

**HOUSE OF REPRESENTATIVES STAFF ANALYSIS**

**BILL #:** HB 1359 Hazard Mitigation for Coastal Redevelopment  
**SPONSOR(S):** Benson  
**TIED BILLS:** **IDEN./SIM. BILLS:** SB 2216

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REFERENCE	ACTION	ANALYST	STAFF DIRECTOR
1) Environmental Regulation Committee		Kliner	Kliner
2) Transportation & Economic Development Appropriations Committee			
3) State Resources Council			
4)			
5)			

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**SUMMARY ANALYSIS**

The bill authorizes the Department of Environmental Protection (DEP) to revoke the authority for the emergency installation of a rigid coastal armoring structure by an agency, political subdivision, or municipality if such installation conflicts with certain public policies regarding adjacent properties, public access, or damage to vegetation or nesting turtle populations.

The bill also:

- Provides for the Division of Emergency Management to manage the update of regional hurricane evacuation studies.
- Prohibits the Department of Health from issuing a construction or repair permit for onsite sewage treatment and disposal systems located seaward of the coastal construction control line without receipt of a permit from the Department of Environmental Protection.
- Provides for the disclosure of a property’s location in a hurricane evacuation zone prior to closing of a real property sale

Fiscal Impact: No impact on General Revenue. According to the DEP, there would be no fiscal impact on local governments that properly use their authority to install or authorize emergency armoring. Local governments that improperly authorize armoring could face enforcement penalties. More significantly, they would have to bear a share of the additional recovery and restoration costs associated with erosion exacerbated by improper armoring and the insurance issues and public infrastructure repair and replacement costs related to beach and dune damage.

## FULL ANALYSIS

### I. SUBSTANTIVE ANALYSIS

#### A. HOUSE PRINCIPLES ANALYSIS:

**Provide limited government.** The bill authorizes the Department of Environmental Protection (DEP) to revoke the authority for the emergency installation of a rigid coastal armoring structure by an agency, political subdivision, or municipality if such installation conflicts with certain public policies regarding adjacent properties, public access, or damage to vegetation or nesting turtle populations.

The bill requires an extra procedural requirement by the Department of Health and the Department of Environmental Regulation regarding permitted work performed on on-site sewage systems seaward of the Coastal Construction Control Line.

#### B. EFFECT OF PROPOSED CHANGES:

##### Present Situation

##### **Dune Armoring**

Along with regulating construction along Florida's coastline, the 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.

The Coastal Construction Control Line Program (CCCL) purpose is protecting Florida's beaches and dunes while assuring reasonable use of private property. The Legislature initiated the CCCL Program to protect the coastal system from improperly sited and designed structures which can destabilize or destroy the beach and dune system. Once destabilized, the valuable natural resources are lost, as are its important values for recreation, upland property protection, and environmental habitat. Adoption of a coastal construction control line establishes an area of jurisdiction in which special site and design criteria are applied for construction and related activities. These standards may be more stringent than those already applied in the rest of the coastal building zone because of the greater forces expected to occur in the more seaward zone of the beach during a storm event.

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 (CCCL) permit application to the DEP within 60 days of installing the armoring. Otherwise, the property owner must remove the temporary armoring structure.

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.

### **Onsite Sewage Treatment and Disposal Systems**

According to the Florida Department of Health, 31 percent of the population is served by estimated 2.3 million onsite sewage treatment and disposal systems (OSTDS). These systems discharge over 426 million gallons of treated effluent per day into the subsurface soil environment.<sup>1</sup>

Onsite sewage treatment and disposal systems are facilities constructed on individual sites used to provide wastewater disposal. Such systems usually consist of a septic tank and a subsurface infiltration system. Within the septic tank, sedimentation and some anaerobic digestion of solids occur. Septic tanks contain bacteria that grow best in oxygen-poor conditions. These bacteria carry out a portion of the treatment process by converting most solids into liquids and gases. Bacteria that require oxygen thrive in the drainfield and complete the treatment process begun in the septic tank. If the septic tank is working well, the remaining partially treated wastewater, referred to as septic tank effluent, which flows out of the tank may be relatively clear, although it still has an odor and may carry disease organisms.<sup>2</sup>

Section 381.0065, F.S., states the intent of the Legislature that where a publicly owned or Investor owned sewerage system is not available, the Department of Health (DOH) shall issue permits for the construction, installation, modification, abandonment, or repair of onsite sewage treatment and disposal systems. The section requires that a person may not perform any of these actions without first obtaining a permit from the department. In issuing onsite system (septic tank) permits, the DOH has no statute or rule that specifically addresses designated coastal high hazard areas or DEP-established coastal construction control lines (CCCL), both of which are established to protect Florida's coastal system and coastal infrastructure and private property. Section 381.0065(4), F.S., states that DOH "shall not make the issuance of such [septic tank] permits contingent upon prior approval" by DEP. Because DOH has no authority to enforce DEP's statutes or rules about location of facilities in the coastal zone and has no authority of its own in this regard, onsite systems are often permitted seaward of structures, where they are most vulnerable to damage from storm surges.

### **Coastal High Hazard Study Committee**

On September 7, 2005, the Governor issued Executive Order 05-178, appointing members to the Coastal High Hazard Study Committee, which was charged with studying and formulating recommendations for managing growth in Coastal High Hazard Areas, defined as the Category 1 hurricane evacuation zones. The Committee was appointed to evaluate and make recommendations to resolve problems exposed by the extraordinary hurricane seasons in 2004 and 2005.

As discussed below under the heading Effects of Proposed Changes, the bill reflects recommendations included in the Coastal High Hazard Study Committee's February 1, 2006 final report. Section 1 of the bill gives the Department of Environmental Protection (DEP) the power to revoke local authority to install or authorize installation of emergency coastal armoring structures when the local entity improperly exercises that authority and causes harm to the coastal system. Section 3 of the bill makes the issuance of a Department of Health (DOH) onsite system permit seaward of the DEP-established coastal construction control line (CCCL) contingent on issuance of a DEP CCCL permit.

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<sup>1</sup> <http://www.doh.state.fl.us/environment/ostds/intro.htm>

<sup>2</sup> <http://www.doh.state.fl.us/environment/OSTDS/pdf/files/forms/brochure.pdf>

## Regional Hurricane Evacuation Studies

Section 252.35, F.S., assigns responsibility to the Division of Emergency Management (DEM) to maintain a comprehensive statewide program of emergency management. The division is required to prepare a comprehensive emergency management plan that is operations oriented. The plan must include specific regional and interregional planning provisions and promote intergovernmental coordination of evacuation activities. The division has the capability to conduct regional hurricane evacuation studies. Such studies include a computerized model run by the National Hurricane Center to estimate storm surge depths and winds resulting from historical, hypothetical, or predicted hurricanes taking into account:

- Pressure
- Size
- Forward speed
- Track
- Winds

This model is known as SLOSH (Sea, Lake, and Overland Surges from Hurricanes). Calculations are applied to a specific locale's shoreline, incorporating the unique bay and river configurations, water depths, bridges, roads, and other physical features to estimate storm surge.<sup>3</sup>

Another model utilized by the Division is The Arbitrator of Storms model or TAOS. The TAOS model is an integrated hazards model that provides data at a higher resolution than the SLOSH model does for surge. According to DEM, the TAOS model enhances the local government's ability to do effective hazard mitigation planning. Currently, SLOSH model storm surge calculations are not available at the same resolution statewide, or in a standard Geographical Information System (GIS) format. The TAOS model can perform calculations of storm hazard risk for the entire state at one time, and the results are available for addition to the GIS data base.

The SLOSH model calculates storm surge for an area of coastline called a basin. In order to provide complete coverage for the state's coastline, 11 separate SLOSH basins and models must be created and run. Unlike the SLOSH model which only calculates for storm surge, the TAOS model will also calculate an estimate of storm surge, wave height, maximum winds, inland flooding, debris and structural damage for the entire state at once. Furthermore, the model resolution for TAOS with respect to underwater and on-land data is much finer than for the SLOSH model. No computer model is perfectly accurate and calculations of storm surge from both TAOS and SLOSH contain some degree of uncertainty.<sup>4</sup>

Periodic hurricane evacuation studies are required because of changing population dynamics. Populations and the existing transportation network define the speed with which an evacuation may be conducted. Regional hurricane evacuation studies are able to determine recommended timing intervals used to control a sequenced evacuation by locality.

## Real Property Sales Disclosures

Many conditions are subject to disclosure to a buyer of real property during a sale, including defects to property or appliance, natural hazards such as flood, inundation and severe fire hazard zones, lead paint, military ordnance, known hazardous substances on the property, and neighborhood environmental contamination. Florida Statutes require disclosure of such items as association

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<sup>3</sup> [http://www.nhc.noaa.gov/HAW2/english/surge/slosh\\_printer.shtml](http://www.nhc.noaa.gov/HAW2/english/surge/slosh_printer.shtml) and [http://www.floridadisaster.org/hurricane\\_aware/english/surge/x\\_slosh.htm](http://www.floridadisaster.org/hurricane_aware/english/surge/x_slosh.htm)

<sup>4</sup> [http://www.floridadisaster.org/brm/lms/faq\\_taosslosh.htm](http://www.floridadisaster.org/brm/lms/faq_taosslosh.htm)

membership requirements,<sup>5</sup> and *ad valorem* taxes.<sup>6</sup> Florida, however, does not currently require disclosure of a property's location within a hurricane evacuation zone prior to a sales transaction.

### **Effects of Proposed Changes**

The bill authorizes the Department of Environmental Protection (DEP) to revoke the authority for the emergency installation of a rigid coastal armoring structure by an agency, political subdivision, or municipality if such installation conflicts with certain public policies regarding adjacent properties, public access, or damage to vegetation or nesting turtle populations.

The bill also:

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### C. SECTION DIRECTORY:

**Section 1.** Amends subsection (3) of s. 161.085, F.S., providing that unless authority has been revoked by the DEP, an agency, political subdivision, or municipality having jurisdiction over the impacted area may install or authorize installation of a rigid coastal armoring structure. The DEP may revoke such authority if the DEP determines that the structure harms or interferes with the protection of the beach-dune system, adversely impacts adjacent properties, interferes with public beach access, or harms native coastal vegetation or nesting marine turtles or their hatchlings.

**Section 2.** Amends paragraph (h) of subsection (2) of section 163.3178, F.S., to direct the Division of Emergency Management to manage the update of regional hurricane evacuation studies. Such studies shall be done in a consistent manner and using the methodology for modeling storm surge that is used by the National Hurricane Center.

**Section 3.** Amends subsection (4) of section 381.0065, F.S., to require the Department of Health to be in receipt of a coastal construction control line permit issued by the Department of Environmental Protection before issuing a permit for work on an onsite sewage treatment and disposal system seaward of the coastal construction control line.

**Section 4.** Creates s. 689.264, F.S., requiring a disclosure that real property is located in a hurricane evacuation zone be presented to a prospective purchaser of said real property at or before execution of a sale contract. Unless a substantially similar disclosure summary is included in the contract, a separate summary must be attached to the contract for sale. The bill provides a sample format for the disclosure summary. The sample format discloses:

- All or a portion of the property lies within a specifically identified hurricane evacuation zone
- This designation may require occupants to evacuate the property during an impending tropical storm or hurricane event.
- The purchaser is advised to verify the hurricane zone evacuation designation at the start of every hurricane season through the county emergency management agency.

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<sup>5</sup> s. 720.401, F.S.

<sup>6</sup> s. 689.261, F.S.

The sale contract must include, "in prominent language", a statement that the potential purchaser should not execute the contract until he or she has read the disclosure summary.

**Section 5.** The bill provides for an effective date of July 1, 2006.

## II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

### A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

Dune armoring: According to the DEP, the fiscal impact is indeterminate yet probably neutral overall. The legislation would save DEP staff resources and money expended on fixing the damage caused by improperly installed emergency armoring. Such armoring increases beach erosion and damages the beach and dune system, increasing the cost of restoration and recovery projects. The cost savings is impossible to estimate with any accuracy as the costs of beach recovery and restoration projects vary greatly depending on site-specific circumstances.

As written, the DOH reports no fiscal impact to the agency.

Hurricane studies: The Division of Emergency Management currently conducts the type of studies required by this bill. Such studies are usually funded through federal sources and recurring state funding is not usually provided.

### B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

According to the DEP, there would be no fiscal impact on local governments that properly use their authority to install or authorize emergency armoring. Local governments that improperly authorize armoring could face enforcement penalties. More significantly, they would have to bear a share of the additional recovery and restoration costs associated with erosion exacerbated by improper armoring and the insurance issues and public infrastructure repair and replacement costs related to beach and dune damage.

### C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

Improved assurance of proper coastal armoring will save private property by preventing coastal erosion, likely saving insurance as well as property repair and replacement costs. These savings could be substantial but are indeterminate.

An owner of an onsite sewage system seaward of the coastal construction control line may pay more for work performed on the system due to additional permitting required under the bill. However, savings would also accrue to homeowners whose septic tanks are not washed away during storms because better consideration is given to proper siting.

The real estate industry will have another disclosure form to present to buyers of a home in a hurricane evacuation zone.

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:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

### IV. AMENDMENTS/COMMITTEE SUBSTITUTE & COMBINED BILL CHANGES

N/A