

## HOUSE OF REPRESENTATIVES STAFF ANALYSIS

**BILL #:** CS/HB 1427 Beach Management  
**SPONSOR(S):** Environment & Natural Resources Council; Mayfield  
**TIED BILLS:** **IDEN./SIM. BILLS:**

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DIRECTOR	REFERENCE	ACTION	ANALYST	STAFF
	1) <u>Committee on Environmental Protection</u>	<u>8 Y, 0 N</u>	<u>Kliner</u>	<u>Kliner</u>
	2) <u>Environment &amp; Natural Resources Council</u>	<u>14 Y, 0 N, As CS</u>	<u>Kliner / Perkins</u>	<u>Dixon / Hamby</u>
	3) <u>Policy &amp; Budget Council</u>	<u></u>	<u>Davila</u>	<u>Hansen</u>
	4) <u></u>	<u></u>	<u></u>	<u></u>
	5) <u></u>	<u></u>	<u></u>	<u></u>

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### SUMMARY ANALYSIS

CS/HB 1427 provides legislative intent to direct and commit the state's beach management efforts to address beach erosion caused by Florida's inlets, and declares that it is in the public interest to replicate the natural flow of sand at inlets.

The bill also:

- Directs that all beach quality sand associated with inlet construction and maintenance dredging, including that at federal inlets, be placed on adjacent beaches, and that the Department of Environmental Protection (DEP) maintain current estimates of the natural net annual transport volume of sand at all inlets and ensure that these volumes be placed on adjacent eroding beaches;
- Requires a port to follow its port master plan and DEP permits in a port's effort to place beach quality sand from dredging and construction projects on eroding beaches.
- Provides for undertaking studies and assessments for determining the cost-sharing responsibilities among entities associated with the extent of erosion caused by inlets.
- Directs the DEP to protect the state's investment in beach nourishment projects within an inlet's zone of influence by taking all reasonable action to reinstate the natural flow of sand in disputes between beneficiaries of the inlet, local governments, or adjacent inlet property owners, regarding how much sand should be by-passed.
- Creates a new section in Chapter 161, F.S., specifically for inlet management. It addresses plan development, establishes annual funding priorities for studies, projects, or other activities relating to inlet management, requires separate ranking criteria exclusively for inlet management and specific funding provisions, and provides for the designation of an Inlet of the Year.

The DEP reports that the bill will have an insignificant fiscal impact on state or local government.

CS/HB 1427 takes effect on July 1, 2008.

## FULL ANALYSIS

### I. SUBSTANTIVE ANALYSIS

#### A. HOUSE PRINCIPLES ANALYSIS:

**Provides Limited Government** -- The bill directs the DEP to maintain current estimates of the natural net annual transport volume of sand at all inlets, and to ensure that these quantities are placed on adjacent eroding beaches. The bill directs the DEP to develop ranking criteria to establish inlet management funding priorities, and requires it to submit annually to the Legislature an inlet management project priority list that includes at least ten separate inlets.

#### B. EFFECT OF PROPOSED CHANGES:

##### Current Situation

The DEP's Bureau of Beaches and Coastal Systems evaluates beach erosion problems throughout the state and seeks viable solutions. The primary vehicle for implementing the beach management planning recommendations is the Florida Beach Erosion Control Program.<sup>1</sup> The program was established for the purpose of working with local, state and federal governmental entities to achieve the protection, preservation and restoration of the coastal sandy beach resources of the state. Under the program, financial assistance in an amount up to 50 percent of project costs is available to Florida's county and municipal governments, community development districts, or special taxing districts, for shore protection and preservation activities located on the Gulf of Mexico, Atlantic Ocean, or straits of Florida.

Eligible activities include beach restoration and nourishment activities, project design and engineering studies, environmental studies and monitoring, inlet management planning, inlet sand transfer, dune restoration and protection activities, and other beach erosion prevention related activities consistent with the adopted Strategic Beach Management Plan. The program is authorized by Section 161.101, F.S. Since its inception in 1964, the Florida Beach Erosion Control Program has been a primary source of funding to local governments for beach erosion control and preservation activities.

According to DEP estimates, over 485 miles, or approximately 59% of the state's beaches, are experiencing erosion. At present, about 387 of the state's 825 miles of sandy beaches have experienced "critical erosion", a level of erosion which threatens substantial development, as well as recreational, cultural, or environmental interests. While some of this erosion is due to natural forces and imprudent coastal development, a significant amount of coastal erosion in Florida is directly attributable to the construction and maintenance of navigation inlets. Florida has 56 inlets around the state.<sup>2</sup> Normally, inlets interrupt the natural flow of sand, often creating erosion on 'downdrift' beaches. Many inlets have been artificially deepened to accommodate commercial and recreational vessels and employ jetties to prevent sand from filling in the channels. A by-product of this practice is that the jetties and the inlet channels have further exacerbated the normal interruption of the natural flow of sand along the beach, causing an accumulation of sand in the inlet channel and at the jetty on one side of the inlet, as well as a dramatic loss of sand to the beaches on the other side of the inlet. Information provided by the DEP, the Florida Shore and Beach Preservation Association (FSBPA), and Dr. Bob Dean indicate that inlets may be the cause of as much as 80% to 85% of the beach erosion along Florida's East Coast in terms of sand removed from the system or blocked by jetties.<sup>3</sup>

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<sup>1</sup> The Beach Erosion Control Program is authorized through chapter 161, Florida Statutes, and implemented through Chapter 62B-36, Florida Administrative Code

<sup>2</sup> The actual number of inlets varies, due to natural processes that create, widen, and sometimes close the inlets.

<sup>3</sup> Dr. Dean is Professor Emeritus, Civil and Coastal Engineering, University of Florida (retired), and is regarded by many to be Florida's resident coastal processes expert. Dr. Dean estimates that 55 million cubic yards of sand have been removed from inlet areas and lost to Florida beaches, at the time 70 million cubic yards of sand have been placed on Florida's beaches as part of beach nourishment projects. Dr. Dean believes

One way to restore eroded beaches is through beach nourishment. In a typical beach nourishment project, sand is collected from an offshore location by a dredge and is piped onto the beach. A slurry of sand and water exits the pipe on the beach, and once the water drains away only sand is left behind. Bulldozers move this new sand on the beach until the beach matches the design profile.

Beach nourishment is a preferred way to add sand to a system which has been starved by the altered inlets because it provides a significant level of storm protection benefits for upland properties and is the least impacting to the coastal system.<sup>4</sup> Since 1986, when the DEP was first charged with developing a plan for every modified inlet to determine the extent of erosion caused by an inlet, only 17 plans have been adopted for the 56 inlets around the state. Under current law, all construction and maintenance dredging of beach-quality sand should be placed on the downdrift beaches; or, if placed elsewhere, an equivalent quality and quantity of sand from an alternative location should be placed on the downdrift beaches.<sup>5</sup> The state's 14 deepwater ports are exempted from this provision.<sup>6</sup>

Since dedicated beach restoration funding of \$30 million annually was secured in 2000, inlet management has received on average 7 % of that funding. The table below indicates the dollar amounts and percent of total appropriations used for inlet management since fiscal year 2000.

FISCAL YEAR	LEGISLATIVE APPROPRIATIONS	INLET MANAGEMENT	PERCENT OF TOTAL APPROPRIATIONS
2000-2001	\$30,338,223	\$3,942,019	13
2001-2002	\$34,804,000	\$229,000	1
2002-2003	\$30,000,000	\$1,493,187	5
2003-2004	\$22,500,000	\$409,039	2
2004-2005	\$25,000,000	\$69,062	0.3
2005-2006	\$58,262,200	\$7,523,112	13
2006-2007	\$48,000,000	\$4,756,700	10
2007-2008**	\$47,566,188	\$5,498,035	12

\*\* The amount of \$5,498,035 is the total amount appropriated in FY 07-08 for inlet management. This amount has not been encumbered.

### Effect of Proposed Changes

The bill provides legislative intent to direct and commit the state's beach management efforts to address beach erosion caused by Florida's inlets, and declares that it is in the public interest to replicate the natural flow of sand at inlets, and for all levels of government to make all reasonable efforts to do so. The bill directs the DEP to ensure that all beach quality sand associated with inlet construction and maintenance dredging, including that at federal inlets, be placed on adjacent beaches, and finds this is the least-cost disposal method for this sand. The bill directs the DEP to approximate the natural net annual transport volume of sand at all inlets, and directs that these quantities be placed on adjacent eroding beaches.

The bill requires ports to follow its port master plan and DEP permits in a port's effort to place beach quality sand from dredging and construction projects on eroding beaches. The bill encourages undertaking studies and assessments to determine the cost-sharing responsibilities among entities associated with the extent of erosion caused by inlets. The bill also requires activities associated with inlet management projects to provide protection to nesting shorebirds, as well as nesting sea

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improved sand management at inlets could potentially reduce annual beach nourishment needs by as much as 1.4 million cubic yards of sand.

See, FSBPA's National Technology Conference, Jan 30, 2008

<sup>4</sup> An additional benefit of beach restoration projects is that they quickly restore shorebird and marine turtle habitat.

<http://www.dep.state.fl.us/beaches/programs/bcherosn.htm>

<sup>5</sup> Section 161.142, F.S.

<sup>6</sup> Jacksonville, Tampa, Port Everglades, Miami, Port Canaveral, Ft. Pierce, Palm Beach, Port manatee, Port St. Joe, Panama City, St. Petersburg, Pensacola, Fernandina, and Key West

turtles and hatchlings. Beach-quality sand placed on a beach as part of an inlet management project must be suitable for marine turtle nesting. In disputes regarding how much sand should be bypassed, the bill directs the DEP to protect the state's investment in beach nourishment projects within an inlet's zone of influence by taking all reasonable action to reinstate the natural flow of sand.

The bill subjects construction on Fisher Island, currently exempt from coastal construction permitting requirements and prohibitions, to the provisions in s. 161.053(2), F.S., but retains the exemptions from s. 161.053(5) and (6), F.S., and requires any construction to comply with the applicable Florida Building Code.

The bill creates a new section in Chapter 161, F.S., specifically for inlet management, planning, prioritizing, funding, and approving and implementing projects. Specifically, the bill provides that studies, projects and other activities to mitigate the erosive effects of inlets and balance the sediment budget of the inlet and adjacent beaches shall be supported by inlet management plans or inlet components of the statewide beach management plan. The ranking criteria to be used by the DEP to establish inlet management funding priorities must be consistent with the requirements and legislative declaration in ss. 161.101(14), 161.142, and 161.161(1)(b), F.S., and shall include consideration of:

- the annual quantity of sand reaching the inlet boundary;
- the severity of the erosion caused by the inlet on adjacent beaches;
- the anticipated success of the project in reinstating the natural flow of sand and addressing the sand deficit on adjacent beaches;
- the degree to which existing bypassing activities would benefit from modest cost-effective improvements;
- the interest and commitment from local government(s) associated with the project to cost-share in the project and future maintenance;
- the previous completion and adequacy of an inlet management plan or study, and the degree to which the project may enhance the longevity of proximate beach nourishment project;

The DEP must submit an inlet management priority list annually to the Legislature that includes at least ten separate inlets. In addition, the DEP may employ university-based or other contractual sources and pay 100 percent of the cost of studies that are consistent with s. 161.142, F.S.

Inlet management projects may receive up to a 75% state cost share and:

- the top three ranked inlet management projects shall receive a minimum of 10% of the total statewide beach management appropriation in each fiscal year;
- at least 50% of all feasibility and design dollars in the department's fixed capital outlay budget request for beach management shall be available for any inlet management plan, study, design, or development work;
- all available funds for statewide beach management that are not encumbered or allocated to specific local government beach management projects, may be used to implement any of the inlet management projects on the priority list, consistent with s. 216.301 (2)(a), F.S. Funds must remain available for such purposes for a period of 18 months pursuant to s. 216.301(2)(a), F.S.

The bill provides for a legislative designation of Inlet of the Year from the top three projects on the DEP's priority list.

C. SECTION DIRECTORY:

Section 1: Amends s. 161.142, F.S. providing for legislative intent and findings, directives to ports, DEP responsibilities, and optional studies by state and local governments.

Section 2: Creates s. 161.143, F.S., requiring the DEP prioritize and allocate funding for inlet studies, activities and other projects concerning inlet management, provides for a designation, and provides rulemaking authority.

Section 3: Provides an effective date of July 1, 2008.

**II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT**

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

See Fiscal Comments.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

See Fiscal Comments.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

See Fiscal Comments.

D. FISCAL COMMENTS:

The bill provides for each level of government to undertake reasonable efforts to maximize inlet sand bypassing to ensure that beach-quality sand is placed on adjacent eroding beaches. Increased funding to inlet projects may help to mitigate their erosive effects on adjacent beaches, therefore benefitting residents in the area and the tourism industry.

The bill provides that ports may sponsor or cosponsor inlet management projects that are fully eligible for state cost-sharing.

The DEP or local government is encouraged to undertake assessments that aid in determining the responsible entity for beach erosion when federal investigation or the state-approved inlet management plan fails to specify the responsible entity. The cost associated with this determination is unknown.

Due to shifting priorities, some projects for beach nourishment or dune enhancement may be delayed or not funded.

The DEP reports that the bill will have an insignificant fiscal impact on state or local government.

### III. COMMENTS

#### A. CONSTITUTIONAL ISSUES:

##### 1. Applicability of Municipality/County Mandates Provision:

This bill does not appear to require counties or municipalities to take an action requiring the expenditure of funds, does not appear to reduce the authority that counties or municipalities have to raise revenue in the aggregate, and does not appear to reduce the percentage of state tax shared with counties or municipalities.

##### 2. Other:

None noted.

#### B. RULE-MAKING AUTHORITY:

The bill provides rulemaking authority to DEP to implement s. 161.143, F.S.

#### C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

#### D. STATEMENT OF THE SPONSOR

No Statement Submitted

### IV. AMENDMENTS/COUNCIL SUBSTITUTE CHANGES

On March 19, 2008, the Environment & Natural Resources Council adopted a strike-all amendment and passed HB 1427 as a committee substitute (CS). The CS replaces technical language in five (5) parts of the bill to more accurately describe the action of balancing the sediment budget of the inlets and adjacent beaches. In addition, the CS reinstates an existing exemption from s. 161.142(1) and (2), F.S., for ports; however, it requires ports to follow their port master plans and DEP permits in a port's effort to place beach quality sand from dredging and construction projects on eroding beaches. The CS also gives the DEP the option to permit near-shore disposal of sand in emergency situations. Instead of repealing an existing exemption from s. 161.053(5) and (6), F.S. -- relating to coastal construction permitting requirements -- for Fisher Island, which has existed since the mid-1980s, the CS provides that any construction on the island is subject to s. 161.053(2), F.S., and must comply with the applicable Florida Building Code.