

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: PCB ENRC 07-13 Sand Source Management
SPONSOR(S): Committee on Environmental Protection
TIED BILLS: **IDEN./SIM. BILLS:**

| REFERENCE | ACTION | ANALYST | STAFF DIRECTOR |
|--|-----------|---------|----------------|
| Orig. Comm.: Environment & Natural Resources Council | 12 Y, 0 N | Kliner | Hamby |
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SUMMARY ANALYSIS

The bill:

- Amends Part I of Chapter 161, F.S., and expands the definition of ‘access’ or ‘public access’ to include an ingress and egress to the shore that have been established by operation of law (i.e., prescriptive easement, dedication).
- Authorizes the DEP to permit sand-filled geotextile containers or similar structures to be used for dune stabilization or restoration where there is public infrastructure or a private structure to protect, and said structure is vulnerable to damage from frequent coastal storms, or is upland of a beach-dune system which has experienced significant beach erosion from such storm events, and directs the DEP to continually evaluate the structures and to report to the Legislature if the law needs to be amended as a result of changed conditions.
- Provides that in a legal action alleging a taking of all or part of a littoral or riparian right resulting from a beach re-nourishment or restoration project, the value enhancement to littoral property and adjoining uplands shall be offset against any damages. The bill further provides that the value enhancement of the property shall not be offset against the value of the property right alleged to have been taken, and if the value enhancement exceeds the damage if any, there shall be no recovery against the property owner.
- Directs the Department of Environmental Protection (DEP), pursuant to s. 161.161, F.S., and in cooperation with federal and local government agencies, to develop and maintain an inventory of identified offshore sand sources as part of the regional elements of its comprehensive long-term beach management plan. Offshore sand sources in state or federal waters which are identified for potential, proposed, or permitted use must be clearly mapped or otherwise noted and readily available for public review. Boards of county commissioners of coastal counties adjacent to sand sources proposed for use outside of the region or sub-region must be provided written notice and an opportunity to comment during a specific project’s planning and permitting stages.

Fiscal: Currently, and subject to additional information, the estimated fiscal impact to DEP is between \$40,000 and \$110,000, for FY 2007-2008.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. HOUSE PRINCIPLES ANALYSIS:

Provide limited government. The bill provides for additional responsibility and duties for DEP staff regarding permitting geotextile container dune structures and for continual monitoring of the structures. The bill also increases duties and responsibility for DEP in establishing an inventory of offshore sand sources for beach restoration and re-nourishment projects.

B. EFFECT OF PROPOSED CHANGES:

Current Situation

Perpendicular Access to Florida Shoreline

Florida's Constitution establishes the public's right to laterally traverse the public shore. There is no "right" to perpendicular access. However, Florida courts have held the public may acquire and preserve rights to beach access through the legal means of "customary use," "prescriptive easement," or "implied dedication." Florida is unique in that the delineation of public and private land is embedded in its Constitution – states that have more generous beach access laws (California, Texas, Oregon) have the relative ease of amending statutes without the need for a constitutional referendum

Beach Re-nourishment Generally

Along with regulating construction along Florida's coastline, the Department of Environmental Protection (DEP) manages beach restoration projects to restore eroded shoreline in coordination with the federal and local governments. Subsequent maintenance of restored shorelines, referred to as nourishment, is also administered by the DEP.

Local governments are key players in beach management. All beach front communities are responsible for assuring compliance with zoning and building codes. Some play active roles in obtaining and maintaining beach access points, trash pickup and cleanup programs, dune vegetation regulation or maintenance, and water safety. Almost all coastal counties, a number of cities, and several special districts now are involved in planning, implementing or maintaining a beach management activity such as inlet sand by-passing, beach restoration or dune restoration. The local government sponsor is responsible for planning the project, submitting information necessary to determine the priority of the proposal, obtaining necessary permits, bidding and contracting the work, and conducting subsequent monitoring.

Federal agencies are involved in the regulation of beach activities through United States Army Corps of Engineers permits required for activities conducted seaward of mean high water, and through consultation required under the National Environmental Policy Act, the Endangered Species Act, the Marine Mammals Protection Act, and others. Typically, close coordination will take place with the National Marine Fisheries Service, the United States Fish and Wildlife Service, and the Environmental Protection Agency. Primary issues include provisions to protect sea turtles and shore birds, beach mice in those areas where they are still located, and Essential Fish Habitat.

Dune Stabilization Structures

Under emergency conditions, local governments may authorize temporary armoring to immediately protect public and private infrastructure like homes, utilities and roads if those structures are threatened. In order to consider the armoring permanent, the property owner must submit a complete Coastal Construction Control Line permit application to the DEP within 60 days of installing the armoring. Otherwise, the property owner must remove the temporary armoring structure.[The Coastal

Construction Control Line Program (which is an integral component of the state's Beach and Shore Preservation Act) protects Florida's beaches and dunes from imprudent construction jeopardizing the beach/dune system, accelerating erosion, threatening upland structures and property, and interfering with public beach access while allowing reasonable use of private property. Improperly sited and designed construction can destabilize or destroy the beach/dune system resulting in loss of this natural resource and its important values for recreation, upland property protection and environmental habitat. Construction activities seaward of the control line are not prohibited, but must meet special siting and design criteria.]

The DEP permits the installation of "dune stabilization or restoration structures" and "beach stabilization or regeneration structures" only in limited circumstances and as temporary systems in order to evaluate (1) the structure's effectiveness, (2) the structure's effect on adjacent properties, and (3) the structure's environmental impact on the beach and dune system. If erosion occurs as a result of a storm event which threatens private structures or public infrastructure, the DEP, a municipality, or another political subdivision may install or have installed rigid coastal armoring structures so long as the following measures are considered with the emergency armoring:

- Protection of the beach-dune system.
- Siting and design criteria for the protective structure
- Impacts on adjacent structures
- Preservation of public beach access
- Protection of native coastal vegetation and nesting marine turtles and their hatchlings.

The 2006 legislative session resulted in an amendment in Chapter 161, F.S., which permitted sand-filled geotubes. The amendment was placed in s. 161.085, F.S., Rigid Coastal Armoring Structures. Subsection (2) (a) of that section permits structures when there is a structure that is "vulnerable." This placement in the statute renders the sand-filled geo tubes for armoring only and not for stabilization.

The installation of dune stabilization technology requires a permit from DEP. It is a Coastal Construction Control Line project (Rule 62B-33, FAC). By statute and rule, DEP must consult first with the state wildlife agency, Fish and Wildlife Conservation Commission (FWC) for a determination that the project will not result in a "take" of endangered wildlife (in this case, turtles) and seek approval prior to issuing a permit. The FWC consults with its federal counterpart Fish and Wildlife Service (FWS) because they are the agency enforcing the federal law governing endangered species. The FWS usually issues an "incidental take" permit which allows the project to go forward. The Endangered Species Act (ESA) does not specifically require the issuance of an incidental take permit – the ESA simply prohibits "takes" of endangered wildlife.

The Erosion Control Line

Pursuant to s. 161.41, F. S., it is the public policy of the state to fix the boundary line between sovereignty lands of the state bordering the Atlantic, the Gulf, and the Straits, and the upland properties adjacent thereto, via beach restoration, beach nourishment, and erosion control projects. Prior to the construction of a beach restoration project, the Board of Trustees of the Internal Improvement Trust Fund must establish the line of mean high water for the area to be restored. This line, which is the average height of the high waters over a 19-year period, is the erosion control line. The erosion control line becomes the new property boundary, and s. 161.191(2), F.S., provides that the common law shall no longer operate to increase or decrease the proportions of any upland property lying landward of such line, either by accretion or erosion.

Once the sand has been placed, the resulting additions to upland property are also subject to a public easement for traditional uses of the sandy beach consistent with uses that would have been allowed prior to the need for the restoration project. It is further declared that there is no intention on the part of the state to extend its claims to lands not already held by it or to deprive any upland or submerged land owner of the legitimate and constitutional use and enjoyment of his or her property. Section 161.141, F.S.

Inventory of Beach-quality Sand

Section 161.161, F.S., requires the DEP to develop and maintain a comprehensive long-term management plan for the restoration and maintenance of the state's critically eroded beaches fronting the Atlantic Ocean, Gulf of Mexico, and Straits of Florida. Pursuant to s. 161.161, F.S., the beach management plan shall:

- Address long-term solutions to the problem of critically eroded beaches in the state.
- Evaluate each improved, modified, or altered inlet and determine whether the inlet is a significant cause of beach erosion.
- Design criteria for beach restoration and beach nourishment projects.
- Evaluate the establishment of feeder beaches as an alternative to direct beach restoration and recommend the location of such feeder beaches and the source of beach-compatible sand.
- Identify causes of shoreline erosion and change, calculate erosion rates, and project long-term erosion for all major beach and dune systems by surveys and profiles.
- Identify shoreline development and degree of density and assess impacts of development and shoreline protective structures on shoreline change and erosion.
- Identify short-term and long-term economic costs and benefits of beaches, including recreational value to user groups, tax base, revenues generated, and beach acquisition and maintenance costs.
- Study dune and vegetation conditions.
- Identify beach areas used by marine turtles and their nests and nesting locations.
- Identify alternative management responses to preserve undeveloped beach and dune systems to restore damaged beach and dune systems, and to prevent inappropriate development and redevelopment on migrating beaches, and consider beach restoration and nourishment, armoring, relocation and abandonment, dune and vegetation restoration, and acquisition.
- Establish criteria, including costs and specific implementation actions, for alternative management techniques.
- Select and recommend appropriate management measures for all of the state's sandy beaches in a beach management program.
- Establish a list of beach restoration and beach nourishment projects, arranged in order of priority, and the funding levels needed for such projects.

The DEP Bureau of Beaches and Coastal Systems, Coastal Engineering Section provides technical expertise and assistance to the beach erosion control and regulatory programs of the Bureau. Technical expertise is provided in coastal hydrodynamics, sediment processes, and geology, and the related principles and practices of coastal engineering and geotechnical analysis. The Regional Offshore Sand Search (ROSS) project, administered by the Coastal Engineering Section, is designed to provide a comprehensive tool for coastal engineers, project managers, and regulators that allow the identification and assessment of potential offshore sand resources that are suitable for beach nourishment projects. The project has incorporated geological and geotechnical data for the Florida Panhandle and is currently extending the coverage to the offshore region of the southwest Florida coastal zone (Pinellas to Collier Counties). The work will continue along the Atlantic Ocean coastal zone during the next fiscal year. The primary area of interest is to be within 10 miles of the shoreline. Data and information from further offshore that assists in understanding or predicting potential sand resources within the area of primary interest will also be included in the database as will data on beach sands.

Effect of Proposed Changes

Perpendicular Access to Florida Shoreline

The bill expands the definition of ‘access” or “public access” to statutorily include an ingress and egress to the shore that have been established by operation of law (i.e., prescriptive easement, dedication).

Dune Stabilization Structures

The bill authorizes the DEP to permit sand-filled geotextile containers or similar structures to be used for dune stabilization or restoration where there is public infrastructure or a private structure to protect, and said structure is vulnerable to damage from frequent coastal storms, or is upland of a beach-dune system which has experienced significant beach erosion from such storm events, and directs the DEP to continually evaluate the structures and to report to the Legislature if the law needs to be amended as a result of changed conditions, provided the following conditions are met:

1. The containers:
 - Are constructed using native or beach-compatible sand, and geotextile material to maintain stability and longevity of the sand-filled core
 - Are installed in a subsurface site and covered with three feet of native or beach-compatible sand and vegetation
 - Are sited as landward as possible in order to minimize beach and frontal dune, minimize impacts to existing native vegetation, and minimize impacts to adjacent properties
 - Are designed and sited in a manner that will minimize erosion
 - Do not materially impede access by the public
 - Are designed to minimize adverse effects to nesting marine turtles and turtle hatchlings, consistent with section 370.12, Florida Statutes
 - Are designed to facilitate easy removal is necessary
2. The bill requires financial assurances in the form of surety or performance bonds or other financial responsibility mechanisms from the applicant or successive property owners to ensure that the permitted structures will be removed if sand maintenance proves not to be feasible, or if the structure ceases to function due to irreparable damage, or is determined by the DEP to have caused significant adverse impact to the beach dune system, or if the U.S. Fish and Wildlife Service revokes the Incidental Take Permit.
3. The U.S. Fish and Wildlife service has approved an Incidental take Permit for marine turtles pursuant to Section 7 or section 10 of the Endangered Species Act, if an Incidental Take Permit is necessary.

The bill requires the DEP to order removal of the project if the preceding conditions are not met, or if the project ceases to function due to irreparable damage, or is determined by the DEP to have caused significant adverse impact to the beach dune system, or if the U.S. Fish and Wildlife Service revokes the Incidental Take Permit. The DEP may require any engineering certifications that are necessary to ensure the adequacy of the design and construction of the projects.

The bill directs the DEP to conduct ongoing reviews of the dune restoration projects to determine whether the structures provides the protection to uplands as designed, and to compare the structures to existing dune protection programs. The DEP is directed to provide a report to the Speaker of the House and the Senate President if the DEP recommends any modification to the law as a result of its ongoing evaluation.

The Erosion Control Line

Current law provides that in establishing the ECL, there is no intention on the part of the state to extend its claims to lands not already held by it or to deprive any upland or submerged land owner of the legitimate and constitutional use and enjoyment of his or her property. The bill provides that in a legal action alleging a taking of all or part of a littoral or riparian right resulting from a beach re-nourishment or restoration project, the value enhancement to littoral property and adjoining uplands shall be offset against any damages. The bill further provides that the value enhancement of the property shall not be

offset against the value of the property right alleged to have been taken, and if the value enhancement exceeds the damage if any, there shall be no recovery against the property owner.

Finally, the bill amends Part I of Chapter 161, F.S., and expands the definition of ‘access’ or ‘public access’ to include an ingress and egress to the shore that have been established by operation of law (i.e., prescriptive easement, dedication).

Inventory of Beach-quality Sand

This bill creates s. 161.144, F.S., to provide policy guidance related to sand source management. As stated in the bill, the Legislature recognizes that beach-quality sand for the nourishment of the state’s critically eroded beaches is an exhaustible resource, in ever-decreasing supply, and must be carefully managed for the system wide benefit of the state’s beaches.

The DEP, pursuant to s. 161.161, F.S., and in cooperation with federal and local government agencies, is required to develop and maintain an inventory of identified offshore sand sources as part of the regional elements of its comprehensive long-term beach management plan. Offshore sand sources in state or federal waters which are identified for potential, proposed, or permitted use must be clearly mapped or otherwise noted and readily available for public review. In addition, boards of county commissioners of coastal counties adjacent to sand sources proposed for use outside of the region or sub-region shall be provided written notice and an opportunity to comment during a specific project’s planning and permitting stages. Any unresolved objections or concern of such coastal counties must be duly noted by the department and transmitted to the Legislature before it considers state funding for a project or before regulatory action is taken if legislative funding precedes approval of the use of specific sand sources.

C. SECTION DIRECTORY:

Section 1. Amends Part I of Chapter 161, F.S., and expands the definition of ‘access’ or ‘public access’ to include an ingress and egress to the shore that have been established by operation of law (i.e., prescriptive easement, dedication).

Section 2. Amends subsections (3), (5) and (9) of section 161.085, F.S., providing a regulatory framework for permitting geotextile containers for dune restoration projects.

Section 3. Amends section 161.141, F.S., providing that any property value enhancement to adjoining uplands, as a result of a beach re-nourishment or restoration project, shall be offset against damages, if any, as a result of a lawsuit alleging a taking of riparian or littoral rights.

Section 4. Amends section 161.144, F.S., directing the DEP to develop and maintain an inventory of identified offshore sand sources as part of the regional elements of its comprehensive long-term beach management plan.

Section 5. Provides an effective date.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

Beach-quality Sand Inventory

The DEP has indicated that it will have to modify their Reconnaissance Offshore Sand Search (ROSS) database to develop the inventory called for in this bill. Specifically, the database will have to improve the detail of mapping and expand the coverage to areas outside existing regions. The department has estimated, based on past work performed on the database that the cost could range from \$40,000 to \$100,000.

Additional department staff resources may be needed to implement the inventory of offshore sand sources, disseminating it to counties, and coordinating with counties and other local entities to resolve any local concerns. Also, the department would have to consult with the Army Corps of Engineers and the Mineral Management Service of the U.S. Department of Interior. The bill does not provide additional funds or staff to the department and the actual staff costs cannot be determined at this time.

Dune restoration

The DEP will undergo rulemaking to implement the geotextile container dune restoration regulations. DEP estimates the cost of rulemaking at approximately \$10,000, exclusive of additional legal costs if there is a challenge to the rules.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

Manufacturers of geotextile containers for dune restoration projects are likely to derive a benefit from the regulatory permitting of this technology.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable because this bill does not appear to: require cities or counties to spend funds or take actions requiring the expenditure of funds; reduce the authority that cities or counties have to raise revenues in the aggregate; or reduce the percentage of a state tax shared with cities or counties.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

The bill directs the DEP to enact rules regarding geotextile container dune restoration permitting.

C. DRAFTING ISSUES OR OTHER COMMENTS:

Currently the bill is an act relating to "sand source management," however, an amendment was accepted at the Council for Environment and natural Resources that expanded the statutory definition of "public access." Staff recommends amending the relating to clause of the bill to incorporate this change.

D. STATEMENT OF THE SPONSOR

N/A

IV. AMENDMENTS/COUNCIL SUBSTITUTE CHANGES

N/A