct or rehabilitate once adversely affected by man related activities and is important to conserve for the present and future use and enjoyment of all citizens and visitors to this state and that the sand-sharing system is an integral part of Georgia's barrier islands, providing great protection to the state's marshlands and estuaries. The General Assembly further finds that this sand-sharing system is a vital area of the state and is essential to maintain the health, safety, and welfare of all the citizens of the state. Therefore, the General Assembly declares that the management of the sand-sharing system has more than local significance, is of equal importance to all citizens of the state, is of state-wide concern, and consequently is properly a matter for regulation under the police power of the state. The General Assembly further finds and declares that activities and structures on offshore sandbars and shoals, for all purposes except federal navigational activities, must be regulated to ensure that the values and functions of the sand-sharing system are not impaired. It is declared to be a policy of this state and the intent of this part to protect this vital natural resource system by allowing only activities and alterations of the sand dunes and beaches which are considered to be in the best interest of the state and which do not substantially impair the values and functions of the sand-sharing system and by authorizing the local units of government of the State of Georgia to regulate activities and alterations of the ocean sand dunes and beaches and recognizing that, if the local units of government fail to carry out the policies expressed in this part, it is essential that the department undertake such regulation.

**12-5-232. Definitions.**

As used in this part, the term:

(1) "Applicant" means any person who files an application for a permit under this part.

(2) "Bare sand surface" means an area of nearly level unconsolidated sand landward of the ordinary high-water mark which does not contain sufficient indigenous vegetation to maintain its stability.

(3) "Barrier islands" means the following islands: Daufuskie, Tybee, Little Tybee, Petit Chou, Williamson, Wassaw, Ossabaw, St. Catherines, Blackbeard, Sapelo, Cabretta, Wolf, Egg, Little St. Simons, Sea, St. Simons, Jekyll, Little Cumberland, Cumberland, Amelia, and any ocean-facing island which is formed in the future and which has multiple ridges of sand, gravel, or mud built on the seashore by waves and currents; ridges generally parallel to the shore; and areas of vegetation.

(4) "Beach" means a zone of unconsolidated material that extends landward from the ordinary low-water mark to the line of permanent vegetation.

(5) "Board" means the Board of Natural Resources.

(6) "Boardwalk" or "crosswalk" means a nonhabitable structure, usually made of wood and without a paved or poured surface of any kind, whose primary purpose is to provide access to or use of the beach, while maintaining the stability of any sand dunes it traverses.

(7) "Committee" means the Shore Protection Committee.

(8) "Dynamic dune field" means the dynamic area of beach and sand dunes, varying in height and width, the ocean boundary of which extends to the ordinary high-water mark and the landward boundary of which is the first occurrence either of live native trees 20 feet in height or greater or of a structure existing on July 1, 1979. The landward boundary of the dynamic dune field shall be the seaward most line connecting any such tree or structure as set forth in this part to any other such tree or structure if the distance between the two is a reasonable distance not to exceed 250 feet. In determining what is a reasonable distance for purposes of this paragraph, topography, dune stability, vegetation, lot configuration, existing structures, distance from the ordinary high-water mark, and other relevant information shall be taken into consideration in order to conserve the vital functions of the sand-sharing system. If a real estate appraiser certified pursuant to Chapter 39A of Title 43 determines that an existing structure, shoreline engineering activity, or other alteration which forms part of the landward boundary of the dynamic dune field has been more than 80 percent destroyed by storm driven water or erosion, the landward boundary of the dynamic dune field shall be determined as though such structure had not been in existence on July 1, 1979.

(9) "Erosion" means the wearing away of land whereby materials are removed from the sand dunes, beaches, and shore face by natural processes, including, but not limited to, wave action, tidal currents, littoral currents, and wind.

(10) "Local unit of government" means a county, as defined by Code Section 36-1-1, or an incorporated municipality, as defined by Code Section 36-40-21, or any combination thereof which has been authorized by an Act of the General Assembly, any of which has within its jurisdiction any sand dune or beach.

(11) "Ordinary high-water mark" means the position along the shore of the mean monthly spring high tide reached during the most recent tidal epoch. This term is not synonymous with "mean" high-water mark.

(12) "Ordinary low-water mark" means the position along the shore of the mean monthly spring low tide reached during the most recent tidal epoch. This term is not synonymous with "mean" low-water mark.

(13) "Permit-issuing authority" means the Shore Protection Committee or a local unit of government which has adopted a program of shore protection which meets the standards of this part and which has been certified by the board as an approved program.

(14) "Person" means any association, individual, partnership, corporation, public or private authority, or local unit of government, and shall include the State of Georgia and all its departments, boards, bureaus, commissions, authorities, any other government agencies or instrumentalities, and any other legal entity.

(15) "Sand dunes" means mounds of sand deposited along a coastline by wind action, which mounds are often covered with sparse, pioneer vegetation and are located landward of the ordinary high-water mark and may extend into the tree line.

(16) "Sand-sharing system" means an interdependent sediment system composed of sand dunes, beaches, and offshore bars and shoals.

(17) "Shoreline engineering activity" means an activity which encompasses any artificial method of altering the natural topography or vegetation of the sand dunes, beaches, bars, submerged shoreline lands, and other components of the sand-sharing system. This includes, but is not limited to, such activities as:

(A) Grading, clearing vegetation, excavating earth, or landscaping, where such activities are for purposes other than erection of a structure;

(B) Artificial dune construction;

(C) Beach restoration or renourishment;

(D) Erosion control activities, including, but not limited to, the construction and maintenance of groins and jetties;

(E) Shoreline stabilization activities, including, but not limited to, the construction and maintenance of seawalls and riprap protection; and

(F) The construction and maintenance of pipelines and piers.

(18) "Stable sand dune" means a sand dune that is maintained in a steady state of neither erosion nor accretion by indigenous vegetative cover.

(19) "Structure" means an institutional, residential, commercial, or industrial building.

(20) "Submerged shoreline lands" means the intertidal and submerged lands from the ordinary high-water mark seaward to the limit of the state's jurisdiction in the Atlantic Ocean.

(21) "Tidal epoch" means the variations in the major tide-producing forces that result from changes in the moon's phase, declination of the earth, distance of the moon from the earth, and regression of the moon's modes, and which go through one complete cycle in approximately 19 years.

**12-5-233. Area of operation of part.**

The area of operation of this part shall be:

(1) The dynamic dune fields on the barrier islands of this state as determined by reference to Code Section 12-5-232. Such determination shall be made by the permit-issuing authority on the basis of site inspection and evaluation of other pertinent information as provided for in subsection (d) of Code Section 12-5-239;

(2) The submerged shoreline lands of this state from the seaward limit of this state's jurisdiction landward to the dynamic dune fields or to a line projected from the westernmost point of the dynamic dune field on the southern end of a barrier island, to the westernmost point of the dynamic dune field on the northern end of the adjacent barrier island to the south; and

(3) If an area has dynamic dune fields as defined by Code Section 12-5-232, and marshlands as defined by Code Section 12-5-282, it is subject to the jurisdiction of this part and Part 4 of this article. In the event of a conflict between this part and Part 4 of this article, the commissioner shall determine which part shall apply so as to best protect the public interest.

**12-5-234. Powers and duties of the Department as to coastal shoreland generally.**

(a) The department shall have the following authority:

(1) To administer and enforce this part and all rules, regulations, and orders issued pursuant to this part;

(2) To accept moneys from persons, government units, and private organizations;

(3) To conduct public hearings and to institute and to prosecute court actions as may be necessary to enforce compliance with this part and any rules and regulations promulgated pursuant to this part; provided, however, that all such actions shall be in the name of the department;

(4) To make reasonable inspections of the lands within jurisdiction of this part to ascertain whether the requirements of this part and the rules, regulations, and permits promulgated or issued pursuant to this part are faithfully complied with; and

(5) To exercise all incidental powers necessary to carry out the purposes of this part.

(b) The foregoing powers and duties may be exercised and performed by the department through such duly authorized agents and employees as it deems necessary and proper.

**12-5-235. Creation of Shore Protection Committee; members; powers of committee generally.**

(a) There is created the Shore Protection Committee within the department. The committee shall be composed of three members, the commissioner of natural resources and two people selected by the board. A person selected by the board shall be a resident of one of the following counties: Camden, Glynn, McIntosh, Liberty, Bryan, or Chatham. The members of the committee shall be entitled to and shall be reimbursed from moneys appropriated to the department for their expenses, such as mileage and per diem, as set by the board.

(b) The committee, in the absence of an approved local shore protection program as provided by this part, shall act as permit-issuing authority and shall have the authority to issue orders and to grant, suspend, revoke, modify, extend, condition, or deny permits as provided in this part. Permits may, at the committee's discretion, be revoked, suspended, or modified upon a finding that the permittee is not in compliance with permit conditions or that the permittee is in violation of any rule or regulation promulgated pursuant to this part.

(c) The chairman of the committee, upon application by the permittee, may issue renewal of a permit previously granted by the committee. Such action must be based upon recommendations of staff, past committee actions, and the results of public comments. The chairman may refer the request for renewal to the committee to decide on renewals that, in his judgment, should receive broader consideration. A committee member may choose to have the full committee decide on renewals that the member feels should receive broader consideration.

**12-5-236. Adoption and promulgation by board of rules and regulations.**

The board shall have the power to promulgate rules and regulations for the implementation and enforcement of this part consistent with the purpose of this part.

**12-5-237. Requirements as to permits for persons engaged in shoreline engineering activity, etc., generally.**

(a) No person shall construct or erect any structure or construct, erect, conduct, or engage in any shoreline engineering activity or engage in any land alteration which alters the natural topography or vegetation of any area within the jurisdiction of this part, except in accordance with the terms and conditions of a permit therefor issued in accordance with this part. A permit may authorize the construction or maintenance of the project proposed in an application. After construction of a project pursuant to a permit, the project may be maintained without a permit so long as it does not further alter the natural topography or vegetation of the site or increase the size or scope of the project.

(b) No permit shall be required for a structure, shoreline engineering activity, or land alteration which exists as of July 1, 1979, provided that a permit must be obtained for any modification which will have a greater adverse effect on the sand-sharing system or for any addition to or extension of such shoreline engineering activity, structure, or land alteration; provided, further, that, if any structure, shoreline engineering activity, or land alteration is more than 80 percent destroyed by wind, water, or

erosion as determined by an appraisal of the fair market value by a real estate appraiser certified pursuant to Chapter 39A of Title 43, a permit is required for reconstruction.

**12-5-238. Contents of permit application.**

All applications for permits required by this part must be on forms prescribed by the permit-issuing authority, must be properly executed, and must include the following:

(1) The name and address of the applicant;

(2) A brief description of the proposed project;

(3) Construction documents showing the applicant's proposed project and the manner or method by which the project shall be accomplished. Such document shall identify the dynamic dune field affected;

(4) A copy of the deed or other instrument under which the applicant claims title to the property or, if the applicant is not the owner, a copy of the deed or other instrument under which the owner claims the title together with written permission from the owner to carry out the project on his land. In lieu of a deed or other instrument referred to in this paragraph, the permit-issuing authority may accept some other reasonable evidence of ownership of the property in question or other lawful authority to make use of the property. If all or any part of the proposed construction or alteration shall take place on property which is owned by the State of Georgia, the applicant shall present an easement, revocable license, or other written permission from the state to use the property for the proposed project; in the alternative, the permit-issuing authority may condition the issuance of the permit on the requirement to obtain written permission from the state. The permit-issuing authority will not adjudicate title disputes concerning the property which is the subject of the application; provided, however, that the permit-issuing authority may decline to process an application when submitted documents show conflicting deeds;

(5) A plat showing the boundaries of the proposed project site;

(6) The names and addresses of all landowners of property adjoining or abutting the parcel of land on which the proposed project is to be located. If the property to be altered is bordered on any side by other property of the applicant, the applicant shall supply the names and addresses of the nearest landowners, other than the applicant, of property adjoining the applicant's property. If the applicant cannot determine the identity of adjoining landowners or their addresses, the applicant shall file in lieu thereof an affidavit stating that a diligent search, including a search of the records of the county tax assessor's office, has been made but that the applicant was not able to ascertain the names or addresses of adjoining landowners;

(7) An application fee in such reasonable amount as is designated by the permit-issuing authority or, if the committee is the permit-issuing authority, a nonrefundable application fee as set by the board which reflects the cost to the department to evaluate the application. Fees for the renewal of a permit shall be equal to the application fee. Application fees shall not exceed $1,000.00 for any one proposal. If the committee is the permit-issuing authority, such fees shall be paid to the department;

(8) Site plans for the proposed project site showing existing and proposed streets, utilities, buildings, and any other physical structures;

(9) A certification by a registered architect or engineer licensed by this state certifying that all proposed structures, if any, for which the permit is applied are designed to meet suitable hurricane-resistant standards;

(10) Any and all other relevant data required by the permit-issuing authority for the purposes of ascertaining that the proposed improvements, activities, and uses will meet the standards of this part;

(11) A certificate or letter from the local governing authority or authorities of the political subdivision in which the property is located stating that the applicant's proposal is not violative of any zoning law; and

(12) A statement from the applicant that he has made inquiry to the appropriate authorities that the proposed project is not over a landfill or hazardous waste site and that the site is otherwise suitable for the proposed project.

**12-5-239. Permit issuance.**

(a) The permit-issuing authority shall take action on each permit application within 90 days after the application is completed; provided, however, that this provision may be waived upon the written request of the applicant. An application is complete when it contains substantially all of the written information, documents, forms, fees, and materials required by this part. An application must be completed sufficiently in advance of the permit-issuing authority meeting at which the project will be considered to allow for public notice and evaluation by the permit-issuing authority.

(b) After receipt of a completed application and at least 30 days prior to acting on the application, the permit-issuing authority shall notify all persons identified by the applicant as owning land adjacent to the location of the proposed project and to all persons who have filed a written request with such permit-issuing authority that their names be placed on a mailing list for receipt of such notice. Any person desiring to be placed on such mailing list must so request in writing and renew such request in December of each year. The name of any person who has not renewed such request shall be removed from the list. The landowners who have not requested to be placed on a mailing list shall be notified in writing if their addresses are known. Such notice shall be in writing and shall include a general description of the proposed project and its location. The applicant shall post such notice in a conspicuous place on the subject property at or prior to the time the permit-issuing authority issues public notice of the application. If the applicant has filed an affidavit that the names or addresses of the adjoining landowners were not ascertained after a diligent search, the permit-issuing authority shall cause a notice of the proposed activity and a brief description of the land to be affected to be published in the legal organ or a newspaper of general circulation in the county in which such land lies. Cost of such public notices shall be paid by the applicant. Whenever there appears to be sufficient public interest, the permit-issuing authority may call a public hearing.

(c) No permit shall be issued except in accordance with the following provisions:

(1) A permit for a structure or land alteration, including, but not limited to, private residences, motels, hotels, condominiums, and other commercial structures, in the dynamic dune field may be issued only when:

(A) The proposed project shall occupy the landward area of the subject parcel and, if feasible, the area landward of the sand dunes;

(B) At least a reasonable percentage, not less than one-third, of the subject parcel shall be retained in its naturally vegetated and topographical condition;

(C) The proposed project is designed according to applicable hurricane-resistant standards;

(D) The activities associated with the construction of the proposed project are kept to a minimum, are temporary in nature, and, upon project completion, restore the natural topography and vegetation to at least its former condition, using the best available technology; and

(E) The proposed project will maintain the normal functions of the sand-sharing mechanisms in minimizing storm-wave damage and erosion, both to the unaltered section of the subject parcel and at other shoreline locations;

(2) No permits shall be issued for a structure on beaches, eroding sand dune areas, and submerged lands; provided, however, that a permit for a pier, boardwalk, or crosswalk in such an area may be issued, provided that:

(A) The activities associated with the construction of the proposed land alterations are kept to a minimum, are temporary in nature, and, upon project completion, the natural topography and vegetation shall be restored to at least their former condition, using the best available technology; and

(B) The proposed project maintains the normal functions of the sand-sharing mechanisms in minimizing storm-wave damage and erosion, both to the unaltered section of the subject parcel and at other shoreline locations;

(3) A permit for shoreline engineering activity or for a land alteration on beaches, sand dunes, and submerged lands may be issued only when:

(A) The activities associated with the construction of the proposed project are to be temporary in nature, and the completed project will result in complete restoration of any beaches, dunes, or shoreline areas altered as a result of that activity;

(B) The proposed project will insofar as possible minimize effects to the sand-sharing mechanisms from storm-wave damage and erosion both to the subject parcel and at other shoreline locations;

(C) In the event that shoreline stabilization is necessary, either low-sloping porous rock structures or other techniques which maximize the dissipation of wave energy and minimize shoreline erosion shall be used. Permits may be granted for shoreline stabilization activities when the applicant has demonstrated that no reasonable or viable alternative exists; provided, however, that beach restoration and renourishment techniques are preferable to the construction of shoreline stabilization activities; and

(D) A copy of the permit application has been transmitted to the local unit of government wherein the project site lies, if such local unit of government has been certified by the board, requesting comments on such application.

(d) In evaluating a permit application in order to determine compliance with the provisions set forth in subsection (c) of this Code section, the permit-issuing authority may use the following assessment tools and techniques, as appropriate and as available:

(1) Historic photographs and topographic data of the project site, which can be used in determining the impact of a proposed project on the stability of the shoreline;

(2) On-site inspections to determine the impact of a proposed project on topographic and vegetative conditions, erosion or accretion rates, and other factors influencing the life cycles of dune plants;

(3) Any recognized or accepted scientific investigations necessary to determine the proposed project's impacts on the surrounding biological and geological systems, and the historic and archeological resources;

(4) When present, the potential effects of shoreline engineering structures (seawalls, groins, jetties, etc.), their condition, and their apparent influence on the sand-sharing system as it relates to the proposed project;

(5) Historic, climatological, tidal data, and meteorological records of the vicinity of the project and possible potential effects of a proposed project upon erosion and accretion rates; and

(6) New scientific information which, through recent advances, would effect a more competent decision relative to wise use and management of Georgia's sand-sharing system.

(e) Every permit shall require that the proposed project be completed within five years after the date of issuance of the permit and shall expire five years after the date of issuance. Such time may be extended five additional years upon a showing that all due efforts and diligence toward the completion of the project have been made. If a permit holder sells, leases, rents, or otherwise conveys the land or any portion of the land for which the permit was issued, such permit shall be continued in force in favor of the new owner, lessee, tenant, or other assignee so long as there is no change in the use of the land as set forth in the original application. The permittee must notify the permit-issuing authority within 30 days after change of ownership of property.

(f) All plans, documents, and materials contained in any application for any permit required by this part shall be made a part of the permit, if granted, and conformance to such plans, documents, and materials shall be a condition of the permit. No change or deviation from any such plans, documents, or materials shall be permitted without the prior notification and approval of the permit-issuing authority.

(g) Compliance with all other federal, state, and local statutes, ordinances, and regulations shall also be a condition of every permit issued pursuant to this part. If, prior to completion of review of an application under this part the committee receives notice of the denial of a permit or authorization necessary for the project, review of the project shall be suspended and, if the denial becomes final, the application shall stand denied.

(h) All permit-issuing authorities may place such conditions on any permit issued under this Code section as are necessary to carry out this part.

(i) In passing upon the application for a permit, the permit-issuing authority shall consider the public interest which for purposes of this part shall be deemed to be the following considerations:

(1) Whether or not unreasonably harmful, increased alteration of the dynamic dune field or submerged lands, or function of the sand-sharing system will be created;

(2) Whether or not the granting of a permit and the completion of the applicant's proposal will unreasonably interfere with the conservation of marine life, wildlife, or other resources; and

(3) Whether or not the granting of a permit and the completion of the applicant's proposal will unreasonably interfere with reasonable access by and recreational use and enjoyment of public properties impacted by the project.

(j) Issuance of a permit under this part and construction of the permitted project shall not remove the designated property from the jurisdiction of this part. All changes in permitted uses which increase impacts to any land subject to the provisions of this part must be ruled upon by the permit-issuing authority to determine if the proposed change is consistent with this part and the permit. Each permitted alteration within the area of operation of this part shall be reviewed by the permit-issuing authority on a five-year basis or when noncompliance with the purpose for which the permit was issued is evident to determine if the use within the area of operation of this part is consistent with the intent of this part. If the permit holder is found not to be in compliance with this part, the permit-issuing authority shall take action as authorized under Code Section 12-5-247.

(k)

(1) A permit granted by the permit-issuing authority becomes final immediately upon issuance, but no construction or alteration may commence until the expiration of 30 days following the date of the permit-issuing authority meeting at which the application is approved, except as otherwise provided in paragraph (2) of this subsection; provided, however, that if a timely appeal is filed, no construction or alteration may commence until all administrative proceedings are terminated except as otherwise provided in paragraph (2) of this subsection.

(2) If the permit-issuing authority, either at the request of the applicant or on its own motion, finds that an emergency exists in any particular geographic area or in regard to any particular permit issued by the permit-issuing authority, the permit-issuing authority is authorized to allow a permittee to commence immediately or to continue the construction or alteration authorized by the permit. The permit-issuing authority in determining an emergency shall base its determination on imminent peril to the public health, safety, or welfare or a grave danger to life, real property, structures, or shoreline engineering activities. If the permit-issuing authority makes such a finding of an emergency, the permittee may commence immediately or continue the construction or alteration authorized by the permit, but such construction or alteration is undertaken at the risk to the permittee of an administrative or judicial order requiring the sand dunes, beaches, and submerged lands to be returned to their condition prior to such construction or alteration.

(l) When work has been completed in accordance with provisions of a permit, the permittee shall so notify the permit-issuing authority in writing within 30 days of such completion.

**12-5-240. Posting of permit.**

A copy of every permit issued to an applicant shall be prominently displayed within the area of proposed activity. If the permit-issuing authority deems it advisable, the applicant may be required to cause a sign to be erected bearing the permit number, date of issuance, name of applicant, and such

other information as the permit-issuing authority may reasonably require. The permit-issuing authority may specify the type of and, within reasonable dimensions, the size of the sign.

**12-5-241. Local shore protection programs.**

(a) If a local unit of government has enacted ordinances which meet or exceed the standards, requirements, and provisions of this part, and which are enforceable by such local unit of government, the board may certify such local unit of government as a permit-issuing authority. In areas in which a local shore protection program has been certified by the board, the local unit of government shall have all permitting authority described in this part, except for shoreline engineering activities and activities proposed to occur in whole or in part on submerged shoreline lands or on other state owned lands. The committee shall exercise exclusive permitting authority for shoreline engineering activities and activities proposed to occur in whole or in part on submerged shoreline lands. Local units of government are authorized to enact ordinances meeting or exceeding the requirements of this part.

(b) The board shall periodically review the actions of local units of government which have approved local shore protection programs and may revoke its certification of such programs if it determines that such ordinances are not being sufficiently enforced to carry out the intent of this part.

(c) In all areas of the state within the areas of operation of this part where no local shore protection program has been certified by the board or where such certification has been revoked by the board, the provisions of this part shall be carried out by the committee.

(d) From appropriations of the General Assembly made to the department for such purposes, the department shall be authorized to provide state grants to local units of government for any one or more of the following purposes:

(1) Construction and maintenance of boardwalks;

(2) Dune stabilization programs;

(3) Beach restoration and renourishment;

(4) Public purchase of rights of way to beaches; and

(5) Construction or removal of shoreline engineering activities.

**12-5-242. Assistance by Department to local governments in developing ordinances.**

The department shall provide technical assistance to any local unit of government which requests such assistance in order to develop an ordinance meeting the requirements of this part. The department shall also develop a model ordinance which may be used by such local units of government.

**12-5-243. Effect of part on power of local governments to adopt more restrictive ordinances.**

Nothing in this part shall be construed as prohibiting a local unit of government from adopting ordinances more restrictive in regard to activity on sand dunes and beaches than the standards set forth in this part.

**12-5-244. Administrative and judicial review.**

(a) Any person who is aggrieved or adversely affected by any order or action of the committee shall, upon petition within 30 days after the issuance of such order or taking of such action, have a right to a hearing before an administrative law judge appointed by the board. The hearing before the administrative law judge shall be conducted in accordance with Chapter 13 of Title 50, the "Georgia Administrative Procedure Act," and the rules and regulations adopted by the board pursuant thereto. The decision of the administrative law judge shall constitute the final decision of the board and any party to the hearing, including the committee, shall have the right of judicial review thereof in accordance with Chapter 13 of Title 50.

(b) Where a local unit of government has, pursuant to this part, granted, suspended, modified, extended, conditioned, or denied a permit, any person aggrieved or adversely affected by such action shall be afforded a right to administrative and judicial review of such action.

(c) Persons are "aggrieved or adversely affected" where the challenged action has caused or will cause them injury in fact and where the injury is to an interest within the zone of interests to be protected or regulated by this part. In the event the committee or local unit of government, as appropriate, asserts in response to the petition before the administrative law judge that the petitioner is not aggrieved or adversely affected, the administrative law judge shall take evidence and hear arguments on this issue and thereafter make a ruling on this issue before continuing with the hearing. The burden of going forward with evidence on this issue shall rest with the petitioner.

**12-5-245. Injunctive relief.**

Any activity in violation of this part or of any ordinance or regulation adopted pursuant to this part shall be a public nuisance; and such activity may be enjoined or abated by an action filed in the appropriate superior court by the Attorney General on behalf of the department, by any local unit of government affected, or by any person. Upon showing of any activity in violation of this part or of any ordinance or regulation adopted pursuant to this part, a temporary restraining order, a permanent or temporary injunction, or other order shall be granted without the necessity of showing lack of an adequate remedy at law and irreparable injury. The relief granted by the court in an action filed pursuant to this Code section may include, but shall not be limited to, an order requiring the sand dunes, beaches, and submerged lands to be returned to their condition prior to such violation.

**12-5-246. Jurisdiction of superior court.**

The superior court of the county in which the land or any part thereof is located or in which jurisdiction is otherwise proper shall have jurisdiction to restrain a violation of this part at the action of any person.

**12-5-247. Enforcement of part; civil penalty.**

(a) If the department determines that any person is violating any provision of this part or any rule or regulation adopted pursuant to this part or the terms and conditions of any permit issued under this part, and such violation is in an area where the committee is the permit-issuing authority, the department may employ any one, or any combination of any or all, of the enforcement methods specified in paragraphs (1) through (4) of this subsection:

(1) The department may issue an administrative order specifying the provision of this part or the rule, or both, alleged to have been violated and require the person so ordered to cease and desist from such activity and to take corrective action within a reasonable period of time as prescribed in the order; provided, however, that the issuance of such order shall not affect the availability of relief under Code Section 12-5-244. Such corrective action may include, but shall not be limited to, requiring that the sand dunes, beaches, and submerged lands be returned to their condition prior to the violation of this part or a rule adopted pursuant to this part. Any such order shall become final unless the person named therein requests in writing a hearing before a hearing officer appointed by the board no later than ten days after the issuance of such order. Review of such order shall be available as provided in subsection (a) of Code Section 12-5-244;

(2) Whenever the committee finds that an emergency exists requiring immediate action to protect the public or private interest where the public interest is served, it may issue an order reciting the existence of such an emergency and requiring or allowing that such action be taken as it deems necessary to meet the emergency. Notwithstanding any other provision of this part, such order shall be effective immediately. If an order requiring a person to take action is issued pursuant to this paragraph, such person shall be entitled to a hearing within ten days of the date of issuance of the order. Any person who is aggrieved or adversely affected by an emergency order of the committee, upon petition within ten days after issuance of such order, shall have a right to a hearing before an administrative law judge appointed by the board. The committee shall hold a meeting no sooner than 30 days after the issuance of an emergency order to review such order to determine whether the order has been complied with, whether the order should continue in force, and any possible effects of such order on the sand-sharing system;

(3) The committee may file in the appropriate superior court a certified copy of an unappealed final order of the administrative law judge or of a final order of the administrative law judge affirmed upon appeal or other orders of the committee, whereupon the court shall render judgment in accordance therewith and notify the parties. Such judgment shall have the same effect, and all proceedings in relation thereof shall thereafter be the same, as though such judgment has been rendered in an action duly heard and determined by the court; and

(4) The department may seek injunctive relief pursuant to Code Section 12-5-245.

(b) Any person who violates any provision of this part or any rule or regulation adopted under this part, any permit issued under this part, or final or emergency order of the department shall be subject to a civil penalty not to exceed $10,000.00 for each act of violation. Each day of continued violation shall subject said person to a separate civil penalty. An administrative law judge appointed by the board after a hearing conducted in accordance with Chapter 13 of Title 50, the "Georgia Administrative Procedure Act," shall determine whether or not any person has violated any provision of this part, any rule or regulation adopted under this part, any permit, or any final or emergency order of the department or permit-issuing authority and shall upon proper finding issue an order imposing such civil penalties as provided in this subsection. Review of such order shall be available as provided in subsection (a) of Code Section 12-5-244. All civil penalties recovered by the department as provided in this subsection shall be paid into the state treasury to the credit of the general fund.

(c) Any person who causes or permits any removal, filling, or other alteration of the dynamic dune field or submerged lands in this state without first obtaining a permit from the permit-issuing authority shall be liable in damages to the state and any political subdivision of the state for any and all actual or projected costs and expenses and injuries occasioned by such alteration of the dynamic dune field or submerged lands. The amount of damages assessed pursuant to this Code section shall include, but shall not be limited to, any actual or projected costs and expenses incurred or to be incurred by the state or any political subdivision thereof in restoring as nearly as possible the natural topography of the sand-sharing system and replacing the vegetation destroyed by any alteration of the dynamic dune field or submerged lands. Damages to the state shall be recoverable in a civil action instituted by the department and shall be paid to the department to cover cost of restoration. Damages to a political subdivision shall be recoverable in a civil action instituted by said subdivision.

(d) Owners of property with knowledge of unauthorized activities occurring thereon are responsible under this part.

**12-5-248. Operation of motorized vehicles, sail boats.**

(a) It shall be unlawful for any person to:

(1) Operate any motorized vehicle or other motorized machine on, over, or across the dynamic dune field or beaches except as authorized by the permit-issuing authority, except that individual disability vehicles, emergency vehicles, and governmental vehicles utilized for beach maintenance or research may operate within the dynamic dune field and beaches without authorization from the permit-issuing authority as long as those vehicles operate across existing cross-overs, paths, or drives; or

(2) Store or park sailboats, catamarans, or other commercial or recreational marine craft in any dynamic dune field.

(b) Any person violating the provisions of subsection (a) of this Code section shall be guilty of a misdemeanor.

*Ref: State of Georgia Peachnet Internet Site, http://www.ganet.org/services/ Downloaded June 15, 1997*

# Appendix V

# MEMORANDUM OF AGREEMENT BETWEEN THE GEORGIA ENVIRONMENTAL PROTECTION DIVISION AND THE GEORGIA COASTAL RESOURCES DIVISION

MEMORANDUM OF AGREEMENT

between

GEORGIA DEPARTMENT OF NATURAL RESOURCES
COASTAL RESOURCES DIVISION

and

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

This memorandum constitutes an agreement between the Coastal Resources Division and the Environmental Protection Division of the Georgia Department of Natural Resources concerning implementation of a program to balance economic development in Georgia's coastal area with preservation of natural, environmental, historic, archeological, and recreational resources for the benefit of Georgia's present and future generations. This agreement is based upon each Division's statutory and regulatory authorities and commitment to appropriate planned development and conservation of Georgia's coastal resources.

The Georgia Department of Natural Resources has been designated by the Georgia General Assembly as the lead Department to prepare and administer the State's Coastal Management Program (O.C.G.A. 12-5-323). Within the Department of Natural Resources, the Coastal Resources Division is responsible for coastal management issues, including preparing and administering a comprehensive coastal management program for the eleven-county coastal area of Georgia as set forth in the Coastal Management Program document. The eleven counties that comprise the coastal area of Georgia are: Brantley, Bryan, Camden, Charlton, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Wayne.

The Coastal Resources Division has the responsibility for administering the Coastal Marshlands Protection Act, the Shore Protection Act, the Revocable License Program, and State Programmatic General Permits for recreational docks; for educating the general public about conservation of resources in the coastal area; and for programs for coastal fisheries resource management, and others. The Environmental Protection Division has the responsibility to administer State laws and rules and regulations for the protection of the environment throughout Georgia including surface waters, underground waters, and air. These responsibilities may be accomplished by enforcement of regulations, and issuance of permits.

This agreement sets out the terms of the relationship between the Coastal Resources Division, hereinafter referred to as CRD, and the Environmental Protection Division, hereinafter referred to as EPD, in connection with the State's fulfillment of its responsibilities under the Georgia Coastal Management Act (O.C.G.A. 12-5-320, *et seq.*).

## I. Objectives

To the extent consistent with their respective statutory authorities and responsibilities, EPD and CRD agree to cooperate and coordinate their respective regulatory efforts in a manner consistent with the policies of the Georgia Coastal Management Program, as required by law (O.C.G.A. 12-5-326). These objectives include the following:

(1) The goals and standards of the federal Clean Water Act as implemented by the Georgia Water Quality Control Act, the Georgia Safe Drinking Water Act, and others; and

(2) The goals and standards of the federal Clean Air Act as implemented by the Georgia Air Quality Act; and

(3) The goals and objectives of the Coastal Marshlands Protection Act, the Shore Protection Act, and other laws regulating land disturbing activities in the coastal area.

## II. Specific Functions to be Coordinated

### 1. Water Quality Resources Management and Regulation

Pursuant to the Official Code of Georgia Annotated, Article 1, Section 12-2-2, EPD is responsible for the State's water quality management; for regulating discharges into the waters of the State; and for permitting activities. In carrying out this responsibility, EPD is charged with ensuring water quality that conserves, preserves, and allows for proper uses; and for protecting public health; including administration of Section 401 of the federal Clean Water Act, Water Quality Certification. The administration of Section 401 Water Quality Certification includes the following:

-- Review and certification of any and all applications for a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters of the United States in Georgia, to ensure that any such discharge will be regulated to comply with the applicable provisions of the federal Clean Water Act.

By way of this memorandum, CRD shall assist EPD with its administration of the Section 401 Water Quality Certification program within the eleven counties that constitute the coastal area of Georgia. EPD shall retain certification responsibility of this program throughout the State, including the coastal area. EPD and CRD shall consult and coordinate responsibilities to ensure administration of this program within the coastal area shall be consistent with the administration of this program throughout the remainder of Georgia. The purpose of this agreement is to reduce administrative overlap and to make administrative procedures more efficient; CRD already implements similar programs in the coastal area of Georgia, such as the Coastal Marshlands Protection Act which requires evaluation of water quality impacts. Within the eleven-county coastal area, when 401 Certification is requested for a project, CRD shall review the project and make recommendations to EPD as to certification. EPD shall consider CRD recommendations prior to rendering certification decisions. There shall be no delay in project evaluation resulting from this agreement.

### 2. Project Evaluation, Interagency Task Force, and Review Procedures

EPD implements permit-related activities that may affect the land, air, and water resources of the State. By way of this memorandum, EPD shall notify CRD via its public notice mailing list of the receipt of any permit application that may affect such resources of the coastal area. Upon receipt of such notification, CRD shall notify any relevant federal agencies that might also be considering authorizations for the project. CRD shall follow up with EPD to determine when the permit is issued for projects needing federal authorization. CRD shall then notify the relevant federal agencies of the State's consistency decision based on the issuance or denial of State authorities. CRD will not evaluate EPD's action nor conduct a separate review of a project. There shall be no delay in project evaluation resulting from this agreement.

Generally, when a federal permit program has been delegated to the State of Georgia, State implementation of the federal permit is not subject to the federal consistency process. Examples of state-issued federal permits not subject to federal consistency include National Pollution Discharge Elimination System (NPDES) permits. CRD and EPD recognize that while authority for some federal environmental programs has been delegated from the U.S. Environmental Protection Agency to EPD and therefore is not subject to the federal consistency process, other federal authorities, federal actions, and federal assistance activities require a consistency decision from CRD. CRD shall render such decision based upon issuance of EPD permits and other state authorities.

By way of this memorandum, CRD will organize quarterly meetings of all State and federal permitting agencies exercising regulatory authority or management or planning authority in the coastal area. A representative from EPD shall be invited and urged to attend these meetings. The purpose of the meetings is to foster agency coordination with respect to agency policies and procedures, air issues, and improve cooperation. The meetings are not intended to review individual projects.

CRD shall also organize occasional meetings, at the request of applicants, of all State and federal agencies exercising regulatory or management or planning authority in the coastal area. A representative from EPD shall be invited and urged to attend these meetings. The purpose of these meetings is to foster coordination among agencies with respect to specific projects and provide technical assistance to applicants, and is not intended as an additional public review of the merits of the project.

## III. Appeal Procedures

The applicant for any permit activity has the right to the appeals process defined for the applicable permit. CRD shall provide technical assistance to EPD for any appeals based on CRD recommendations for 401 Water Quality Certifications.

IN WITNESS WHEREOF, the contents of this memorandum of agreement have been accepted and approved by the Department of Natural Resources, Environmental Protection Division and Coastal Resources Division this 5th day of July, 1997.

Lonice C. Barrett, Commissioner — 8/4/97 — Date
Georgia Department of Natural Resources

Duane Harris, Director — 7/8/97 — Date
Coastal Resources Division

Harold Reheis, Director — 7/15/97 — Date
Environmental Protection Division

# Appendix VI

# SAMPLE MEMORANDUM OF AGREEMENT BETWEEN OTHER AGENCIES AND THE GEORGIA COASTAL RESOURCES DIVISION

# APPENDIX VI:
# SAMPLE MEMORANDUM OF AGREEMENT BETWEEN OTHER AGENCIES AND THE GEORGIA COASTAL RESOURCES DIVISION

**-- Generic Discussion Draft --**

**MEMORANDUM OF AGREEMENT**

**between**

**GEORGIA DEPARTMENT OF NATURAL RESOURCES**
**COASTAL RESOURCES DIVISION**

**and**

***[ADD AGENCY NAME HERE]***

This memorandum constitutes an understanding between the Georgia Coastal management Program and the *[Agency]* concerning implementation of a program to balance economic development in Georgia's coastal area with preservation of natural, environmental, historic, archeological, and recreational resources for the benefit of Georgia's present and future generations. This understanding is based upon each Department's statutory and regulatory authorities and commitment to appropriate planned development and conservation of the land, rivers, sounds, marshes and other waters of Georgia's coast, including the submerged lands seaward of the coast to the extent of Georgia's jurisdiction.

The Georgia Department of Natural Resources has been designated by the Georgia General Assembly as the lead Department to prepare and administer the State's Coastal Management Program (O.C.G.A. 12-5-323). Within the Department of Natural Resources, the Coastal Resources Division is responsible for coastal management issues, including preparing and administering a comprehensive coastal management program for the eleven-county coastal area of Georgia as set forth in the Coastal Management Program Document. The eleven counties that comprise the coastal area of Georgia are: Brantley, Bryan, Camden, Charlton, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Wayne.

The Coastal Resources Division has the responsibility for administering the Coastal Marshlands Protection Act, the Shore Protection Act, the Revocable License Program, and State Programmatic General Permits for recreational docks; for educating the general public about conservation of resources in the coastal area; and for programs for coastal fisheries resource management, and others. The *[Agency]* has the responsibility for *[Insert agency's responsibilities]*.

This agreement sets out the terms of the relationship between the Coastal Resources Division, hereinafter referred to as CRD, and the *[Agency]*, hereinafter referred to as *[Agency abbreviation]*, in connection with the State's fulfillment of its responsibilities under the Georgia Coastal Management Act (O.C.G.A. 12-5-320, *et seq.*).

## I. Objectives

To the extent consistent with their respective statutory authorities and responsibilities, [Agency] and CRD agree to cooperate and coordinate their respective regulatory efforts in a manner consistent with the policies of the Georgia Coastal Management Program, as required by law (O.C.G.A. 12-5-326). These objectives include the following:

(1) *[Insert objectives of agency.]*

(2) The goals and objectives of the Coastal Marshlands Protection Act and the Shore Protection Act.

## II. Specific Functions to be Coordinated

1. Project Evaluation, Interagency Task Force, and Review Procedures

*[Agency]* implements *[Describe agency's activities].* By way of this memorandum, *[Agency]* shall notify CRD via its public notice mailing list of the receipt of any permit application that may affect resources of the coastal area. Upon receipt of such notification, CRD shall notify any relevant federal agencies that might also be considering authorizations for the project. CRD shall follow up with *[Agency]* to determine when the permit is issued for projects needing federal authorization. CRD shall then notify the relevant federal agencies of the State's consistency decision based on the issuance or denial of State authorities. CRD will not evaluate *[Agency's]* action nor conduct a separate review of a project. There shall be no delay in project evaluation resulting from this agreement.

By way of this memorandum, CRD will organize quarterly meetings of all State and federal permitting agencies exercising regulatory authority or management or planning authority in the coastal area. A representative from *[Agency]* shall be invited and urged to attend these meetings. The purpose of the meetings is to foster agency coordination with respect to agency policies and procedures, air issues, and improve cooperation. The meetings are not intended to review individual projects.

CRD shall also organize occasional meetings, at the request of applicants, of all State and federal agencies exercising regulatory or management or planning authority in the coastal area. A representative from *[Agency]* shall be invited and urged to attend these meetings. The purpose of these meetings is to foster coordination among agencies with respect to specific projects and provide technical assistance to applicants, and is not intended as an additional public review of the merits of the project.

*[2. Other?]*

## III. Appeal Procedures

The applicant for any permit activity has the right to the appeals process defined for the applicable permit.

IN WITNESS WHEREOF, the contents of this memorandum of agreement have been accepted and approved by the *[Agency]* and the Department of Natural Resources, Coastal Resources Division this _____ day of _____, 1997.

_____

Lonice C. Barrett, Commissioner — Date
Georgia Department of Natural Resources

_____

Duane Harris, Director — Date
Coastal Resources Division

_____

*[Agency representative]* — Date

# Appendix VII

# DESCRIPTION OF GEORGIA'S COASTAL NONPOINT SOURCE PROGRAM

# APPENDIX VII:
# DESCRIPTION OF GEORGIA'S COASTAL NONPOINT SOURCE PROGRAM

## A. Introduction

This appendix describes the nonpoint source pollution control efforts conducted in Georgia, and, more specifically, the coastal components of the nonpoint programs that relate to Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA). Section 6217 of CZARA, entitled "Protecting Coastal Waters," is intended to help address the problem of nonpoint source pollution and its effect on coastal waters. Section 6217 requires coastal states with approved coastal zone management programs to address nonpoint pollution impacting or threatening coastal waters. The administration of Section 6217 at the federal level is a joint responsibility of the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA). The purpose of Section 6217 is to strengthen the links between federal and state coastal zone management and water quality programs in order to enhance state and local efforts to manage land use activities that degrade coastal waters and habitats.

Each state program must contain the following components:

- Coordination with existing state programs
- Determination of 6217 management area
- Identification and implementation of additional management measures
- Technical assistance
- Public participation
- Administrative coordination
- Identification of enforceable policies and mechanisms
- Monitoring
- Implementation of management measures in conformity with (g) guidance

A brief description of how Georgia intends to comply with each of these program components follows. This appendix is not intended to be an exhaustive description of the nonpoint source program in Georgia. It is only intended to be a brief description of the program components. The State of Georgia believes that there are existing state, local, or industry programs that will ensure compliance with all of the components of Section 6217, including all 56 of the (g) measures. Georgia will submit a complete Coastal Nonpoint Program description to NOAA and EPA 30 months following NOAA's approval of the Georgia Coastal Management Program.

## B. Coordination with Existing State Programs

The Georgia Coastal Management Program is a networked program, coordinated by the Coastal Resources Division (CRD) of the Georgia Department of Natural Resources (DNR). The Environmental Protection Division (EPD) of DNR has primary responsibility for administration of state water quality laws, including Section 401 Water Quality Certification Authority for the state. CRD and EPD have agreed to coordinate responsibilities for nonpoint source pollution management in the coastal area. EPD will retain all regulatory authority as prescribed by Georgia law. CRD will provide a coordination role for all matters that affect the coastal area, including monitoring, enforcement, education, and identification of a need for additional management measures. CRD provides technical assistance for Section 401 Certification authority for the coastal area. CRD and EPD will continue to work closely on water quality issues in the coastal area. In addition to EPD, CRD will coordinate with the Georgia Department of Transportation, the Georgia Forestry Commission, the Georgia Soil and Water Conservation Commission, and other pertinent agencies for activities conducted within the coastal zone to ensure that siting and design of structures and activities are done in such a way to minimize damage to state waters.

## C. Determination of 6217 Management Area

The Georgia Coastal Management Program boundary defined in the Georgia Coastal Management Act will be used as the 6217 management area. This area consists of the eleven coastal counties that encompass all of the tidally influenced state waters. The counties, from north to south, are: Effingham, Chatham, Bryan, Liberty, Long, McIntosh, Wayne, Glynn, Brantley, Camden, and Charlton.

## D. Identification and Implementation of Additional Management Measures

The EPD policy for nonpoint source management is problem driven, and limited agency resources do not allow a comprehensive assault on all sources of nonpoint pollution. Therefore, the agency relies on River Basin Management Planning to address the specific problems within each particular watershed. Each year, two to four watersheds comprising one river basin group will be targeted for the development of a management plan, to be reviewed and updated on a five-year cycle. The plans are to include: a description of the basin or watershed; identification of local governments in each watershed; land use inventories; and a description of plan goals which may include providing environmental education, improving water quality, reducing pollution at the source, improving aquatic habitat, reestablishing native fish species, restoring and protecting wildlife habitat, and providing recreational benefits. A description of the strategies and measures to accomplish the goals is to be a part of each management plan. In some areas urban runoff may be the primary culprit leading to degraded water quality, while in other areas it may be agricultural grazing, forestry roads, marina runoff, or some other nonpoint source. In each of the watersheds, an advisory group works to identify the primary sources of

nonpoint source pollution and develop a plan to remedy the situation. The plan that is developed might require management measures that are not listed as one of the 56 (g) measures -- in fact, some unique solutions may result. Management of nonpoint source pollution is not limited to the River Basin Management Plans. Several legislative authorities can be used to assert control over various sources of pollution (See "Identification of Enforceable Policies and Mechanisms").

## E. Technical Assistance

EPD, using Section 319 funds and other resources, provides technical assistance to local governments and other user groups for control of nonpoint source pollution. EPD has arranged by Memorandum of Understanding for the Georgia Soil and Water Conservation Commission to provide technical assistance, especially for feedlot operations and other agricultural practices to minimize nonpoint source pollution.

## F. Public Participation

As mentioned above, EPD has embarked on a management strategy based on river basin planning for the fourteen watersheds of Georgia. Within each watershed an advisory group, composed of seven local citizens, helps to identify problems and solutions to nonpoint source pollution. This active participation by the public involves education and consensus building efforts by EPD.

## G. Administrative Coordination

EPD has a Nonpoint Source Program manager within the Water Protection Branch. In addition to management of Section 319 grants, the EPD Nonpoint Source Program provides technical assistance, education, and coordination activities statewide. CRD will coordinate closely with EPD on nonpoint source issues that may affect the coastal zone.

## H. Identification of Enforceable Policies and Mechanisms

Throughout this appendix, reference is made to the enforceable policies and mechanisms used to implement the nonpoint source management programs throughout the State. The primary enforceable mechanisms are listed below.

- Georgia Water Quality Control Act ( O.C.G.A. 12-5-20, *et seq.*) provides the authority for EPD to regulate the waters of the state for public and private water supply, and for agricultural, industrial, and recreational uses. The Act requires EPD to restore and maintain a reasonable degree of purity in the waters of the state, to maintain an adequate

supply of such waters, to require where necessary reasonable usage of state waters, and to require reasonable treatment of sewage, industrial wastes, and other wastes prior to their discharge into such waters.

- Erosion and Sedimentation Act (O.C.G.A. 12-7-1, *et seq.*), administered by EPD, requires each county or municipality to adopt a comprehensive ordinance establishing procedures governing land-disturbing activities based on the minimum requirements established by the Act. The rules, regulations, ordinances, or resolutions adopted for purposes of controlling land-disturbing activities under this Act require, at a minimum, sound conservation and engineering practices to prevent and minimize erosion and sedimentation. Permits are required for specified "land disturbing activities," including some construction activities, certain activities associated with transportation facilities, activities on marsh hammocks, etc. EPD may periodically review county or municipality implementation of erosion and sedimentation standards and, if such review indicates that the local authority has not administered or enforced the ordinances that have been approved for this purpose, EPD may enforce the local ordinances.

- Metropolitan River Protection Act (O.C.G.A. 12-5-440, *et seq.*) requires buffers and limits land disturbing activities in designated corridors adjacent to rivers in certain metropolitan areas. The Act prohibits the erection of any structure that may adversely affect the waterflow or increase siltation or other pollution of state waters. The Act provides the state with the authority to protect the waters of major streams while protecting the private property rights of landowners; prevents activities that contribute to floods and flood damage; controls erosion, siltation, and intensity of development; and provides for location and design of land uses to minimize the adverse impacts of development on streams and flood plains. The authority is provided for those streams in metropolitan areas with a population greater than 1,000,000. Since there are no metropolitan areas in coastal Georgia that meet the minimum population requirements this law currently is not pertinent; with a growing coastal population, however, it may become effective.

- Coastal Marshlands Protection Act (O.C.G.A. 12-5-280, *et seq.*) requires a permit for certain activities within the coastal marshes of Georgia and includes water quality protection requirements.

- Shore Protection Act (O.C.G.A. 12-5-230, *et seq.*) requires a permit for activities along beaches and requires designs to limit erosion of dunes and dune fields.

- Comprehensive Planning Act (O.C.G.A. 45-12-200, *et seq.*) asserts the interests of the state in setting minimum standards for land use in order to protect natural resources including water supply watersheds, wetlands, and groundwater recharge areas.

- River Corridor Protection Act (O.C.G.A. 12-2-8, *et seq.*) requires that local governments adopt a river corridor management plan as part of their Comprehensive Management Plan. Such a plan requires the local government to identify the river corridor as defined by the Act, identify land uses, and ensure that forestry and agricultural activities are consistent with the best management practices established by the Georgia Forestry Commission or the Georgia Soil and Water Conservation Commission. The Act sets minimum standards for protecting buffers on either side of rivers with a mean annual flow of 400 cubic feet per second or greater.

- River Basin Management Plan Act (O.C.G.A. 12-5-520, *et seq.*) requires that a plan be developed for each of the fourteen river basins in Georgia. These plans should include: a description of the basin or watershed; identification of local governments in each watershed; land use inventories; and a description of plan goals which may include providing environmental education, improving water quality, reducing pollution at the source, improving aquatic habitat, reestablishing native fish species, restoring and protecting wildlife habitat, and providing recreational benefits. A description of the strategies and measures to accomplish the goals is to be a part of each management plan. The law requires a seven person local advisory committee be appointed to provide advice and council to EPD during the development of the plan. The basin management plans address nonpoint source pollution, among other issues. An assessment of the water quality for each basin is conducted, the issues are prioritized, and implementation strategies are presented to address each of the issues. EPD and CRD coordinate closely on the plans, goals, and implementation strategies for those management plans that affect the coastal region -- the Savannah-Ogeechee, the Altamaha, the Satilla, and the St. Marys watershed areas.

- Georgia Hazardous Waste Management Act (O.C.G.A. 12-8-60, *et seq.*) governs storage, transport, disposal, labeling, etc. of hazardous wastes throughout Georgia.

- Underground Storage Tank Law (O.C.G.A. 12-3-1, *et seq.*) governs installation, maintenance, inspection, and permitting for underground storage tanks.

Other, non-enforceable, mechanisms that are used throughout Georgia are:

- BMPs for Silviculture, Agriculture, Urban Areas The Agricultural and Forestry communities offer protection to the state waters largely through the use of Best Management Practices (BMPs). BMPs depend on voluntary compliance by farmers, ranchers, and timber harvesters. The Georgia Forestry Commission and the Georgia Soil and Water Conservation Commission have developed BMPs for silvicultural and agricultural activities, respectively, based on the recommendations of several sources, including: the U.S. Environmental Protection Agency, the University of Georgia Cooperative Extension Service, the U.S. Department of Agriculture Natural Resource Conservation Service, the U.S.D.A. Forest Service, the Georgia Forestry Commission, and the Georgia Department of Natural Resources, among others. BMPs for Urban Areas

are currently under development by the Atlanta Regional Development Center on a grant provided by EPD using Section 319 funds. The Urban Area BMPs are being developed with the condition that they can be implemented statewide.

- The Georgia Department of Transportation (DOT) has responsibility for all road and bridge construction activities in Georgia. Although DOT is exempt from the permit requirements of the Erosion and Sedimentation Act, the Coastal Marshlands Protection Act, and certain other provisions of state law, they must comply with the spirit of the law. DOT has developed its own standards specifications manual which describes the acceptable construction standards for road and bridge contractors. Included within these standards are specifications for "Construction Erosion Control," such as embankment stabilization, sediment barriers, etc. The standards describe the construction practices. There are provisions for penalties for non-compliance with the standards.

- Adopt-A-Stream Program is a volunteer program designed to encourage local civic groups to "adopt" a section of a stream or river for protection. Litter control, stormwater drain stenciling, education, and other activities are done with the technical assistance of EPD.

- River Care 2000 is a program implemented by Governor Zell Miller in 1994 that is designed to acquire and maintain property in natural condition along Georgia rivers for recreation, flood control, water quality, and natural habitat.

- Clean Water Act, Section 401 Water Quality Certification The Georgia Attorney General has determined that the conditions of this section are non-enforceable under Georgia law. The U.S. Army Corps of Engineers must enforce this section.

- Nationwide Permits are issued by the U.S. Army Corps of Engineers for certain activities. EPD reviews preconstruction notifications for nationwide permit numbers 8, 12, 14, 18, 26, 27, 29, 31, 33, 37, and 38 for certain applications, including: the proposed activity is located on high quality wetland as determined by the Georgia National Heritage Program; the proposed activity is within a seven-mile radius in the watershed of a drinking supply reservoir; the proposed activity is located on the 303(d) list for the State of Georgia; and others. Review of Nationwide Permits is conducted within the EPD Water Protection Branch's Nonpoint Source Program, and adequate management for sources of nonpoint source pollution shall be one of the review parameters. Georgia will issue, issue with conditions, waive, or deny water quality certification under Section 401 based on its review of the proposed projects.

- Georgia Nonpoint Source Management Program (Section 319) The program that was developed by the DNR's Environmental Protection Division pursuant to Section 319 of the CWA, addresses nonpoint pollution from urban sources, agriculture, forestry, stormwater, erosion and sedimentation, and surface mining. The program also stresses

education, citizen input (Adopt-a-Stream), and watershed assessment and monitoring. The program was developed in 1989 and updated in 1995. The Environmental Protection Division has designated the Georgia Soil and Water Conservation Commission the lead agency to address agricultural nonpoint sources of pollution and the Georgia Forestry Commission as the lead agency to address nonpoint source pollution from silviculture. The 319 program is generally focused on urban sources of pollution in the Atlanta metropolitan area, although there are projects specific to the coastal area, such as the Savannah Urban Stream Management Program, and statewide projects such as promotion and funding of agricultural and silvicultural best management practices. Several examples of 319-funded activities are cited throughout this document.

- Others Local efforts often include wetlands education, shore and marsh appreciation and education, pollution prevention activities and strategies, and others.

## I. Monitoring

EPD continues to monitor rivers and streams throughout Georgia. There are approximately 37 permanent monitoring stations established throughout the state, and another 100 (approximate) stations that are established within those watershed areas for which management plans are under development. This approach allows for comprehensive evaluation of a given watershed every five years while maintaining a baseline of data for Georgia waters at large.

## J. Implementation of Management Measures in Conformity with (g) guidance

Agriculture

Agricultural BMPs address management measures for this category. Erosion and sediment control is accomplished through a voluntary BMP program implemented by the Satilla River and Coastal Soil and Water Conservation Districts. The Soil and Water Conservation Districts educate landowners and users on tillage practices, cover crops, etc. and promotes conservation measures through a low-cost equipment rental program. Agricultural erosion and sedimentation may be incorporated into applicable River Basin Management Planning in the near future.

Through a Memorandum of Understanding between EPD, the Natural Resource Conservation Service, and the Georgia Soil and Water Conservation Commission, no direct discharge from confined animal feedlot operations into surface waters is allowed. The Memorandum of Understanding also contains design criteria. Land discharge permits are required for large facilities and the Commission recommends manure disposal management plans, including construction of cost-share lagoon systems.

The Natural Resource Conservation Service and Cooperative Extension Service recommend nutrient management plans for all crops. Nutrification of coastal waters is not a significant issue in Georgia. The Natural Resource Conservation Service and the Soil and Water Conservation Districts also provide pesticide management education. BMPs suggest the use of companion crops that introduce beneficial insects.

There is very little impact in the coastal zone from grazing due to low topography and slope in the area, and the small number and extent of grazing lands. BMPs limit grazing access to streams and protect sensitive areas. Land owner education, cost-share programs, and EPD-funded demonstration projects have been effective in reducing range animal access to streams.

Irrigated lands are limited and little or no chemigation is done in the coastal zone. The Georgia Water Wells Standards Act requires protection against the entrance of pollutants into wells through construction standards. Agricultural BMPs address irrigation water management. A groundwater management strategy for the coastal zone is currently under development by EPD in coordination with local governments and industry.

Forestry

A forestry BMP manual has been developed by the Georgia Forestry Commission which addresses the management measures for this category. Many of the major timber companies, as well as the Georgia Forestry Commission, offer landowner assistance programs incorporating preharvest plans. A separate preharvest planning section is being considered in upcoming forestry BMP manual revisions. Turbidity standards contained in the Georgia Water Quality Control Act are used for sedimentation issues.

A Streamside Management Zone BMP recommends a 20 foot wide management area on either side of a stream in the lower coastal plain of Georgia. Practices to be avoided include fire, roads or trails unless unavoidable, mechanical site preparation, and aerial pesticide and herbicide application, among others.

Construction and reconstruction of forestry roads are managed by forestry BMPs and the 156 federally mandated road crossing BMPs for waters of the United States. EPD and the Georgia Forestry Commission conduct periodic compliance surveys. Forestry BMPs recommend: stabilization of roadbeds with mulch or seed; retirement of unused roads; adequate culvert sizing; soil stabilization; use of prescribed slope angle for roads construction and stream crossings; avoidance of anything which would impede the free flow of water; and keeping road construction as far away as possible from Stream Management Zones. The revision of the Georgia BMPs for Forestry will include the federal requirements.

In addition to the road construction BMPs listed above, road management BMPs recommend: avoiding constant use of soft roads during wet ground conditions; use of drainage crossings and culverts; and retirement of temporary access roads, which includes reshaping,

mulching, and seeding, in combination with water bars. Federal mandate requires that temporary road crossings be removed in their entirety and the area restored to its original elevation.

Timber harvesting is also managed by Forestry BMPs. BMPs recommend: skidding should not be done straight down steep slopes (there are no steep slopes in coastal Georgia); skid trails should alternate between several different skid trails to minimize soil exposure and disturbance; logging debris is to be left on soil, dry washes and at points of concentrated drainage from skid trails; on saturated soils, concentrate skid trails to minimize compaction and soil disturbance; sawdust and sawmill waste should not be discharged into streams and lakes; and recommends avoiding leaving trees or tops in water of streamside management zones. Cable yarding is not significant in Georgia. Federal mandates also apply to skid trails that cross streams.

Site preparation and forest regeneration BMPs take into account all Streamside Management Zone BMPs as well as recommending: construction of planting beds should be done on the contour; avoidance or careful use of wheeled or tracked vehicles of any kind in Streamside Management Zones; removal of debris in live or wet-weather streams; orientation of debris on the contour when windrowing; use of fire breaks; and suspension of operations during wet periods. Different wetland types and recommended site preparation methods are covered by BMP. A new EPA wetland guidance addresses mechanical site preparation in certain wetland types for the purpose of pine conversion, which may require a permit from the U.S. Army Corps of Engineers.

Forestry BMPs describe measures related to prescribed burns. The Certified Burner program, administered by the Georgia Forestry Commission, is designed to educate Georgians about safe burning techniques. BMPs for fire lines describe a need for water bars placed in firebreak lines in areas where the grade is over five percent, to be placed at frequent intervals to slow the water and disperse it. The BMP also recognizes that wildfire suppression lines are made during high-stress times and therefore the implementation of BMPs should be left to the discretion of the landowner.

Forestry BMPs do not call for revegetation of disturbed areas. Rather, they say that reforestation is not a threat to water quality and BMPs are not necessary, but if you do revegetate, then certain BMPs should be followed. In practice, pine forests are replanted at appropriate times of year, generally in the fall. With Georgia's climate and long growing season, natural revegetation occurs almost immediately during the growing season. Planting beds in wet areas usually requires one to two months to allow the soil to settle, forcing removal of air pockets that could be detrimental to new seedling survival. Because artificial regeneration takes place from December to March after site-prep, revegetation cannot always be accomplished immediately following disturbance of an area. If other BMPs are followed -- stabilization of decks, skid trails, stream crossings, etc -- water quality will not be impaired through revegetation.

Forest chemicals are managed by BMPs as well as by state and federal laws. State law provides authority for regulatory control of pesticides throughout Georgia. There are requirements for licensing for contractors and applicators, as well as labeling and other requirements. The Georgia Pesticide Use and Application Act provides for equipment inspection, transport, storage, disposal of pesticides, accident reporting procedures, etc. Spill contingency plans for coastal waters are coordinated by the U.S. Coast Guard, with input from the National Oceanic and Atmospheric Administration, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the Georgia Department of Natural Resources.

Wetlands are addressed by Forestry BMPs. Additionally, wetlands are considered waters of the state and as such are under the jurisdiction of EPD. Federal mandates and mechanical site preparation guidance address this measure.

Urban Areas

The "Manual for Erosion and Sediment Control in Georgia," developed by the Georgia Soil and Water Conservation Commission, provides a reference for development of erosion and sedimentation plans. The Erosion and Sedimentation Act provides EPD with authority to issue permits for land disturbing activities, including construction, with certain exemptions. The Georgia Department of Transportation is exempt from the Erosion and Sedimentation Control Act but has established standards for sediment control. The Georgia Water Quality Control Act provides some backup authority for protection of water supplies. Urban area BMPs, currently under development by the Atlanta Regional Development Center, provide guidance for urban activities and are envisioned for used throughout Georgia. The Urban Area BMPs are scheduled for completion by 1998. The River Basin Planning Act requires development of river basin management plans for all major rivers in the coastal area. These plans may address many management measures for this category. EPD uses Section 319 funds for education and encouragement to local governments for stormwater control and water quality management issues, and for development of guides and model ordinances.

The University of Georgia School of Design has been awarded a grant to develop revised building codes for Georgia that will minimize water quality impacts. Requirements for maintenance of postdevelopment runoff rates at predevelopment levels is done in a number of urban areas by local ordinance.

EPD also issues stormwater permits that may include nonpoint source pollution measures as permit conditions to urban governments as NPDES permits. EPD can also condition municipal stormwater management permits such that storm water management programs and necessary ordinances be developed to monitor, assess, and implement a plan that might incorporate these measures, but such conditions must be based on an identified need specific to the area.

The Pollution Prevention Assistance Division (P2AD) of the Georgia DNR addresses pollution prevention by providing education and technical assistance to citizens, community organizations, industries, schools, and other groups. P2AD is relatively new program, but it has been very well received since it provides an opportunity for potential polluters to receive technical assistance before they get into trouble. The University of Georgia Horticulture Extension Service, through a grant from the P2AD, is developing guidelines and educational materials for turf management throughout Georgia. There is a litter control law in Georgia, but a great deal of the litter management effort in Georgia is conducted by volunteer groups such as garden clubs and Adopt-A-Highway and Adopt-A-Stream programs. Commercial activities such as parking lots, gas stations, etc that are not under NPDES purview are still subject to other authorities administered by EPD, such as the Water Quality Control Act, the Hazardous Waste Management Act and Department of Transportation standards. EPD also provides pollution prevention education using Section 319 funds.

Georgia has a Hazardous Waste Management Act and an Oil and or Hazardous Material Spills or Releases Act that address construction hazards. Georgia's Litter Control Law and the solid waste rules and regulations also apply to construction activities. Other authorities or programs that address these measures are the River Care 2000 program and the River Corridor Protection Act.

State law describes the establishment of County Boards of Health, which have the responsibility for enforcing the regulations for onsite sewage management systems. Each of the eleven counties in Georgia's coastal area has a Board of Health, and each has adopted rules for sewage management. The agency with responsibility is the Georgia Department of Human Resources. Each county has permit requirements and monitoring (usually on a "complaint driven" basis). Disposal of pet excrement is not a significant problem in coastal Georgia and is addressed by local ordinances.

Roads, highways, and bridges are under the purview of the Georgia Department of Transportation and are addressed by the BMP manual "Georgia DOT Standard Specifications: Construction of Transportation Systems."

Marinas and Recreational Boating

Coastal Georgia has an average eight foot daily tidal range that provides exceptional flushing for most areas. The Georgia Coastal Marshlands Protection Act prohibits the construction of marinas or any other structures that adversely impact marshlands unless there are no feasible alternatives, and includes a "public interest" test that includes criteria for water quality and flushing. Water quality assessment management is currently not required for marina siting, but may be considered as a condition for NPDES and other permits. Potential impacts to designated uses are assessed prior to permit issuance. CRD reviews all U.S. Army Corps of Engineers permit applications for compliance with the antidegradation rules of Section 404(b) of the federal Clean Water Act. Approved and restricted shellfish areas are considered existing

resources, and therefore are afforded the protection of this section. Aquatic habitat is also protected under the Coastal Marshlands Protection Act and the Shore Protection Act. Permanent structures, including marinas, piers, etc. are prohibited on Georgia's beach areas by the Shore Protection Act as a means of protecting the dunes and sand sharing system. At marinas, NPDES permits are required for stormwater discharges from onshore hull maintenance areas, fueling areas, and areas where chemicals or hazardous materials are used. There are few proposed new and expanding marinas in coastal Georgia. Waste water discharge requires a permit from EPD. The Water Quality Control Act is effective for regulating certain water quality violations. NPDES permits are required for onshore fueling areas. The Coastal Marshlands Protection Act requires contingency plans for spills, shutoff valves for fuel pumps, etc. Most marinas in the coastal area have and maintain a pumpout station.

NPDES Permits are required for stormwater discharges from onshore hull maintenance areas. The Coastal Marshlands Protection Act and the Georgia Litter Control Act are also applicable. Fish wastes are not a problem in coastal Georgia since marinas located in the coastal zone are subject to tidal ranges averaging over eight feet, which provides excellent flushing. The Litter Control Law prohibits depositing any litter, including "dead animals" and other waste on public or private property or in any waters of the state. Public education regarding proper disposal of fish waste can be provided via technical assistance from the Pollution Prevention Assistance Division and other divisions of the Georgia DNR. Permits issued under the Georgia Coastal Marshlands Protection Act are conditioned to include requirements for proper operation and maintenance. The Georgia Hazardous Waste Management Act governs the storage, transport, and disposal of hazardous wastes. The Georgia Underground Storage governs underground storage. The U.S. Coast Guard has primary responsibility and jurisdiction for all vessel-related oil/fuel spills in Georgia. EPD coordinates closely with the Coast Guard on all spills, and has cited vessels for violation of the Georgia Water Quality Control Act that requires that state waters remain free of oil. The Coast Guard Auxiliary conducts boating education courses in Georgia that include discussion of safe fueling practices. The Coastal Marshlands Protection Act permits are conditioned to minimize impacts from hull scrubbing, etc. Boat use in shallow areas is naturally restricted by geography and tides -- the creeks become too shallow to navigate. Due to the natural turbidity in Georgia waters there is no submerged aquatic vegetation. There is no evidence that shallow water habitats such as mud flats and sand bars are adversely impacted by boat use.

Hydromodification: Channelization and Channel Modification, Dams, and Streambank and Shoreline Erosion

A Section 401 Water Quality Certification is required for any channelization. Channel modification projects would most likely be accomplished by the U.S. Army Corps of Engineers and would, therefore, be subject to federal consistency review. Any channelization projects in the coastal zone would require a permit issued under the authority of the Coastal Marshlands Protection Act unless conducted by an exempted agency.

Dam construction is not an issue in coastal Georgia, given the flat topography. There are no dams in Georgia's eleven-county coastal area, and no plans to build any.

Streambank and shoreline erosion are managed using BMPs and state laws. A "Streambank Stabilization Manual" for non-tidal areas has been developed using Section 319 funds. The Coastal Marshlands Protection Act and the Shore Protection Act provide needed authority for tidal areas. The Shore Protection Act provides for the stabilization of developed upland areas to protect against erosion.

Wetlands, Riparian Areas, and Vegetated Treatment Systems

The Georgia Water Quality Control Act provides the authority to manage wetlands and other waters of the state based on water quality standards. Section 401 Water Quality Certification provides the state with authority over federally permitted activities. EPD has authority under the Georgia Water Quality Act to require permits for all point sources and nonpoint sources of pollution in state waters. Point source permits (NPDES) are only issued for no-discharge wastewater land application systems. River Basin Management Plans may include wetlands protection measures.

The Georgia DNR is a signatory to the U.S. Army Corps of Engineers "Wetlands Mitigation Strategy for Georgia." The mitigation strategy is sequential: the first step is to avoid impact to wetlands; the second step is to minimize damage to wetlands; the third step is to mitigate for damages to wetlands. Mitigation involves a system of points to be awarded for various restoration and/or preservation functions. For example, vegetative treatment systems as buffer zones are awarded a higher percentage of points than re-creation of a wetlands. Completely surrounding a wetland area with a vegetative buffer is worth more than just doing one side of the area. Restoration of wetlands and riparian areas is a major component of the program. Preservation is limited to a maximum of fifty percent of a mitigation project and the rest must be creation or restoration, with the emphasis on restoration.

Monitoring and Tracking

Section 6217 calls for a description of any necessary monitoring techniques to accompany the management measures to assess over time the success of the measures in reducing pollution loads and improving water quality. Georgia's River Basin Management Plan provides the framework for intensive monitoring of each of Georgia's watersheds on a five-year cycle. Interim monitoring is done, but on a less intensive basis. EPD publishes a report on the state of Georgia waters every two years.

# Georgia Department of Natural Resources

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August 15, 1997

Mr. Jeffrey R. Benoit, Director
Office of Ocean and Coastal Resource Management
NOAA - U.S. Department of Commerce
1305 East-West Highway, N/ORM3
Silver Spring, MD 20910

Dear Mr. Benoit,

Governor Zell Miller has submitted the Georgia Coastal Management Program (GCMP) to the National Oceanic and Atmospheric Administration (NOAA) for federal approval. After federal approval, the nonpoint source pollution control provisions of Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 will apply to the GCMP.

The State of Georgia believes that its existing comprehensive Nonpoint Source Pollution Management Program contains the authorities, assessment, and implementation activities that provide the basis for an approvable coastal nonpoint source pollution control program. This program is administered cooperatively by the Georgia Department of Natural Resources, Environmental Protection Division (EPD) and other state agencies. We recognize, however, that NOAA and the U.S. Environmental Protection Agency (EPA) cannot make a final finding on that issue because the type and amount of information included in Appendix 7 of the GCMP Draft Environmental Impact Statement clearly does not constitute a complete description and assessment of Georgia's program under the requirements set out in NOAA and EPA's Coastal Nonpoint Program guidance dated January 1993 and March 16, June 21, and June 28, 1995.

The State of Georgia commits to submitting its coastal nonpoint source pollution management program to NOAA and EPA within thirty months of GCMP approval. We look forward to working with you and your staff on this matter.

Sincerely,

Duane Harris

# Appendix VIII

# PUBLIC TASK FORCE RECOMMENDATIONS

# APPENDIX VIII:
# PUBLIC TASK FORCE RECOMMENDATIONS

The federal Coastal Zone Management Act provides funding assistance to states with approved coastal management programs for the purpose of program implementation and administration. This administrative funding is an annual, non-competitive, formula-driven, allocation based upon the linear distance of the coastline and the population of the prescribed coastal area. Georgia's anticipated allocation (subject to Congressional appropriations) is approximately $950,000 per year. The Coastal Resources Division estimates Georgia Coastal Management Program implementation costs to be approximately $400,000 annually, leaving a balance of about $550,000. That balance of annual administrative funding not utilized in program implementation will be passed through to local governments, educational and research institutions, and state agencies as competitive "Coastal Incentive Grants." Through these grants, coastal issues can be defined at the grass-roots level and the Coastal Resources Division can provide local entities with the financial assistance to research, develop, and implement solutions.

Coastal Incentive Grants available through the Georgia Coastal Management Program are directed at addressing specific information needs or projects that are local and regional priorities. Annual themes and funding criteria are developed by the Coastal Advisory Committee. Projects must fulfill the goals of the Coastal Management Program, and priority is given to projects that address the public Task Force recommendations presented in this appendix. Many resource issues, including groundwater concerns, historic resource identification, beach access, and others can best be solved through education and outreach rather than regulations. Coastal Incentive Grants provide a mechanism to address these types of local and regional issues, thereby fulfilling the goals of the Coastal Management Program proactively.

In the Spring of 1994, the Coastal Zone Advisory Committee, the predecessor of the Coastal Advisory Committee, established Task Forces to consider issues in coastal Georgia and make recommendations as to how the Coastal Management Program should address those issues. More than two hundred people from throughout the coastal area volunteered to serve on a Task Force in one of nine respective issue areas. By June of that year, the Task Forces had developed a comprehensive list of recommendations that were subsequently adopted by the Advisory Committee. This appendix presents the Task Force recommendations verbatim, as developed by the public and as prioritized by the Coastal Zone Advisory Committee. In determining funding criteria for Coastal Incentive Grants, the Coastal Advisory Committee will fully consider these recommendations. These recommendations are not policies of the program. The policies of the Coastal Management Program are found in Chapter Five of the Coastal Management Program Document, and are comprised solely of the enforceable provisions of Georgia state law as described in that chapter.

Announcements regarding funding priorities will be made ninety days in advance of application closing dates, applications will be evaluated by staff according to established selection criteria, and project awards will be made by staff subject to criteria approved by the Coastal Advisory Committee. The Committee will meet annually to review the selection criteria, to establish funding priorities, to assist staff with evaluating the grant review and selection efforts, and to ensue that each step in the award process complies with the Georgia Fair and Open Grants Act. Activities conducted using grant monies must comply with all relevant state and federal laws and rules and regulations, and obtain all necessary state and federal authorities. Technical assistance is available from Coastal Resources Division to determine requirements.

## A. Fish & Wildlife Task Force

- Develop educational materials targeted for our school systems as well as the general public, to educate them on the importance of wildlife, fisheries and their related habitats.

- Research should be done prior to the addition of any new regulations, with the data having gone through sufficient peer review.

- Research should be analyzed to determine where we have large gaps in our existing research data on fisheries and wildlife issues.

- Fisheries management decisions should be based on scientific technical data with input from citizen advisory committees.

- Improve the transfer of technology and information between the research community and the involved parties (users). Examples: between various state agencies; between research groups; between research and industry; and between research and private landholders

- Stable and consistent funding for research, management and law enforcement for game and non-game programs is essential.

- Georgia DNR should continue to pursue opportunities to purchase areas of critical or unique habitat and utilize as wildlife management areas.

- Encourage development of a system for resolving tension between the need to manage and regulate for the common good and the rights of private property owners. For example, compensation, case-by-case for landowners severely burdened with cost of management or loss of income due to endangered species on property.

- Recognize importance of corridors for wildlife movement.

- Establish a mechanism to help coordinate these education efforts, involving all parties in the development of the educational materials.

- Foster cooperation between local, state, interstate and federal jurisdictions dealing with fish and wildlife enforcement issues.

- Stable, sufficient funding for the coastal fisheries program is essential and especially needed for the research. Possible sources of funds include: percentage of existing DOT state fuel tax funds (same percentage as used by boats); saltwater fishing license as additional funding on coastal fisheries program; and, general fund (increase percentage distributed to DNR)

- The value of critical wildlife, fisheries, and threatened and endangered species habitat should be recognized as a key to healthy populations.

- In all aspects of fisheries, wildlife, and threatened and endangered species, additional research should be directed towards gathering data to specific problems, concerns, and opportunities.

- Research should be broad enough to include the biological as well as the socio-economic impacts involved with the issues being studied.

- Continually develop educational materials on the importance of adherence to existing laws relating to the introduction on non-native species.

- Revitalization of urban and industrial areas -- stay near the existing infrastructure.

- Develop a long term strategic plan for public access, public facilities, and stock enhancement (reefs, structure).

- Georgia DNR should develop fisheries management plans that would establish priorities, identify problems (overfishing, estuarine problems, allocations) and identify research priorities needed to accomplish the goals of the plans.

- Increase law enforcement manpower and resources for fisheries and wildlife in the coastal zone. Example: dedicated marine patrol for coastal waters.

- Widely publicize the conviction and associated penalties of violators of fish and wildlife laws. Alternative penalties (community service, lifetime loss of license for repeat offenders of serious violations, etc.) should be considered in lieu of small monetary fines.

- Penalties for many fish and wildlife associated violations should be increased as added deterrents.

- Encourage and support a system of incentives or rewards for providing information leading to the arrest and conviction of violators of fish, wildlife and endangered species laws. Example: DNR's Turn in Poachers Program.

- Should encourage private landowners to practice wildlife management to improve the quality of existing habitat. Example: Encourage prescribe burning as a management tool. (Limit liability exposure when prescribe burning.) Support the Certified Burner program offered by Georgia Forestry Commission.

- Should recognize non-game as well as game species (vertebrate and invertebrate) as important components of the wildlife community of all ecosystems.

- Should recognize hunting as an important and necessary wildlife population and habitat management tool.

- Recognize importance of maintaining bio-diversity in fish and wildlife populations.

- New manufacturing facilities of chemicals harmful to the environment which are banned for use in the United States should not be allowed to relocate to the coastal zone.

- Should look for and develop alternative solutions when dealing with endangered species on private lands. Example: Relocate isolated populations of endangered species to public lands with suitable habitat for that species.

- Recognize that local influences into the jurisdictional system can result in diminished penalties or convictions.

- Provide incentives for revitalization of urban areas as an alternative to urban sprawl and loss of habitat.

## B. Agriculture & Silviculture Task Force

- It shall be the policy of the Georgia Coastal Management Program to provide support for research to investigate issues of water quality and quantity and the effects on fresh water, ground water, and estuarine areas. It shall further be the policy of the Georgia Coastal Management Program to support research to investigate the effects of agricultural and silvicultural chemicals on freshwater, groundwater, and estuarine waters.

- It shall be the policy of the Georgia Coastal Management Program to support a goal of zero loss of wetlands and support voluntary restoration efforts.

- It shall be the policy of the Georgia Coastal Management Program to ensure compliance with relative existing laws and regulations through enhanced enforcement, education, and technical assistance.

- It shall be the policy of the Georgia Coastal Management Program to support programs which recognize unique and sensitive habitats on private and public lands and encourage responsible uses and management practices through economic incentives including special tax treatment to maintain diversity of plants and wildlife habitat in an economically and environmentally sound manner.

- It shall be the policy of the Georgia Coastal Management Program to support 100% compliance to voluntary Forestry and Agriculture Best Management Practices. CZM will provide educational and technical assistance to achieve this.

- It shall be the policy of the Georgia Coastal Management Program to support programs which recognize a sensitivity to aesthetics and encourage the judicious use of buffer zones and other techniques, such as rapid regeneration and replanting, to enhance scenic qualities.

- It shall be the policy of the Georgia Coastal Management Program to ensure that, in areas of rural/urban interface (transition areas), the establishment of buffers shall be the responsibility of the party making the land use change.

- It shall be the policy of the Georgia Coastal Management Program to support the continued use of prescribed fire as an integral tool of agriculture and silviculture practices when conducted in accordance with state law.

## C. Public Service Facilities

- Study downstream impacts prior to further permitting.

- Industries should be encouraged to further reduce their dependence on the Floridan aquifer.

- Reclamation and reuse of water should be encouraged.

- The Georgia Coastal Management Program provides technical assistance to local governments and planning agencies.

- The appropriate erosion control measures shall be employed during the crossing of wetland areas. Revegetation with suitable wetland species shall be required. This regards hydrologic regimes.

- Alignments of new projects shall be designed to utilize existing rights-of-way and topographic features wherever possible.

- For locations immediately adjacent to the shoreline, the water-dependent nature of the structure shall be demonstrated.

- Research and development studies directed towards improved construction of right-of-ways in order to create the minimum impact on the environment, scenic value, and maximize pollution control.

- All publicly or privately owned treatment works shall have enforceable industrial pre-treatment programs to preclude the discharge of toxics to sewage treatment works.

- Alignments of new projects shall be designed to utilize existing rights-of-way and topographic features wherever possible.

- Visual buffer areas around sewage treatment facilities should be provided.

- Discourage development of sewage infrastructure in excess of population projections.

- Destroyed and removed vegetation shall be replaced with suitable plantings of native vegetation, consistent with the intended use, to restore as nearly as possible the original appearance, to control runoff, and to prevent pollution. In the case of service roads as little bare surface as possible shall be retained to permit the passage of vehicles. Where possible, access by other than authorized vehicles shall be prevented.

- Suitable erosion controls shall be installed and maintained in accordance with Georgia's Erosion and Sedimentation Act.

- There shall be coordination with the Environmental Protection Division to ensure protection of unique or fragile vegetation, wildlife, and water sources. Existing right-of-ways shall be used where feasible and where possible in order to limit or prevent further damage.

- Serve as a clearinghouse for new technologies for source reduction, recycling, and disposal.

- The siting of nonwater-dependent structures shall be prohibited over water and/or wetland areas.

- Maintain a directory of points of contact for all federal, state, and local regulatory bodies.

- Development of local plans and regulations that address the location and design of public/quasi-public buildings are encouraged.

- The design of such right-of-ways shall meet all applicable federal, state, and local construction and environmental protection standards. Additionally, the design shall cause minimal impact on the vegetation, scenic value, and wildlife habitat.

- Erosion and sedimentation runoff with subsequent pollution of submerged areas must be prevented. All applicable standards for dredging and filling shall be adhered to. Additionally, the guidelines below should be followed.
    - Dimensions of excavated ditches for buried cables, pipelines, storm drains, and similar buried item right-of-ways shall be the minimum required. Permanently open channels shall not be used.
    - Construction of such facilities, water supply lines, in or adjacent to freshwater wetlands shall be prohibited unless no feasible alternatives exist. Construction activities should be timed so as not to disrupt fishery spawning seasons or migratory fish populations.

- Water supply facilities and transmission systems in the coastal zone shall meet applicable federal, state, and local construction and drinking water standards. The Georgia Environmental Protection Division is the focal point for permitting withdrawals from the aquifers and/or surface water in the region. The federal Clean Water Act shall be complied with for effluent discharges.

- The Environmental Protection Division and the U.S. Geological Survey have the ability to decide whether or not further withdrawals should be permitted. The federal Safe Drinking Water Act must be complied with for drinking water monitoring and standards.

- Dredging and filling for water supply projects in wetland areas shall be undertaken only if that activity is water-dependent and there are no feasible alternatives.

- Within the jurisdiction of the Coastal Marshlands Protection Act, excavation activities for the installation of pipelines and transmission lines should be designed to minimize adverse environmental impacts.

- Creation of permanent open water canals to install pipelines shall be denied.

- Bridges and roadways traversing wetland or water areas should consider inclusion of pipelines to avoid additional impacts to these areas.

- Educate local governmental units and industries on existing solid waste regulations (e.g., Coastal Georgia Regional Development Center -- Regional Solid Waste Plan).

- Review federal, state, and local laws for overlapping or conflicting rules. Distribute results for all regulatory groups.

- Maintain a directory of points of contacts for all federal, state, and local regulatory groups.

- Sewage treatment facilities and transmission systems in the coastal zone shall meet applicable federal, state, and local construction and water quality standards.

- The Coastal Management Program will coordinate with the Environmental Protection Division and other agencies with responsibility for implementing comprehensive plans affecting sewage treatment to ensure that proposed projects are compatible with growth and development plans and that alternative locations for sewage treatment facilities are considered.

- Construction of such facilities in freshwater or saltwater wetlands should not be approved by state agencies where feasible alternatives exist. For locations adjacent to such sensitive habitats, priority considerations will be given to major facilities over small plants.

- Construction of facilities shall be consistent with local, state, and federal regulations in regard to water quality.

- Outfall locations shall consider water depth, circulation, and mixing in order to protect water quality. Effluent shall not be discharged or flushed into wetland areas unless the wetlands are specifically designed for such purposes.

- Maximum study and analysis shall be given to no discharges and/or tertiary treatment alternatives to conventional treatment methods; for example, land disposal, water conservation techniques, land application, wetlands creation, and overland flow.

- The Coastal Management Program will ensure that plans for all proposed septic systems requiring a state permit will meet current Environmental Protection Division standards and regulations. Septic systems can degrade both underground and surface water. These shall only be installed after a study and analysis of the soil conditions has been conducted by qualified public health and technical personnel.

- The Coastal Management Program will also coordinate with local health departments, the Environmental Protection Division, and other implementing agencies to ensure that septic systems standards and regulatory enforcement are adequate to protect coastal resources.

- Applications for the construction of unlined lagoons or impoundments for water treatment facilities, and similar activities shall be denied by applicable authorities, where adverse effects on protected wetlands or tidelands will result or where aquifers may be harmed. Lagoons and impoundments shall have a monitoring system to check on leakage.

- Waste treatment facilities shall be designed in such a manner that no effluent will be discharged into areas adjacent to or approved for shellfish harvesting.

- Construction of facilities shall be consistent with local, state, and federal regulations in regards to water quality.

- Excavation activities within the jurisdiction of the Coastal Marshlands Protection Act and/or the Shore Protection Act are sometimes required for the installation of sewage lines. These installations shall be designed to minimize adverse environmental impacts. In addition to standards for dredging and filling, the following standards are required.
    - Creation of permanent open water canals to install pipelines shall be prohibited.
    - Wherever feasible all excavation in wetland areas shall be backfilled with the excavated material after installation of the appropriate structure, while maintaining the original marsh elevation.
    - The appropriate erosion control measures shall be employed during the crossing of wetland areas. Destroyed and removed vegetation shall be replaced with suitable plantings of native vegetation, consistent with the intended use, to restore as nearly as possible the original appearance.
    - Discharges across public beaches shall be prohibited.

- Speculative excess capacity in treatment facilities should not be approved unless the projects meet population projections for the area.

- Permanent alterations to freshwater wetlands, from either dredging or filling for the construction of public buildings shall be prohibited unless no feasible alternatives exist or there is an overriding public interest or need, and must comply with federal wetlands regulations.

- Construction methods and site drainage plans which reduce erosion hazards and limit the direct discharge of storm water run-off shall be utilized to protect coastal water quality. To the extent feasible, public buildings should not be located in high flood zone areas, as designated under the National Flood Insurance Program.

- Plans for major public buildings or complexes shall include adequate sewage disposal capacity meeting federal Environmental Protection Agency, Georgia Environmental Protection Division, and local health department standards.

- The siting of buildings within eroding dune fields or on beaches shall be prohibited.

- All such development should conform to applicable local and/or regional plans and zoning requirements.

- Educate local governments and private industries on the existing dam and reservoir regulations. To include low flow dams.

- Appropriate sections of the Coastal Marshlands Protection Act, Shore Protection Act, Safe Dams Act, and Scenic Rivers Act should be applied.

- Pipelines traversing beaches shall be prohibited.

- Dimensions of excavated canals for cables and pipelines shall be minimal.

- Monitor Environmental Protection Agency, Environmental Protection Division, Police and Code Enforcement records for current legal and illegal waste handling practices. Serve as an information clearinghouse for existing data.

- Dimensions of excavated canals for cables and pipelines shall be minimal.

- Review federal, state, and local regulations for overlapping or conflicting rules. Notify all regulatory groups of the findings.

### D. Marine Related Facilities

- Recreational docks and piers shall not be permitted on lots with less than 100 linear feet of waterfront property. Community docks or individual recreational docks and piers shared by adjacent landowners are encouraged. Consider: (1) carrying capacity; and (2) master plan for docks in new development.

- Provision of dry storage facilities, where possible.

- Marinas and community docks shall avoid or minimize disruption of currents. Dead-end or deep canals without adequate circulation or tidal flushing will not be permitted, unless it can be determined that water quality will not be designed to prevent long-term degradation of water quality.

- The Georgia Ports Authority should not have jurisdiction over private projects; perhaps DNR holds jurisdiction.

- Provision of loading/unloading docks on new public boat ramps, where construction is feasible.

- Boat ramp locations that require dredging of wetlands to provide channel access to deep water will be prohibited.

- The following priorities will be considered when justifying boat ramp location in sensitive areas: (i) public use -- open to all citizens; (ii) restricted use -- open to citizens of a particular area or organization only; and (iii) private use -- use for one citizen or family.

- Recreational docks and piers shall be constructed in a manner that does not restrict waterflow.

- In review and certification of marinas and community dock permit applications, the extent of public demand for the facilities, as demonstrated by the applicant, will be considered.

- Construction of marinas or community docks within 1,000 feet of approved or restricted shellfish harvesting areas shall be prohibited.

- Excavation of boat basins in marshlands shall be prohibited.

- Marinas and community docks shall be located in areas where the least amount of initial and maintenance dredging will be required. No project will be certified if initial and maintenance dredging will result in dissolved oxygen or turbidity levels not in compliance with the Georgia Erosion and Sedimentation Act or current Corps of Engineers dredging guidelines. Applications for marinas and community docks shall include maintenance dredging and schedules and dredged material disposal sites when applicable.

- Excavation of boat basins in upland areas shall be permitted provided other criteria in this section and all applicable local, state, and federal specifications and requirements are met. An upland boat basin is defined as a facility built at greater than 5'6" above mean sea level, with positive natural flushing or a lock system. Depth of the basin cannot exceed the depth of the adjoining water body. Canal width shall be no greater than the minimum required for boat ingress and egress. Canal length shall be as short as possible, based on site-specific parameters. Facilities will not be allowed on access canals.

- Provision of adequate parking facilities and transportation access from the landward side.

- Construction of joint use or community piers rather than individual structures.

- Recreational docks and piers shall not impede navigation or restrict reasonable public use of the waters.

- Siting of public use boat ramps in easily accessible areas, such as bridged and dead-end causeways.

- Provision of telephones accessible to Emergency 911.

- Marinas and community docks shall be located in areas that will have the least potential adverse impact on wetlands and water quality as stated in Section 404 of the federal Clean Water Act and following sequencing requirements as described in the Corps of Engineers 404(b)(1) guidelines.

- Marinas and community dock designs shall minimize the need for excavation and filling of shoreline areas and salt marsh as stated in Section 404 of the Clean Water Act and following sequencing requirements as described in the Corps of Engineers 404(b)(1) guidelines.

- Marinas and community docks shall be located in areas that will have the least potential adverse impact on federal and state listed species and migratory birds, as stated in the federal Endangered Species Act, the Georgia Endangered Species Act, and the federal Migratory Bird Treaty Act. U.S. Fish and Wildlife Service and Corps of Engineers Standard Manatee Conditions for construction activities and manatee awareness will apply to all new marinas and community docks.

- Marinas and community docks shall be prohibited in the jurisdictions of the Shore Protection Act in those areas on the Atlantic Ocean.

- Buildings associated with marinas and community docks shall not be constructed within the wetland setback required by county ordinance and/or state law, whichever is wider.

- New marinas shall provide facilities for proper handling and disposal of fuel, lubricants and other petroleum products; wastes from cleaning, painting, maintenance, and repair operations; and sewage, litter, waste, storm water and wash water runoff, in accordance to all applicable local, state, and federal specifications and requirements. New community docks with launch and haul-out facilities must provide facilities for proper handling and disposal of storm water and wash water runoff. Boat maintenance areas in new marinas and community docks shall be designed so that all bottom scraping and painting is conducted over dry land with proper control and deposition of residues, spills, and storm water runoff.

- New marinas shall provide pump-out facilities and trash receptacles. New community docks must provide trash receptacles. All pump-out and sewage facilities shall be included in the public notice and certified by the Environmental Protection Division or appropriate authority before permit approval. Proper trash receptacles or similar facilities should be plentiful and convenient for proper disposal of trash, waste, and noxious materials such as paints, rags, and oil cans required for normal boat maintenance and repair.

- Marinas and community docks with fueling facilities shall have an approved contingency plan for spills of petroleum projects, as required by the Corps of Engineers and the Coast Guard.

- Before any state-issued permit, license, or lease shall be renewed, marinas and community docks existing at the time of approval of the Georgia Coastal Management Program must not be in violation of any applicable local, state, or federal law, policy, specification, or requirement.

- Provision of upland facilities at new marinas that are compatible with and enhance recreational boating opportunities (such as bathrooms, showers, laundry facilities, and telephone accessible to Emergency 911).

- Provision and maintenance of recycling containers.

- Georgia tax incentives and technical assistance will be provided for recreational docks and piers that are constructed using less toxic alternatives to new CCA-treated wood, including plastic lumber, untreated wood, salvaged dock materials, and concrete.

- The size and extension of a recreational dock or pier shall be limited to that reasonable for the intended use. To preclude shading of marsh vegetation, decks shall not be located over vegetated marsh and walkways to the dock or pier that are built over vegetated marsh shall not exceed six feet in width and shall be elevated at least three feet above mean high water. Docks that extend more than 1,000 feet from the top of the bank shall not be permitted.

- Construction of recreational docks and piers within 1,000 feet of approved or restricted shellfish harvesting areas shall be prohibited.

- Projects shall include facilities for proper handling of litter, waste, and refuse, where applicable. No disposal of petroleum products will be permitted at private recreational docks and piers.

- Recreational docks and piers are prohibited in areas subject to the jurisdiction of the Shore Protection Act.

- Use of easily maintained and repaired construction materials.

- Provision of dry storage facilities, where possible.

- Fill of productive salt, brackish, or freshwater wetlands for boat ramp construction will be prohibited unless no feasible alternatives exist in adjacent non-wetland areas. Boat ramp designs shall minimize the need for excavation and filling of shoreline areas and salt marsh as stated in Section 404 of the federal Clean Water Act and following sequencing requirements as described in the U.S. Army Corps of Engineers 404(b)(1) guidelines.

- Boat ramps shall be constructed of environmentally acceptable materials, such as concrete or oyster shell. Environmentally unacceptable materials include, but are not limited to, roofing shingles, asphalt, and old tires.

- Construction of boat ramps within 1,000 feet of approved or restricted shellfish harvesting areas shall be prohibited.

- Provision of adequate parking facilities and transportation access from the landward side.

- Provision and maintenance of trash receptacles and recycling containers.

- Incorporation of public boat ramps with other public boating facilities to improve recreational opportunities.

- Construction and maintenance of new public docks to minimize damage to vehicles, boats, and trailers during loading and unloading.

- A study should be conducted to evaluate the impact of wash water runoff (soap and water washing or rinsing after boat pulled out of water) on wetland resources.

### E. Transportation Task Force

- Maximize reuse/beneficial use of materials (active/passive) through improved interagency coordination.

- It should be recognized that harbor maintenance has impacts on sand-sharing system.

- Explore county-to-county consistency in implementation of standards.

- Balance access and impacts on resources such as barrier islands.

- Provide for multiagency (all) acceptance of an existing standard application for permits.

- Quality assurance process for environmental studies.

- Dredging of commercial/industrial berthing areas must be conducted in accordance with existing water quality standards for the appropriate river classification, in light of new technologies and research finding.

- Require peer review of scientific data for developing, establishing or revising policies/regulations. Require development of peer review process prior to initiation of specific study.

- Issue CZM "updates", i.e., newsletter, on proposed/ongoing studies. Available to the general public.

- Maximize uses of current industrial/commercial areas prior to developing outside existing industrial/commercial areas.

- Consolidate wetland crossings to a single point wherever possible.

- Infrastructure and access on publicly held lands must be compatible with the purpose for which these lands were established.

- Encourage public acquisition of privately held islands.

- Encourage and facilitate general consistency determinations for agency O&M operation and maintenance activities, e.g., dike repair, water control, dredging, disking, prescribed burns, HAZMAT transfer/transport.

- Recognize ports/harbors as an economic resource that should be kept economically viable.

- Areas of special consideration within the coastal zone (e.g., national/state parks or wildlife refuges, public lands) should be restricted from incompatible uses such as jet skis, billboards, or other degrading factors. Use should not ruin the special consideration of the area.

- Make available informal preplanning guidelines for all permittees, agencies, and potential mitigation landowners.

- Develop/implement educational program to foster awareness of CZM-related requirements for permits, etc.

- Maximize life of existing disposal areas.

- Establish and maintain efficient intermodal links.

- Establish program to encourage responsible disposal of abandoned vehicles/vessels. When such efforts fail, levy appropriate penalties to the offender.

- All man-made structures within the coastal zone will be designed to utilize best management practices (BMPs) for controlling non-point source discharges.

- Assure facilities designed, built, and operated within the coastal zone adhere to BMPs for transfer of oil and hazardous materials.

- Enforce laws and regulations concerning dumping along transportation corridors (roadways, rivers, streams, railroads, pipelines).

- Ensure compliance with existing test requirements. Implies good tests now, some tests unnecessary. New technology demands flexibility in requirement/testing.

- Retain current easements for future use where possible. Government will acquire and retain land often for uncertain reasons.

## F. Areas of Special Concern Task Force

- Discourage additional development on barrier islands without causeway access (e.g., no state tax benefits, no state grants or loans in support of such development, and state compliance with federal Coastal Barrier Island Improvement Act for state-owned barrier islands, or portions thereof).

- Encourage use of land in areas most suitable for such uses; discourage development of areas not within existing public service areas. (Use city, county, and state tax incentives, location or public facilities and services, acquisition and maintenance of conservation easements, and zoning, subdivision regulations, performance standards, and other local land use management controls.)

- Conduct geological studies of the system-wide effects of beach, dune, and inlet dynamics on all developed barrier islands (Tybee, Saint Simons, Sea Island, Jekyll). Incorporate already existing studies such as the Corps of Engineers study of Jekyll, Saint Simons, Sea Island, and Little Saint Simons Islands.

- Develop and implement public education and training programs to enhance understanding about special areas and their importance.

- Require water management plans to be developed and implemented by local governments; develop new regional plans.

- Water conservation measures need to be enacted and enforced now -- residential, commercial, and industrial. Encourage innovative measures to decrease amount of water used. (Such as: treated wastewater on golf courses and lawns instead of using aquifer drinking water, etc.) Require water conservation in individual homes, commercial, and industry -- ALL water users. Encourage low-use plumbing codes and ordinances changes.

- To hammocks larger than two acres that are accessible by motor vehicle apply the following provisions.
    - Hammocks larger than two acres that are accessible either by existing causeways or on existing navigable creek or channel may be developed provided that a setback buffer (25 feet) of natural vegetation be preserved on the borders of the hammocks facing waterways and marshes, except under special appeal. This setback is consistent with the Erosion and Sedimentation Act and is subject to alteration if justified by further study. Construction within the buffer should be discouraged but may be allowed under a special appeals process.
    - Consistently analyze the resource impacts of development on hammocks through local evaluation studies paid for by CZM program funds. Subsequently utilize findings of such studies in stipulating conditions applied to development and use of property under the authority of state and local government.
    - Encourage use of land in areas most suitable for such uses; discourage development of areas not within existing public service areas. (Use city, county, and state tax incentives, location of public facilities and services, acquisition, and maintenance of conservation easements, and zoning, subdivision regulations, performance standards, and other local land use management controls.)
    - Maintain the scale and visual character of hammocks by developing and implementing locally enforced standards and local government policies to ensure the following.
        -- Adequate protection of native vegetation and wildlife.
        -- Control of building size, height, and density.
        -- Limitations on impervious surfaces (paving and buildings).

-- Adequate capacity, appropriate location, and design of public service systems, including water and sewer, drainage, roads, and lighting, signage, recreation facilities/areas, and provision of open space and publicly accessible natural areas.

- Any hammock of any size that is isolated, either because it is surrounded by marsh or accessible at mean high water only by a tidal creek impassable by boats larger than 14 feet should be left in its natural state. Engineering modifications to provide access to hammocks should be discouraged.

- Hammocks of two acres or less should be left in natural condition.

- Strict consistent and prompt enforcement of all existing laws and regulations regarding aquifer protection, management, and monitoring.

- Provide CZM-funded technical support in determining the areas and activities most suitable for sustainable economic development throughout coastal Georgia.

- Discourage development on hammocks larger than two acres without motor vehicle access (e.g., no state tax benefits, no state or local grants or loans in support of such development).

- Research existing studies and programs to compile a list of description of all areas in coastal Georgia that are environmentally unique or vulnerable.

- Use funding from CZM in combination with other state and federal sources to secure additional public access areas to coastal waters, as determined by access studies.

- Monitor effects of silviculture and agriculture practices for impact on freshwater wetlands and for compliance with "Best Management Practices for Forested Wetlands in Georgia" (Published by Georgia Forestry Association -- Wetlands Committee, July 1990).

- Update/upgrade identification of and protect aquifer recharge areas for both the Floridan and the Miocene aquifers. Use CZM funds to support local governments in their efforts to implement protective measures addressed in their comprehensive plans.

- Seek and implement alternative sources for secondary uses of water by industry, golf courses, lawn care, etc.

- Ensure that all industrial effluent meets or exceed existing water quality standards.

- All future wastewater treatment plants that are sited on rivers or drain into a river system (watershed) will provide, as a minimum, [tertiary] treatment of the effluent -- sewage treatment for removal of nutrients.

- Due to sediment flow restrictions and water quantity/quality problems created by dams, no new dams shall be built on rivers in Georgia below those already in place. This applies to rivers with a flow rate of 400 cubic feet per second or greater. Investigate downriver effects of any proposed alteration of Georgia rivers (such as channelization, discharge, dredging, and operation of dams). Based on these findings, propose further controls in the public interest. No more big dams in the state.

- Identify, manage, and protect areas of special concern along our rivers such as unique plant communities and other areas of ecological significance, consistent with the general policies. Encourage sustainable yield practices.

- Use CZM funding to support local governments in developing and implementing land use and zoning policies that address the specific needs of our riverine systems, consistent with requirements of the Mountain and River Corridor Protection Act. Use as baseline the "Recommended River Corridor Protection" developed by the Coastal Georgia Regional Development Center. Use landsat and other "state-of-the-art" technology to delineate these areas.

- Identify, cap, and monitor abandoned wells, especially on or near hazardous waste sites and military facilities, to avoid contamination. Federal standards need to be met or exceeded.

- Review all applications for permits to the U.S. Army Corps of Engineers for Section 404 activity.

- Identify management concerns for sites. Examples include impacts from recreational use, deposition of dredge spoil, and any other activity which might adversely impact shorebird nesting.

- Use state tax incentives for environmentally sensitive areas.

- Public access to publicly- and privately-owned barrier islands and other publicly-owned lands should be managed so as to reduce conflicts with the functions of such areas to ensure compliance with management plans.

- Minimize length of docks with criteria to include: aesthetics; navigation; environmental; safety.

- Planning efforts in the coastal zone should be incorporated into large area development (malls, highways, industrial parks, etc.) to keep deforestation to a minimum. Existing large trees should be kept and trees planted where possible.

- Prohibit dredging or excavation of any new shipping channels from the Atlantic Ocean to inland waters. Examples of areas protected by this policy include the Altamaha, Ogeechee, and Satilla rivers, and sounds that are not currently being dredged.

- Review proposals for deepening or extending existing channels in terms of impacts on erosion, freshwater and saltwater habitat, wildlife refuges, water quality, and other measures of environmental stability.

- 25-foot vegetative buffer adjacent to marshes should be maintained as required under the Erosion and Sedimentation Act.

- All development adjacent to marshlands will apply a 25-foot buffer of natural vegetation.

- Yearly survey of potential shorebird nesting sites on public and private lands to determine nesting activity and the need for protection. This could be coordinated by the Department of Natural Resources and/or the U.S. Fish and Wildlife Service, and utilize volunteers, seasonal sea turtle interns, and agency personnel.

- Open space standards should be provided/established for each coastal county to be enforced through the planning and zoning process established by respective communities or municipalities.

- Provide and distribute information about the location and features of public access facilities as a means for ensuring their maximum benefit to both resident and tourists.

- Encourage research to determine best construction designs and materials to use in dock construction, especially in the area of fuel storage and handling over or adjacent to coastal waters.

- Based on findings of this evaluation, establish a coastal resources public access program, including priorities and funding recommendations for easement acquisition and maintenance and for facility construction, improvement, and maintenance.

- In an effort to reduce the amount of time required to assess sites of potential significance, form a citizen review committee of qualified individuals. They will initiate action upon notification by the State Historic and Preservation office to research and evaluate property proposed for development or as requested.

- The state shall identify and map areas of archaeological interest within the coastal zone by interviewing professional and non-professional archaeologist and combine with existing information. Archaeological field surveys should be undertaken on these sites on a priority basis by the state with the assistance of a citizens advisory committee. (Utilize universities and colleges to take on investigation and research of this program. Adequate supervision will be required.)

- Initiate studies of various resource systems and areas to determine carrying capacity/sustainable use conditions, to ensure adequate biodiversity, and adopt management plans that include controls and incentive measures to ensure compliance with findings of these studies. Encourage private financial participation in such studies for large development projects.

- Devise management plans for all areas of special concern, including those that are privately owned, integrating such plans into the local comprehensive planning process to the maximum extent possible.

- Establish monitoring programs to be used on a continuing basis to determine the existing condition and use of special areas.

- Consistently analyze the resource impacts of development on barrier islands through local evaluation studies paid for by CZM program funds. Subsequently utilize findings of such studies in stipulating conditions applied to development and use of property under the authority of state and local governments.

- Maintain the scale and visual character of barrier islands by developing and implementing locally enforced standards and local government policies to ensure the following.
    - Adequate protection of native vegetation and wildlife;
    - Control of building size, height, and density;
    - Limitations on width of roads and streets; and,
    - Limitations on impervious surfaces (paving and buildings).

- Consistently analyze the resource impacts of development on barrier islands through local evaluation studies paid for by CZM program funds. Subsequently utilize findings of such studies in stipulating conditions applied to development and use of property under the authority of state and local governments.

- Research and set a percentage to reduce aquifer water use by industry and communities by the year 2000.

- Develop and enforce a program for long-term management of the sand-sharing system based on these studies. Management program should include cost/benefit analysis of its implementation and detailed analysis of financing and pay-back for recommended projects. Make a cost analysis of the pay-back to the public, including tourism, and recreational benefits for the publicly-funded portions of all future projects.

- Based on these studies, determine relationship between channel maintenance and sand-sharing system, and recommend related policies and procedures for protecting shorelines from erosion. When dredging shipping lands, opening sand-clogged inlets, or in other ways artificially taking sediment out of the natural system, the sediment should be placed in favorable down-draft positions so as to re-enter the littoral stream. No new shipping channels should be developed on the Georgia coast.

- If and when beach renourishment projects are used as part of the sand-sharing system management program, ensure that the material used exceeds minimum standards of quality, as measured in chemical composition and physical characteristics, consistent with applicable state and federal water quality standards. Use dredge material whenever it is available, provided that it meets or exceeds these standards.

- Avoid using engineered structures, or other beach modifications, that prevent full function of the sand-sharing system in adjacent areas, or which degrade physical, biological, or chemical effects or functions, or the appearance or recreational use of the shoreline.

- Establish cooperative partnerships between regional and local organizations, for the purpose of developing and applying the leadership needed to ensure properly balanced and successful economic development.

- Through assistance from the Georgia Coastal Management Program, encourage counties lacking state-recognized Erosion and Sedimentation Control Ordinances to adopt and implement them to obtain state certification under the Erosion and Sedimentation Act. The Coastal Management Program should sign-off before issuance of permit.

- All storm sewer discharge will be removed from sewage treatment systems and treated, as needed, through a separate system.

- Potential sites for landfill and/or dredged materials disposal which encompass significant historic, cultural, or archaeological areas shall not be approved.

- Include vertebrate Paleolithic remains dating to the late Pleistocene (20,000 BC).

- Basic survey information of unsurveyed and partially surveyed counties should be completed by the state so that consistent, reliable, and up-to-date field survey information is available to make informed decisions regarding historic properties within the coastal zone. Analysis and synthesis of survey data on a county by county and regional basis should be undertaken to augment the development of historic contexts by providing solid information on historic properties.

- Develop and implement financial techniques, tax incentives, and state and local protection ordinances to protect archaeological sites within the coastal zone that have been identified. Tax incentives should be afforded developers who plan construction and development which takes into account historic, cultural, or archaeological areas within the proposed development area, as approved by the State Historic Preservation Office.

- Develop criteria and procedures to ensure that sites for development which encroach upon historic, cultural, or archaeological sites on ALL property will not be approved without actions being taken to ensure adequate mapping and exploration or avoidance of said areas. This will require elimination of certain existing public exemptions. (Possibly use as a guide Hilton Head and Jasper County, South Carolina archaeological resource preservation ordinance.) Adequate tax incentives are provided the developer to meet or exceed the cost of such mapping and exploration.

- Nontitled land within the coastal zone which includes historic, cultural, or archaeological sites should be deemed state property so that they may be adequately protected from harm.

- Take advantage of existing corridors (canals, parkways, etc.) to provide space for recreational, aesthetic, or wildlife benefits.

- Inventory and evaluate the adequacy of public access locations and facilities throughout coastal Georgia.

- Establish a monitoring program to periodically re-evaluate the adequacy and use of coastal public access areas and facilities.

- Where a residential community is sited, a community dock should be built instead of individual docks.

- Docks should be permitted with consideration for impacts to the marsh, shellfish, and water flow.

- Docks should be constructed of materials that are the least harmful to the environment (pollution, chemicals, etc.)

- Coastal habitats are numerous and varied, each with its unique value. The public should be allowed access to representative areas for enjoyment, relaxation, and education.

- Coastal counties should be inventoried to identify areas that could be purchased or preserved for open space.

- Additional open land corridors should be provided for alternative forms of transportation, i.e., bicycling.

- Determine need for additional research required to identify such areas, including technical criteria to be used.

- Promote state and non-profit acquisition and management of highest priority areas (refer to Heritage Trust and Preservation 2000 Programs, but other areas may be added).

- Install signage as needed in critical areas to inform the public about restrictions on activities (by season and activity), consistent with special area management plans.

- Establish fund and long-term program of implementation for property acquisition or purchase of all or partial development rights and/or conservation easements from private landowners.

- Investigate the feasibility of providing additional incentives for contribution of property or development rights by private landowners to public agencies (state or local government or non-profit corporations).

- Adequate capacity, appropriate location, and design of public service systems, including water and sewer, drainage, roads, lighting, signage, recreation facilities/areas, and provision of open space and publicly accessible natural areas.

- Require a copy of all U.S. Army Corps of Engineers letters certifying Section 404 Wetland Delineation and surveys within the Georgia coastal zone be sent to the Georgia Coastal Management Program.

- Certify proposed U.S. Army Corps of Engineers Permits that comply with federal guidelines.

- Analyze feasibility of Mitigation Banking for Freshwater Wetlands.

- Use the findings of such studies to support local land use decisions, investment in capital improvements, promotion of business and industry, and other actions related to economic development.

- Use CZM-funded staff to help local governments develop and implement strategic economic development programs, consistent with the above policies, to achieve more complementary relationships between economic development and resource management.

- Ensure the state investments and permitting activities are consistent with the above policies, in an effort to achieve better coordination between local and state economic development programs, while promoting predictable and sustainable use of resources.

- Provide incentives for developers to encourage use of management plans meeting or exceeding criteria to be established by the local governments in cooperation with the state.

- Encourage, promote, and monitor the use of Agricultural and Silvicultural Recommended Best Management Practices.

- Monitor and increase quality (where justified) of rivers to comply with the Georgia Water Quality Control Act. Investigate the river and water classification procedures and their application to coastal rivers and based on this research upgrade the classification to reflect the actual quality of the water.

- Initiatives should be taken to upgrade existing sewage treatment facilities that are sited on river systems in order to conform with these policies.

- Establish legal mechanism to seasonally protect sites from activities which might have negative impacts on shorebird nesting.

- Provisions in tax laws to protect culturally unique communities from rising property taxes where the community retains right-of-first-refusal when culturally unique areas are for sale.

- Use the CZM program to help create jobs with upward mobility and long-term stability for regional residents, especially for the unemployed or underemployed, with an emphasis on enterprises based on sustainable use of resources.

- Private islands should be protected against trespassing (above high water line).

- Public access for other reasons should be avoided within 2,000 feet of historic sites (on the National Register of Historic Places), national wildlife refuges, state management areas, and other environmentally-sensitive areas. Within this zone, nationwide/county permits would not apply, and formal permitting process would be required.

### G. Manufacturing Task Force

- Potential and rate of growth outside the coastal zone should be recognized (i.e., downstream effects, and watershed impacts as groundwater use).

- The use of groundwater should be controlled to ensure the withdrawal rate is not greater than the recharge rate.

- Landowners should be compensated for loss of use due to environmental regulation.

- Develop adequate means for resolving potentially competing concerns of various jurisdictions.

- Ground regulations in sound science -- provide funds for literature and field studies.

- Existing industrial users should be encouraged to reduce the use of groundwater through recycling or location of alternative sources.

- Growth of environmentally compatible industries should be encouraged.

- Uniform application of regulations is necessary.

- Surface water should be the primary source of water for most new industrial uses.

- Some consideration should be given to the priority of use of groundwater with respect to need and cost.

- Industry needs to know in advance what new regulations are likely to be imposed for realistic implementation time frame.

- Development of environmental standards for existing industry should include consideration of economic needs of a community as a factor.

- Current industrial users of water should be encouraged to utilize surface water where it is economically feasible to do so.

- There must be in place a scientific procedure to locate and identify those parameters of water quality which are real concerns to the resources of the area. Industry should then make the necessary changes.

- Current regulations of wetlands are strong enough to control the industrial impact on wetland areas.

- The ability to evaluate the effects of smaller and smaller levels of air emissions combined with new regulations under development will address many concerns.

- Dedicate funds to a survey of unexplored subject areas and their biological significance to the coastal region.

- CZM should act as a "clearing house" for permitting processes (without eroding DNR's "one-stop permitting" or adding layers of regulation or permit review).

- Incentives should be provided to encourage existing facilities to upgrade to current environmental standards.

- Existing regulations should be enforced.

- Storm water runoff regulations should only reflect existing controls which will prevent adverse impacts from industrial sites.

## H. Residential, Commercial, and Industrial Development Task Force

- Design, implement, and enforce a master drainage plan at the county, regional, and watershed level.
    a. Facilitate retention and reuse of runoff water for irrigation, etc.
    b. Consider tree ordinances.

- Seek the establishment of a "green belt" or a continuous natural landscaped buffer between development and the marshes, salt water, or major fresh water rivers.
    a. Consider establishing scenic corridor zoning.
    b. Consider tree and lighting ordinances.

- Do not let standards slide and preserve "fishing" grade water quality standards for all coastal rivers in the short term, and move toward "recreational" standards; with Georgia Environmental Protection Division and U.S. Environmental Protection Agency established timetables.

- Implement a large-scale study to determine, track, and continuously model sustainable use of coastal aquifers.
    a. Bring all large-scale users into the model, including agricultural users.
    b. Identify potential users of non-aquifer and non-potable water supplies.
    c. Relate study to comprehensive growth management plans.
    d. Identify interstate issues and potential solutions.
    e. Identify and plan ahead for alternative water sources, costs, and implementation schedules.
    f. Minimize delays and encourage implementation.
    g. Recommend an effective implementation and regulatory strategy and mechanism, such as a state or regional water commission.

- Design surfaces to facilitate absorption by local soils and wetlands.
    a. Use trees and grass islands in parking lots.
    b. Design drainage to slow and divert flow. Consider alternatives to curbs and gutters, such as drainage ditches.
    c. Reduce and control slopes.
    d. Protect tree cover.

- DNR accelerate the development of artificial reefs.

- Conduct studies to determine reasonable limits and capacity for development in coastal region. Develop incentives and controls to apply the findings of the studies. Provide an opportunity for public input before implementing any findings from the studies.

- The use of the Floridan aquifer should be prioritized for drinking (domestic) consumption. All new development must provide for its water supply in accordance with a comprehensive regional water use and allocation plan.
    a. Relate implementation to factual data from the study.
    b. Give priority to development in areas with available capacity.
    c. Discourage development in areas with insufficient capacity.

- Fully fund and staff wetlands delineation, permitting, and enforcement programs.

- Minimize the construction of impervious surfaces.
    a. Use grass lawns for overflow parking.
    b. Lay out compact car spaces in parking lots.

c. Use permeable parking surfaces (such as "popcorn asphalt").
d. Manage growth.
e. Require subdivision drainage plans and review existing subdivision drainage engineering requirements.

- Promote quality, affordable housing with performance standards.
  a. Discourage mobile homes.
  b. Avoid 100-year floodplains.
  c. Consider public transportation accessibility in site selection.
  d. Encourage the use of existing infrastructure.

- Environmental Protection Division reduce permitted toxic discharge (per NPDES permits) in all areas draining into fisheries and prohibit additional toxic discharge from new development.

- Conduct a cost/benefit analysis of proposed actions including internal, external, and quality of life considerations.

- Prohibit the construction of all new revetments on the coast of Georgia.

- Conduct a review of the existing regulatory structure.

- Respect individual property rights -- but not preeminent to the needs of the community.

- Conduct regional studies to determine the specific protective measures for different wetland types and areas.
  a. Study the appropriate sizes of buffers between development and wetlands or rivers.
  b. Use the study to determine allowable variances and subdivision guidelines.
  c. Identify wetlands possibly requiring government acquisition for protection.
  d. Determine appropriate grandfathering practices and policies for existing development.
  e. Determine adequate funding and staffing for wetlands delineation, permitting, and enforcement.

- Encourage the study and development of alternative energy sources in the coastal zone.
  a. Prohibit the development or expansion of "Waste-to-Energy" municipal garbage incinerators.
  b. Investigate the utilization of wood debris, and other forms of biomass, as an energy source.
  c. Investigate the utilization of wave energy and other aquatic-based sources of energy.
  d. Solar, wind, and other "clean" alternatives should also be investigated.

- Discourage the establishment of fission nuclear power plants in coastal Georgia.

- Discourage the use of energy-efficient materials, methods, and equipment in all new construction through the use of county building codes and other means.

- Avoid and reduce the disturbance of soils and ground cover at construction sites.

- Encourage the use of non-polluting alternatives to substances contained in runoff waters.
  a. Consider alternatives to pesticides and fertilizers.
  b. Require leaking automobiles to be corrected.

- Prioritize waterfront property use by water-dependent development in accordance with long-term comprehensive area planning.

- Minimize dependence on "stocking" for maintaining fish populations in natural areas.

- Consolidate the permitting process without reducing the authority of existing regulatory bodies.
    a. Provide a single point of contact for permits.
    b. Provide time limits for response from regulators
    c. Provide adequate funding for permit staff.
    d. Regulators should provide applicants with a team review of reasons for denial of a permit.

- Locate new development to maximize use of existing infrastructure.
    a. Encourage compact growth.
    b. Encourage new development to go in between existing developments, not in undeveloped areas (in-filling).
    c. Reuse existing structures and sites.

- Planning for highways should include an evaluation of their impact on land use.

- Base taxes on a property's current use, rather than highest and best use.
    a. Assist historical and cultural land use.
    b. Encourage counties to factor in existence of conservation and other restricted-use conservation easements in their tax assessment process.
    c. Protect long-term residents from being dispossessed by reason of tax reevaluation.
    d. Protect historically- and culturally-significant communities from dispossession by reason of tax reevaluations.

- Maximize the use of non-aquifer water, particularly for new developments where appropriate.
    a. Use "gray" and recycled sewage water for irrigation.
    b. Use the lowest quality waters for their highest and best use, prior to utilizing the highest quality waters.
    c. Reuse waters on site, where economically feasible.
    d. Reuse storm water runoff.
    e. Provide incentives for all of the above.

- Implement water conservation measures for all new development.
    a. Use "xeric" landscaping.
    b. Meter water use for all new development.
    c. Encourage low use plumbing.
    d. Provide incentives for all innovative solutions.

- Residential, commercial, and industrial development should occur outside of wetland areas, and impact wetland areas as little as possible.
    a. Require buffers between development and wetlands.
    b. Don't subdivide properties into parcels that make the parcels difficult or impossible to build on without a variance to wetland regulations.
    c. Facilitate undivided ownership in natural areas common to a subdivision.
    d. Allow some flexibility in local subdivision rules (such as minimum property sizes or setbacks) to facilitate the protection of wetlands.
    e. Consider the implementation of closely-regulated permit variances for access when there is no practical alternative.

- Identify and restrict sources of land erosion and sedimentation at construction sites -- consider buffer zones between construction and drainage systems.

- Hold new development to stricter standards of water effluent quality than existing development.

- Site landfills away from aquifer recharge and drainage zones.
    a. Encourage source reduction.
    b. Encourage recycling.
    c. Provide incentives.

- Provide an adequate amount (green zones) of land for agriculture and silviculture use through state growth management planning, i.e., conservation easements for family lands.
    a. Consider rural preservation zoning districts.
    b. Encourage growth within existing cities and towns as an alternative to suburban development.
    c. Establish goals for agricultural, silvicultural, and developmental acreage according to local needs and requirements.

## I. Tourism and Recreation Task Force

- Promote ecotourism.

- DNR must consider recreational fishing during any discussions concerning fishing.

- CZM should identify and acquire scenic easements.

- Encourage communities to identify scenic areas and take steps to preserve them.

- A permanent funding source, such as user fees, should be explored in order to develop low-impact recreational pursuits and education programs.

- CZM should identify and encourage preservation of historic and archaeological sites on both public and private land.

- When decisions are made regarding new development, maintaining lakes, streams, etc., in good condition for tourism and recreation should be a top priority.

- CZM should develop tax incentives (easy to use) in order to encourage the protection of cultural entities.

- CZM should actively research, recognize, and educate tourists about cultural entities and foster and preserve such cultures that still exist.

- When decisions are made regarding new development, maintaining groundwater in good condition for drinking should be a top consideration.

- CZM should encourage tourism- and recreation-oriented users of groundwater to conserve as much water as possible.

- Be sensitive to wetlands and surrounding areas in all proposed developments.

- Encourage tourism and recreation-oriented use of wetlands which do not have a negative impact on the area.

- DNR's canoe trips on the Altamaha should be continued or expanded.

- All fishing, both fresh water and salt water, be subject to licensing with limits imposed (if fish stocks are low and selective fish breeding is not a cost-effective option).

- CZM should provide public access to publicly-owned areas so that visitors can see native wildlife and plants.

- Provide public access to scenic areas.

- Develop primitive camping on at least one barrier island.

- Any recreational development on a state-owned island shall have minimal negative impact to the environment.

- Maintain clean water so that habitats for fish are not reduced.

- Increase fish stocks by either licensing or selective fish breeding.

- Any taking of minerals should be done with a minimum impact.

# Appendix IX

# GLOSSARY

# APPENDIX IX:
# GLOSSARY

**"A Zone"** -- that portion of the 100 year flood plain not subject to wave action. The residual forward motion of the breaking wave may be present in this zone.

**Access canals** -- waterways designed and constructed strictly for passage to and from marinas and other launch facilities.

**Activity** -- an action or actions which will have reasonably foreseeable effects upon land use, water use, or natural resources of the coastal area.

**Agency** -- see definitions for Federal Agency and State Agency.

**Applicant** -- any person or agency who files an application for a permit.

**Aquaculture** -- the extensive or intensive farming of aquatic animals or plants.

**Bare sand surface** -- an area of nearly level unconsolidated sand landward of the ordinary high-water mark which does not contain sufficient indigenous vegetation to maintain its stability.

**Barrier islands** -- the following islands: Tybee, Little Tybee, Petit Chou, Williamson, Wassaw, Ossabaw, St. Catherines, Blackbeard, Sapelo, Cabretta, Wolf, Egg, Little St. Simons, Sea, St. Simons, Jekyll, Little Cumberland, Cumberland, and any ocean-facing island which is formed in the future and which has multiple ridges of sand, gravel, or mud built on the seashore by waves and currents; ridges generally parallel to the shore; and areas of vegetation.

**Beach** -- a zone of unconsolidated material that extends landward from the ordinary low-water mark to the line of permanent vegetation.

**Best Management Practice (BMP)** -- a method, activity, maintenance procedure, or other management practice for reducing the amount of pollution entering a waterbody. BMPs generally fall into two categories: source control BMPs and nonpoint source control BMPs. The term originated from the rules and regulations developed pursuant to Section 208 of the federal Clean Water Act (40 CFR 130).

**Board** -- the Board of Natural Resources.

**Boardwalk** or **crosswalk** -- a nonhabitable structure, usually made of wood and without a paved or poured surface of any kind, whose primary purpose is to provide pedestrian access to or use of the beach, while maintaining the stability of any sand dunes it traverses.

**Certification of Consistency** -- a certification made by a person in connection with an application for a federally administered permit to conduct an activity or activities as previously defined. Such certification of consistency shall be based on determination of the activity's compliance with the policies of the Georgia Coastal Management Program Document. Only those activities requiring a federally administered permit will require such certification of consistency.

**C.F.R.** or **CFR** -- U.S. Code of Federal Regulations, where the regulations of all departments of the United States Government are published or "codified."

**Coastal area** or **coastal zone** -- all tidally influenced and submerged lands seaward to the state's jurisdictional limits and all lands, submerged lands, waters, and other resources within the counties of Brantley, Bryan, Camden, Charlton, Chatham, Effingham, Glynn, Long, Liberty, McIntosh, and Wayne.

**Coastal marshlands** or **marshlands** -- any intertidal area, mudflat, tidal water bottom, or salt marsh in the state of Georgia within the estuarine area of the state, whether or not the tidewaters reach the littoral areas through natural or artificial watercourses. "Vegetated marshlands" shall include those areas upon which grow one, but not necessarily all, of the following: salt marsh grass (Spartina alterniflora), black needlerush (Juncus roemerianus), saltmeadow cordgrass (Spartina patens), big cordgrass (Spartina cynosuroides), saltgrass (Distichlis spicata), coast dropseed (Sporobolus virginicus), bigelow glasswort (Salicornia bigelovii), woody glasswort (Salicornia virginica), saltwort (Batis maritima), sea lavender (Limonium nashii), sea oxeye (Borrichia frutescens), silverling (Baccharis halimifolia), false willow (Baccharis angustifolia), and high-tide bush (Iva frutescens). The occurrence and extent of salt marsh peat at the undisturbed surface is deemed to be conclusive evidence of the extent of a salt marsh or a part thereof.

**Coastal Management Program Document** or **Program Document** or **Plan** -- that management plan prepared by the Department in consultation with the agencies and local governments exercising statutory authority in the coastal area and in accordance with the requirements of the federal Coastal Zone Management Act of 1972, as amended (P.L. 92-583).

**Coastal Wetlands** -- see "wetlands."

**Commissioner** -- the Commissioner of the Department of Natural Resources.

**Conservation easement** -- a legally binding agreement between a property owner and a governmental body or land trust that restricts the type and amount of development and

use that may take place on the property. A conservation easement may be arranged for conservation purposes, to allow public access to beaches or other areas, to provide hiking trails, or for other similar objectives.

**Consistency** -- the compliance with the resource policies and requirements as outlined in the Coastal Management Program Document (O.C.G.A. 12-5-260 *et seq.*).

**Crosswalk** -- see "Boardwalk."

**Demand-side Capacity Option** -- A program proposed by a utility or the Public Service Commission for the reduction of future electricity requirements the utility's Georgia retail customers would otherwise impose, including but not limited to energy efficiency and energy management options (together known as demand-side resources), and co-generation and renewable resource technologies. Co-generation and renewable resource technologies are generally included among supply-side resources because they add to the total amount of electrical energy produced by society.

**Department** -- the Department of Natural Resources.

**Determination of Consistency** -- a determination made by a federal agency proposing an activity or activities as previously defined. Such determination of consistency shall be based on a determination of the activity's effects upon the coastal area. Only those activities proposed to be undertaken by a federal agency will be subject to a determination of consistency.

**Disposal site** -- That portion of the "waters of the United States" where specific disposal activities are permitted and consist of a bottom surface area and any overlying volume of water. In the case of wetlands on which surface water is not present, the disposal site consists of the woodland surface area. Upland locations can also constitute disposal sites.

**Dolomitic** -- geologic term, referring to material that consists of or contains dolomite, a rock or mineral consisting of calcium and magnesium carbonate.

**Dredged material** -- Material that is excavated or dredged from waters of the United States.

**Dynamic dune field** -- the dynamic area of beach and sand dunes, varying in height and width, the ocean boundary of which extends to the ordinary high-water mark and the landward boundary of which is the first occurrence either of live native trees 20 feet in height or greater or of a structure existing on July 1, 1979. The landward boundary of the dynamic dune field shall be the seaward most line connecting any such tree or structure as set forth in the Shore Protection Act to any other such tree or structure if the distance between the two is a reasonable distance not to exceed 250 feet. In determining what is a reasonable distance for purposes of this paragraph, topography, dune stability, vegetation, lot

configuration, existing structures, distance from the ordinary high-water mark, and other relevant information shall be taken into consideration in order to conserve the vital functions of the sand-sharing system. If a real-estate appraiser certified pursuant to Chapter 39A of Title 43 of the Official Code of Georgia Annotated determines that an existing structure, shoreline engineering activity, or other alteration which forms part of the landward boundary of the dynamic dune field has been more than 80 percent destroyed by storm driven water or erosion, the landward boundary of the dynamic dune field shall be determined as though such structure had not been in existence on July 1, 1979.

**Easement** -- A right, other than the acquisition of title, acquired to use or control property for a designed purpose.

**Electrical plant** -- Any facility, or portion of a facility, that produces electricity, or is intended to produce electricity, for a utility's Georgia retail customers. "Electric plant" includes the realty, ancillary facilities, and associated facilities required to interconnect the electric plant with the bulk power supply system.

**Eligible person** -- any person who is the owner of high land adjoining the state owned marshland or water bottoms, or combination thereof, sought to be leased by said person such that at least 100 percent of the landward boundary of the state owned marshland or water bottom, or combination thereof, sought to be leased is bordered by said adjoining high land.

**Energy facilities** -- any equipment or facility which is or will be used primarily in the exploration for or the development, production, conversion, storage, transfer, processing, or transportation of, any energy resource; or for the manufacture, production, or assembly of equipment, machinery, products, or devices which are involved in any of these activities.

**Environmental integrity** -- a complete or whole natural system, unimpaired by physical alteration or contamination to function as an ecosystem.

**Erosion** -- the wearing away of land whereby materials are removed from the sand dunes, beaches, and shore face by natural processes, including, but not limited to, wave action, tidal currents, littoral currents, and wind.

**Estuarine area** -- all tidally influenced waters, marshes, and marshlands lying within a tide-elevation range from 5.6 feet above mean tide level and below.

**Federal agency** -- the United States government and all its departments, boards, bureaus, commissions, and wholly owned corporations owned by the federal government.

**Federal Insurance Administration** -- A section of the Federal Emergency Management Agency (FEMA) that administers the National Flood Insurance Program.

**Federal Emergency Management Agency (FEMA)** -- The agency charged with the responsibility of administering the National Flood Insurance Program through the Federal Insurance Administration.

**Federally administered permit** -- only those permits, licenses, or approvals required by federal law or regulation and issued by an agency of the federal government.

**Feral** -- having reverted from domestication back to the original wild or untamed state, such as feral horses and pigs on Georgia's barrier islands.

**Flood hazard areas** -- Areas designated by the Federal Insurance Administration as flood-prone. These areas include all land inundated by the flood that has a one percent chance of being equalled or exceeded in any given year (also known as the "base flood" or "100 year flood"). Flood hazard areas are categorized into two zones: A Zones and V Zones.

**Floodplain** -- a plain bordering a river and made of sediment deposited during floods.

**Freshwater wetlands** -- those wetland areas that are characterized by vegetation adapted to saturated conditions, but are not tolerant of saline conditions.

**GCMP** -- the Georgia Coastal Management Program.

**Georgia Coastal Management Program** -- a compilation of policies to guide the public and private uses of land and waters within the coastal area administered by the Department of Natural Resources in consultation with the state agencies and local governments of the coastal area and approved by the Secretary of Commerce in accordance with the requirements of the federal Coastal Zone Management Act of 1972, as amended, 16 U.S.C., Section 1451 and following.

**Greenbelt** -- a vegetated area of various widths provided between or surrounding an area, often used to provide a natural barrier between industrial and residential areas, airports, etc. Greenbelts provide air and water filtration, habitat for plants and animals, noise reduction, and visual and aesthetic improvement.

**Groundwater** -- water that flows or seeps downward and saturates soil or rock, supplying springs and wells. The upper level of this saturated zone is called the water table.

**Hammock(s)** -- forested islands adjacent to salt marshes that exist as a result of a number of processes such as: the remnants of old barrier islands formed during times of higher sea

level; islands separated from larger islands by erosion; formations from ballast dumped by ships during the colonial era; or, dredge spoil sites.

**Highway, Road, Street** -- Each of these words is a general term denoting a public way for the purpose of vehicular travel including the entire area within the rights of way.

**Hydric soils** -- a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.

**Hydrologic** -- having to do with water and its properties, physical laws, geographical distribution, etc., as in hydrologic cycle.

**Hydrophytic vegetation** -- plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

**Integrated Resource Plan (IRP)** -- A utility resource planning process defined in O.C.G.A. 46-3A, in which an integrated combination of demand-side and supply-side resources is selected to satisfy future energy service demands at least cost (considering both direct and indirect costs) to society, balancing the interests of utility customers, utility shareholders and society-at-large. In Integrated Resource Planning, all resources reasonably available to meet future energy supply demands are considered by the utility on a fair and consistent basis.

**Land-disturbing activity** -- any activity that may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands within the state, including, but not limited to, clearing, dredging, grading, excavating, transporting, and filling of land other than federal and state lands, except that the term shall not include those activities exempted by O.C.G.A. 12-7-17.

**Land trust** -- Land trusts are non-profit corporations whose purpose includes acquiring and holding land and interests in land for conservation purposes. Land trusts are recognized as publicly-supported charitable organizations by the Internal Revenue Service.

**Liquified Natural Gas (LNG)** -- Natural gas that has been made liquid by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure. Liquified natural gas is 1/600th of its original gas volume.

**Litter** -- all discarded sand, gravel, slag, brickbats, rubbish, waste material, tin cans, refuse, garbage, trash, debris, dead animals, or other discarded materials of every kind and description which are not waste as such term is defined in Paragraph 6 of O.C.G.A. Section 16-7-51.

**Live-aboard** -- a floating vessel or other water craft that is moored to a dock, tree, or piling, or anchored in the estuarine waters of the state and is utilized as a human or animal abode. Live-aboards include but are not limited to: monohulls, multihulls, houseboats, floating homes, and other floating structures that are used for human or animal habitation. See also "Riverhouse Structure."

**Local government** -- a county, as defined by O.C.G.A. 36-1-1, or an incorporated municipality, as defined by O.C.G.A. 36-40-21, or any combination thereof, which has been authorized by an Act of the General Assembly, any of which has within its jurisdiction any coastal area.

**Marl** -- a loose, crumbly rock material or earthy deposit containing clay and calcium carbonate. Marl is used as fertilizer.

**Marshlands** -- See "coastal marshlands."

**Midden** -- loosely consolidated structures associated with native American habitation, often composed of the "by-products" of daily living, including such refuse as bones, shell fragments, pottery pieces, and charred materials. Middens vary in size but are generally less than ten feet in diameter and five feet in depth. Middens should not be confused with burial mounds.

**Minor alteration** -- any change in the marshlands which, taken singularly or in combination with other changes, involve less than 0.10 acres.

**Mitigation** -- a term that encompasses a broad array of activities, especially as applied to wetlands management. Mitigation describes the efforts to minimize, or compensate for, the impacts of a development project. The process of mitigation follows a preferred sequence of options, as defined by the National Environmental Policy Act (NEPA).

(A) Avoiding the impact altogether by not taking a certain action or parts of an action;

(B) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;

(C) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

(D) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of an activity; and,

(E) Compensating for the impact by replacing or providing substitute resources or environments.

**MOA** -- Memorandum of Agreement, a formal agreement signed by two or more parties.

**National Flood Insurance Program** -- Initiated by Congress in 1968, this program makes flood insurance available to communities with flood hazard areas while regulating new construction and development in special flood hazard areas. This program is administered by the Federal Insurance Administration section of the Federal Emergency Management Agency.

**Nationwide Programmatic General Permit (NWP)** -- a type of general permit issued on a nationwide basis by the U.S. Army Corps of Engineers that authorizes activities that are substantially similar in nature and cause only minimal individual or cumulative impacts. NWPs are designed to reduce regulatory delays for certain activities with minimal environmental impacts.

**Navigable waters** -- as defined in the federal Clean Water Act (33 USC § 1362(7)), and interpreted by the courts to mean the "waters of the United States," which includes wetlands that are adjacent to waters associated with interstate commerce, as well as certain intrastate "isolated" wetland areas located great distances from streams and navigable water bodies.

**NOAA** -- the National Oceanic and Atmospheric Administration, an agency within the U.S. Department of Commerce. NOAA is the parent agency for the Office of Ocean and Coastal Resource Management (OCRM), the office that administers the federal Coastal Zone Management Act.

**Nonpoint source** -- any source that discharges pollutants into the waters of the state from other than a point source. Such sources include, but are not limited to, agricultural, silvicultural, stormwater, and urban runoff.

**Nursery areas** -- habitat areas that provide suitable safety and food supply for young fish.

**Ordinary high-water mark** -- the position along the shore of the mean monthly spring high tide reached during the most recent tidal epoch. This term is not synonymous with "mean" high-water mark.

**O.C.G.A. or OCGA** -- Official Code of Georgia Annotated. All of the laws of Georgia are in the O.C.G.A. The O.C.G.A. is arranged by titles, chapters, and sections; the Shore Protection Act is cited as O.C.G.A. 12-5-230, *et seq.*, because it is codified at Title 12 Chapter 5 Section 230. The term *et seq.* is used to indicate that the sections following the one cited are also applicable.

**Ordinary low-water mark** -- the position along the shore of the mean monthly spring low tide reached during the most recent tidal epoch. This term is not synonymous with "mean" low-water mark.

**Permeable** or **permeable zone** -- the property of a material that allows the passage or diffusion of liquids. Permeable zones refer to those areas that have soil characteristics that allow infiltration of water.

**Permit-issuing authority** -- the Shore Protection Committee, the Coastal Marshlands Protection Committee, or a local unit of government which has adopted a program of shore protection which meets the standards of the Shore Protection Act and which has been certified by the board as an approved program.

**Person** -- any individual, partnership, corporation, municipal corporation, local government, association, state agency, or public or private authority.

**P.L. or PL** -- Public Law of the United States.

**Pocosin** -- evergreen shrub swamps or bogs, common to the Southeast United States. Pocosins, and shrub swamps in general, tend to be transitional systems between marsh and upland areas.

**Point source** -- any discernible, confined, or discreet conveyance, including, but not limited to: any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated feedlot operation, or vessel or other floating craft, from which pollutants are or may be discharged.

**Policy or policies of the Georgia Coastal Management Program** -- the enforceable provisions of present or future applicable statutes of this state or regulations duly promulgated thereunder.

**Political subdivision** -- the governing authority of a county or a municipality in which the marshlands to be affected or any part thereof are located.

**Pollution** -- any manmade or man-induced alteration of the chemical, physical, biological, and radiological integrity of the environment.

**Private dock** -- a structure built onto or over the marsh and submerged lands that is used for recreational fishing and other recreational activities, is not available to the public, does not have enclosures, and does not create a navigation hazard; provided, however, that a private dock may be covered and screened with a wainscotting not higher than three feet and may be equipped with a hoist.

**Reason to believe** -- Subpart G of the Corps of Engineers 404(b)(1) guidelines requires the use of available information to make a preliminary determination concerning the need for testing of material proposed for dredging. This principle is commonly known as "reason to believe," and is used in Tier I evaluations to determine acceptability of the material for

discharge without testing. The decision not to perform additional testing based on prior information must be documented, in order to provide a "reasonable assurance that the proposed discharge material is not a carrier of contaminants."

**Recreational dock** -- See definition for "Private Dock."

**Revetment** -- A facing of stone, concrete, etc., built to protect a scarp, embankment, or shore structure against erosion by wave action or currents.

**Riverhouse structure** -- Any structure located upon any tidewaters of the State of Georgia, where such structure is floating upon such tidewaters and is made fast by the use of lines, cables, anchors, or pilings, or any combination thereof, or is built upon anchors, or pilings, or any combination thereof, or is built upon pilings embedded in the beds of such tidewaters when such structure is being or has been used or is capable of being used as a place of habitation, dwelling, sojournments, or residence for any length of time; is not being used or is not capable of being used as a means of transportation upon such tidewaters; and is used as a means of transportation upon such tidewater; and is not owned, occupied, or possessed pursuant to a permit issued by the Commissioner of the Department of Natural Resources under Code Section 52-1-10.

**Sand dunes** -- mounds of sand deposited along a coastline by wind action, that mounds are often covered with sparse, pioneer vegetation and are located landward of the ordinary high-water mark and may extend into the tree line.

**Sand-sharing system** -- an interdependent sediment system composed of sand dunes, beaches, and offshore bars and shoals.

**Shall or will** -- A *mandatory* condition. When certain requirements are described with the "shall" or "will" stipulation, it is mandatory that the requirements be met.

**Shoreline engineering activity** -- an activity that encompasses any artificial method of altering the natural topography or vegetation of the sand dunes, beaches, bars, submerged shoreline lands, and other components of the sand-sharing system. This includes, but is not limited to, such activities as:

(A) Grading, clearing vegetation, excavating earth, or landscaping, where such activities are for purposes other than erection of a structure;
(B) Artificial dune construction;
(C) Beach restoration or renourishment;
(D) Erosion control activities, including, but not limited to, the construction and maintenance of groins and jetties;
(E) Shoreline stabilization activities, including, but not limited to, the construction and maintenance of seawalls and riprap protection; and
(F) The construction and maintenance of pipelines and piers.

**Should** -- An *advisory* condition. Considered to be recommended but not mandatory.

**Silviculture** -- the practice of applied forest ecology. As used in the timber industry, the practice of considering all aspects of the forest community for management of the forest for timber harvesting, such as using sound practices to avoid introduction of sediment and contaminants into streams and waterways, avoid disruption of spawning and nursery grounds, and maintenance of forest habitat.

**Spawning areas** -- areas that provide suitable habitat for deposition of eggs or sperm directly into the water by aquatic animals, such as fish, shellfish, frogs, etc.

**Stable sand dune** -- a sand dune that is maintained in a steady state of neither erosion nor accretion by indigenous vegetative cover.

**State agency** -- this state and all its departments, boards, authorities, bureaus, and commissions.

**State permit** -- all those permits, licenses, or approvals, whether required by federal or state law, which are administered by a state agency.

**State Programmatic General Permit (SPGP)** -- a type of general permit issued, on a statewide basis, by the U.S. Army Corps of Engineers that authorizes, for purposes of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act, certain activities that are also regulated by state, regional, or local regulatory programs. As with nationwide permits, they are issued for activities that are substantially similar in nature and cause only minimal individual or cumulative impacts. SPGPs are designed to reduce regulatory delays for certain activities with minimal environmental impacts, and they serve to augment the requirements and environmental features of the state, regional, or local program by adding specific conditions to those programs. They are intended to avoid unnecessary duplication of regulatory control by other agencies.

**Stormwater runoff** -- overland flow from rainfall that does not infiltrate the ground or evaporate but instead flows onto adjacent land or watercourses or is routed into drain/sewer systems.

**Structure** -- an institutional, residential, commercial, or industrial building (O.C.G.A. 12-5-230 *et seq.*).

**Submerged land** -- all lands lying in or being under tidally influenced waters of the state.

**Surficial** -- found at or near the surface, especially as related to water found near the surface of the soil.

**Temporary** -- as used in shore structures, means those structures that are not intended to remain in place except for a very short period of time and that may be used for special events. Such structures include, but are not limited to, tents, signal towers, and fences.

**Tidal epoch** -- the variations in the major tide-producing forces that result from changes in the moon's phase, declination of the earth, distance of the moon from the earth, and regression of the moon's modes, and which go through one complete cycle in approximately 19 years.

**Tidal water bottoms** -- the bed or bottom of all tidewaters within the state. The State of Georgia continues to hold title to all tidal water bottoms within the state, except where title in a private party can be traced to a valid Crown of England and by the common law.

**Tidal wetlands** -- those wetland areas that are influenced primarily by tidal inundation of salt or brackish water. Plants and animals in these systems are adapted to the stresses of salinity, periodic inundation, and extremes in temperature.

**Tidally influenced waters** -- any water where the tide ebbs and floods on a daily basis.

**Tiered approach** -- A structured, hierarchical procedure for determining data needs relative to decision-making, which involves a series of tiers of levels of intensity of investigation. Typically, tiered testing involves decreased uncertainty and increased available information with increasing tiers. This approach is intended to ensure the maintenance and protection of environmental quality, as well as the optimal use of resources. Specifically, the least effort is required in situation where clear determination can be made of whether (or not) unacceptable adverse impact are likely to occur based on available information. The most effort is required where clear determination cannot be made with available information.

**U.S.C** or **USC** -- United States Code. All of the statutes passed by Congress are in the United States Code. The U.S.C. is arranged by titles and sections; the Endangered Species Act, for instance, is cited as 16 U.S.C. §§ 1531 to 1544, because it is codified in Title 16 of the United States Code at sections 1531 through 1544. The titles are arranged by subject matter. The term *et seq.* is sometimes used to indicate the sections following the one cited are also applicable.

**"V Zone" (Velocity Zone)** -- That portion of the coastal 100 year flood plain that would be inundated by tidal surges with velocity wave action. Generally, the V Zone indicates the inland extent of a three-foot breaking wave, where the stillwater depth during the 100 year flood decreases to less than four feet.

**Water dependent** -- Water related, dependent on waterfront access, or cannot be satisfied by the use of an alternative nonmarshland site. (Modified from the Coastal Marshlands Protection Act.)

**Waters** or **waters of the State** -- any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, wetlands, and all other bodies of surface or

subsurface water, natural or artificial, lying within or forming part of the boundaries of the state which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.

**Watercourse** -- a flowing, channelized water system.

**Wetlands** or **coastal wetlands** -- those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. (See 33 CFR § 323.2, and 40 CFR § 230.3). Wetlands include both freshwater and tidal wetlands. (This definition is taken from the "U.S. Army Corps of Engineers Wetlands Delineation Manual," published in January 1987. This definition shall be used until such time as a more generally accepted definition is developed.)

# Appendix X

# LIST OF PARTICIPANTS

# APPENDIX X:
# LIST OF PARTICIPANTS

***This document was produced in cooperation with the citizens of Georgia.***

## THE COASTAL ADVISORY COMMITTEE

Dewey Benefield
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Allan Bryant
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Jimmy M. Floyd
Bill Foster, Sr.
Virginia Gunn
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Charles E. Hartzog
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Jerry McCollum
Don Mendosa
Danny Norman
Walter Parker
Joe Murray Rivers
Rebecca Shortland
Larry Stuber
Daniel L. Williams, Jr.
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*Note: Former members of the Coastal Advisory Committee and its predecessor, the Coastal Zone Advisory Committee include Jack Blanton, William "Jackie" Carter, Dennis Duke, Jim Kundell, Randal Morris, Lee Noel, Delores Roberson, Robert Russell, and Julie Smith.*

## THE GOALS SUBCOMMITTEES

*(Note: Affiliation listed is that provided at the time of participation, 1993-1994.)*

### *Associated Resources Subcommittee*

Charles H. Boles (Richmond Hill Heritage Trust Prog.)
Ben Brewton (Bryan Co. Planning Comm.)
Sarah Brown (Historic Savannah Fndtn.)
Jack D'Antignac (GA Fisherman's Assoc.)
Royce Hayes (St. Catherine's Isl. Fndtn.)
Vernon J. Henry (GA Southern Univ.)
Billy Herrin (GA Board of Natural Resources)
Linda King (Coastal GA Historical Society)
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Don Mendonsa (Savannah City Mgr.)
Carl Paulsen (Nat'l Coalition for Marine Conservation)
Eric Peterson (Coastal GA RDC)
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### *Water Resources Subcommittee*

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Richard Morgan (U.S. Army Corps of Engineers)
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Andrew Rea (The Sierra Club)
Gene Rigdon (Citizen)
Karen Robertson (Union Camp)
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Jim McDonald (Coast Guard Marine Safety Ofc.)
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Thomas L. Moore (GA Ports Authority)
Jim More (Kings Bay Naval Sub. Base)
Erik Peterson (Coastal GA RDC)
John Phillips (GA Dept. of Transportation)
Herb Windom (Skidaway Inst. of Oceanography)

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** = Committee Co-Chair*

Representative Bob Hanner* (Dist. 159)
Representative Kathy Ashe (Dist. 46)
Representative Tom Bordeaux (Dist. 151)
Representative DuBose Porter (Dist. 143)
Representative Charlie Smith (Dist. 175)

Senator Hugh Gillis* (Dist. 20)
Senator Ed Boshears (Dist. 6)
Senator Mike Egan (Dist. 40)
Senator Steve Henson (Dist. 55)
Senator Rene Kemp (Dist. 3)

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Jeffrey Benoit
David Kaiser
Ed Kruse
Clement Lewsey
Joshua Lott
Jim Mills
LCDR Tim Steele
LCDR Steve Thompson
Joseph Uravitch

For the sea lies all about us.... In its mysterious past it encompasses all the dim origins of life and receives in the end, after, it may be, many transmutations, the dead husks of that same life. For all at last returns to the sea -- to Oceanus, the ocean river, like the overflowing stream of time, the beginning and the end.

Rachel Carson
*The Sea Around Us*

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