



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT
Silver Spring, Maryland 20910

SEP 16 2005

Mr. Brad Gane
Assistant Director for Ecological Services
Coastal Resources Division
Georgia Department of Natural Resources
One Conservation Way
Brunswick, GA 31520

Dear Mr. Gane:

Thank you for your request dated August 15, 2005, to incorporate changes to the Georgia Coastal Management Program (GCMP). You requested that these program changes be incorporated as routine program changes (RPCs) pursuant to the Coastal Zone Management Act (CZMA) regulations at 15 C.F.R. part 923, subpart H and the Office of Ocean and Coastal Resource Management's (OCRM's) Program Change Guidance (July 1996).

After evaluating your submittal, we concur with your determination that the addition of GA. CODE ANN. §§ 52-9-1, and 52-9-2 (May 14, 2004) are RPCs and should be approved as an enforceable policy of the GCMP. The April 2004 Memorandum of Understanding (MOU) between the U.S. Army Corps of Engineers (Corps) and Georgia Department of Natural Resources (GADNR) is also incorporated as part of the GCMP, however, as described below, federal consistency will not apply to the MOU.

SECTIONS APPROVED

O.C.G.A. Title 52, Chapter 9, River and Harbor Development

Sections added: GA. CODE ANN. §§ 52-9-1, and 52-9-2 (May 14, 2004)

Memorandum of Understanding

"Memorandum of Understanding Between U.S. Army Corps of Engineers, Savannah District and the Georgia Department of Natural Resources" (April 2004)

As described in your August 15, 2005, request, the "limitation of applicable state and federal law" in GA. CODE ANN. § 52-9-2 (May 14, 2004) considers the availability of state, local and/or sponsor funding and federal cost-sharing requirements in regard to beneficial use of dredged materials. Therefore, when applying federal consistency to federal dredging activities, Georgia will consider the applicable beneficial use and federal cost-sharing requirements of the Water Resources Development Act (WRDA) and implementing regulations.

Federal consistency will not apply to the April 2004 MOU between the Corps and GADNR. As described in item No. 7 of the April 2004 MOU, the document is not legally binding or

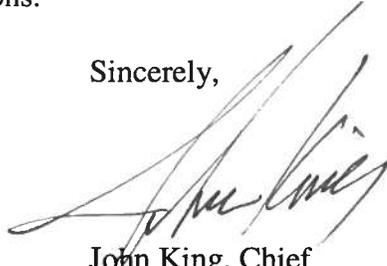


enforceable under state law. Therefore, although the April 2004 MOU is incorporated into the GCMP with this approval, federal consistency will not apply to the MOU because it does not contain enforceable policies as defined in 15 C.F.R. § 930.11(h).

Federal consistency shall apply to the approved changes to GA. CODE ANN. §§ 52-9-1, and 52-9-2 (May 14, 2004) only after you publish notice of this approval pursuant to 15 C.F.R. § 923.84(b)(4). Please include in the public notice the list of changes to enforceable policies provided in this letter and send a copy of the notice to OCRM.

Thank you for your cooperation in this review. Please contact Bill O'Beirne at (301)713-3155 extension 160, if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "John King", is written over a light blue horizontal line.

John King, Chief
Coastal Programs Division

cc: James R. Thornton, Jr.
Acting District Counsel
Department of the Army
Savannah District, Corps of Engineers
100 W. Oglethorpe Ave.
Savannah, GA 31401-3640

Georgia Coastal Management Program Request for Routine Program Change

Introduction

The Coastal Resources Division requests a routine program change to the approved Georgia Coastal Management Plan. The change calls for the inclusion of a recently modified statutory authority, Official Code of Georgia (O.C.G.A.) Title 52 (Waters of the State, Ports and Watercraft), Chapter 9 (River and Harbor Development), Section 1 (Projects for improving navigation channels), and Section 2 (Disposal of sand and sediment originating from water navigation related projects) and the inclusion of a Regional Sediment Management (RSM) Memorandum of Understanding (MOU) between the Georgia Department of Natural Resources and the US Army Corps of Engineers.

The modified code section is based upon HB 727 of the 2004 General Assembly of Georgia and simply emphasizes what is already stated in the Georgia Coastal Management Program (GA CMP): dredging can create shoreline erosion, which in turn can impact beaches. Beach nourishment is a preferred management alternative. This legislation which addresses the potential use of dredged materials for beach nourishment does not create a new area of management for the GA CMP, but serves as an additional tool to better manage the sand sharing system. As a result, this change is not considered substantial.

The MOU between the US Army Corps of Engineers and the Georgia Department of Natural Resources is, likewise, a tool to help address currently established enforceable policies within the Georgia CMP and to establish a foundation for collaboration between the two parties regarding the protection, preservation and management of Georgia's beaches.

Background

The 2004 Session of the Georgia General Assembly enacted House Bill 727 that affects coastal natural resource management regarding projects for improving navigation channels and disposal of sand and sediment originating from water navigation related projects. This legislation amends O.C.G.A. 52-9-1 and 52-9-2 and was signed into law by Governor Sonny Perdue on May 14, 2004.

Traditionally, sediment dredged from navigation channels within tidal inlets, river entrances and harbor entrances on the Georgia coast has been placed on confined or unconfined disposal sites or ocean dump sites where the sand is lost to the sand sharing system. The 2004 Act enhances the Georgia Shore Protection Act (O.C.G.A. 12-5-230 et seq.) by requiring that all sand suitable for beach replenishment originating from the dredging of navigation channels within tidal inlets, as well as the entrances to harbors and rivers, be placed on the adjacent coastal beaches, if feasible, either by deposition of sand into the near shore littoral zone or direct placement on affected beaches. The Act further requires that if such sand is placed elsewhere, then a quality and quantity of sand from an alternate location necessary to mitigate adverse effects caused by the dredging be used to replenish affected coastal beaches, when feasible.

The deposition of sand would be completed in cooperation with and, when required by applicable state or federal law, with the approval of the local governing authority and the Department of Natural Resources according to the requirements of the 'Shore Protection Act.' All activities must be conducted so as to provide protection to coastal marshlands and to nesting sea turtles and hatchlings and their habitats.

Pursuant to this legislation, the Georgia Department of Natural Resources and the U.S. Army Corps of Engineers executed a Memorandum of Understanding (MOU) in April 2004 that creates a formal process by which the two agencies collaborate on issues regarding dredging and sediment management (Appendix A). This MOU calls for the inclusion of a newly created coordination effort through a Regional Sediment Management (RSM) plan. The purpose of this MOU is to state the mutual responsibilities of the parties to carry out the principles of regional sediment management in the protection, preservation and management of Georgia's beaches. Regional sediment management broadens the scope of aspects the Corps must consider for individual projects to include all impacts to sediment resources and is aimed at maintaining or enhancing the natural exchange of sediment within a given region as defined by natural sediment processes in an environmentally sustainable manner.

Analysis

The requirements for Program Change as set forth in 15 C.F.R. §923.84 and the guidelines for Program Change as outlined by OCRM describe a Routine

Program Change as the detailing of a state's Coastal Management Program that does not constitute a substantial change to either the CMP's enforceable policies or other program areas. Furthermore, a substantial change includes a high threshold change that incorporates new or revised enforceable policies that address areas not previously managed.

Prior to passage of HB 727 and execution of a Memorandum of Understanding with the U.S. Army Corps of Engineers for Regional Sediment Management, the State of Georgia exercised authority for dredging and sand management through the Six Enforceable Policies listed under Uses Subject to Management, Chapter 6, pages 182-183 of the Georgia Coastal Management Program. They are:

1. Coastal Marshlands Protection Act
2. Georgia Erosion and Sedimentation Act
3. Georgia Water Quality Control Act
4. Shore Protection Act
5. Revocable License Program (Georgia Administrative Procedures Act)
6. Mountain and Corridor Protection Act.

The submitted routine changes, both the inclusion of the Regional Sediment Management MOU and the addition of O.C.G.A. §52-9-1-2, will not substantially change the uses subject to management or authorities in the coastal zone. The MOU and the Code will act as tools to foster collaboration between State and Federal agencies to best manage Georgia's beaches. Specifically, the new law codified into 52-9-1 and 52-9-2 is a refinement of our Revocable License and Shore Protection Act responsibilities regarding sand dredging and nourishment management in coastal Georgia.

The GA CMP, prior to program approval, identified uses that affect or produce some regional benefit in coastal Georgia. Included in this list (Program Document Section II, Activities of Regional Benefit) is "important navigational projects". In addition, the GA CMP under its Special Management Areas Section addresses areas of particular concern. The GA CMP has identified "Navigational Channels", "Beaches, dunes, and the sand-sharing system" and "Ocean Management" as Areas of Particular Concern. Section IV: Shoreline Erosion and Hazard Mitigation Planning addresses erosion control activities including beach restoration and nourishment, sand dune construction, and the construction and maintenance of groins and jetties. The submitted routine changes will not impact

how Georgia treats uses of regional benefit or special management areas pursuant to 15 CFR part 923, subpart C, and the new law and MOU will complement the existing program's Special Management Areas section and Uses of Regional Benefit sections.

The Georgia Department of Natural Resources Coastal Resources Division, through its Federal Consistency component, reviews U.S. Army Corps of Engineers dredging projects as a listed direct federal activity. All listed activities must be consistent to the maximum extent practicable under legally permissible federal statutory mandates. The "limitation of applicable state and federal law" in 52-9-2 acknowledges the limitations placed on the U.S. Army Corps by the Water Resources Development Act (WRDA) for state, local and/or sponsor funding and federal cost share requirements.

Before HB 727, the Georgia Coastal Management Program reviewed *Joint Public Notices* issued by the Corps of Engineers and had the opportunity to make comment on specific dredging projects along with other interested parties. Now we have the Regional Sediment Management (RSM) Memorandum of Understanding (MOU), which considers the effective utilization of littoral, estuarine, and riverine sediment resources in an environmentally sustainable and economical manner. RSM broadens the scope of consideration for individual projects to include all impacts to sediment resources and is aimed at maintaining or enhancing the natural exchange of sediment within a given region as defined by natural sediment processes in an environmentally sustainable manner (Appendix A).

The Shore Protection Act (12-5-231) 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. Coastal sand dunes, the most inland portion of the sand-sharing system, are the fragile product of shoreline evolution and are easily disturbed by actions inhibiting their natural development. 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.

It is also stated in the Shore Protection Act [Section 12-5-239 (c)(3)(C)] that beach restoration and nourishment techniques are preferable to the construction of shoreline stabilization activities. This new law expands on the concept of beach nourishment as a preferred method of bank stabilization and provides direction for resource managers. This idea is furthered in the Georgia Coastal Management Program document in Chapter Seven: Erosion control activities include beach restoration and renourishment, sand dune construction, and the construction and maintenance of groins and jetties.¹

The Georgia Department of Natural Resources Coastal Resources Division (CRD) currently manages deposition of spoils through existing enforceable policies such as the Coastal Marshlands Protection Act (CMPA; O.C.G.A. 12-5-280 et seq.), the Shore Protection Act (SPA; O.C.G.A. 12-5-230 et seq.), Georgia Erosion and Sedimentation Act (O.C.G.A. 12-7-1 et seq.), Georgia Water Quality Control Act (O.C.G.A. 12-5-30 et seq.), Revocable License Program (Georgia Administrative Procedures Act, O.C.G.A. 1-1-10 [b] [1] and 50-16-34[9]), and the Mountain and River Corridor Protection Act (O.C.G.A. 12-2-8[c][2]).

Inclusion of this new law and the attendant MOU (Appendix A) into the Georgia Coastal Management Program will serve to enhance the Program. This law change creates a concrete method for obtaining the goals of the Shore Protection Act in protecting the sand sharing system, and helps us to better manage our sand resources. The change will create a cooperative framework between the federal, state and local governments for partnering on issues regarding sediment management including beach nourishment. According to the new law, it is preferable to place dredged sand, if suitable and feasible, on or near our beaches for nourishment. This adds a tool for Georgia to better manage our sand sharing resources.

The following section shows the language of O.C.G.A. 52-9-1 et seq. prior to and after passage of HB 727, which allows for a direct comparison of the changes and should be helpful to our analysis.

Sections 52-9-1 and 52-9-2 prior to HB 727:

52-9-1. Projects for improving river channels.

¹ Georgia Coastal Management Program, Program Document, January 1997, page 230.

The Department of Natural Resources shall have the power and authority to sponsor and participate in projects for the deepening, widening, and improving of river channels for navigational and other purposes and to receive from the General Assembly appropriations therefore and to disburse such funds for such purposes, such projects contributing to the general welfare and benefit of this state and being projects approved by the Congress of the United States of America (Ga. L. 1967, p. 516; Ga. L. 1972, p. 1015, § 1516.)

52-9-2. Approval of contracts or agreements by Attorney General.

Prior to execution, such proposed contracts or agreements shall be approved by the Attorney General of this state and shall not contravene any laws and statutes of this state. (Ga. L. 1967, p. 516; Ga. L. 1972, p. 1015, § 1516.)

Sections 52-9-1 and 52-9-2 after passage of HB 727:

04 LC 25 3539S/AP

House Bill 727 (AS PASSED HOUSE AND SENATE)

By: Representatives Day of the 126th, Rogers of the 20th, and Hanner of the 133rd

A BILL TO BE ENTITLED
AN ACT

To amend Title 52 of the Official Code of Georgia Annotated, relating to waters of the state, ports, and watercraft, so as to change certain provisions relating to river and harbor development; to repeal conflicting laws; and for other purposes.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF GEORGIA:

SECTION 1.

Title 52 of the Official Code of Georgia Annotated, relating to waters of the state, ports, and watercraft, is amended by striking Chapter 9, relating to river and harbor development, and inserting in lieu thereof the following:

"CHAPTER 9

52-9-1.

The General Assembly recognizes the need for maintaining navigation inlets, harbors, and rivers to promote commercial and recreational uses of our coastal waters and their resources. The General Assembly further recognizes that dredging activities to deepen or maintain navigation channels within tidal inlets, as well as the entrances to harbors and rivers, often alter the natural drift of sand resources within the littoral zone. This alteration can be exacerbated when the sand resources are deposited in designated upland or offshore disposal areas instead of being returned to the natural river-sand transport-beach system. This alteration can adversely impact natural resources, recreation, tourism, and associated coastal economies. Moreover, the General Assembly believes in the duties of government to protect life and property. Therefore, it is the policy of this state that there shall be no net loss of sand from the state's coastal barrier beaches resulting from dredging activities to deepen or maintain navigation channels within tidal inlets, as well as the entrances to harbors and rivers.

52-9-2.

(a) With regard to all sand that is suitable for beach replenishment originating from the dredging of navigation channels within tidal inlets, as well as the entrances to harbors and rivers:

(1) Such sand shall be used to replenish the adjacent coastal beaches, if feasible, either by deposition of sand into the near shore littoral zone or direct placement on affected beaches;

(2) If such sand is placed elsewhere, then a quality and quantity of sand from an alternate location necessary to mitigate any adverse effects caused by the dredging shall be used to replenish affected coastal beaches; provided, however that this paragraph shall apply only where beach replenishment is necessary to mitigate effects from the dredging and dredged material removal from the natural river-sand transport-beach system of a specific project and beach replenishment from another source is the least costly environmentally sound mitigation option;

(3) The disposition of sand shall be completed in cooperation with and, when required by applicable state or federal law, with the approval of the local governing authority and the Department of Natural Resources according to the requirements of Part 2 of Article 4 of Chapter 5 of Title 12, the 'Shore Protection Act'; and

(4) All such activities shall provide protection to coastal marshlands as defined in paragraph (3) of Code Section 12-5-282 and to nesting sea turtles and hatchlings and their habitats.

(b) The Department of Natural Resources and the party undertaking the dredging shall coordinate to determine the option under subsection (a) of this Code section

for beach replenishment that is most beneficial to the adjacent or affected coastal beaches, including, where applicable, identifying an alternate source of sand for purposes of paragraph (2) of subsection (a) of this Code section, after taking into consideration environmental impacts and any limitation of applicable state and federal law."

SECTION 2.

All laws and parts of laws in conflict with this Act are repealed.

If we look to the language pre and post HB 727, we see several changes in the way Georgia DNR Coastal Resources Division does business regarding our role in sediment management. We must ask the entity dredging to find out whether or not sand from dredging is suitable for beach nourishment. If not, that is the end of the process. If it is suitable material, then feasibility must be determined. Listed are the steps to take in how the new law is implemented.

Does dredging project include material removal from a navigation channel within a tidal inlet, harbor entrance or river entrance?

No – done

Yes:

May material be suitable for beach replenishment (do any sections of the dredging project contain a high percentage of sand)? Dredge material must be tested to determine sand content.

No – done

Yes:

Additional testing may be necessary to determine suitability, such as, among other things, percentage of silts and clays, quantity and quality of rock or shell fragments, grain size and coloration. Does additional testing show that material is suitable for replenishment (DNR will make final determination for suitability on a case-by-case basis after coordination with the project sponsors)?

No – done

Yes:

Is it feasible to use the dredged sands for replenishment of adjacent coastal beaches by direct placement on affected beaches? Does material contain at least 88% sand and meet other physical characteristic suitability tests as determined by DNR after coordination with project sponsors? Feasibility study may be required.

Yes – place materials directly on adjacent beach in cooperation with DNR and local government.

No:

Is it feasible to use the dredged sands for replenishment of adjacent coastal beaches by deposition of sand into the near-shore littoral zone? Does material meet near-shore placement suitability tests as determined by DNR after coordination with project sponsors? Feasibility study may be required.

Yes – place materials into near-shore littoral zone in cooperation with DNR and local government.

No:

Material is found to be suitable for beach replenishment but it is not feasible to place material directly on beach or into near-shore littoral zone. Sand is placed elsewhere. Are there adverse effects caused by the dredging to adjacent coastal beaches? Is beach replenishment necessary to mitigate effects from the dredging project and dredged material removal from the natural river-sand transport-beach system?

No – done

Yes:

Determine quality and quantity of sand, from an alternate location, needed to replenish affected coastal beaches and mitigate effects from dredging project. Is this the least costly environmentally sound option?

No – done

Yes – place alternative-source sands on affected coastal beaches in cooperation with DNR and local government.

To determine if sand is suitable for nourishment, one must look at the composition of the dredge material according to its physical characteristics. Dredge material with a high percentage of sand, low percentage of rock and/or shell, small grain size, and light in coloration is desirable for nourishment. Materials containing 88% or more sand may be suitable. Dredge material containing less than 88% sands may be more suitable for near-shore placement in feeder berms. Dredge material with a lower percentage of sands may be suitable for feeder berm creation as sorting occurs offshore and the resulting beach-quality sand migrates onshore².

The Georgia Department of Natural Resources Coastal Resources Division finds that this additional state law enhances our ability to manage natural resources and is in no way contrary to any other section in Georgia's Coastal Management Program. It does not detract from, but enhances, the intent, purposes and mission of Georgia's Coastal Management Program. The submitted routine changes fall within the existing State authority included in the Georgia CMP and do not substantially change uses subject to management, authorities and organization, or special management areas in the coastal zone.

² Kelie Moore, Federal Consistency Coordinator, Georgia Department of Natural Resources, Coastal Resources Division

Appendix A

MEMORANDUM OF UNDERSTANDING
BETWEEN
US ARMY CORPS OF ENGINEERS, SAVANNAH DISTRICT
AND
THE GEORGIA DEPARTMENT OF NATURAL RESOURCES

SUBJECT:

1. This Memorandum of Understanding (MOU) is entered into between the US Army Corps of Engineers, Savannah District (Savannah District), and the Georgia Department of Natural Resources (GaDNR). The purpose of this MOU is to state the mutual understandings of the parties regarding Regional Sediment Management (RSM) and to establish a foundation for collaboration between the parties to carry out the principles of RSM in the protection, preservation, and management of Georgia's beaches. RSM is a national program that considers the effective utilization of littoral, estuarine, and riverine sediment resources in an environmentally sustainable and economical manner. RSM broadens the scope of studies for individual projects to include all impacts to sediment resources and is aimed at maintaining or enhancing the natural exchange of sediment within a given region as defined by natural sediment processes in an environmentally sustainable manner.

2. The parties believe activities carried out pursuant to this MOU will contribute to an understanding of coastal processes along the Georgia coastline, identification of the impacts of dredging on a broad scale, and of alternatives to existing dredged sediment placement practices that may be beneficial in terms of shore protection, storm damage reduction and the environment.

3. The Savannah District, subject to the authorization and appropriation of funds for these purposes, will:

- a. Identify a principal representative for cooperative RSM efforts.
- b. Obtain, compile and collect survey data.
- c. Identify the quantity and quality of beach suitable sediments dredged annually from federal navigation channels.
- d. Model existing conditions.
- e. Formulate and evaluate alternative placement plans from engineering, economic and environmental perspectives.
- f. Report results.
- g. As appropriate, enter into partnership agreements for endeavors to accomplish specific work or research projects.

4. The GaDNR, subject to available funding and resources, will:

- a. Identify a principal representative for cooperative RSM efforts.
 - b. Assist in the qualification of sediments suitable for deposition in nearshore zones or directly onto beaches.
 - c. Identify beaches or other natural resources that may benefit from RSM applications.
 - d. Provide information pertaining to RSM's affects on natural resources.
 - e. As appropriate, enter into partnership agreements for endeavors to accomplish specific work or research projects.
5. The Savannah District and the GaDNR will cooperate in the development of a Program Management Plan (PgMP) that will describe the Georgia coastal resources of concern, provide descriptions of past, present and proposed Savannah District practices and projects that affect coastal resources, the methodologies employed and the differences in costs, schedules and restrictions placed on each. The PgMP shall outline a tentative schedule for feasible actions along with monitoring and quality control recommendations.
 6. The Savannah District and the GaDNR will hold at least one meeting annually, with local, state and federal officials, as necessary, to outline the goals of the RSM process and describe the progress made towards the mutually established PgMP goals.
 7. The Savannah District and the GaDNR recognize and understand that this MOU is not a legally binding or enforceable document. This MOU neither confers nor establishes any rights or privileges enforceable at law, and cannot be the subject of any litigation to enforce its provisions.
 8. The Savannah District and the GaDNR understand and agree that the Savannah District's authority to undertake activities that are the subject of this MOU are dependent on and subject to authorization and appropriation of funds for the purposes of the MOU; that this MOU does not obligate in any manner the United States; and that the participation and activities of the Savannah District are governed solely by existing federal law applicable to U.S. Army Corps of Engineers civil works projects.
 9. This MOU may be modified or amended only by written mutual agreement of the parties.
 10. The Savannah District or the GaDNR may terminate this MOU at any time upon 30 days written notice.
 11. This MOU shall be effective on the date last executed by the parties.

The US Army Corps of Engineers,
Savannah District

The Georgia Department of
Natural Resources

Roger A. Gerber
Colonel, US Army District Engineer

Lonice C. Barrett
Commissioner, Georgia DNR

Copy of Program Text

The following text represents the proposed revisions to the approved Georgia Coastal Management Program Document. All requested revisions in **red font** are submitted as additions to the text.

For clarity and convenience, Chapter Titles, Section and Sub-section Titles, and page numbers are provided.

Again, all proposed additions to text are printed in **red** so that proposed revisions may be viewed in context. Text preceding and following the additions is provided for clarity.

Chapter Five

Section I Policies and Management Authorities

Page 102

-- 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.

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.

Policy Statement

Chapter 9 of Title 52, River and Harbor Development

52-9-1 Legislative Findings and Declarations

The General Assembly recognizes the need for maintaining navigation inlets, harbors, and rivers to promote commercial and recreational uses of our coastal waters and their resources. The General Assembly further recognizes that dredging activities to deepen or maintain navigation channels within tidal inlets, as well as the entrances to harbors and rivers, often alter the natural drift of sand resources within the littoral zone. This alteration can be exacerbated when the sand resources are deposited in designated upland or offshore disposal areas instead of being returned to the natural river-sand transport-beach system. This alteration can adversely impact natural resources, recreation, tourism, and associated coastal economies. Moreover, the General Assembly believes in the duties of the government to protect lives and property. Therefore, it is the policy of this state that there shall be no net loss of sand from the state's coastal barrier beaches resulting from dredging activities to deepen or maintain navigation channels within tidal inlets, as well as the entrances to harbors and rivers.

General Description

House Bill 727 was enacted by the 2004 Georgia Assembly and signed by the Governor on May 14, 2004. *House Bill 727 modified Chapter 9 of Title 52, River and Harbor Development, of the Official Code of Georgia.* Traditional deposition of sand from navigation channels within tidal inlets, river entrances and harbor entrances on the Georgia coast has been placed in upland spoils areas or dumped offshore where the sand may be lost to beach related sand sharing processes. The 2004 Act enhances the Georgia Shore Protection Act by requiring that all sand that is suitable for beach replenishment originating from the dredging of navigation channels within tidal inlets, as well as the entrances to harbors and rivers, be placed on the adjacent coastal beaches, if feasible, either by deposition of sand into the near shore littoral zone or direct placement on affected beaches. The Act further requires that if such sand is placed elsewhere, then a quality and quantity of sand from an alternate location necessary to mitigate any adverse effects caused by the dredging shall be used to replenish affected coastal beaches; provided, however that this condition shall apply only where beach replenishment is necessary to mitigate effects from the dredging and dredged material removal from the natural river-sand transport beach system of a specific project and beach replenishment from another source is the least costly environmentally sound mitigation option. The disposition of sand shall be completed in cooperation with and, when required by applicable state or federal law, with the approval of the local governing authority and the Department of Natural Resources according to the requirements of part 2 of Article 4 of Chapter 5 of Title 12, of the 'Shore Protection Act'; and all such activities shall provide protection to coastal marshlands as defined in paragraph (3) of Code Section 12-5-282 and to nesting sea turtles and hatchlings and their habitats. The

Department of Natural Resources and the party undertaking the dredging shall coordinate to determine the option under subsection (a) of this Code section for beach replenishment that is most beneficial to the adjacent or affected coastal beaches, including, where applicable, identifying an alternate source of sand for purposes of paragraph (2) of subsection (a) of this Code section, after taking into consideration environmental impacts and any limitation of applicable state and federal law.

Chapter Five

Section III Table of Management Authorities

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**SECTION III:
TABLE OF MANAGEMENT AUTHORITIES²**

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, <i>et seq.</i>) (1997)	<ul style="list-style-type: none"> · Enables DNR to develop and implement plan · Provides authority to DNR to accept, spend, and grant funds · Provides authority to DNR to hold public hearings · Provides authority to Governor to review and approve coastal management plan and to submit it to federal government for approval 	DNR/ Coastal Resources Division	Y e s	· Enabling legislation only: does not require new regulations.
<i>Chapter 9 of Title 52, River and Harbor Development</i> (O.C.G.A. 52-9-1 <i>et seq.</i>) (2004)	<ul style="list-style-type: none"> · Requires sand suitable for beach replenishment from dredging of navigation channels within tidal inlets and river and harbor entrances be used to replenish adjacent coastal beaches, if feasible, either by deposition of sand 	DNR/Coastal Resources Division	Yes	· Augments Shore Protection Act

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
	<p>into the near shore littoral zone or direct placement on affected beaches.</p> <p>The DNR and the party undertaking the dredging shall coordinate to determine the option for beach replenishment that is most beneficial to the adjacent or affected coastal beaches, including, where applicable, identifying an alternate source of sand.</p>			
<p>Coastal Marshlands Protection Act (O.C.G.A. 12-5-280, <i>et seq.</i>) (1970)</p>	<ul style="list-style-type: none"> · Protects tidal wetlands · Requires permit for structures, dredging, filling · Establishes Coastal Marshlands Protection Committee 	DNR/ Coastal Resources Division	Yes	· Requires permit for structures or activities in coastal marshes
<p>Coordinated Comprehensive Planning By Counties and Municipalities Act (O.C.G.A. 45-12-200, <i>et seq.</i>) (1989)</p>	<ul style="list-style-type: none"> · 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
<p>Department of Community</p>	<ul style="list-style-type: none"> · Establishes the Department 	Dept. of	No	· Authorizes the DCA and RDCs

Management Authority (Georgia Code Section) (Year of Enactment)	Major Provisions	Agency	GCMP Policy ?	Comments
Affairs Code (O.C.G.A. 50-8-1, <i>et seq.</i>) (1988)	of Community Affairs and the structure of the Regional Development Centers	Community Affairs		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, <i>et seq.</i>) (1937)	<ul style="list-style-type: none"> · Establishes structure, powers and duties of DNR, including EPD · Establishes DNR Board 	DNR	Yes	

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Transportation Facilities
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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 contaminants 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 other 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
- **Chapter 9 of Title 52, River and Harbor Development**
- 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.

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Recreation and Tourism

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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
- Chapter 9 of Title 52, River and Harbor Development

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Marine Related Facilities
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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
- **Chapter 9 of Title 52, River and Harbor Development**
- 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. **Chapter 9 of Title 52, River and Harbor Development, enhances the Georgia Shore Protection Act by requiring that all sand that is suitable for beach replenishment originating from the dredging of navigation channels within tidal inlets, as well as the entrances to harbors and rivers, be placed on the adjacent coastal**

beaches, if feasible, either by deposition of sand into the near shore littoral zone or direct placement on affected beaches. The Act further requires that if such sand is placed elsewhere, then a quality and quantity of sand from an alternate location necessary to mitigate any adverse effects caused by the dredging shall be used to replenish affected coastal beaches; provided, however that this condition shall apply only where beach replenishment is necessary to mitigate effects from the dredging and dredged material removal from the natural river-sand transport beach system of a specific project and beach replenishment from another source is the least costly environmentally sound mitigation option. The disposition of sand shall be completed in cooperation with and, when required by applicable state or federal law, with the approval of the local governing authority and the Department of Natural Resources according to the requirements of part 2 of Article 4 of Chapter 5 of Title 12, of the 'Shore Protection Act'; and all such activities shall provide protection to coastal marshlands as defined in paragraph (3) of Code Section 12-5-282 and to nesting sea turtles and hatchlings and their habitats. The Department of Natural Resources and the party undertaking the dredging shall coordinate to determine the option under subsection (a) of this Code section for beach replenishment that is most beneficial to the adjacent or affected coastal beaches, including, where applicable, identifying an alternate source of sand for purposes of paragraph (2) of subsection (a) of this Code section, after taking into consideration environmental impacts and any limitation of applicable state and federal law.

The “limitation of applicable state and federal law” in 52-9-2 includes the availability of State, local and/or sponsor funding and federal cost sharing requirements.

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.

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Dredging
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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 (still in draft form). The guidance in this draft 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
- **Chapter 9 of Title 52, River and Harbor Development**

- 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. 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. **Provisions of Chapter 9 of Title 52, River and Harbor Development will provide better alternatives for beach quality sand by requiring that those sands be used to preserve and protect coastal resources rather than dumped outside the sand sharing system.**

Chapter 9 of Title 52, River and Harbor Development, enhances the Georgia Shore Protection Act by requiring that all sand that is suitable for beach replenishment originating from the dredging of navigation channels within tidal inlets, as well as the entrances to harbors and rivers, be placed on the adjacent coastal beaches, if feasible, either by deposition of sand into the near shore littoral zone or direct placement on affected beaches. The Act further requires that if such sand is placed elsewhere, then a quality and quantity of sand from an alternate location necessary to mitigate any adverse effects caused by the dredging shall be used to replenish affected coastal beaches; provided, however that this condition shall apply only where beach replenishment is necessary to mitigate effects from the dredging and dredged material removal from the natural river-sand transport beach system of a specific project and beach replenishment from another source is the least costly environmentally sound mitigation option. The disposition of sand shall be completed in cooperation with and, when required by applicable state or federal law, with the approval of the local governing authority and the Department of Natural Resources according to the requirements of part 2 of Article 4 of Chapter 5 of Title 12, of the 'Shore Protection Act'; and all such activities shall provide protection to coastal marshlands as defined in paragraph (3) of Code Section 12-5-282 and to nesting sea turtles and hatchlings and their habitats. The Department of Natural Resources and the party undertaking the dredging shall coordinate to determine the option under subsection (a) of this Code section for beach replenishment that is most beneficial to the adjacent or affected coastal beaches, including, where applicable, identifying an alternate source of sand for purposes of paragraph (2) of subsection (a) of this Code section, after taking into consideration environmental impacts and any limitation of applicable state and federal law.

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.

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Special Management Areas

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Areas of Particular Concern

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Navigational Channels
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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
- Chapter 9 of Title 52, River and Harbor Development

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.

Chapter Seven
Special Management Areas

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Beaches, Dunes, and Sand Sharing System
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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
- Chapter 9 of Title 52, River and Harbor Development

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.

Chapter 9 of Title 52, River and Harbor Development enhances the Georgia Shore Protection Act by requiring that all sand that is suitable for beach replenishment originating from the dredging of navigation channels within tidal inlets, as well as the entrances to harbors and rivers, be placed on the adjacent coastal beaches, if feasible, either by deposition of sand into the near shore littoral zone or direct placement on affected beaches. The Act further requires that if such sand is placed elsewhere, then a quality and quantity of sand from an alternate location necessary to mitigate any adverse effects caused by the dredging shall be used to replenish affected coastal beaches; provided, however that this condition shall apply only where beach replenishment is necessary to mitigate effects from the dredging and dredged material removal from the natural river-sand transport beach system of a specific project and beach replenishment from another source is the least costly environmentally sound mitigation option. The disposition of sand shall be completed in cooperation with and, when required by applicable state or federal

law, with the approval of the local governing authority and the Department of Natural Resources according to the requirements of part 2 of Article 4 of Chapter 5 of Title 12, of the 'Shore Protection Act'; and all such activities shall provide protection to coastal marshlands as defined in paragraph (3) of Code Section 12-5-282 and to nesting sea turtles and hatchlings and their habitats. The Department of Natural Resources and the party undertaking the dredging shall coordinate to determine the option under subsection (a) of this Code section for beach replenishment that is most beneficial to the adjacent or affected coastal beaches, including, where applicable, identifying an alternate source of sand for purposes of paragraph (2) of subsection (a) of this Code section, after taking into consideration environmental impacts and any limitation of applicable state and federal law.

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Ocean Management
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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
- **Chapter 9 of Title 52, River and Harbor Development**

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.

Chapter 9 of Title 52, River and Harbor Development enhances the Georgia Shore Protection Act by requiring that all sand that is suitable for beach replenishment originating from the dredging of navigation channels within tidal inlets, as well as the entrances to harbors and rivers, be placed on the adjacent coastal beaches, if feasible, either by deposition of sand into the near shore littoral zone or direct placement on affected beaches. The Act further requires that if such sand is placed elsewhere, then a quality and quantity of sand from an alternate location necessary to mitigate any adverse effects caused by the dredging shall be used to replenish affected coastal beaches; provided, however that this condition shall apply only where beach replenishment is necessary to mitigate effects from the dredging and dredged material removal from the natural river-sand transport beach system of a specific project and beach replenishment from another source is the least costly environmentally sound mitigation option. The disposition of sand shall be completed in cooperation with and, when required by applicable state or federal law, with the approval of the local governing authority and the Department of Natural Resources according to the requirements of part 2 of Article 4 of Chapter 5 of Title 12, of the 'Shore Protection Act'; and all such activities shall provide protection to coastal marshlands as defined in paragraph (3) of Code Section 12-5-282 and to nesting sea turtles and hatchlings and their habitats. The Department of Natural Resources and the party undertaking the dredging shall coordinate to determine the option under subsection (a) of this Code section for beach replenishment that is most beneficial to the adjacent or affected coastal beaches, including, where applicable, identifying an alternate source of sand for purposes of paragraph (2) of subsection (a) of this Code section, after taking into consideration environmental impacts and any limitation of applicable state and federal law.

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.

Chapter Seven
Special Management Areas

Section IV

Shoreline Erosion and Hazard Mitigation Planning
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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.

Land-use planning in Georgia is the responsibility of local governments. **Both the City of Tybee Island and the Sea Island Company engage in beach related planning activities and maintain Beach Management Plans.** Through the Georgia Coastal Management Program the Coastal Resources Division can assist with hazard mitigation planning by providing technical assistance and, to local governments, pass-through funding.

Policies

- Coastal Marshlands Protection Act
- **Chapter 9 of Title 52, River and Harbor Development**

- 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.

Chapter 9 of Title 52, River and Harbor Development enhances the Georgia Shore Protection Act by requiring that all sand that is suitable for beach replenishment originating from the dredging of navigation channels within tidal inlets, as well as the entrances to harbors and rivers, be placed on the adjacent coastal beaches, if feasible, either by deposition of sand into the near shore littoral zone or direct placement on affected beaches. The Act further requires that if such sand is placed elsewhere, then a quality and quantity of sand from an alternate location necessary to mitigate any adverse effects caused by the dredging shall be used to replenish affected coastal beaches; provided, however that this condition shall apply only where beach replenishment is necessary to mitigate effects from the dredging and dredged material removal from the natural river-sand transport beach system of a specific project and beach replenishment from another source is the least costly environmentally sound mitigation option. The disposition of sand shall be completed in cooperation with and, when required by applicable state or federal law, with the approval of the local governing authority and the Department of Natural Resources according to the requirements of part 2 of Article 4 of Chapter 5 of Title 12, of the 'Shore Protection Act'; and all such activities shall provide protection to coastal marshlands as defined in paragraph (3) of Code Section 12-5-282 and to nesting sea turtles and hatchlings and their habitats The Department of Natural

Resources and the party undertaking the dredging shall coordinate to determine the option under subsection (a) of this Code section for beach replenishment that is most beneficial to the adjacent or affected coastal beaches, including, where applicable, identifying an alternate source of sand for purposes of paragraph (2) of subsection (a) of this Code section, after taking into consideration environmental impacts and any limitation of applicable state and federal law.

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.